

**TECHNICAL MANUAL**

**CHILD DEVELOPMENT CENTER  
PLAY AREA INSPECTION AND  
MAINTENANCE PROGRAM**

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**HEADQUARTERS, DEPARTMENT OF THE ARMY**

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# CHILD DEVELOPMENT CENTER PLAY AREA INSPECTION AND MAINTENANCE PROGRAM

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## CHAPTER 1 GENERAL

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### 1-1. Purpose

This manual provides the Child Development Center (CDC) Director, CDC staff, care givers, installation safety officer, and Director of Public Works (DPW) engineer staff with the step-by-step guidance needed to establish a customized inspection and maintenance program for the CDC outdoor play area. The inspection and maintenance program will help installation staff identify and correct play area health and safety hazards before accidents occur or health is endangered. The manual is intended as a guide for improving child safety; it is not a "prescribing directive" for program implementation.

### 1-2. Scope

This manual describes a method for developing and maintaining a customized inspection and maintenance program for a CDC outdoor play area. Detailed instructions are included for customizing the program to meet the specific needs of each installation. The recommended inspection questions that are provided in the tables should be used by staff to inspect the CDC play area using specialized tools, procedures, and techniques described in this manual. Maintenance schedules for all elements within the CDC play area are keyed to the recommended inspection questions that apply to those elements and are provided in the tables in appendix E. These schedules are references for correcting identified hazards. Procedures for reporting and managing hazards and for keeping complete and accurate records are described.

### 1-3. References

Appendix A contains a list of references used in this manual. Prescribed forms are also listed.

### 1-4. Applicability

This system can be used at both new and existing sites, but applies only to supervised outdoor play areas at Army Child Development Centers Unsupervised play areas, such as those in family housing and recreational facilities, have other requirements.

### 1-5. Definitions

The following terms are used in this manual:

*a. Deve/opmental Program.* A developmental program is a group of organized or free-play activities designed to support child development. Program activities in the outdoor play area will provide experiences that enhance children's physical, social, emotional, and intellectual development (see AR 608-70). The outdoor play area must be designed to support developmental programming. To accomplish this, the play area must be diverse and age appropriate. Both man-made elements and natural elements, such as plants, grassy fields, and insects, contribute to the child's play and learning experiences.

*b. E/ement.* An element is any item found in the play area. This manual discusses the inspection and maintenance requirements of elements that comprise the CDC play area. The elements are organized in consistent categories throughout the manual and appendices. The two major categories of elements are: site elements and maintenance practices, and play elements. Each major category includes several sub-categories. The elements within each subcategory are arranged alphabetically. The major categories, sub-categories, and elements contained in each subcategory are described below:

*(1) Site elements and maintenance practices.* Site elements and maintenance practices support play area function and use. Subcategories include: general site elements, ground cover and plant material, impact safety surfacing, utilities and drainage, site furnishings, and maintenance practices. Subcategory descriptions follow:

*(a) Genera/ site e/ements.* These fixed elements include: boulders, fencing and gates, pathways, planters, shade structures, signs, and trellis.

*(b) Ground cover and plant material.* These elements include: ground cover, mulch, shrubs, trees, and turf.

*(c) Safety surfacing.* Safety surfacing is material that meets the impact attenuation requirements of ASTM F 7292. This criteria reduces the likelihood of serious head injuries which can result from falls from play equipment. Surfacing types include: sand, synthetic surfacing, and wood products.

*(d) Site furnishings.* Site furnishings are elements which provide program support. They include: benches, removable shade, tables, and trash receptacles.

*(e) Utilities and drainage.* These elements include: drinking fountains, irrigation, sinks, and storm drains.

*(f) Maintenance practices.* Maintenance practices are policies and procedures which protect

child health and safety. Weed and pest management practices are included.

(2) *Play elements.* Play elements include play equipment and other structures or items designed for play activities. Play elements include: composite structure play equipment, play activity areas, and toys and loose parts.

(a) *Composite structure play equipment.* A composite structure is a multi-deck, manufactured piece of play equipment with one or more attached play events. These attached play events support a variety of sequential play activities and/or serve as the “parts” which comprise the structure. Attached play events may include: arch climber, bubble panel, clatter bridge, cleated ramp, game panel, horizontal ladder, ladders and stairs, net climber, protective barrier, ring trek, roof, slide, stationary bridge, track ride, tunnel/tunnel slide, and wheel.

(b) *Play activity areas.* These include free-standing play equipment and other elements designed for children’s play. The following are included: amphitheater, ball play area, ball wall, crawl area, digging area, platforms, playhouse, play station, program pole, sand play area, sand and water table, storage/pram storage, and swings.

(c) *Toys and loose parts.* These elements include: wheeled toys and tricycles, and toys and scrap materials for constructive play.

c. *Play Area.* A play area is an outdoor environment designed for children’s play activities. The term can be used to describe the entire CDC outdoor play environment or a subdivision of the play area that is designed for one of four age groups: infant, toddler, preschool, and school age.

**1-6. The numbering system for elements**

All play elements in the play area have been consecutively numbered (fig I-1). This numbering system is used to refer to elements throughout the manual and corresponds with the numbered inspection question and maintenance schedule tables in appendices B through E. For example, the baseline inspection for swings is appendix B table B-55 and the swing maintenance schedule is presented in appendix E table E-55. It is recommended that a similar system be used for the customized inspection and maintenance program.

**1-7. Elements not included in the manual**

If a CDC play area includes elements which are not addressed in this manual, these elements may be hazardous or may not be a preferred design option. Installation staff should consult the U.S. Consumer Product Safety Commission’s *Handbook for Public Playground Safety, ASTM F 1487*, and the manufacturers’ recom-

mendations to determine the safety and maintenance requirements for these elements.

**1-8. The inspection and maintenance program**

Health and safety in a CDC play area depend largely on maintenance. Maintenance tasks, therefore, must be well understood by CDC staff and communicated to the Director of Public Works (DPW). The inspection and maintenance program provides the guidance necessary to meet safety requirements, identify hazards, and correct inspection deficiencies.

a. *Program Goal.* The goal of the program is to maintain a safe CDC outdoor play area. A comprehensive inspection and maintenance program is necessary to meet this goal. Maintenance is essential to play area safety. It is important that maintenance staff understand that their role is to protect child health and safety.

b. *Understanding the Role of Maintenance Development Programming.* Maintenance staff must know the purpose of an element within the play area so that it can be maintained for that purpose. All elements within the play area, both natural and man-made, serve a specific function in the CDC developmental program. For example, a grassy field designed for group gathering cannot serve this purpose if overgrown or infested with insects. Only continued maintenance can provide the environment required for the developmental program. Maintenance efforts must be coordinated with the CDC Director to ensure that maintenance supports the developmental program.

c. *Determining Inspection and Maintenance Requirements.* General health and safety requirements for CDCs are provided in *AR 608-10*. This regulation prescribes a high level of custodial services - specified as hospital-grade work -to maintain the interior of the CDC facility. The outdoor play area requires a similar level of planned maintenance to meet current child safety requirements. Play area inspection and maintenance requirements can be identified through customizing the inspection and maintenance program to meet local needs.

d. *Identifying Maintenance Responsibilities.* The DPW provides grounds maintenance support. However, in practice, maintenance responsibilities vary by facility. Therefore, maintenance responsibilities should be established between the CDC and the DPW. Clear identification of maintenance responsibilities is an important step in establishing this program at the CDC. Once responsibility is assigned, maintenance tasks can be effectively accomplished. Some tasks may be written into the CDC custodial contract. Guidance for establishing responsibilities for outdoor play area maintenance is provided.

e. *Budgeting for Play Area Inspection and Maintenance.* An important objective of the inspection and

maintenance program is to provide the CDC Director with a method to determine cost effective use of funds, personnel, equipment and materials that is required for the daily maintenance of the play area to meet child safety requirements. By maintaining accurate inspection and maintenance records; annual man-hours, frequency and material quantities can be projected into a budget for funding. The following factors should also be considered when budgeting for inspection and maintenance:

(1) Maintenance needs increase over the life of a play area.

(2) Replacement costs of equipment and other elements within the play area must be anticipated.

(3) Maintenance must be based on availability of funds.

### 1-9. Implementation

This program should be implemented by a team of Professionals which includes: the Child Development Services (CDS) Coordinator, CDC Director, Director of Public Works (DPW), and the Installation Safety Officer.

SITE ELEMENTS AND MAINTENANCE	PLAY ELEMENTS
<p>General Site Elements</p> <ol style="list-style-type: none"> <li>1. Boulder</li> <li>2. Fencing and gates</li> <li>3. Pathways: hard surfaced</li> <li>4. Pathways: wood chip</li> <li>5. Planter</li> <li>6. Shade structure</li> <li>7. Sign</li> <li>8. Trellis</li> </ol> <p><b>Ground Cover and Plant Material</b></p> <ol style="list-style-type: none"> <li>9. Ground cover</li> <li>10. Mulch</li> <li>11. Shrubs</li> <li>12. Tree</li> <li>13. Turf</li> </ol> <p><b>Utilities and Drainage</b></p> <ol style="list-style-type: none"> <li>14. Drinking fountain</li> <li>15. Irrigation</li> <li>16. Sink</li> <li>17. Storm drain</li> </ol> <p><b>Safety Surfacing (within use zones)</b></p> <ol style="list-style-type: none"> <li>18. Sand safety surfacing</li> <li>19. Synthetic safety surfacing</li> <li>20. Wood product safety surfacing</li> </ol> <p><b>Site Furnishings</b></p> <ol style="list-style-type: none"> <li>21. Bench</li> <li>22. Removable shade</li> <li>23. Table</li> <li>24. Trash receptacle</li> </ol> <p><b>Maintenance</b></p> <ol style="list-style-type: none"> <li>25. Weed and pest management practices</li> </ol>	<p>Composite Structure Play Equipment</p> <ol style="list-style-type: none"> <li>26. Composite structure</li> <li>27. Arch climber</li> <li>28. Bubble panel</li> <li>29. Clatter bridge</li> <li>30. Cleated ramp</li> <li>31. Game panel</li> <li>32. Horizontal ladder</li> <li>33. Ladders and stairs</li> <li>34. Net climber</li> <li>35. Protective Barrier</li> <li>36. Ring trek</li> <li>37. Roof</li> <li>38. Slide</li> <li>39. Stationary bridge</li> <li>40. Track ride</li> <li>41. Tunnel/tunnel slide</li> <li>42. Wheel</li> </ol> <p><b>Play Activity Areas</b></p> <ol style="list-style-type: none"> <li>43. Amphitheater</li> <li>44. Ball play area</li> <li>45. Ball wall</li> <li>46. Crawl area</li> <li>47. Digging area</li> <li>48. Platform</li> <li>49. Playhouse</li> <li>50. Play station</li> <li>51. Program pole</li> <li>52. Sand play area</li> <li>53. Sand and water table</li> <li>54. Storage/pram storage</li> <li>55. Swing</li> </ol> <p><b>Toys and Loose Parts</b></p> <ol style="list-style-type: none"> <li>56. Toys and scrap material</li> <li>57. Tricycle and wheeled toy</li> </ol>

Figure 1-1: The numbering system for elements within the play area.

Other installation staff may serve as inspection team members for specific inspections. Since the inspection and maintenance program requires a team effort, it is important that installation staff work effectively together. The role of each staff member is as follows:

a. *CDS Coordinator.* The CDS Coordinator serves as a resource person for establishing and maintaining the inspection and maintenance program. The CDS Coordinator also participates in baseline, periodic, and annual inspections of the CDC play area.

b. *CDC Director.* The CDC Director is responsible for establishing and maintaining the inspection and maintenance program. The CDC Director develops and maintains the play area record keeping system and participates in baseline, periodic, and annual play area inspections. The CDC Director's responsibilities also include the training and supervision of CDC staff who conduct daily visual play area inspections.

c. *DPW.* It is important that the DPW have a clear understanding of inspection and maintenance program procedures and requirements, including child safety requirements in the outdoor play area. The DPW assists in establishing the program and conducting baseline, periodic, and annual play area inspections. The ongoing technical assistance provided by the DPW is important to the program's success.

d. *The Installation Safety Officer.* The Safety Officer assists in customizing the inspection and maintenance program at the CDC to ensure that child safety has been adequately addressed. In addition, the Safety Officer works with the CDC Director to train CDC staff to conduct play area inspections. The Safety Officer's ongoing involvement and participation in baseline, periodic, and annual play area inspections ensures that the program is administered to maintain child safety.

e. *Other Inspection Team Members.* Other installation staff contribute their specialized expertise during inspections. During baseline, periodic, and annual inspections, the fire marshal, health services representative, and local horticulture expert serve as inspection team members.

f. *CDC Staff.* CDC staff perform daily visual inspections of the play area under the supervision of the CDC Director. A program for training CDC staff to conduct play area inspections is provided. A staff training video, *Playing It Safe*, should be available from the CDC Director or CDS coordinator.

## 1-10. Overview of the inspection and maintenance program

The inspection and maintenance program is implemented in three phases (fig 1-2). Staff training is required to help installation staff establish and maintain the program. The program phases are described below.

a. *Phase One, Establish the Program.* Figure 1-3 illustrates this phase and the staff responsible. Phase one consists of two steps:

(1) *Customize the inspection and maintenance program.* In the first step, key staff develop a customized inspection and maintenance manual for each age appropriate play area at the CDC using the recommended inspection questions, DA Form 731 O-R, and the maintenance schedules provided. The customized manual includes site-adapted DA Forms 731 O-R, maintenance schedules, and reference materials needed to inspect and maintain each play area.

(2) *Establish the play area record keeping system.* Next, staff develop a record keeping system to track inspection and maintenance activities and maintain other documents necessary for play area management.

b. *Phase Two, Identify Current Play Area Conditions.* An inspection team identifies current play area conditions and establishes a baseline. Figure 1-4 illustrates this phase and identifies members of the play area inspection team. This phase consists of four steps:

(1) *Conduct a baseline inspection.* Using a site-adapted DA Form 731 O-R, the inspection team identifies elements in the play area which do not meet safety and maintenance requirements. Play area records are reviewed and materials are identified. This inspection serves as a starting point for beginning safety improvements and implementing daily visual, periodic, and annual inspections.

(2) *Record hazards.* The Child Development Center Play Area Safety Inspection Summary, DA Form 7308-R, is used to record inspection results and all identified hazards. Work orders are prepared and submitted to DPW.

(3) *Perform appropriate corrective actions.* For each hazard identified, maintenance tasks will be performed to correct the hazard. If hazards cannot be immediately corrected, the affected elements or, if necessary, the entire play area, must be closed to use until hazards are eliminated. If many hazards are identified, the inspection team should develop a prioritized list of hazards for DPW. DPW should then develop a timeline for repairs and maintenance.

(4) *Maintain inspection and maintenance records.* Inspection results and maintenance records are maintained in the play area record keeping system.

c. *Phase Three, Maintain a Safe Play Area.* Daily visual, periodic, and annual play area inspections are conducted to maintain a safe play area. Figure 1-5 illustrates this phase and identifies inspection team members for each type of inspection. Existing inspection requirements, such as the annual inspection by the Installation **Safety Officer, can be met using the procedures described.** These inspections are described below:

(1) *Daily visual inspection.* Daily visual play area inspections are conducted before the children go outdoors to play each day. This inspection ensures that

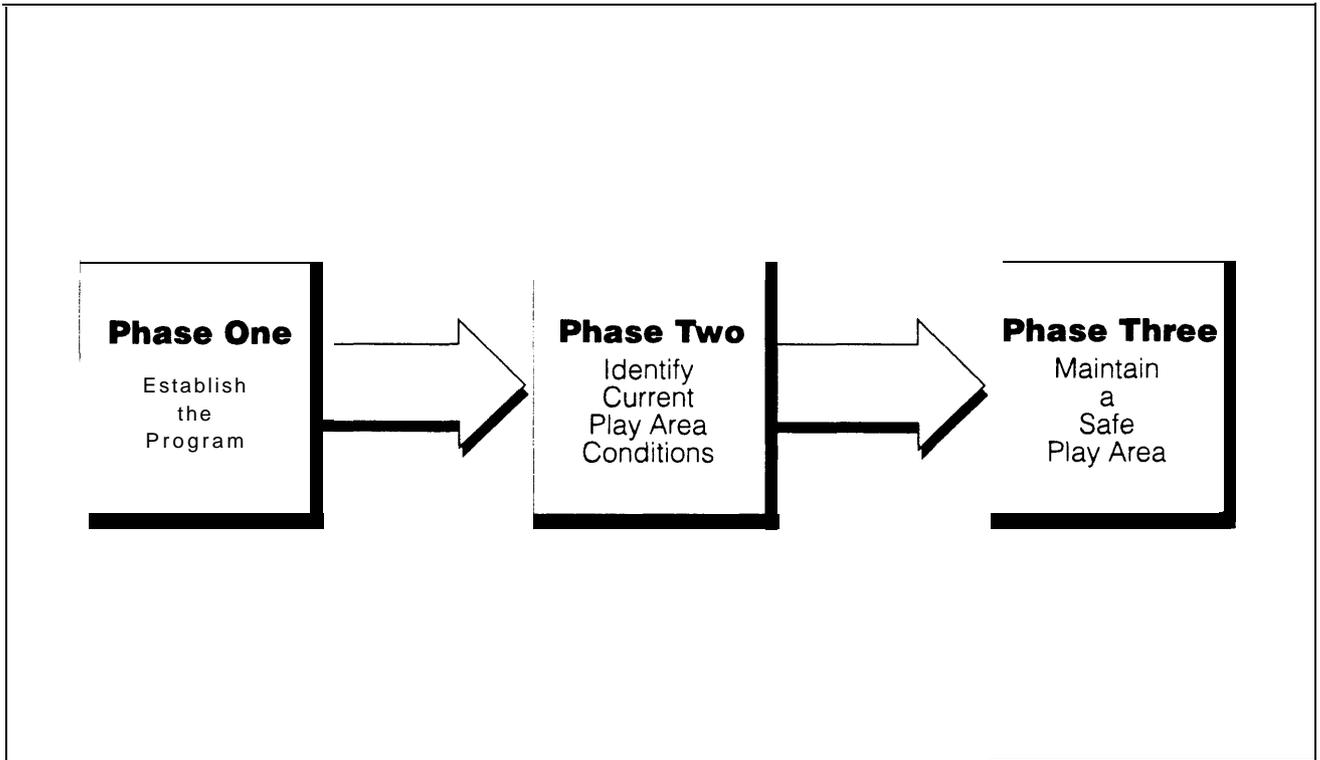


Figure 1-2: Phases of the CDC inspection and maintenance program.



Figure 1-3: Phase one - establish the program.

the play area is in a safe condition for use. The inspection has four steps:

(a) *Conduct daily visual play area inspections.* A visual inspection is conducted by CDC staff using a site-adapted visual inspection list. After the inspection, staff initials the daily visual inspection log to verify that the inspection has been accomplished.

(b) *Record hazards.* If there are any hazards that staff cannot immediately correct, CDC staff will notify the CDC Director and complete a Child Development Center Play Area Safety Inspection Summary, DA Form 7308-R. The CDC Director submits a work order to DPW.

(c) *Perform the appropriate connective actions.* For each hazard identified, maintenance tasks will be performed to correct the hazard. The affected elements or, if necessary, the entire play area, must be closed to use until hazards are eliminated.

(d) *Maintain inspection and maintenance records.* Inspection logs and maintenance records are maintained in the play area record keeping system.

(2) *Periodic inspection.* Periodic inspections are conducted by the inspection team on a regular basis — monthly, bi-monthly or quarterly, depending on play area needs and conditions. This inspection assesses material wear and deterioration, such as wood rot, rust, worn hardware, or the need to replenish sand or wood product surfacing in play equipment areas. The inspection team will



Figure 1-4: Phase two - identify current play area conditions.

review hazards identified and maintenance actions performed since the last inspection of this type to ensure that corrective actions are being accomplished. The inspection has four steps:

(a) *Conduct periodic play area inspections.*

The inspection team conducts the periodic inspection using a site-adapted DA Form 731 O-R. Periodic inspections may be performed on a monthly, hi-monthly, or quarterly basis depending on the condition of the play area, age and type of equipment, type of safety surfacing material, and climate conditions. A regularly scheduled bimonthly or quarterly inspection frequency maybe adequate for some play areas. Key staff must determine the appropriate inspection frequency for each play area based on local conditions. Assessment questions are provided to help guide this decision- making process.

(b) *Conditions which may require monthly inspection.* If any of the following questions are answered “Yes”, a monthly inspection frequency may be required:

- 1 Is sand, wood products, or pea gravel used as safety surfacing in equipment areas?
- 2 Does play equipment have moving parts, such as chains, ring treks, track rides, etc.?
- 3 Does the site contain wooden play equipment and/or site elements older than one year?
- 4 Are severe climate conditions present, such as cold, hot, or wet climates?

(c) *Conditions which may require bimonthly or quarterly inspection.* If the following questions are

answered “Yes”, a bimonthly or quarterly inspection may be appropriate:

- 1 Is synthetic safety surfacing used in play equipment areas?
- 2 Is all equipment free from moving parts?
- 3 Is all wooden play equipment and/or site elements less than one year old?
- 4 Is all metal play equipment and/or site elements less than three years old?
- 5 Is the climate mild and free from excessively hot, cold, or wet weather?

(d) *Record hazards.* The Child Development Center Play Area Safety Inspection Summary, DA Form 7308-R, is used to record inspection results and all identified hazards. Work orders are prepared and submitted to DPW.

(e) *Perform the appropriate corrective actions.* For each hazard identified, maintenance tasks will be performed to correct the hazard. The affected elements or, if necessary, the entire play area, must be closed to use until hazards are eliminated.

(f) *Maintain inspection and maintenance records.* Inspection results and maintenance records are maintained in the play area record keeping system.

(3) *Annual inspection.* The annual inspection is an in-depth evaluation of play area health and safety factors. This inspection includes a review of hazards noted, corrective actions taken to eliminate hazards, and maintenance performed during the past year. The annual inspection can be conducted as a self-study tool before unannounced inspections performed to comply

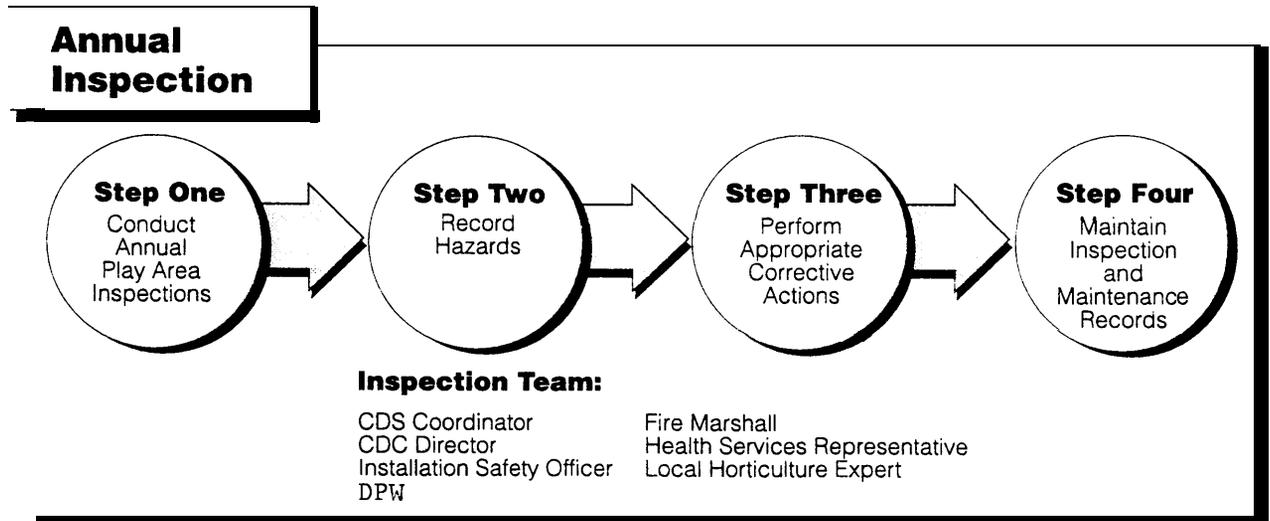
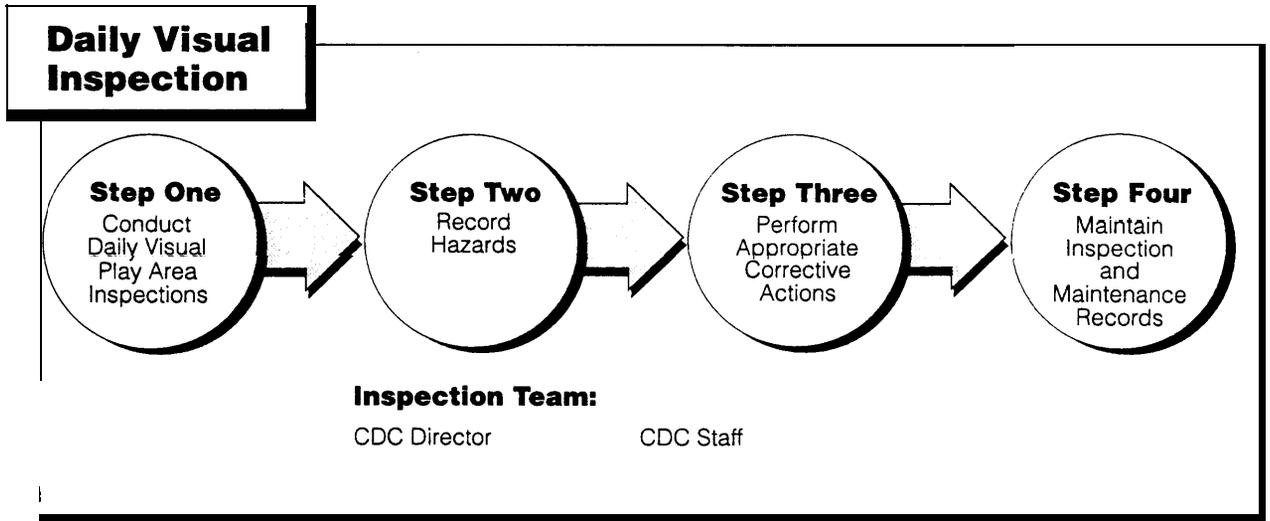


Figure 1-5: Phase three - maintain a safe play area.

with the military child care act. The inspection has four steps:

(a) *Conduct annual play area inspections.*

The inspection team conducts the annual inspection using a site-adapted DA Form 731 O-R.

(b) *Record hazards.* The Child Development Center Play Area Safety Inspection Summary, DA Form 7308-R, is used to record inspection results and all hazards identified. Work orders are prepared and submitted to DPW.

(c) *Perform the appropriate corrective actions.* For each hazard identified, maintenance tasks will be performed to correct the hazard. The affected elements or, if necessary, the entire play area, must be closed to use until hazards are eliminated.

(d) *Maintain inspection and maintenance records.* Inspection results and maintenance records are maintained in the play area record keeping system.

## 1-11. Establishing the play area record keeping system

The CDC Director will establish a record keeping system to track inspection and maintenance activities. The purpose of the record keeping system is to decrease liability, promote staff accountability, identify recurring problems, and assist in budgeting for maintenance and long-term improvements.

a. *Records.* Inspection records for the baseline inspection, daily visual inspection, periodic inspections, and annual inspections will be maintained. In addition, maintain a file of maintenance records, such as work orders and verifications of completed work, in the CDC record keeping system.

b. *Maintaining the Record Keeping System.* Keep ing files up-to-date as records are generated will ensure that no critical documentation is misplaced. On an annual basis, review the play area record keeping system. Revise and update outdated records as needed.

## 1-12. Additional play area record keeping requirements

Other documents necessary for play area management should also be maintained by installation staff. A list of documents recommended for a comprehensive play area management program follows:

a. *Play Area Assessment.* These records document current play area users, conditions, and program activities. They include:

(1) *Description of the developmental program for the outdoor play area.* Include a brief description of the goals and objectives of the developmental program for the outdoor play area, including typical program activities.

(2) *User profiles.* Write a brief paragraph describing the age and developmental characteristics of children using the play area.

(3) *Needs assessment results.* According to AR 608-10, the CDS Coordinator must perform a needs assessment to determine the construction requirements for the child development center. This assessment includes waiting list data, needs assessment information, and demographic data collected. Obtain a copy of this needs assessment.

(4) *Play area user capacity.* The play area user capacity will be established after play area occupancy by a team consisting of the CDC Director, installation Safety Officer, and Fire Marshal. The CDC Director should record the play area user capacity and maintain this information in the record keeping system.

b. *Play Area Design.* These documents provide a record of the play area design process and should be available from DPW. They include:

(1) *The names of the Army design agency and design firm.*

(2) *Equipment and material specifications.* A list of all equipment and material specifications should be available from DPW.

(3) *Source list and vendors verification.* The vendor for purchased elements and verification from vendors that the product meets specifications should be available from DPW.

(4) *Manufacturers' catalogues.* A copy of manufacturers' catalogues which include products selected for use in the play area design should be obtained from the manufacturer.

(5) *Safety surfacing specification.* The specifications for safety surfacing should be available from DPW. The specification must meet the requirements of ASTM F 1292.

(6) *Use zone detail.* A scale drawing illustrating play equipment use zones should be maintained.

(7) *Site layout.* A plan view of the play area site layout should be maintained.

(8) *Construction details.* A copy of all construction details should be maintained.

c. *Purchase of Equipment.* These items document play equipment selection. The documents are available from DPW or the equipment manufacturer. These include:

(1) *Procurement source list.* A vendor list and a copy of the vendor's verification that the product meets specifications should be available from DPW.

(2) *Manufacturer's guarantee.* If applicable, obtain a copy of the manufacturer's product guarantee.

(3) *Manufacturer's certification of CPSC and ASTM compliance.* For play equipment, obtain a written certification from the manufacturer that the equipment meets CPSC guidelines, ASTM F 1487 standards, and army safety requirements.

(4) *Manufacturer's specified user capacity.* If applicable, obtain a copy of the manufacturer's recom-

mendations for equipment user capacity. This user capacity should be obtained for all play equipment.

(5) *Manufacturer's certificate of insurance.*

Each manufacturer must carry insurance for both products and general liability of not less than 500,000 dollars. The issuing underwriter must be AA-rated. Obtain a copy of this certificate from the manufacturer.

(6) *Purchase order.* A copy of equipment purchase orders should be available from DPW.

(7) *Verification of correct shipment.* Obtain a copy of the shipping receipt denoting that the shipment was complete.

(8) *Educational benefits of equipment.* For play equipment, obtain a statement from the manufacturer which lists the educational benefits of the equipment.

(9) *Final construction site inspection.* When construction is completed, the contract administrator will perform a post-construction site inspection. Obtain a copy of the results of this inspection.

d. *Play Area Maintenance.* These items facilitate the play area maintenance program. Recommended documents include:

(1) *Manufacturer's maintenance recommendations.* For any purchased elements, obtain the manufacturer's recommendations for maintenance.

(2) *List of vendors.* Develop a list of all vendors who provide replacement parts and other materials which require periodic replacement.

(3) *Spare parts.* Develop a brief written description of procedures for ordering replacement parts and materials from vendors.

(4) *Replacement schedule.* All elements within the play area have a limited life span. Prepare an anticipated replacement schedule for elements within the play area. Include cost estimates for replacement.

(5) *Product updates or modifications.* Obtain any updated safety recommendations or modifications recommended by the manufacturer to meet safety guidelines. Contact the play equipment manufacturer

and request product update information for all equipment which has been installed in the play area.

(6) *Weed and pest management plan.* Obtain a copy of the weed and pest management plan for the CDC from DPW.

e. *Supervision and User Safety.* These items document safe play area supervision and use practices. The documents may be addressed in existing accident prevention standard operating procedures. Required documents include:

(1) *Adult/child ratio guidelines.* Develop a brief written description of adult/child supervision ratios in the outdoor play area.

(2) *Safe use guidelines.* Develop a brief description of rules for safe use of the outdoor play area, including safe play equipment use.

(3) *Safety awareness program.* Develop a brief written description of how the CDC communicates the safe use guidelines to children and parents. Maintain documentation of safety workshops provided for children and parents.

(4) *Accident response and reporting procedures.* Develop a brief written description of accident response and reporting procedures at the CDC. These will comply with AR 608-10.

(5) *Accident reports.* Maintain accident reports in compliance with accident reporting procedures.

*Staff Training.* These items document CDC staff development activities.

(1) *Supervision training program.* Develop a brief written description of the supervision training provided to CDC staff. Include a list of staff members who attend each training session.

(2) *Play area inspection training program.* Write a brief description of the play area inspection training program at the CDC. Describe all training sessions. Include a list of staff who participate in each training session.

## CHAPTER 2

# CUSTOMIZING THE INSPECTION AND MAINTENANCE PROGRAM

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### 2-1. Introduction

No two CDC play areas are identical. Each play area contains different pieces of play equipment, different site elements, and different materials. Thus, the inspection and maintenance program must be customized for every CDC. This chapter describes how to assemble a customized inspection and maintenance manual for each age appropriate play area at the CDC. Figure 2-1 illustrates the process. When completed, the customized manual will include site-adapted checklists, maintenance schedules, and reference materials needed for inspecting and maintaining a CDC play area. The detailed directions provided in the following paragraphs are given as an example. These directions may be adapted to meet each installation's needs.

### 2-2. Assemble supplies

The starting point to begin customizing the inspection and maintenance program is to assemble the following supplies for each age appropriate play area at the CDC: a three-ring binder, labels for the binder cover and spine, three-hole punched tabbed dividers, the recommended inspection questions and maintenance schedules provided in appendices B through E, a copy of the U.S. Consumer Product Safety Commission's (CPSC) *Handbook for Public Playground Safety*, a copy of American Society for Testing and Materials (ASTM) F 1292 and F 1487 standards, and a copy of the Army requirements for child safety in the outdoor play area (chap 3). The binders and tabbed dividers should be labeled.

a. Obtain Copies of the DA Forms. DA Form 7309-R, Child Development Center (CDC) Play Area Inventory, and DA Form 731 O-R, Child Development Center (CDC) Play Area Checklist, will be used to customize the inspection and maintenance program. Copies of these forms are available at the back of this manual. The forms will be locally reproduced.

b. *Label the Binders.* Label each binder cover and spine with the CDC name, name of the age appropriate play area, and the title "Inspection and Maintenance Manual" (e.g., Fort Strong Child Development Center, Preschool Play Area, Inspection and Maintenance Manual),

c. *Label the Tabbed Dividers.* Type the following tabbed divider labels for each manual:

- (1) Site-adapted play area inventory;
- (2) Baseline inspection checklist;
- (3) Daily visual inspection;
- (4) Periodic inspection checklist;
- (5) Annual inspection checklist;

- (6) Maintenance schedules;
- (7) CPSC guidelines;
- (8) ASTM standards, and;
- (9) Army child safety requirements.

### 2-3. Conduct the play area inventory

The next step is to conduct a play area inventory using DA Form 7309-R, Child Development Center (CDC) Play Area Inventory. The play area inventory identifies all elements in each age appropriate play area—infant, toddler, preschool, and school age—and serves as the basis for customizing the inspection and maintenance program.

a. *The Importance of the Inventory.* A comprehensive list of all elements is the basis of the CDC inspection and maintenance program. Therefore, it is important that an accurate inventory of each play area be completed. Conduct a walking tour to ensure that each element is noted, including any changes that have occurred since the initial play area development, such as adding or removing play equipment or other elements.

b. *DA Form 7309-R.* DA Form 7309-R includes all the elements addressed in this manual. The elements listed are numbered to correspond to the recommended inspection questions and maintenance schedules provided in the appendix. Subcategory headings are listed in bold,

c. *Conducting the Play Area Inventory.* The CDC Director and DPW representative should then conduct a walking tour of each age appropriate play area and annotate DA Form 7309-R in accordance with the instructions that follow. Use a separate form for each age appropriate play area. Figure 2-2 illustrates a completed play area inventory using DA Form 7309-R.

(1) *CDC name.* Fill in the name of the CDC in Block 1.

(2) *Date of inventory.* Write the date in Block 2.

(3) *Name of play area.* Check the play area name in Block 3.

(4) *Number included.* During the walking tour of each play area, note the numbers of each element provided in the "number included" blocks in Columns 4 and 5. Care must be taken to identify less visible elements, such as irrigation systems.

(5) *Elements not listed on DA Form 7309-R.* If the play area includes elements which are not listed on DA Form 7309-R, write the names of these elements in the blank blocks provided in Columns 4 and 5. Note the numbers of each element provided in the "number included" blocks in Columns 4 and 5,

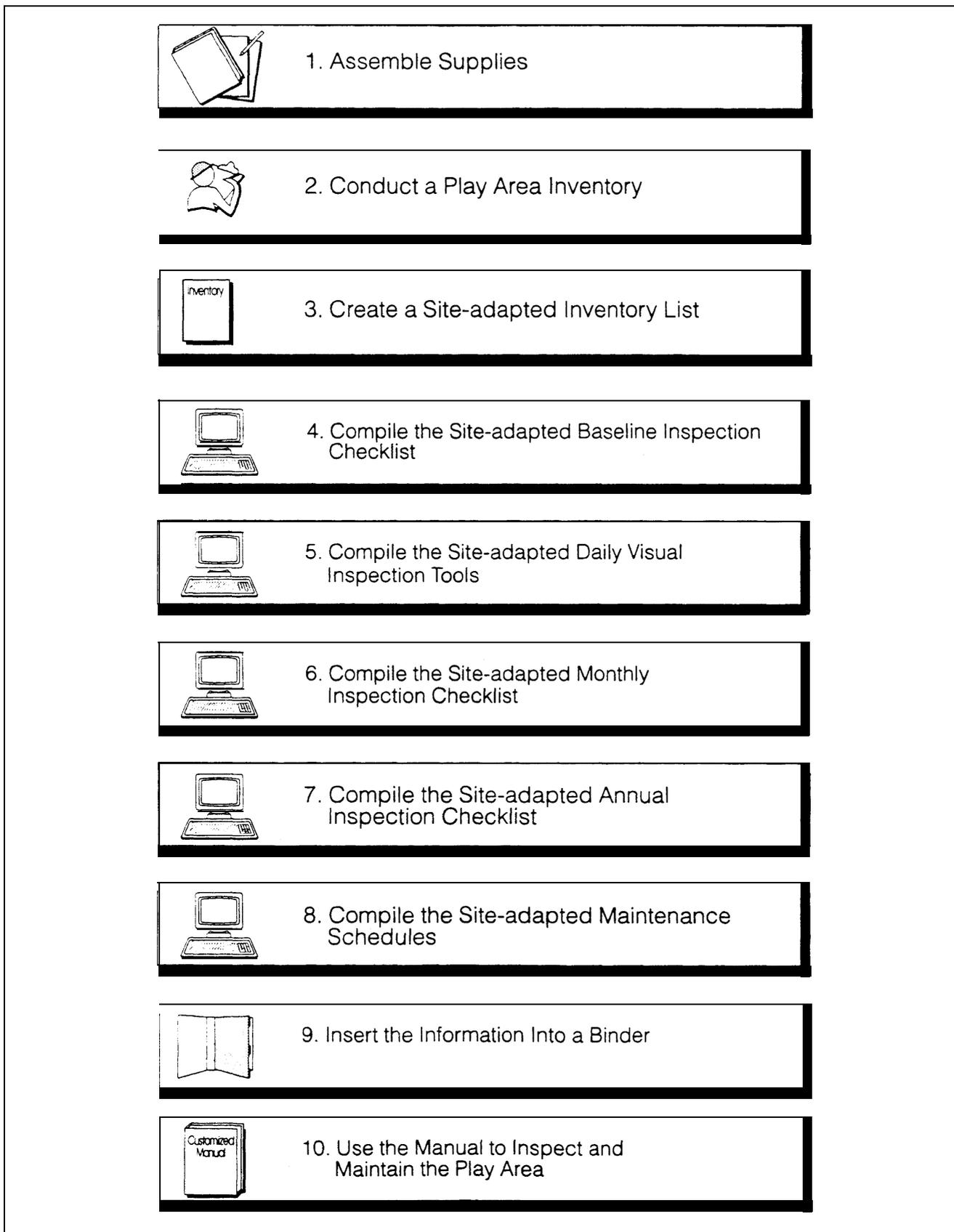


Figure 2-1: Assembling the customized inspection and maintenance manual.

CHILD DEVELOPMENT CENTER (CDC) PLAY AREA INVENTORY			
For use of this form, see TM-5-663; the proponent agency is USACE			
1. CDC NAME <b>FT. STRONG</b>		2. DATE OF INVENTORY <b>MAY 28, 1995</b>	
3. PLAY AREA <input type="checkbox"/> Infant <input type="checkbox"/> Toddler <input checked="" type="checkbox"/> Preschool <input type="checkbox"/> School Age			
4. SITE ELEMENTS AND MAINTENANCE	NUMBER INCLUDED	5. PLAY ELEMENTS	NUMBER INCLUDED
<b>a. GENERAL SITE</b>		<b>a. COMPOSITE STRUCTURE PLAY EQUIPMENT</b>	
1. Boulder		26. Composite structure	
2. Fencing and gates		27. Arch climber	
3. Pathways: hard surfaced	1	28. Bubble panel	
4. Pathways: wood chip	1	29. Clatter bridge	
5. Planter		30. Cleated ramp	1
6. Shade structure	1	31. Game panel	
7. Sign		32. Horizontal ladder	
8. Trellis		33. Ladders and stairs	2
		34. Net climber	1
		35. Nonclimable enclosure	7
		36. Ring trek	
		37. Roof	1
		38. Slide	1
<b>b. GROUND COVER AND PLANT MATERIAL</b>		39. Stationary bridge	1
9. Ground cover		40. Track ride	
10. Mulch	1	41. Tunnel/Tunnel slide	
11. Shrubs	1	42. Wheel	
12. Tree	6		
13. Turf	1		
		<b>b. PLAY ACTIVITY AREAS</b>	
<b>c. UTILITIES AND DRAINAGE</b>		43. Amphitheater	
14. Drinking fountain		44. Ball play area	1
15. Irrigation	1	45. Ball wall	
16. Sink	1	46. Crawl area	
17. Storm drain	1	47. Digging area	
		48. Platform	2
<b>d. SAFETY SURFACING (within use zones)</b>		49. Play house	3
18. Sand safety surfacing		50. Play station	
19. Synthetic safety surfacing	1	51. Program pole	6
20. Wood product safety surfacing		52. Sand play area	1
		53. Sand and water table	
<b>e. SITE FURNISHINGS</b>		54. Storage/pram storage	
21. Bench		55. Swing	
22. Removable shade			
23. Table	5		
24. Trash receptacle	1		
<b>f. MAINTENANCE PRACTICES</b>		<b>c. TOYS AND LOOSE PARTS</b>	
25. Weed and Pest Management Practices	1	56. Toys and scrap material	1
		57. Tricycle and wheeled toy	10
<b>6. INVENTORY CONDUCTED BY</b>			
a.		b.	

DA FORM 7309-R, JAN 97

Figure 2-2: Sample completed DA Form 7309-R illustrating an actual inventory of a play area.

(6) *Signature.* In blocks 6a and 6b, staff completing the inventory will sign in the spaces provided.

## 2-4. Create a site-adapted play area inventory list

Once DA Form 7309-R is completed, create a site-adapted play area inventory list for each age appropriate play area based on the completed forms. Figure 2-3 provides a sample of a site-adapted play area inventory list developed from the example completed DA Form 7309-R (fig 2-2). The site-adapted inventory identifies elements to be addressed in the customized manual. For each play area at the CDC, type a site-adapted inventory list based on the completed DA Form 7309-R.

*a. Title the Page.* Type the CDC name and name of the play area at the top of the page. Title the page "Site-adapted Play Area Inventory."

*b. Include Each Subcategory Name.* Copy each subcategory from the completed DA Form 7309-R. Examples of subcategories include: general site, ground cover and plant material, utilities and drainage, etc.

*c. List and Number Elements Included in the Play Area.* Using the completed DA Form 7309-R, type the name of all elements included in the play area in each subcategory. Consecutively number each element listed. This numbering system is important because it will be used to refer to elements throughout the customized manual. The numbering system assists staff in locating information related to a specific element.

*d. Indicate the Quantity of Each Element Included.* If more than one of a particular element is included in the play area, indicate how many are included by typing the appropriate number in parenthesis after the element's name, e.g., "(6 included)."

## 2-5. Compile the site-adapted baseline inspection checklist

A site-adapted baseline inspection checklist should be compiled for each age appropriate play area using DA Form 731 O-R, Child Development Center (CDC) Play Area Checklist. A sample page of a site-adapted DA Form 731 O-R for baseline inspection is provided in figure 2-4. To compile the site-adapted form, select the recommended inspection questions needed from appendix B, identify any additional inspection questions needed, and produce the site-adapted checklist on DA Form 731 O-R. Directions for compiling a site-adapted baseline inspection checklist are as follows:

*a. Select the Recommended Baseline Inspection Questions.* Select one list of recommended baseline inspection questions from appendix B for each element identified in the site-adapted inventory. For composite structures, select the recommended baseline inspection questions for composite structures and the recommended inspection questions for each play event

included on the structure (e.g., slide, horizontal ladder, etc.). Put the selected inspection questions in the same order listed in the site-adapted inventory.

*b. Identify Any Additional Inspection Questions Needed.* Key staff, including the Installation Safety Officer, will review the recommended baseline inspection questions which were selected from the appendix. If any additional questions are needed to inspect the play area, add these questions to the list of recommended questions. Additional questions must be written so that a "NO" answer indicates a hazard and a "YES" answer meets inspection requirements.

*c. Produce the Site-adapted Baseline Inspection Checklist on DA Form 7310-7.* The play area baseline inspection will be conducted using the site-adapted DA Form 731 O-R. Instructions for producing the form follow.

(1) *CDC name.* In Block 1, type the name of the CDC.

(2) *Play area.* In Block 2, check the type of play area.

(3) *Type of inspection.* In Block 3, check "baseline".

(4) *Inspection questions.* In Block 5, each element in the play area will be listed in order and numbered to correspond with the numbering system used on the site-adapted inventory. After the element name, type the inspection questions needed to conduct a baseline inspection of that element.

*d. Second and Subsequent Pages.* Instructions for producing second and subsequent pages on DA Form 731 O-R follow.

(1) *CDC name.* In Block 1, type the name of the CDC.

(2) *Play area.* In Block 2, check the type of play area.

(3) *Type of inspection.* In Block 3, check "baseline".

(4) *Inspection questions.* In Block 5, continue to list each element in the play area in order and number the elements to correspond with the numbering system used on the site-adapted inventory. After the element name, type the inspection questions needed to conduct a baseline inspection of that element.

*e. Multiple Elements of One Type.* If more than one of a particular element is included in the play area, a separate set of inspection questions can be used to inspect each individual element or one set of inspection questions can be used for all elements of the same type. Figures 2-5 and 2-6 are sample pages of site-adapted DA Forms 731 O-R which include multiple elements of one type.

(1) *Using a separate set of inspection questions for each element.* If a separate set of inspection questions are to be used for each individual element, indicate the element's location in parenthesis after the name of the element (fig 2-5). Repeat the set of in-

FT. STRONG CHILD DEVELOPMENT CENTER  
PRESCHOOL PLAY AREA

Site-adapted Play Area Inventory List

General Site

1. Fencing and gates
2. Pathways: hard surfaced pathway
3. Shade structure

Ground Cover and Plant Material

4. Mulch
5. Shrubs
6. Tree (6 included)
7. Turf

Utilities and Drainage

8. Drinking fountain
9. Irrigation
10. Sink

Safety Surfacing

11. Synthetic safety surfacing
12. Wood products

Site Furnishings

13. Table (5 included)
14. Trash receptacle

Maintenance Practices

15. Weed and pest maintenance practices

Composite Structure Play Equipment

16. Composite structure
17. Cleated ramp
18. Ladders and stairs (2 included)
19. Net climber
20. Protective barrier (7 included)
21. Roof
22. Slide
23. Stationary bridge

Play Activity Areas

24. Ball play area
25. Platform (2 included)
26. Playhouse (3 included)
27. Program pole (6 included)
28. Sand play area
29. Swing

Toys and Loose Parts

30. Toys and scrap material
31. Tricycle and wheeled toy (10 included)

Figure 2-3: Sample of a play area inventory prepared from a completed DA Form 7309-R.



7. CDC NAME <b>Ft. Strong CDC</b>			8. PLAY AREA <input type="checkbox"/> Infant <input type="checkbox"/> Toddler <input checked="" type="checkbox"/> Preschool <input type="checkbox"/> School Age			Page ____ of ____
9. TYPE OF INSPECTION <input checked="" type="checkbox"/> Baseline <input type="checkbox"/> Annual <input type="checkbox"/> Periodic: (Circle one) Monthly Bimonthly Quarterly				10. DATE OF INSPECTION		
YES	NO	NA	11. INSPECTION QUESTIONS			
			<b>26. Playhouse (South)</b>			
			1. Is the playhouse free from loose, missing, or broken parts?			
			2. Is the playhouse free from vandalism?			
			3. Is the playhouse free of wet or icy surfaces when children are brought outdoors to play?			
			4. Is the walking surface free from loose and slippery material, e.g., sand, wood chips, leaves, etc?			
			5. Does the playhouse have a 1800 mm (72-inch) use zone free from any obstruction, including portable climbing equipment, trikes, and wheeled toys?			
			6. Are wood materials free from warping, wood rot, insect damage, and checking (cracks more than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width)?			
			7. Are metal materials free from rust, corrosion or bending of members?			
			8. Are plastic materials unbroken and without chips or cracks, particularly at joints and connections?			
			9. Are wood materials free from splinters; loose or missing knots; and sharp edges or corners?			
			10. Are metal materials free from rough metal and sharp edges or corners?			
			11. Is all hardware present, securely attached, and without significant wear?			
			Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.			
			12. Is the playhouse free from chipped, peeling or worn paint?			

PAGE 2, DA FORM 7310-R, JAN 97

Figure 2-5: Sample of a completed page 2 of DA Form 7310-R illustrating separate inspection questions for each individual element.

spection questions for every individual element, labeling each set of questions with the element's name and location. For example, if three playhouses are included in the play area, the inspection questions for playhouse will be repeated three times. The location of each playhouse will be indicated after the title, "Playhouse".

(2) *Using one set of inspection questions for multiple elements.* If one set of inspection questions is used for multiple elements of one type, list the quantity of elements that will be inspected using the set of inspection questions in parenthesis after the element's name on the site-adapted DA Form 731 O-R (fig 2-6).

f. *Page Numbering.* After all inspection questions needed to conduct a baseline inspection have been typed onto DA Form 731 O-R, complete the "Page\_ of \_" Block on each page of the site-adapted form.

## 2-6. Compile the site-adapted daily visual inspection tools

A site-adapted daily visual inspection list and log for documenting completed inspections should be compiled for each age appropriate play area. Directions for compiling these daily visual inspection tools are as follows:

a. *Develop the Site-adapted Daily Visual Inspection List.* Follow the steps below to develop a Daily Visual Inspection List and Log. A sample of a site-adapted daily visual inspection list is provided in figure 2-7.

(1) *Header.* Type the name of the CDC, name of the play area, and the title "Daily Visual Inspection List" at the top of the page.

(2) *Note.* Add a note describing procedures for inspection reporting which states: "Initial the Daily Visual Inspection Log after each inspection. All hazards must be corrected or hazardous elements closed to use. If any hazard requires repair by DEH, complete DA Form 7308-R, Child Development Center Play Area Safety Inspection Summary, and notify the CDC Director."

(3) *List of needed inspection items.* Key staff, including the Installation Safety Officer, will review the sample daily visual inspection list (fig 2-7) and customize it to meet the needs of the CDC play area. Additional inspection items can be added and non-applicable items deleted. Type the finalized list.

b. *Develop the Site-adapted Daily Visual Inspection Log.* Prepare a log for documenting completed daily visual inspections. The log should include a note regarding inspection reporting procedures. A sample of a site-adapted daily visual inspection log is provided in figure 2-8. Adapt this sample to meet the needs of each CDC play area.

## 2-7. Compile the site-adapted periodic inspection checklist

A site-adapted periodic inspection checklist should be compiled for each age appropriate play area using DA Form 731 O-R, Child Development Center (CDC) Play Area Checklist. A sample page of a site-adapted DA Form 731 O-R for periodic inspection is provided in figure 2-9. To compile the site-adapted form, select the recommended inspection questions needed from appendix C, identify any additional inspection questions needed, and produce the site-adapted checklist on DA Form 731 O-R. Directions for compiling a site-adapted periodic inspection checklist are as follows:

a. *Select the Recommended Periodic Inspection Questions.* Select one list of recommended periodic inspection questions from appendix C for each element identified in the site-adapted inventory. For composite structures, select the recommended periodic inspection questions for composite structures and the recommended inspection questions for each play event included on the structure (e.g., slide, horizontal ladder, etc.). Put the selected inspection questions in the same order listed in the site-adapted inventory.

b. *Identify Any Additional Inspection Questions Needed.* Key staff, including the Installation Safety Officer, will review the recommended periodic inspection questions which were selected from the appendix. If any additional questions are needed to inspect the play area, add these questions to the list of recommended questions. Additional questions must be written so that a "NO" answer indicates a hazard and a "YES" answer meets inspection requirements.

c. *Produce the Site-adapted Periodic Inspection Checklist on DA Form 7310-R.* The play area periodic inspection will be conducted using the site-adapted DA Form 731 O-R. Instructions for producing the form follow.

(1) *CDC name.* In Block 1, type the name of the CDC.

(2) *Play area.* In Block 2, check the type of play area.

(3) *Type of inspection.* In Block 3, check "periodic". Verify the necessary inspection frequency. Periodic inspections may be performed monthly, hi-monthly, or quarterly depending on the condition of the play area, age and type of equipment, type of safety surfacing material, and climate conditions (chap 1). Circle the appropriate frequency in Block 3.

(4) *Inspection questions.* In Block 5, each element in the play area will be listed in order and numbered to correspond with the numbering system used on the site-adapted inventory. After the element name, type the inspection questions needed to conduct a periodic inspection of that element.

7. CDC NAME Ft. Strong CDC			8. PLAY AREA <input type="checkbox"/> Infant <input type="checkbox"/> Toddler <input checked="" type="checkbox"/> Preschool <input type="checkbox"/> School Age		Page ____ of ____
9. TYPE OF INSPECTION <input checked="" type="checkbox"/> Baseline <input type="checkbox"/> Annual <input type="checkbox"/> Periodic: (Circle one) Monthly Bimonthly Quarterly			10. DATE OF INSPECTION		
YES	NO	NA	11. INSPECTION QUESTIONS		
			<b>6. Trees (6)</b>		
			1. Is the tree free from broken stakes and protruding wires?		
			2. Does the tree receive sufficient water (25 mm (1-inch) per week) for health and vigor?		
			3. Is the tree free from broken, dead, or sharp branches?		
			4. Is the tree free from roots which may cause trip hazards?		
			5. Is the tree free from branches that protrude into the pathway overhead at a height of 2000 mm (80 inches)?		
			6. Are stakes and guy wires adjusted and removed when appropriate to prevent plant damage?		
			7. Is the tree pruned to maintain a natural looking appearance, maintain or reduce size, rejuvenate plants, and remove hazards?		
			8. Is a minimum 900 mm (36-inch) diameter bed of organic mulch maintained around the tree?		
			9. Is organic mulch maintained at a 100 mm (4-inch) depth?		
			10. Is insect infestation evaluated and treated by Certified Pesticide Applicators as described in AR 420-76?		
			11. Is plant disease evaluated and treated by Certified Pesticide Applicators as described in AR 420-76?		
			12. Is the tree fertilized using a subsurface method to maintain a healthy condition?		
			13. Are proper planting techniques employed to prevent plant and trunk damage?		
			14. Is the tree species nonpoisonous?		
			15. Are trees free from fruit and berries?		

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Figure 2-6: Sample of a completed page 2, DA Form 7310-R illustrating one set of inspection questions for multiple elements of one type.

Fort Strong Child Development Center  
 Preschool Play Area

DAILY VISUAL INSPECTION

Initial the Daily Visual Inspection Record after each inspection. All hazards must be corrected or hazardous elements closed. If any hazard requires repair by DPW, complete a Child Development Center Play Area Safety Inspection Summary, DA Form 7308-R, and notify the CDC Director.

1. No trash.
2. No spills on or around trash receptacles.
3. No mushrooms or other fungi in the play area.
4. No known toxic plants or plants with thorns or berries in the play area.
5. No broken or sharp branches on trees or shrubs.
6. No unretracted irrigation heads.
7. No dirty, broken or clogged sinks and drinking fountains.
8. No clogged storm drains.
9. No insect infestation.
10. No rodents or other vertebrate pests.
11. no low areas or holes in sand or wood products used as safety surfaces in play equipment areas.
12. No animal feces or hidden debris in sand or wood products.
13. No frozen sand or wood product safety surfaces in play equipment areas when children go outdoors to play.
14. No outdoor temperature of 25° F or less when synthetic safety surfacing is used in play equipment areas.
15. No slippery materials, such as sand, gravel, leaves, soil, puddles, ice, or snow on synthetic safety surfaces.
16. No slippery material, such as sand, ice, snow, algae, moss, etc. , on hard surfaced pathways.
17. No slippery materials on play equipment decks, stairs, or rungs, such as water, ice, sand or leaves.
18. No toys, trikes, portable climbing equipment, or other obstructions in the play equipment area.
19. No toys or trikes which are not cleaned and stored as required.
20. No loose, missing or broken parts within the play area.
21. No sharp edges within the play area.
22. No metal surfaces on play equipment which are excessively hot or cold to the touch when children go outdoors to play.
23. No unsupervised loose part additions to the play equipment such as ropes, sheets and cardboard.

*Figure 2-7: Sample site-adapted daily visual inspection list.*

**Daily Visual Inspection Log  
 Ft. Strong Child Development Center  
 Preschool Play Area**

Initial the Daily Visual Inspection Log after each inspection.

*Note:*  
 All hazards must be corrected or hazardous elements must be closed to use. If any hazard requires repair by DPW, complete a Child Development Center Play Area Safety Inspection Summary Form, DA Form 7308-R, and notify the CDC Director.

MONTH	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
January																																
February																																
March																																
April																																
May																																
June																																
July																																
August																																
September																																
October																																
November																																
December																																

Figure 2-8: Sample daily visual inspection log.

CHILD DEVELOPMENT CENTER (CDC) PLAY AREA CHECKLIST For use of this form, see TM 5-663; the proponent agency is USACE			Page ____ of ____
<p><b>INSTRUCTIONS:</b> Use this form for inspections of Child Development Center (CDC) play areas. If any of the inspection questions are answered NO, the appropriate corrective action must be performed. A CDC Play Area Safety Inspection Summary, DA Form 7308-R, must be completed for each play area after every baseline, periodic, or annual inspection.</p>			
<p>1. CDC NAME <b>Ft. Strong CDC</b></p>		<p>2. PLAY AREA  <input type="checkbox"/> Infant   <input type="checkbox"/> Toddler   <input checked="" type="checkbox"/> Preschool   <input type="checkbox"/> School Age                 </p>	
<p>3. TYPE OF INSPECTION  <input type="checkbox"/> Baseline   <input type="checkbox"/> Annual  <input checked="" type="checkbox"/> Periodic: (Circle one)   Monthly   Bimonthly   Quarterly                 </p>		<p>4. DATE OF INSPECTION</p>	
YES	NO	NA	5. INSPECTION QUESTIONS
			<b>1. Fencing and gates</b>
			1. Are the fencing and gates free from loose, missing, or broken parts?
			2. Are the fencing and gates free from vandalism?
			3. Are metal materials free from rust, corrosion or bending of members?
			4. Are metal materials free from rough metal, sharp wires, and sharp edges or corners?
			5. Is all hardware present, securely attached and without significant wear?
			Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.
			6. Are fence fabrics intact with all tension wires and connections secure?
			7. Are gates well-lubricated and locking components in working order?
			8. Is the distance between fence and gate materials and the ground surface less than 75 mm (3 inches)?
<b>6. INSPECTORS' SIGNATURES</b>			
a.		b.	
c.		d.	
e.		f.	
g.		h.	

DA FORM 7310-R, JAN 97

Figure 2-9: Sample of a completed DA Form 7310-R illustrating a periodic inspection checklist.

*d. Second and Subsequent Pages.* Instructions for producing second and subsequent pages on DA Form 731 O-R follow.

(1) *CDC name.* In Block 7, type the name of the CDC.

(2) *Play area.* In Block 8, check the type of play area.

(3) *Type of inspection.* In Block 9, check “periodic”.

(4) *Inspection questions.* In Block 11, continue to list each element in the play area in order and number the elements to correspond with the numbering system used on the site-adapted inventory. After the element name, type the inspection questions needed to conduct a periodic inspection of that element.

*e. Multiple Elements of One Type.* One set of inspection questions will be used to inspect multiple elements of one type. List the quantity of elements that will be inspected using the set of inspection questions in parenthesis after the element’s name on the site-adapted DA Form 731 O-R (fig 2-9).

*f. Page Numbering.* After all inspection questions needed to conduct a periodic inspection have been typed onto DA Form 731 O-R, complete the “Page of \_” Block on each page of the site-adapted form

## 2-8. Compile the site-adapted annual inspection checklist

A site-adapted annual inspection checklist should be compiled for each age appropriate play area using DA Form 731 O-R, Child Development Center (CDC) Play Area Checklist. A sample page of a site-adapted Form 7310-R for annual inspection is provided in figure 2-10. To compile the site-adapted form, select the recommended inspection questions needed from appendix D, identify any additional inspection questions needed, and produce the site-adapted checklist on DA Form 731 O-R. Directions for compiling a site-adapted annual inspection checklist are as follows:

*a. Select the Recommended Annual Inspection Questions.* Select one list of recommended annual inspection questions from appendix D for each element identified in the site-adapted inventory. For composite structures, select the recommended annual inspection questions for composite structures and the recommended inspection questions for each play event included on the structure (e.g., slide, horizontal ladder, etc.). Put the selected inspection questions in the same order listed in the site-adapted inventory.

*b. Identify Any Additional Inspection Questions Needed.* Key staff, including the Installation Safety Officer, will review the recommended annual inspection questions which were selected from the appendix. If any additional questions are needed to inspect the play area, add these questions to the list of recommended questions. Additional questions must be written so that

a “NO” answer indicates a hazard and a “YES” answer meets inspection requirements.

*c. Produce the Site-adapted Annual Inspection Checklist on DA Form 7310-R.* The play area annual inspection will be conducted using the site-adapted DA Form 731 O-R. Instructions for producing the form follow.

(1) *CDC name.* In Block 1, type the name of the CDC.

(2) *Play area.* In Block 2, check the type of play area.

(3) *Type of inspection.* In Block 3, check “annual”.

(4) *Inspection questions.* In Block 5, each element in the play area will be listed in order and numbered to correspond with the numbering system used on the site-adapted inventory. After the element name, type the inspection questions needed to conduct an annual inspection of that element .

*d. Second and Subsequent Pages.* Instructions for producing second and subsequent pages on DA Form 731 O-R follow.

(1) *CDC name.* In Block 7, type the name of the CDC.

(2) *Play area.* In Block 8, check the type of play area.

(3) *Type of inspection.* In Block 9, check “annual”.

(4) *Inspection questions.* In Block 11, continue to list each element in the play area in order and number the elements to correspond with the numbering system used on the site-adapted inventory. After the element name, type the inspection questions needed to conduct an annual inspection of that element.

*e. Multiple Elements of One Type.* If multiple elements of one type are included in the play area, use the same procedures as those used to compile the site-adapted baseline inspection checklist. If more than one of a particular element is included in the play area, a separate set of inspection questions can be used to inspect each individual element or one set of inspection questions can be used for all elements of the same type (fig 2-5 and 2-6).

(1) *Using a separate set of inspection questions for each element.* If a separate set of inspection questions are to be used for each individual element, indicate the element’s location in parenthesis after the name of the element (fig 2-5). Repeat the set of inspection questions for every individual element, labeling each set of questions with the element’s name and location. For example, if three playhouses are included in the play area, the inspection questions for playhouse will be repeated three times. The location of each playhouse will be indicated after the title, “Play house.”

(2) *Using one set of inspection questions for multiple elements.* If one set of inspection questions is used for multiple elements of one type, list the quantity of elements that will be inspected using the set of

CHILD DEVELOPMENT CENTER (CDC) PLAY AREA CHECKLIST For use of this form, see TM 5-663; the proponent agency is USACE			Page ____ of ____
<p>INSTRUCTIONS: Use this form for inspections of Child Development Center (CDC) play areas. If any of the inspection questions are answered NO, the appropriate corrective action must be performed. A CDC Play Area Safety Inspection Summary, DA Form 7308-R, must be completed for each play area after every baseline, periodic, or annual inspection.</p>			
1. CDC NAME <b>Ft. Strong CDC</b>		2. PLAY AREA <input type="checkbox"/> Infant <input type="checkbox"/> Toddler <input checked="" type="checkbox"/> Preschool <input type="checkbox"/> School Age	
3. TYPE OF INSPECTION <input type="checkbox"/> Baseline <input checked="" type="checkbox"/> Annual <input type="checkbox"/> Periodic: (Circle one)   Monthly   Bimonthly   Quarterly		4. DATE OF INSPECTION	
YES	NO	NA	5. INSPECTION QUESTIONS
			<b>1. Fencing and gates</b>
			1. Are the fencing and gates free from loose, missing, or broken parts?
			2. Are the fencing and gates free from vandalism?
			3. Are metal materials free from rust, corrosion or bending of members?
			4. Are metal materials free from rough metal, sharp wires, and sharp edges or corners?
			5. Is all hardware present, securely attached, and without significant wear?
			Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping?
			6. Are fence fabrics intact with all tension wires and connections secure?
			7. Are gates well lubricated and locking components in working order?
			8. Is the distance between fence and gate materials and the ground surface less than 75 mm (3 inches)?
3. INSPECTORS' SIGNATURES			
a. _____		b. _____	
c. _____		d. _____	
e. _____		f. _____	
g. _____		h. _____	

DA FORM 7310-R, JAN 97

Figure 2-10: Sample of a completed DA Form 7310-R illustrating an annual inspection checklist.

inspection questions in parenthesis after the element's name on the site-adapted DA Form 731 O-R (fig 2-6).

*f. Page Numbering.* After all inspection questions needed to conduct an annual inspection have been typed onto DA Form 731 O-R, complete the "Page of \_" Block on each page of the site-adapted form

## 2-9. Compile the site-adapted maintenance schedules

To correlate with baseline, periodic, and annual inspections, a set of site-adapted maintenance schedules should be compiled for each age appropriate play area. To correlate with the daily visual inspection, each site-adapted maintenance schedule must address all elements within the play area. Directions for compiling the site-adapted maintenance schedules are as follows:

*a. Compiling Site-adapted Baseline, Periodic, and Annual Maintenance Schedules.* A sample page of a site-adapted maintenance schedule for baseline, periodic, and annual inspections is provided in figure 2-11. To compile the site-adapted maintenance schedules, select the tables needed from appendix E, identify the necessary maintenance standards and tasks, establish maintenance responsibilities, and produce the site-adapted maintenance schedules.

*(1) Select the maintenance schedules.* Select one maintenance schedule from appendix E for each element identified in the site-adapted inventory. For composite structures, select the composite structure maintenance schedule and one maintenance schedule for each play event included on the equipment (e.g., slide checklist, horizontal ladder checklist, etc.). Put the schedules in the same order as listed in the site-adapted inventory.

*(2) Identify the necessary maintenance standards and tasks.* The periodic and annual maintenance schedules include maintenance standards and tasks which correspond to each question included on the site-adapted DA Forms 731 O-R. If any questions have been added to the site-adapted forms in addition to those provided in appendices C and D, corresponding maintenance standards and procedures must be developed and written in the blank lines provided. If any inspection questions have been deleted when compiling the site-adapted forms, corresponding maintenance standards and tasks must also be deleted. Key staff, including the Installation Safety Officer and DPW, will review the maintenance schedules selected from appendix E and the site-adapted DA Forms 731 O-R to determine the required maintenance standards and tasks for the site-adapted maintenance schedules.

*(3) Establishing maintenance responsibilities.* Maintenance responsibilities vary from installation to installation. The following approach is recommended to assign responsibilities at each installation:

*(a) Identify responsibilities.* The CDC Director should meet with DPW to review the maintenance schedules. Responsibility for each maintenance standard and task will be determined. Indicate whether CDC or DPW is responsible for each task by typing or printing the name of the responsible agency next to each line of the play area maintenance schedule (fig 2-1 1).

*(b) Determine routine and requested tasks.* The CDC Director and DPW will determine which tasks will be completed routinely and which tasks will require a work order.

*(c) Assign staff.* Staff will be assigned to complete routine maintenance tasks.

*(4) Produce the maintenance schedules.* Using the site-adapted play area inventory as a guide, type a header at the top of each maintenance schedule. The header should include the name and number of the element addressed. This number will correspond with the numbering system used on the site-adapted inventory.

*b. Compiling the Site-adapted Daily Maintenance Schedule.* A sample of a site-adapted daily maintenance schedule is provided in figure 2-12. To compile the site-adapted daily maintenance schedule, use the example provided, identify the necessary maintenance standards or tasks, establish maintenance responsibilities, and produce the site-adapted daily maintenance schedule.

*(1) Use the maintenance schedule.* Select the sample maintenance schedule provided (fig 2-12).

*(2) Identify the necessary maintenance standards and tasks.* The daily maintenance schedule includes maintenance standards and tasks which correspond to each item included on the site-adapted daily visual inspection list. If any additional items have been added to the site-adapted inspection lists, corresponding maintenance standards and tasks must be developed. If any items have been deleted when site-adapting the inspection list, corresponding maintenance standards and task must also be deleted. Key staff, including the Installation Safety Officer and DPW, will review the sample maintenance schedule and the site-adapted daily visual inspection list to determine the required maintenance standards and tasks for the site-adapted daily maintenance schedule.

*(3) Establishing maintenance responsibilities.* Maintenance responsibilities vary from installation to installation. The following approach is recommended to assign responsibilities at each installation:

*(a) Identify responsibilities.* The CDC Director will meet with DPW to review the maintenance schedules. Responsibility for each maintenance standard and task will be determined. Indicate whether CDC or DPW is responsible for each task by typing or printing the name of the responsible agency next to each line of the play area maintenance schedule (fig 2-12).

*(b) Determine routine and requested tasks.* The CDC Director and DPW will determine which

**SYNTHETIC SAFETY SURFACING**

<b>MAINTENANCE STANDARDS</b>		<b>MAINTENANCE TASKS</b>	
<b>BASELINE:</b>			
Synthetic safety surfacing will comply with baseline inspection criteria.		Repair deficiencies noted upon inspection or replace as needed.	CDC/ DPW
<b>PERIODIC:</b>			
1. Synthetic safety surfaces will be free of loose material and foreign objects such as debris, sand, gravel, leaves, soil, and toys.	Pick up debris, toys, and wheeled toys; sweep surfacing to remove loose materials such as sand, gravel, leaves, and soil.		CDC
2. Synthetic safety surfaces will be firmly attached to the underlying surface.	Repair surfacing with materials and techniques recommended by the product manufacturer.		DPW
3. Synthetic safety surfaces will be free of abrupt changes in level greater than 6 mm (1/4 inch).	Repair surfacing with materials and techniques recommended by the product manufacturer.		DPW
4. Synthetic safety surfaces will be free of cuts, nicks or damaged areas.	Repair surfacing with materials and techniques recommended by the product manufacturer.		DPW
5. Synthetic safety surfaces will be free from exposed hardware and sharp edges.	Repair surfacing with materials and techniques recommended by the product manufacturer.		DPW
<b>ANNUAL:</b>			
1. Synthetic safety surfaces will be free of loose material and foreign objects such as debris, sand, gravel, leaves, soil, and toys.	Pick up debris, toys, and wheeled toys; sweep surfacing to remove loose materials such as sand, gravel, leaves, and soil.		CDC
2. Synthetic safety surfaces will be free from puddles, ice, and snow when children are brought outdoors to play.	Remove puddles, ice, and snow.		CDC
3. Synthetic safety surfaces will be monitored for cold temperatures which will reduce impact attenuation.	Close the play equipment area when the outdoor temperature is 25 degrees Fahrenheit or less.		CDC
4. Synthetic safety surfaces will be firmly attached to the underlying surface.	Repair surfacing with materials and techniques recommended by the product manufacturer.		DPW
5. Synthetic safety surfaces will be free of abrupt changes in level greater than 6 mm (1/4 inch).	Repair surfacing with materials and techniques recommended by the product manufacturer.		DPW
6. Synthetic safety surfaces will be free of cuts, nicks or damaged areas.	Repair surfacing with materials and techniques recommended by the product manufacturer.		DPW
7. Synthetic safety surfaces will be free from exposed hardware and sharp edges.	Repair surfacing with materials and techniques recommended by the product manufacturer.		DPW

Figure 2-11: Sample of appendix E annotated with who has the maintenance responsibilities.

Fort Strong Child Development Center  
Preschool Play Area

MAINTENANCE STANDARDS	MAINTENANCE TASKS	
<b>DAILY:</b>		
1. The play area will be free from trash.	Remove trash from the play area.	CDC
2. Spills on or around trash receptacles will be cleaned as they occur.	Clean spills as they occur.	CDC
3. The play area will be free from mushrooms and other fungi.	Remove mushrooms and other fungi.	CDC
4. The play area will be free from toxic plants and plants with thorns or berries.	Remove toxic plants and plants with thorns or berries.	CDC
5. Trees and shrubs will be free from broken or sharp branches.	Remove broken or sharp branches.	CDC
6. The play area will be free from unretracted irrigation heads.	Repair irrigation heads.	DPW
7. The play area will be free from dirty, broken or clogged sinks or drinking fountains.	Clean and disinfect or repair sinks or drinking fountains as needed.	DC/DPW
8. The play area will be free from clogged storm drains.	Clear the inlet of debris, sand, leaves or other material to prevent standing water; clear out the drain as needed.	DC/DPW
9. The play area will be free from insect infestation.	Contact installation pest management personnel for appropriate insect treatment.	CDC
10. The play area will be free from rodents or other vertebrate pests.	Trap and remove vertebrates.	CDC
11. Sand and wood products used as safety surfaces in play equipment areas will be free from low areas or holes.	Shovel or rake sand or wood products to fill low areas or holes caused by digging or play activities.	CDC
12. Sand and wood products will be free from animal feces and hidden debris.	Rake to expose hidden feces or debris; remove animal feces with a shovel.	CDC
13. Play equipment areas will be closed to use when sand or wood product safety surfaces are frozen which reduces impact attenuation.	Close play equipment areas to use when sand or wood products surfaces used for impact attenuation are frozen.	CDC
14. Play equipment areas will be closed to use when the outdoor temperature is 25°F or less and synthetic safety surfacing is used in play equipment areas.	Close play equipment areas to use when the outdoor temperature is 25°F or less and synthetic safety surfacing is used for impact attenuation.	CDC
15. Synthetic safety surfaces will be free from slippery materials, such as sand, wood chips, gravel, leaves, soil, puddles, ice or snow.	Sweep to remove loose materials; remove puddles, ice and snow.	CDC
16. Hard surfaced pathways will be free from slippery material such as sand, ice, snow, algae, moss, etc.	Remove slippery material.	CDC
17. Play equipment decks, stairs, and rungs will be free from slippery materials, such as water, ice, sand, or leaves.	Remove slippery materials.	CDC
18. The play equipment area will be free from obstructions such as toys, trikes, and portable climbing equipment.	Remove obstructions from the play equipment area.	CDC
19. Toys and trikes will be cleaned and stored as required.	Clean and store toys and trikes as required.	CDC
20. Elements within the play area will be free from loose, missing or broken parts.	Repair or replace loose, missing or broken parts. Parts recommended by the manufacturer will be used for all manufactured elements.	DPW

Figure 2-12: Sample of a site-adapted daily maintenance schedule.

MAINTENANCE STANDARDS		MAINTENANCE TASKS
<b>DAILY:</b>		
21. Elements within the play area will be free from sharp edges.	Refinish or replace parts to eliminate sharp edges.	DPW
22. Metal play equipment will be closed to use when surfaces are excessively hot or cold to the touch.	Close metal play equipment when surfaces are excessively hot or cold to the touch.	CDC
23. Play equipment will be free from unsupervised loose part additions, such as ropes, sheets and cardboard.	Remove unsupervised loose part additions from play equipment.	CDC

Figure 2-12: Sample of a site-adapted daily maintenance schedule - continued.

tasks will be completed routinely and which tasks will require a work order.

(c) *Assign staff.* Staff will be assigned to complete routine maintenance tasks.

(4) *Produce the maintenance schedule.* insert a header at the top of each maintenance schedule. The header should include the name of the CDC, name of the play area, and the title "Daily Maintenance Schedule." Maintenance standards and tasks will be numbered to correlate with items on the daily visual inspection list.

**2-10. Insert the information into a binder**

Insert the following information into the binder behind the appropriate tabbed dividers: site-adapted play area inventory list, site-adapted inspection checklists (DA Form 731 O-R), site-adapted maintenance schedules, CPSC guidelines, ASTM standards, and Army child safety requirements.

**2-11. Use the customized manual to inspect and maintain the play area**

Chapters three through six describe how the customized manual is used to inspect and maintain the CDC play area.

## CHAPTER 3

# CHILD SAFETY REQUIREMENTS IN THE OUTDOOR PLAY AREA

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### 3-1. Introduction

All play equipment will meet the requirements of CPSC and ASTM F1487. Those involved with the inspection and maintenance of the CDC outdoor play area must be familiar with child safety requirements for the outdoor play area. Guidelines for child safety are as follows:

### 3-2. Head and neck entrapment

All elements within the play area will be designed, constructed, and assembled to reduce the risk of accidental head or neck entrapment when children enter any opening headfirst or feetfirst. Entrapment occurs when a child's head or neck becomes lodged within a space and cannot be withdrawn. Strangulation or emotional injury can result. Both the opening size and shape are considered in determining entrapment potential. Any opening that is closed on all sides and all angular openings will meet the entrapment criteria specified in *ASTM F 1487*. This *ASTM* standard includes testing criteria that can be used to evaluate opening size and shape for entrapment potential. Recommended inspection procedures are provided.

### 3-3. Maximum recommended equipment heights by age group

Play equipment should be selected that allows safe and successful use by children of a specific chronological age, mental age, and physical ability. Play equipment height and complexity should not exceed the user's ability as defined by tables 3-1 and 3-2. These tables are based on the average user in each age group. An individual child's skills may vary from these averages and must be assessed by caregivers during program activities.

### 3-4. Multiple exits

A minimum of two exits should be provided on all play equipment, including composite structures and playhouses. Climbers, such as rung ladders, climbing nets, and arch climbers, should not be used as the sole means of access to equipment intended for children under age five. A playhouse window may qualify as an exit if it is large enough to be climbed through by a child.

### 3-5. Pinch, crush, and shear points

Pinch, crush, or shear points are junctures that could cause contusion, laceration, abrasion, amputation, or fracture during use. A pinch, crush, or shear point is defined by *ASTM F 1487* as any point that entraps a 16 mm (5/8-inch) diameter rod at one or more positions. Accessible crush, pinch, or shearing points will not be provided in outdoor play areas. To reduce the likelihood of unintentional contact with a pinch, crush, or shear point, openings will meet the specifications of *ASTM F 1487*. The hardware that attaches chain to equipment are exempt from pinch, crush, and shear point requirements. The attachment area of heavy duty coil springs to the body and base of rocking equipment is also exempt.

### 3-6. Protective barriers

Protective barriers are enclosures that help keep children from falling off elevated platforms. A protective barrier is a vertical surface, game panel, series of vertical or diagonal bars spaced less than 90 mm (3-1/2 inches) apart, or other design free of footholds or handholds that may facilitate climbing. For school age children, any play equipment platform over 750 mm (30 inches) in height above the playing surface will be surrounded with a protective barrier a minimum 970 mm (38 inches) high. For toddlers and preschoolers, any play equipment platform over 500 mm (20 inches) in height above the playing surface will be surrounded with a protective barrier. A protective barrier a minimum 750 mm (29 inches) high will be provided for preschoolers. For toddlers, a protective barrier a minimum 500 mm (20 inches) high will be provided. *ASTM F 1487* also allows the use of a guardrail for some platform heights and age groups. However, guardrails provide less protection. Therefore, the use of guardrails will be avoided, except when necessary for play equipment function, e.g., on moving bridges. Protective barrier requirements are illustrated in figure 3-1.

### 3-7. Protrusions

Protrusions are hardware, pipes, posts, or other structural members that extend in any direction from play equipment, site elements, or site furnishings. Protrusions may catch a child's clothing causing strangulation or loss of balance. Protrusions may also pose a potential impact hazard. Hardware that increases in diameter from the surface to the exposed end and caps or coverings that do not fit flush against the nut or surrounding surface are two examples of protrusions that are likely to catch a child's clothing. All protrusions will meet the requirements of *ASTM F 1487*.

Table 3-1: Recommended composite structure platform heights.

Age Group	Maximum Platform Height	
	Millimeters	Inches
Toddler	900	36
Preschool	1200	48
School age	1400	56

Table 3-2: Maximum recommended play equipment heights.

Play Events	Infant	Toddler	Preschool	School age
Balance beam (maximum height)	N/A	N/A	300 mm (12 inches)	400 mm (16 inches)
Banister slide (maximum height of attached platform)	N/A	N/A	N/A	1400 mm (56 inches)
Chinning/turning bars (maximum height)	N/A	N/A	1500 mm (60 inches)	2100 mm (84 inches)
Clatter bridge (height to bridge surface)	N/A	N/A	760 mm <sup>b</sup> (30 inches)	1200 mm (48 inches)
Climber - freestanding (maximum height)	N/A	N/A	1500 mm <sup>c</sup> (60 inches)	1500 mm (60 inches)
Climber - attached to composite (maximum height)	N/A	N/A	1200 mm <sup>c</sup> (48 inches)	1400 mm (56 inches)
Climber - arch (maximum height, attached to composite structure)	N/A	N/A	1200 mm <sup>c</sup> (48 inches)	1400 mm (56 inches)
Climber - arch - freestanding	N/A	N/A	N/A	1500 mm (60 inches)
Climber - net - installed at 90° (maximum height)	N/A	N/A	2400 mm (96 inches)	2400 mm (96 inches)
Climber - net- installed at 60° (maximum height)	N/A	N/A	N/A	1400 mm (56 inches)
Fire pole (maximum height of attached platform)	N/A	N/A	N/A	1400 mm (56 inches)
Horizontal ladder (maximum height)	N/A	N/A	1500 mm <sup>c</sup> (60 inches)	2100 mm (84 inches)
Parallel bars (maximum height)	N/A	N/A	N/A	900 mm (36 inches)
Playhouse - freestanding (maximum height at roof ridge)	1800 mm (72 inches)	1800 mm (72 inches)	1800 mm (72 inches)	1800 mm (72 inches)
Ring trek (maximum height - rings to safety surface)	N/A	N/A	N/A	2100 mm (84 inches)
Slide (maximum height at entrance)	N/A	900 mm <sup>a</sup> (36 inches)	1200 mm (48 inches)	1400 mm (56 inches)
Spring rocking equipment (maximum seat height)	N/A	N/A	700 mm (28 inches)	N/A
Stationary bridge (maximum height to bridge surface)	No potential fall	900 mm (36 inches)	1200 mm (48 inches)	1400 mm (56 inches)

Table 3-2. Maximum recommended play equipment heights (cont.).

Play Events	Infant	Toddler	Preschool	School age
Swings - to-fro (maximum crossbeam height)	2100 mm (84 inches)	2100 mm (84 inches)	2400 mm <sup>b</sup> (96 inches)	2400 mm (96 inches)
Swings - rotating (maximum crossbeam height)	N/A	N/A	2400 mm <sup>b</sup> (96 inches)	2400 mm (96 inches)
Track ride (maximum height - hand hold to safety surface)	N/A	N/A	N/A	2100 mm (84 inches)
Tunnel (maximum height of attached deck)	Ground level No potential fall	900 mm (36 inches)	1200 mm (48 inches)	1400 mm (56 inches)

Note: <sup>a</sup>Recommended for ages 2 and older.  
<sup>b</sup>Recommended for ages 3 and older.  
<sup>c</sup>Recommended for ages 4 and older.

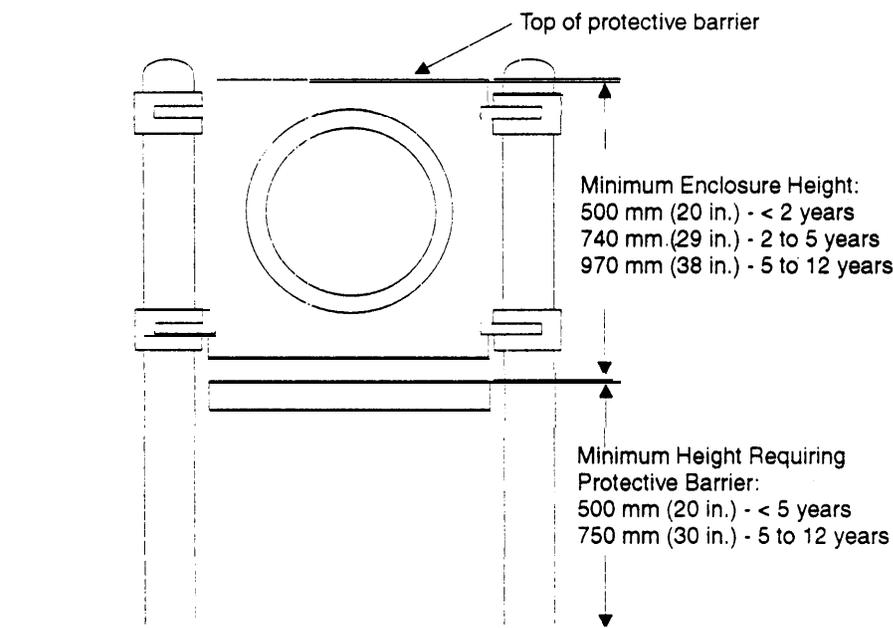


Figure 3-1: Protective barrier requirements.

### 3-8. Safety surfaces

Adequate safety surfacing throughout play equipment use zones is essential. Falls from play equipment represent over 70% of all playground equipment-related injuries treated in hospital emergency rooms. Without appropriate safety surfacing, these falls may result in permanent head injury or death.

a. *Types of Safety Surfacing.* A number of safety surfacing materials are available. Each type of safety surfacing has unique advantages and disadvantages.

The two major types of safety surfaces are synthetic surfacing and loose-fill surfacing. Synthetic surfacing is purchased as tiles that are formed in the factory, or it is poured in place on-site. Loose-fill surfacing includes organic and inorganic materials, such as sand, gravel, chopped tire, and wood products.

b. *Impact Attenuation Criteria.* Standards for impact attenuation have been developed with the goal of reducing severe head injury or death from falls from manufactured play equipment. Safety surfaces that meet the requirements of *ASTM F 1292* will be provided throughout the play equipment use zone. *ASTM F 1292*

states that the surface must yield both a peak deceleration of no more than 200 g's and a Head Injury Criteria (HIC) value of no more than 1,000 for a headfirst fall from the highest accessible height of the play equipment. G-force measures the peak deceleration of the head during impact. HIC measures the duration of the impact during its most severe phase.

c. *Critical Height of Safety Surfacing Materials.* The performance of safety surfacing is measured from potential fall heights. The critical height of a surfacing material is the maximum height at which a headfirst fall from equipment onto the safety surface meets the *ASTM F 1292* standard. For instance, a particular surfacing material may not meet test criteria for a fall from 2400 mm (96 inches), but will meet criteria for a 1800 mm (72-inch) fall. It can then be said that this surfacing material has a 1800 mm (72-inch) critical height. The critical height of safety surfacing material used in children's play areas will equal or exceed the highest accessible height of the equipment provided. The highest accessible height of various types of play equipment is measured from different points. Table 3-3 describes how the highest accessible height is determined for various manufactured equipment.

d. *Manufactured Safety Surfacing.* Testing data should be obtained from manufacturers of synthetic surfaces, chopped tire surfaces, or wood products manufactured as safety surfacing to verify that the sur-

face meets the requirements of *ASTM F 1292* for a headfirst fall from the highest accessible equipment height to be provided.

e. *Loose-Fill Surfacing.* Loose-fill materials are often not manufactured specifically as safety surfacing. Therefore, test data is not available from suppliers. In 1993, the U.S. Army Corps of Engineers commissioned a testing program to develop recommended material depths for loose-fill surfaces. Materials tested include sand, pea gravel, and bark mulch. To reproduce required impact-attenuating performance, the materials must meet standard specifications; the maximum accessible height of play equipment must not exceed 2400 mm (96 inches); and the surface must receive regular maintenance to maintain material depth. A 25 mm (1-inch) difference in material depth may dramatically increase injury potential. Table 3-4 describes the recommended installed material depth for loose-fill surfacing.

### 3-9. Use zones

A use zone is the clear area under and around play equipment where a child could land when falling, jumping, or exiting from the equipment. For all play equipment, an unobstructed use zone covered with safety surfacing will be provided, which at minimum conforms to *ASTM F 1292* for the highest accessible equipment

Table 3-3: Highest accessible height of play equipment.

Play Equipment	Highest Accessible Height
Composite equipment	Measure from the top edge of the protective barrier.
Infant crawl area	Measure from maximum height of 600 mm (24 inches).
Playhouse, nonclimbable	Measure from the maximum height of the highest surface which is a minimum 50 mm (2 inches) wide and has a slope of 30 degrees or less.
Spring rockers	Measure from the seat.
Stationary equipment, climbable	Measure from the maximum height of the structure.
Swings	Measure from the height of the swing crossbeam.

Table 3-4: Recommended installed depths for loose-fill safety surfacing.

Material	Recommended Installed Depth
Sand	450 mm (18 inches)
Gravel	300 mm (12 inches)
Wood products	300 mm (12 inches)
Chopped tire	150 mm (6 inches)

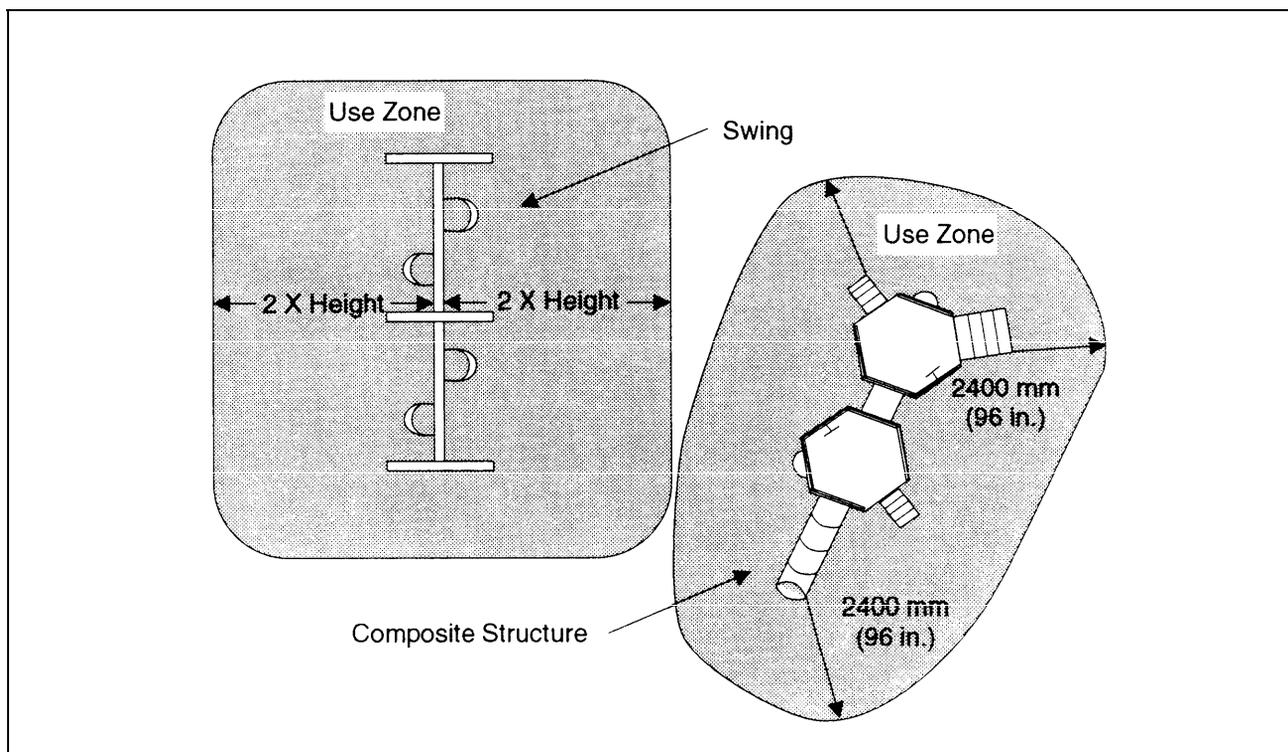


Figure 3-2: Adjacent play equipment without overlapping use zones.

fall height. This criteria reduces the likelihood of life-threatening head injuries that often result from falls from play equipment. Use zones should not overlap except where indicated. Figure 3-2 provides an example of adjacent play equipment without overlapping use zones. The use zone dimensions depend on the equipment type and users' age group. Use zone requirements for each type of play equipment are provided.

*a. Stationary Equipment.* Figure 3-3 illustrates a typical stationary equipment use zone. For toddlers, provide a minimum 1800 mm (72-inch) use zone from all sides of the equipment. For preschoolers and school age children, provide a minimum 2400 mm (96-inch) use zone from all sides of the equipment.

*b. To-Fro Swing Use Zone.* Swings require an ample fall zone to protect children who may fall or jump from a moving swing (fig 3-4). For swings, the use zone is equal to two times the height of the crossbeam. This use zone will be provided both in front of and behind the equipment. A 1800 mm (72-inch) use zone must also be provided on both sides of the swing. When two swings are located adjacent to each other, the swings may share the use zone at the side.

*c. Slide Use Zone.* For slides, use zone dimensions in front of the slide exit region and to both sides of the slide bed must be considered (fig 3-5). Depending

on the height of the slide, an 1800 to 2400 mm (72 to 96-inch) use zone in front of the slide exit region is required. An 1800 mm (72-inch) use zone is also required on both sides of the slide bed.

*d. Playhouses and Ba/ante Beams.* Some play equipment with a maximum accessible height under 750 mm (30 inches) may have overlapping use zones (fig 3-6). Two nonclimbable playhouses may have overlapping use zones. Two balance beams under 500 mm (20 inches) high may have overlapping use zones.

*e. Hard Surfaces.* Do not allow hard surfaces such as concrete or asphalt to intrude upon equipment use zones. Containment barriers for loose-fill surfacing and hard-surfaced pathways must be located outside of equipment use zones. If a pathway lies within an equipment use zone, it must be covered with safety surfacing. Dirt and grass are not acceptable fall zone surfacing materials.

*f. High Use Play Areas.* Sufficient space should be provided between all adjacent structures and individual play equipment for play and circulation. In settings where periodic overcrowding is likely, a supplemental circulation area beyond the use zone is recommended.

### 3-10. Sharp points and edges

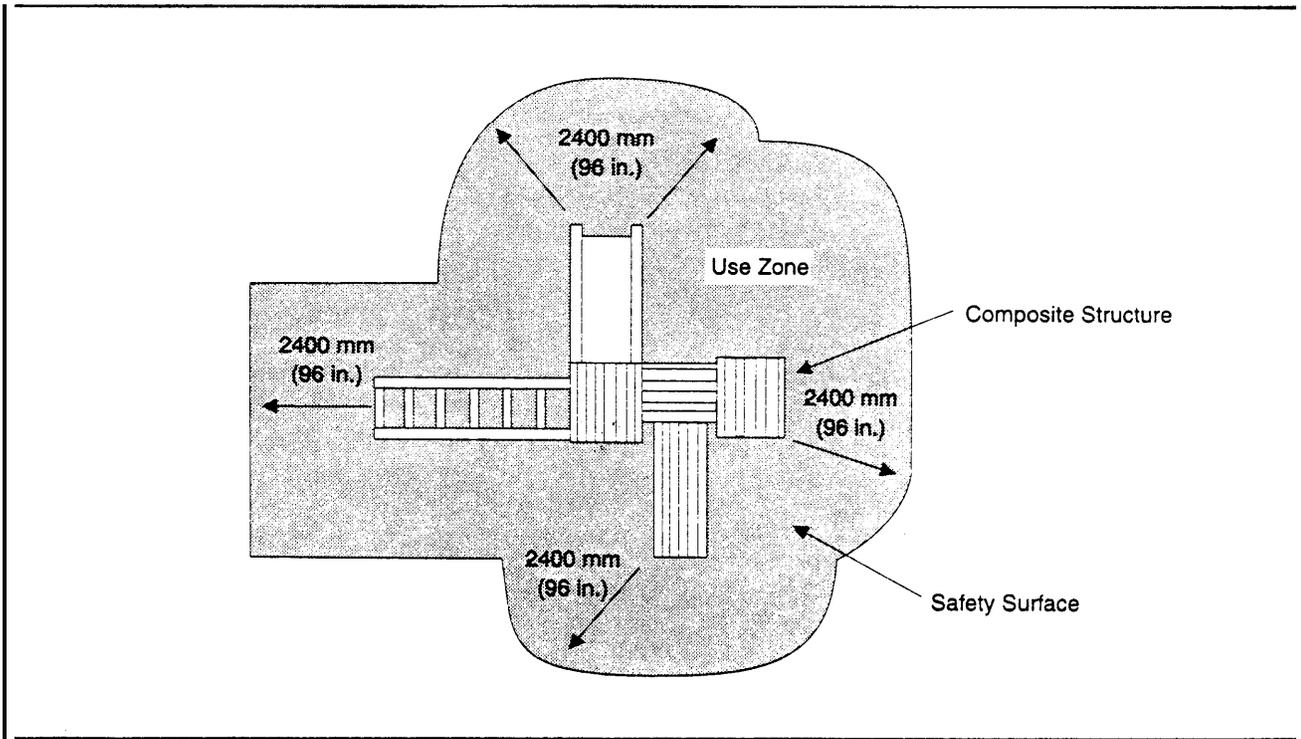


Figure 3-3: Typical stationary equipment use zone.

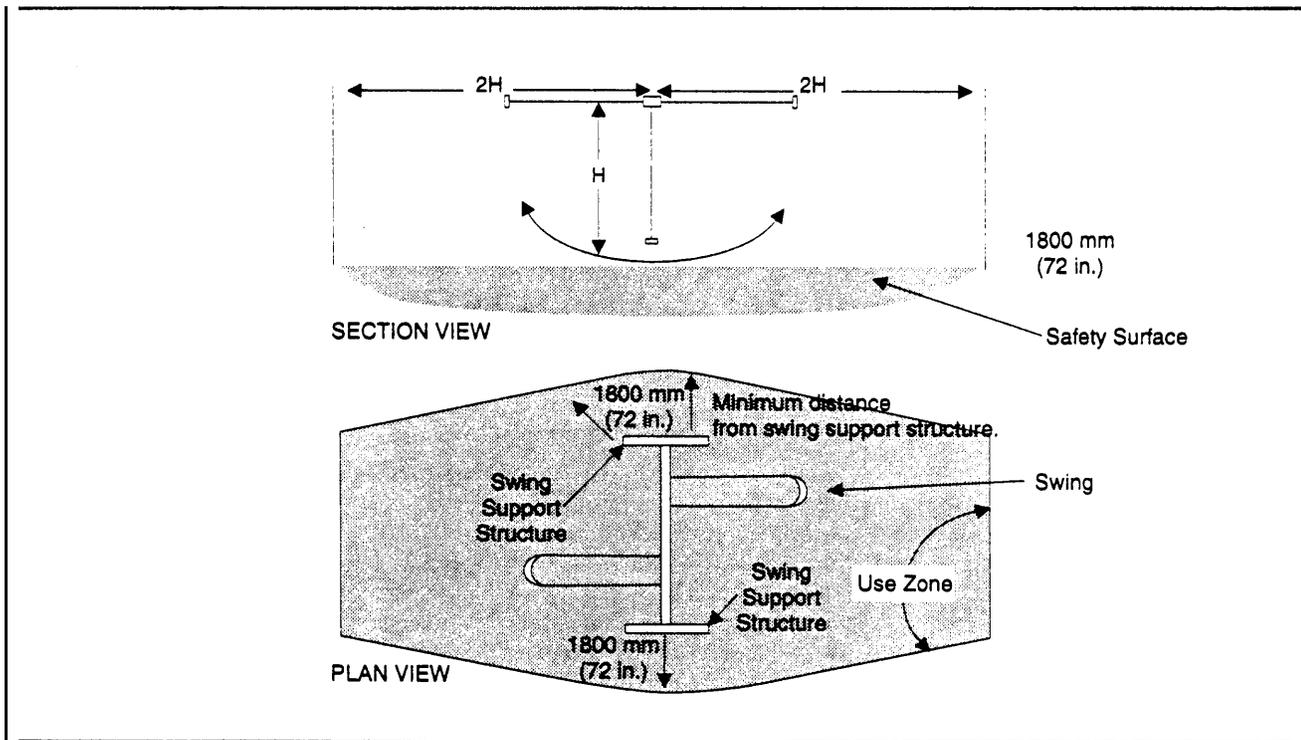


Figure 3-4: Typical swung use zone.

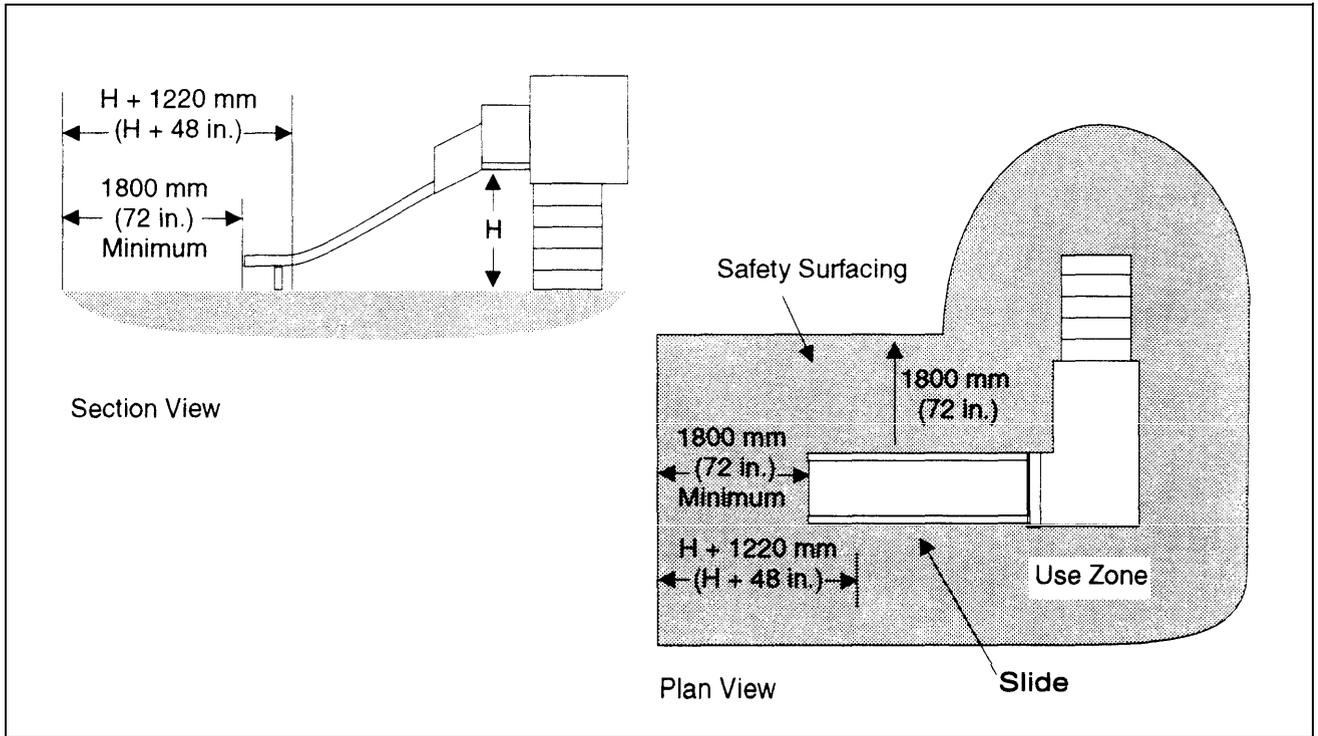


Figure 3-5: Typical slide use zone.

A sharp point or edge is one that can puncture or cut a user’s skin. Accessible sharp points or edges will not be provided in the outdoor play area. Manufacturers will provide verification that all points and edges meet ASTM F 1487 standards.

**3-11. Wood preservatives**

Wood play equipment should be naturally rot- and insect-resistant or should be treated to avoid deterioration. The CPSC has made recommendations on acceptable wood preservatives for children’s play areas as well as preservatives which must be avoided. These guidelines will be followed by the CDC.

a. *Inorganic Arsenicals*, The most common wood treatment used for playground equipment are the inorganic arsenical. These should be applied by the manufacturer or wood preserver in accordance with the specifications of the American Wood Preservers Association CI 7 standard. This standard states that the treated wood should be visibly free of residues which may contain high levels of arsenic. Chromated copper arsenate, which causes a greenish coloration, is acceptable if the dislodgeable arsenic on the surface of the wood is minimized. Treated wood which complies with these standards may be suitable for use in children’s play areas. However, arsenical treated wood must not be used in the construction of drinking fountains or other

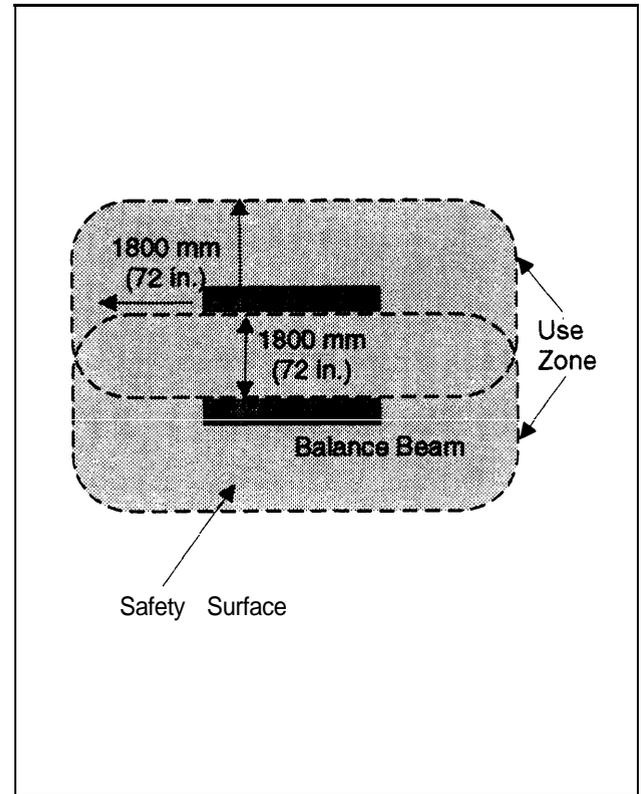


Figure 3-6: Typical overlapping use zones.

locations where it would contact public drinking water directly or indirectly.

*b. Other Acceptable Wood Preservatives.* According to CPSC, wood treated with other preservatives that have low toxicity may be suitable for use in children's play areas. These include copper or zinc naphthenates, and berates.

*c. Unacceptable Wood Preservatives.* CPSC has identified several wood preservatives as too toxic or irritating to be used as preservatives in children's play areas. These preservatives will not be used in CDC play areas. These include creosote, pentachlorophenol and tributyl tin oxide. Finishes that contain pesticides must also be avoided.

*d. Guarantee of Wood Treatment Safety.* When writing contract specifications, require a written guarantee that preservatives or other treatments applied to wood do not present a hazard to the consumer.

*e. Maintenance Precautions for Treated Wood.* Special health precautions may be needed for persons

performing woodworking tasks, such as sanding, sawing, and sawdust disposal, on wood treated with preservatives. Before performing these tasks, staff must consult the wood manufacturer regarding necessary health precautions and disposal information.

### **3-12. Weed and Pest Management Plan**

The weed and pest management plan for the CDC outdoor play area includes policies and practices designed to control pests. The effect of this plan on child health and safety is frequently overlooked. Because children are considered at greater risk than adults when exposed to toxic chemicals, weed and pest management must emphasize child safety. Current policies and practices must be evaluated by the play area inspection team. DPW shall be consulted to ensure that a weed and pest management plan which emphasizes child safety is developed for the CDC.

## CHAPTER 4

### ASSEMBLING THE INSPECTION TOOL KIT

#### 4-1. Introduction

The play area inspection tool kit should be assembled by the CDC Director and Installation Safety Officer. The tool kit is used along with the site-adapted DA Form 731 O-R, Child Development Center (CDC) Play Area Checklist, to inspect a play area. The tools allow staff to take simple measurements within the play area to determine compliance with child safety guidelines. A list of purchased tools necessary for play area inspections is provided.

#### 4-2. Tools needed for play area inspection

The tools needed for play area inspection are commercially available. The tools can be kept in a tote bag for ready access and portability during inspection. The play area inspection tools include:

- Eight-meter (25-foot) Tape Measure.*
- b. *Electronic Level,*
- c. *Six Hundred Millimeter (24-inch) Ruler.*
- d. *Torso Probe (fig 4-1)\*.*
- e. *Head Probe (fig 4-2)\*.*
- f. *Set of Three Protrusion Inspection Gauges (fig 4-3)\*.*
- g. *Protrusion Gauge for Swing Seats and Hardware (fig 4-4) \*.*
- h. *Articulated Web Stop Probe (fig 4-5)\*\*.*

–CPSC and ASTM recommended tools commercially available through NRPA (appendix A).

\*\*ASTM recommended tool commercially available through Underwriters Laboratories (appendix A).

#### 4-3. Using the specialized tools to inspect the play area

The following paragraphs describe how to inspect the play area for hazards using the specialized tools from the inspection tool kit. The Installation Safety Officer will ensure that the inspection team performs these techniques as stated.

#### 4-4. Head and neck entrapment

Any completely bounded opening that is accessible to children should meet all entrapment inspection requirements. The torso probe and head probe should be used to inspect openings for possible head and neck entrapments (fig 4-1 and 4-2). Openings between the safety

surfacing and the bottom edge of the play area element are exempt from entrapment requirements (fig 4-6).

a. *Completely Bounded Opening.* Any opening enclosed on all sides with a continuous perimeter is considered a completely bounded opening.

b. *Accessible Opening.* An opening is considered accessible when a torso probe maybe inserted into the opening to a depth of 100 mm (4 inches) or greater.

c. *Inspection Procedure for Rigid Openings.* The sides of rigid openings are fixed and do not change form. Examples of rigid openings include the openings between platforms, rung ladders, and steps. To pass the inspection procedure, the opening will not permit the torso probe to pass through it or the opening will permit both the torso and head probes to pass through it.

(1) *Using the torso probe.* The torso probe should be held parallel to the opening. The inspector will attempt to insert the probe into the opening. If the probe does not fit through the opening to a depth of 100 mm (4 inches) or more when rotated in any direction, the opening is not a potential entrapment and requires no further inspection. If the torso probe does pass through the opening, the inspector will inspect the opening with the head probe.

(2) *Using the head probe.* The head probe should be held parallel to the opening. The inspector should attempt to insert it through the opening. If the probe does not pass freely through the opening, the space is a potential entrapment.

d. *Inspection Procedure for Nonrigid Openings.* Nonrigid openings, such as openings in flexible nets, tarps, and plastic enclosures, change shape when pressure is applied. To pass the inspection, the opening must not permit the base of the torso probe to pass through or must permit both the torso probe and the head probes to pass through.

(1) *Using the torso probe.* The probe should be held parallel to the opening. The inspector will attempt to push or pull the probe through the opening using not more than 20 kg (50 pounds) of pressure. If the base of the probe does not fit through the opening when rotated in any direction, the opening is not a potential entrapment and requires no further testing. If the torso probe does pass through the opening, the inspector will inspect the opening with the head probe.

(2) *Using the head probe.* The head probe should be held parallel to the opening. The inspector will attempt to insert it through the opening. If the probe does not pass freely through the opening, the space is a potential entrapment.

e. *Inspection Procedure for Openings With Limited Depth.* An example of an opening with limited depth is a ladder with a barrier behind it. In openings with limited depth, there are two potential entrapment areas:

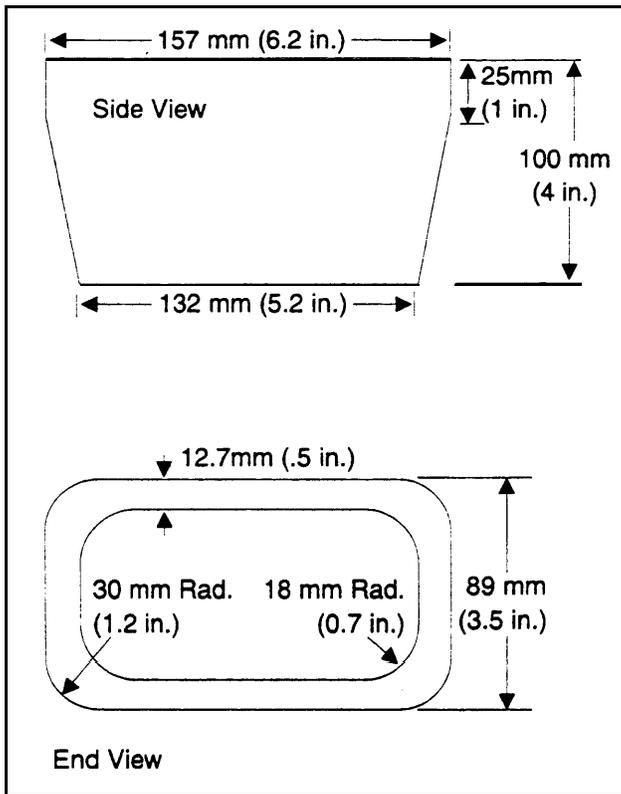


Figure 4-1: Torso probe.

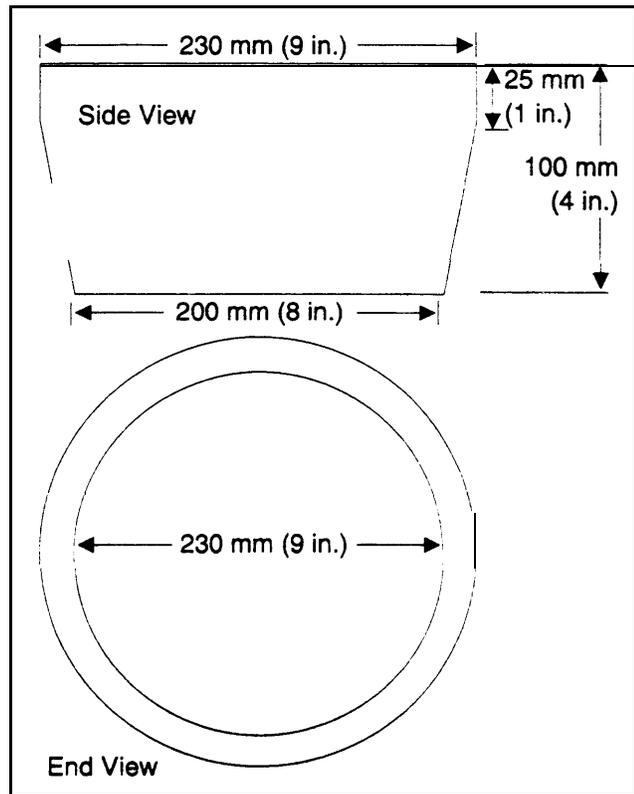


Figure 4-2: Head probe.

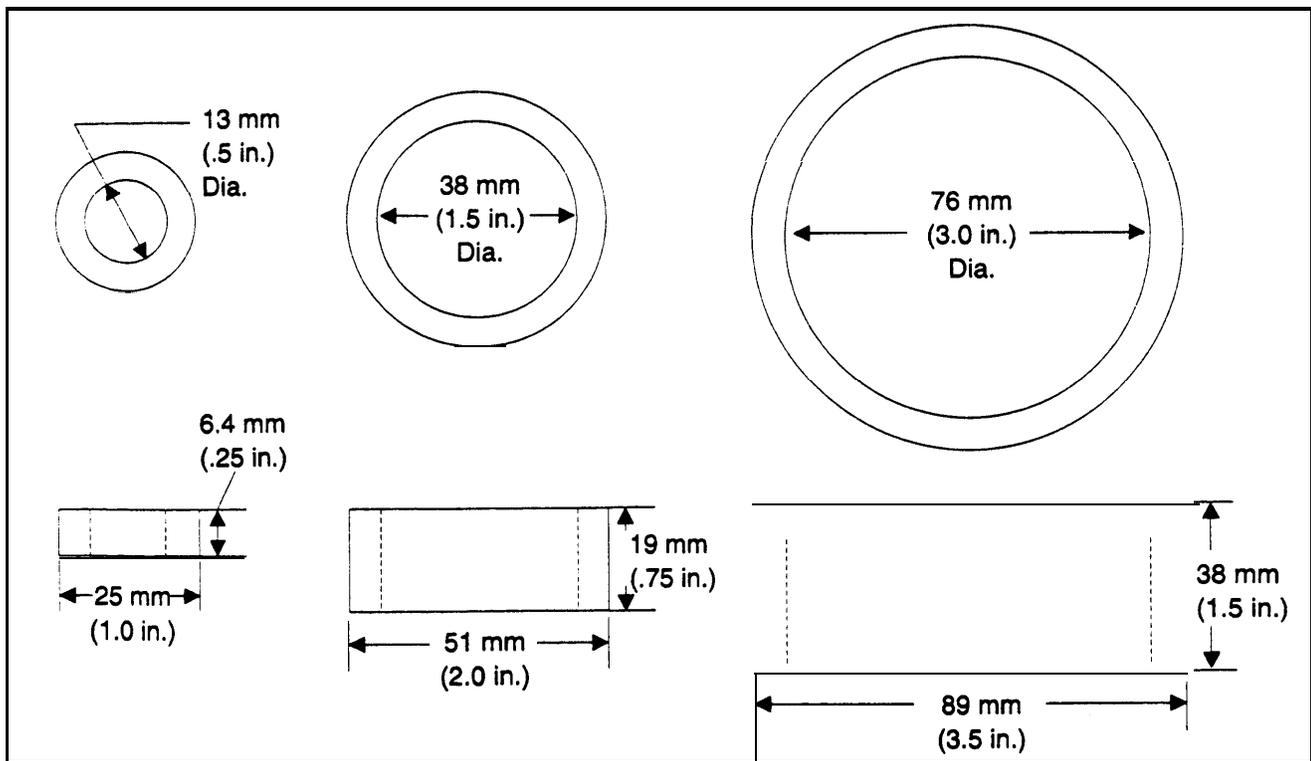


Figure 4-3: Set of three protrusion inspection gauges.

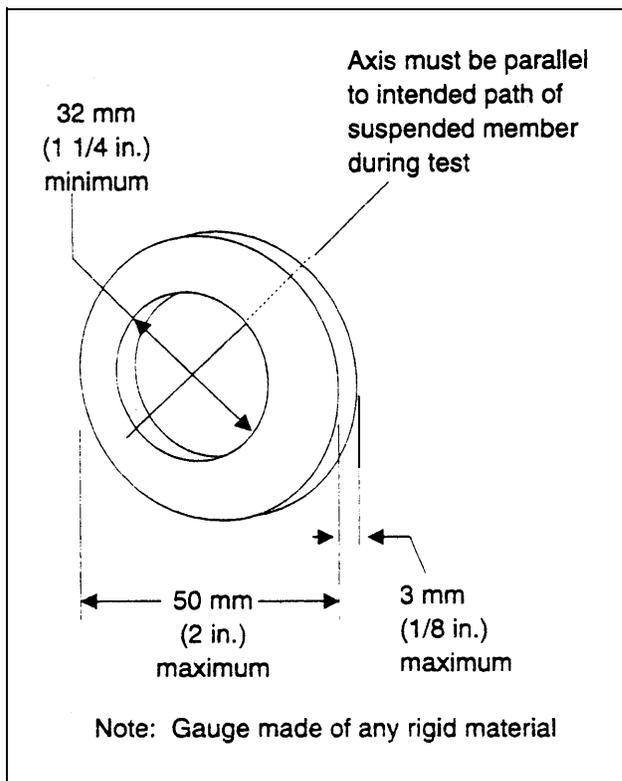


Figure 4-4: Protrusion gauge for swing seats and hardware.

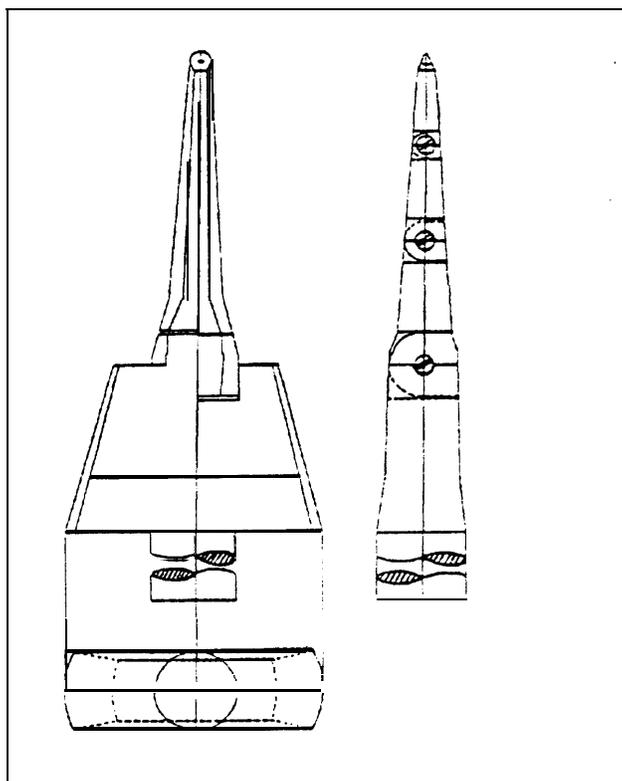


Figure 4-5: Articulated web stop probe.

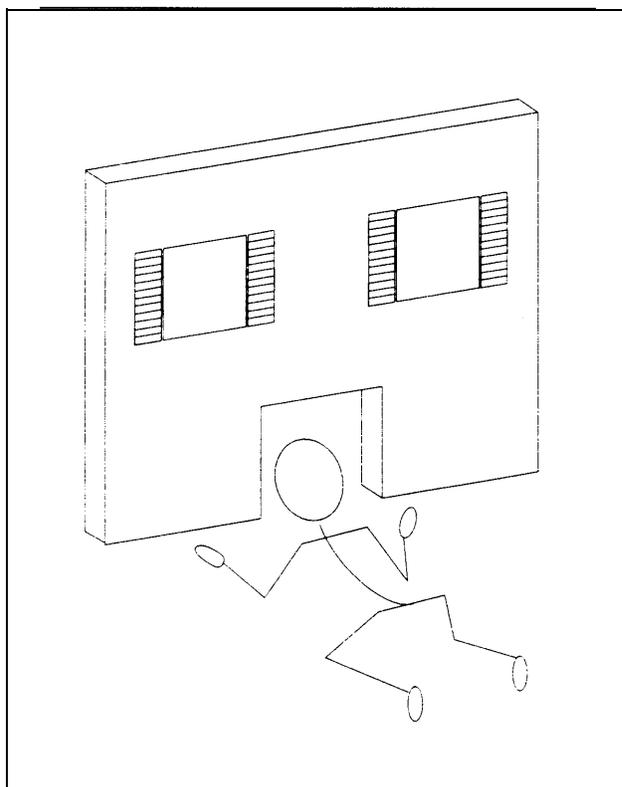


Figure 4-6: Surfacing serves as bottom edge of opening.

a vertical opening (A) and a horizontal opening (B) (fig 4-7). The inspection "procedure emulates a child crawling into the vertical opening feetfirst and passing downward through the horizontal space. To pass the inspection, the vertical opening (A) will not permit the torso probe to pass through it, or the torso probe may pass through the vertical opening (A), but not the horizontal opening (B). If the torso probe passes through both openings, the head probe will also pass through both openings.

(1) *Inspecting vertical opening (A) with the torso probe.* The torso probe should be used to inspect the vertical opening (A). The probe should be held parallel to the opening. The inspector will attempt to insert the probe into the opening. If the probe does not fit into the opening when rotated in any direction, the opening is not a potential entrapment and requires no further inspection. If the torso probe does pass through the opening, the inspector will inspect the horizontal opening (B) with the torso probe.

(2) *Inspecting horizontal opening (B) with the torso probe.* The torso probe should be held horizontally with the longest end of the tool against the edge of the vertical opening (A). The inspector will attempt to insert the probe into the opening. If the probe does not fit through the opening, the space is not large enough for a child to completely enter it. It is not an entrapment. If the torso probe does pass through the horizontal

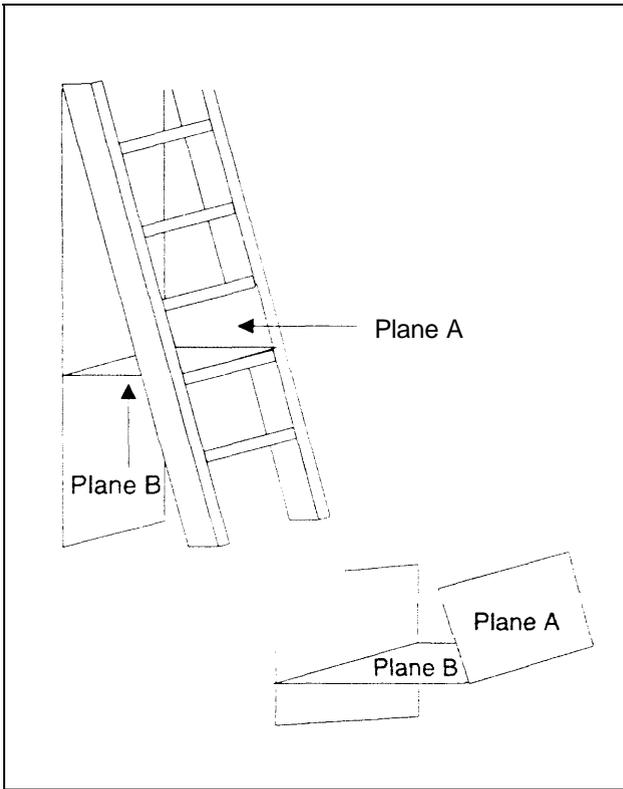


Figure 4-7: Opening with limited depth.

opening (B), the inspector will inspect both openings (A and B) with the head probe.

(3) *Inspecting the vertical and horizontal openings with the head probe.* The head probe should be held parallel to the openings A and B. The inspector will attempt to insert it through the openings. If the head probe passes through both spaces, there is no entrapment. If the probe does not pass freely through both openings, the space is a potential head and neck entrapment.

f. *Angular Openings.* Angles may be formed by adjacent intersecting surfaces or by surfaces that would intersect if projected. All angles formed by the surfaces of an opening should be at least 55° (fig 4-8). The head probe will be used to inspect angular openings for potential head and neck entrapments.

(1) *Inspecting angular openings with the head probe.* The distance between angle surfaces should be greater than 230 mm (9 inches) to prevent head entrapment. To measure compliance, the head probe should be inserted between the angle surfaces. It should not contact both surfaces of the angle simultaneously when the probe is rotated to any orientation.

(2) *Inspecting inverted angles.* An angle is inverted if the lower edge of the angle is horizontal or slopes downward (fig 4-8). An inverted angle cannot entrap the head or neck, and is exempt from requirements for angular openings.

(3) *Inspecting an angle with a filled apex.* To measure compliance, the head probe should be inserted between the angle surfaces. If an angle less than 55° is infilled so that the head probe cannot contact both surfaces of the angle simultaneously when the probe is rotated to any orientation, the angle is not considered an entrapment hazard (fig 4-9).

#### 4-5. Protrusions

Hardware, pipes, posts, or other structural members that extend in any direction from play equipment, site elements, or site furnishings should be inspected with the set of three protrusion gauges (fig 4-3). A separate protrusion gauge is used to inspect swing seat and swing hardware protrusions (fig 4-4). A measuring tape or ruler is also required. A protrusion is considered inaccessible and exempt from protrusion requirements when recessed or located so that a protrusion gauge cannot be placed over it.

a. *Inspection Procedure for Protrusions.* Protrusions should be tested by successively placing each of the three test gauges over the protrusion. If the protrusion fits inside any gauge, the protrusion should not extend beyond the face of the gauge in order to pass the inspection. The inspector should also visually inspect each protrusion to ensure that no protrusion increases in diameter from the surface to the exposed end. Any caps or coverings should also be visually inspected to ensure that these caps fit flush against the nut or surrounding surface.

b. *Inspection Procedure for Compound Protrusions.* For compound protrusions, the inspector will successively place gauges over increasing diameters to determine compliance (fig 4-1 O). To pass the inspection, protrusions should not extend beyond the face of any of the three test gauges.

c. *Inspection Procedure for Vertical Protrusions.* If a vertical protrusion fits within any of the three test gauges, the length of the protrusion should be measured. To pass the inspection, the protrusion should not project more than 3 mm (1/8-inch) above the adjacent horizontal surface.

d. *Inspection Procedure for Compound Vertical Protrusions.* For compound vertical protrusions, the length of each individual protrusion surface should be measured (fig 4-1 1). To pass the inspection, the length of each individual protrusion surface should not project more than 3 mm (1/8-inch) above the adjacent horizontal surface. Next, the compound vertical protrusions should be tested by successively placing each of the three protrusion test gauges over the protrusion. To pass the inspection, the total length of the protrusion should not extend beyond the face of any of the three test gauges.

e. *Inspection Procedure for Swing Seat and Swing Hardware Protrusions.* The swing protrusion test gauge should be placed over the protrusion (fig 4-4). To

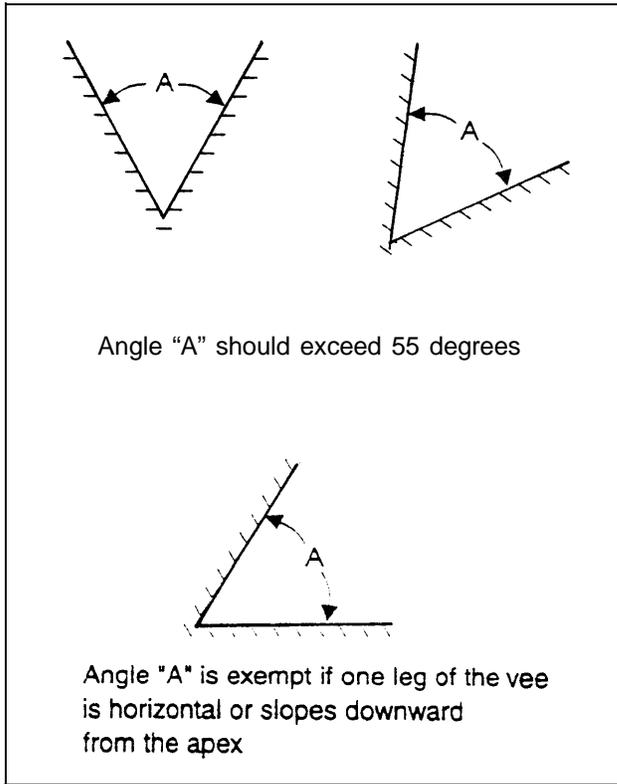


Figure 4-8: Recommendations for angles.

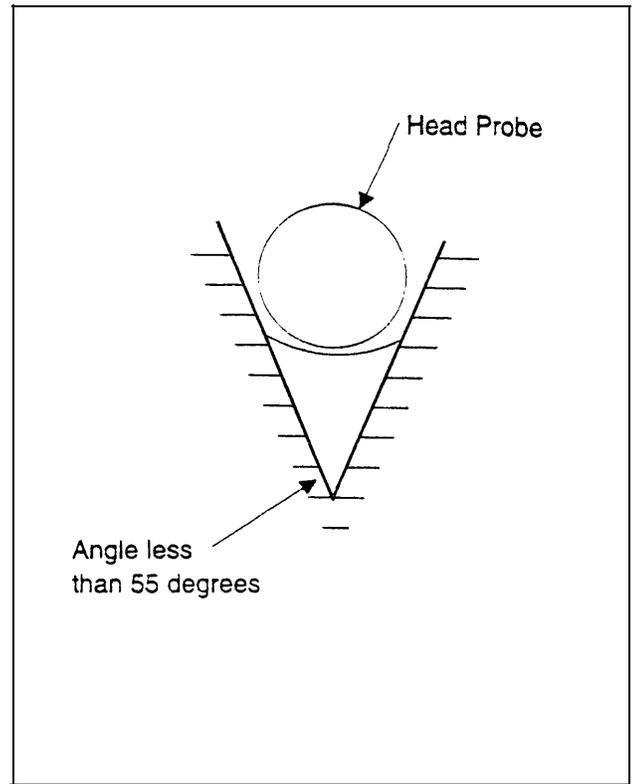


Figure 4-9: Filled apex for angles less than 55 degrees.

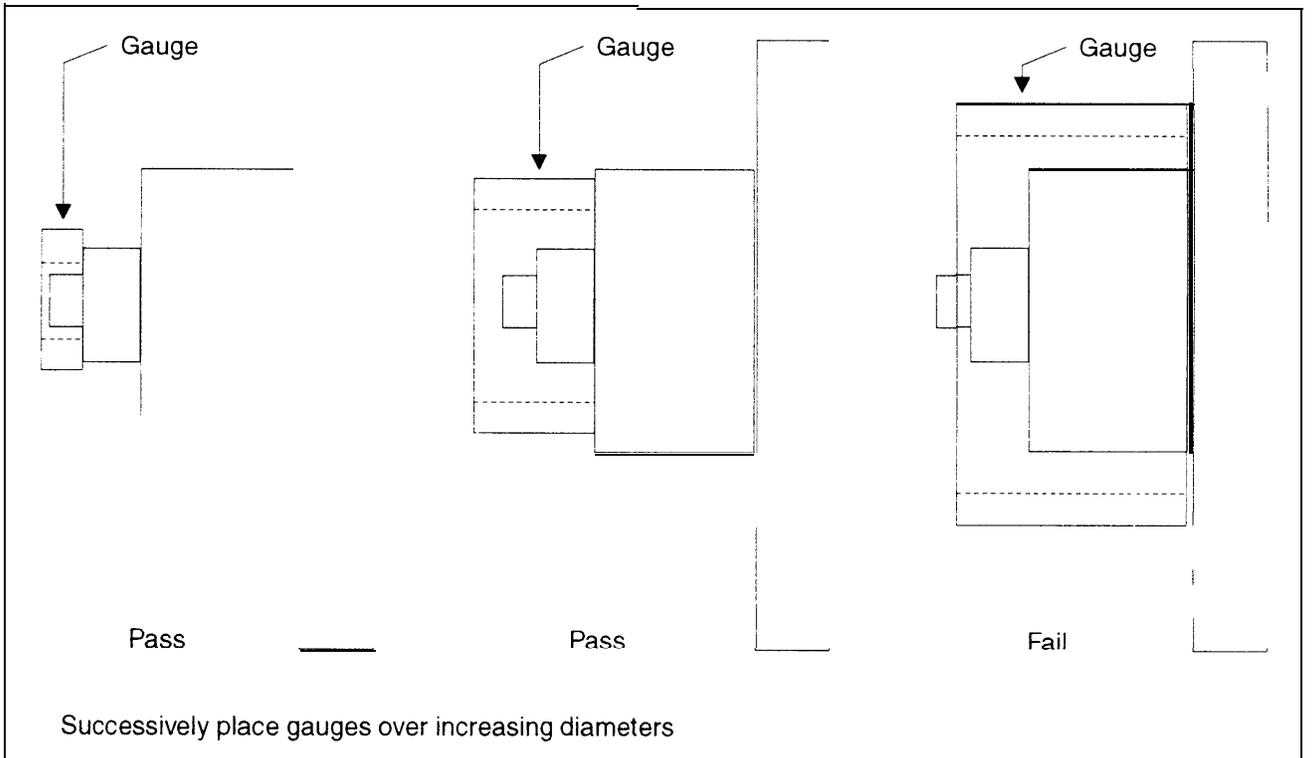


Figure 4-10: Compound protrusions.

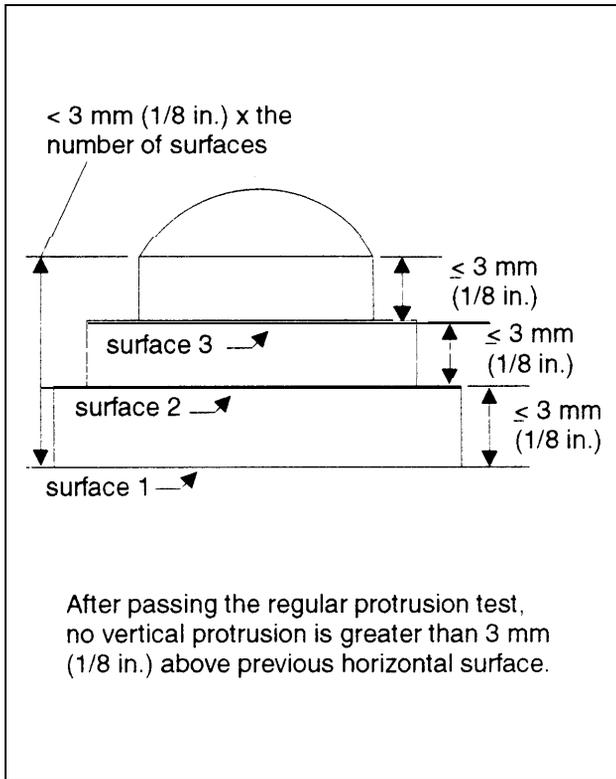


Figure 4-11: Compound vertical protrusions.

pass the inspection, no protrusion should extend beyond the face of the gauge.

#### 4-6. Pinch, crush, and shear points

Openings that may provide access to potential pinch, crush, and shear points should be inspected with the articulated web stop probe (fig 4-5). A tape measure will also be needed.

a. *Inspection Procedure for Openings With a Minor Dimension of Less Than 25 mm (1-inch).* The inspector will insert the articulated web stop probe point first into the opening in all possible positions with a force not to exceed 4 N (1 pound)). To pass the inspection, the finger probe should not touch any pinch, crush, or shear point.

b. *Inspection Procedure for Openings With a Minor Dimension of 25 mm (1-inch) or Greater.* When potential pinch, crush, or shear points are covered with material that contains openings of 25 mm (1-inch) or greater, measure the distance from the opening to the potential pinch, crush, or shear point. To pass the inspection, the distance measure should meet the requirements of table 4-1.

Table 4-1: Minimum distance to pinch, crush, or shear point.

Minimum Dimensions of Opening		Minimum Distance from Opening to Part	
Millimeters	Inches	Millimeters	Inches
25	1	175	6-1/2
30	1-1/4	200	7-1/2
40	1-1/2	300	12-1/2
50	1-7/8	400	15-1/2
50	2-1/8	450	17-1/2
>50 and <150	>2-1/8 and <6	750	30

## CHAPTER 5 INSPECTING THE PLAY AREA

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### 5-1. Introduction

Once a customized inspection and maintenance manual is assembled for each CDC play area, the play area inspection program can begin. This chapter describes how to inspect the CDC outdoor play area. The purpose of play area inspection is to identify child safety hazards. Hazards can then be corrected before accidents occur or health is endangered.

### 5-2. Four types of play area inspections

Four types of play area inspections comprise a comprehensive inspection program: baseline inspection, daily visual inspection, periodic inspection, and annual inspection. Each inspection has a specific purpose and level of complexity. The site-adapted Child Development Center (CDC) Play Area Checklist, DA Form 731 O-R, must be completed during baseline, periodic, and annual inspections. Daily visual inspections simply require that a log be initiated daily to verify that the inspection was completed.

### 5-3. The play area inspection team

The play area inspection program is based on a team approach. The team members responsible for each type of inspection vary. All inspection team staff must be trained to accurately conduct inspections. The play area inspection team for each type of inspection is identified (fig 1-4 and 1-5).

### 5-4. Preparing for the play area inspection

To prepare for a play area inspection, complete the following tasks:

*a. Assemble the Supplies Needed.* For each play area to be inspected, assemble the following supplies:

(1) *Child Development Center (CDC) Play Area Checklist, DA Form 7310-R.* The site-adapted DA Forms 731 O-R for baseline, periodic, and annual checklists and daily visual inspection lists are included in the customized inspection and maintenance manual for each play area. The forms will be locally reproduced.

(2) *Child Development Center (CDC) Safety Inspection Summary, DA Form 7308-R.* DA Form 7308-R is used to report play area inspection results and to record hazards (chap 6). A copy of this form is inserted at the back of this manual. It will be locally reproduced. Complete one copy of DA Form 7308-R

for each baseline, periodic, or annual inspection. Use DA Form 7308-R for daily visual inspections when any hazards are noted which cannot be immediately corrected.

(3) *The play area inspection toolkit.* The play area inspection tool kit is needed to accurately answer some inspection questions.

*b. Schedule the Inspection.* The CDC Director should contact the inspection team members and schedule the inspection.

### 5-5. Organizing play area records for baseline, periodic, and annual inspections

During baseline, periodic, and annual inspections, certain play area records are reviewed by the inspection team for compliance with child safety guidelines. Records which must be assembled prior to each inspection are as follows:

*a. Baseline Inspections.* The following records are needed to conduct baseline inspections:

(f) *Play area materials.* When a baseline inspection is conducted, information requested about existing play area materials on the site-adapted DA Form 731 O-R may not be readily available. Additional research may be necessary and should be conducted before the inspection. This research may include: contacting manufacturers to identify wood preservatives or lead content of paint, obtaining plant samples for identification of toxicity, or contacting manufacturers of synthetic surfacing to determine whether or not a product meets ASTM F 1292 requirements for impact attenuation.

(2) *Hazards.* Develop a list of hazards identified during the past year. This list will be reviewed by the baseline inspection team.

(3) *Maintenance.* Assemble work orders requested and completed during the past year. The inspection team will review these work orders to ensure that maintenance is being performed to correct hazards.

(4) *Paints.* Develop a list of paints used in the play area during the past year. The inspection team will review this list for lead content and toxicity.

(5) *Weed and pest management plan.* The baseline inspection team will review the weed and pest management plan for compliance with child safety guidelines.

(6) *Product updates.* The CDC Director will contact the play equipment manufacturer and request product update information for all equipment installed in the play area. This information will include any modifications recommended by the play equipment

*b. Periodic/inspections.* The following records are needed to conduct periodic inspections:

*(f) Hazards.* Develop a list of hazards identified during the past month. This list will be reviewed by the periodic inspection team.

*(2) Maintenance.* Assemble work orders requested and completed in the past month. The inspection team will review these work orders to ensure that maintenance is being performed to correct hazards.

*c. Annual Inspections.* The following records are needed to conduct annual inspections:

*(1) Hazards.* Develop a list of hazards identified during the past year. This list will be reviewed by the annual inspection team.

*(2) Maintenance.* Assemble work orders requested and completed during the past year. The inspection team will review these work orders to ensure that maintenance is being performed to correct hazards.

*(3) Paints.* Develop a list of paints used in the play area during the past year. The inspection team will review this list for lead content and toxicity.

*(4) Weed and pest management plan.* The annual inspection team will review the weed and pest management plan for compliance with child safety guidelines.

*(5) Product updates.* The CDC Director will contact the play equipment manufacturer and request product update information for all equipment installed in the play area. This information will include any modifications recommended by the play equipment manufacturer to improve play equipment safety. The information will be reviewed by the inspection team.

## 5-6. Conducting baseline, periodic, and annual inspections

Separate DA Forms 731 O-R are used to conduct baseline, periodic, and annual inspections. A sample of a completed form is provided (fig 5-1). For each type of written inspection, certain basic procedures are followed to complete the DA Form 731 O-R. These procedures are described below.

*a. Date.* In Block 3, fill in the date of inspection.

*b. Inspection Questions.* All questions on the site-adapted DA Form 731 O-R are formatted as “Yes” or “No” questions. The inspector will check “Yes”, “No”, or “NA” in response to each inspection question in Block 5. Sometimes the use of an inspection tool may be required to determine the appropriate response.

*(1) Answers to inspection questions.* All “Yes” answers meet inspection requirements. A “No” answer indicates a maintenance need or potential hazard. A “No” answer requires an immediate follow-up action by

the inspector. “NA” may be circled to indicate any nonapplicable questions.

*(2) Making notations.* As the inspector responds to each question during the inspection, additional handwritten notes can be added as necessary to describe any hazards and their location. These notes may assist in repotting hazards and completing work orders.

*c. Play Areas with Multiple Elements of One Type.* If more than one of a particular element is included in the play area, one set of inspection questions can be used to inspect each individual element or one set of inspection questions can be used for all elements of the same type during baseline, periodic, or annual inspections.

*(1) Using DA Form 731 O-R when a separate set of inspection questions is used for each element.* If a separate set of inspection questions is used for each individual element, the location of the element to be inspected will be indicated after the name of the element on the site-adapted DA Form 731 O-R (fig 5-2).

*(2) Using DA Form 731 O-R when one set of inspection questions is used for multiple elements.* If one set of inspection questions is used for multiple elements of one type, the number of elements to be inspected will be indicated after the name of the element on the site adapted DA Form 731 O-R (fig 5-3).

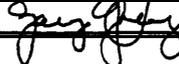
*b. Inspector’s Signatures.* In Block 6, staff completing the inspection will sign the form.

## 5-7. Conducting daily visual inspections

The daily visual inspection is conducted by CDC staff using the site-adapted daily visual inspection tools before children go outdoors to play each day. The daily visual inspection tools include the daily visual inspection list and the daily visual inspection log. These tools can be kept in a convenient place in the CDC, such as on a clipboard near the building exit leading to the specified play area. After completing the inspection, the staff will initial the site-adapted daily visual inspection log to verify that the inspection has been completed. Techniques used to inspect the play area are described in *Playing It Safe*, the training video which accompanies this manual.

## 5-8. Hazard management and inspection reporting

Depending on the type of inspection performed and hazards noted, completing the Child Development Center Play Area Safety Inspection Summary, DA Form 7308-R, may be required after the inspection. All hazards identified in the play area require immediate corrective action. Procedures for inspection reporting and hazard management are presented in chapter six.

CHILD DEVELOPMENT CENTER (CDC) PLAY AREA CHECKLIST For use of this form, see TM 5-663; the proponent agency is USACE			Page <u>1</u> of <u>1</u>
<p><b>INSTRUCTIONS:</b> Use this form for inspections of Child Development Center (CDC) play areas. If any of the inspection questions are answered NO, the appropriate corrective action must be performed. A CDC Play Area Safety Inspection Summary, DA Form 7308-R, must be completed for each play area after every baseline, periodic, or annual inspection.</p>			
1. CDC NAME <b>Ft. Strong CDC</b>		2. PLAY AREA <input checked="" type="checkbox"/> Infant <input checked="" type="checkbox"/> Toddler <input checked="" type="checkbox"/> Preschool <input checked="" type="checkbox"/> School Age	
3. TYPE OF INSPECTION <input checked="" type="checkbox"/> Baseline <input type="checkbox"/> Annual <input type="checkbox"/> Periodic: (Circle one)      Monthly   Bimonthly   Quarterly		4. DATE OF INSPECTION <b>MAY 28, 1995</b>	
YES	NO	NA	5. INSPECTION QUESTIONS
			<b>1. Fencing and gates</b>
✓			1. Are the fencing and gates free from loose, missing, or broken parts?
✓			2. Are the fencing and gates free from vandalism?
✓			3. Are metal materials free from rust, corrosion or bending of members?
	✓		4. Are metal materials free from rough metal, sharp wires, and sharp edges or corners? <b>SHARP WIRE ON BOTTOM OF FENCE - W. SECTION.</b>
✓			5. Is all hardware present, securely attached and without significant wear?
			Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.
✓			6. Are fence fabrics intact with all tension wires and connections secure?
	✓		7. Are gates well-lubricated and locking components in working order? <b>GATES SQUEAK</b>
✓			8. Is the distance between fence and gate materials and the ground surface less than 75 mm (3 inches)?
6. INSPECTORS' SIGNATURES			
a.			b. <b>Paul Strong</b>
c.			d. <b>Janet Rouse</b>
e.			f.
g.			h.

DA FORM 7310-R, JAN 97

Figure 5-1: Sample of a completed DA Form 7310-R illustrating an actual inspection.

7. CDC NAME <b>Ft. Strong CDC</b>			8. PLAY AREA <input type="checkbox"/> Infant <input checked="" type="checkbox"/> Toddler <input checked="" type="checkbox"/> Preschool <input type="checkbox"/> School Age		Page <u>1</u> of <u>1</u>
9. TYPE OF INSPECTION <input checked="" type="checkbox"/> Baseline <input type="checkbox"/> Annual <input type="checkbox"/> Periodic: (Circle one) Monthly Bimonthly Quarterly			10. DATE OF INSPECTION <b>MAY 28, 1995</b>		
YES	NO	NA	11. INSPECTION QUESTIONS		
			<b>26. Playhouse (South)</b>		
<input checked="" type="checkbox"/>			1. Is the playhouse free from loose, missing, or broken parts?		
<input checked="" type="checkbox"/>			2. Is the playhouse free from vandalism?		
<input checked="" type="checkbox"/>			3. Is the playhouse free of wet or icy surfaces when children are brought outdoors to play?		
<input checked="" type="checkbox"/>			4. Is the walking surface free from loose and slippery material, e.g., sand, wood chips, leaves, etc?		
<input checked="" type="checkbox"/>			5. Does the playhouse have a 1800 mm (72-inch) use zone free from any obstruction, including portable climbing equipment, trikes, and wheeled toys?		
		<input checked="" type="checkbox"/>	6. Are wood materials free from warping, wood rot, insect damage, and checking (cracks more than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width)?		
<input checked="" type="checkbox"/>			7. Are metal materials free from rust, corrosion or bending of members?		
	<input checked="" type="checkbox"/>		8. Are plastic materials unbroken and without chips or cracks, particularly at joints and connections? <b>CRACK IN NW WALL PANEL.</b>		
<input checked="" type="checkbox"/>			9. Are wood materials free from splinters; loose or missing knots; and sharp edges or corners?		
<input checked="" type="checkbox"/>			10. Are metal materials free from rough metal and sharp edges or corners?		
<input checked="" type="checkbox"/>			11. Is all hardware present, securely attached, and without significant wear?		
			Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.		
<input checked="" type="checkbox"/>			12. Is the playhouse free from chipped, peeling or worn paint?		

PAGE 2, DA FORM 7310-R, JAN 97

Figure 5-2: Sample of a completed DA Form 7310-R illustrating an actual inspection consisting of separate inspection questions for each individual element.

7. CDC NAME <b>Ft. Strong CDC</b>			8. PLAY AREA <input checked="" type="checkbox"/> Infant <input checked="" type="checkbox"/> Toddler <input checked="" type="checkbox"/> Preschool <input checked="" type="checkbox"/> School Age			Page <u>1</u> of <u>1</u>
9. TYPE OF INSPECTION <input checked="" type="checkbox"/> Baseline <input type="checkbox"/> Annual <input type="checkbox"/> Periodic: (Circle one) Monthly Bimonthly Quarterly			10. DATE OF INSPECTION <b>MAY 28, 1995</b>			
YES	NO	NA	11. INSPECTION QUESTIONS			
			<b>6. Trees (6)</b>			
<input checked="" type="checkbox"/>			1. Is the tree free from broken stakes and protruding wires?			
<input checked="" type="checkbox"/>			2. Does the tree receive sufficient water (25 mm (1-inch) per week) for health and vigor?			
	<input checked="" type="checkbox"/>		3. Is the tree free from broken, dead, or sharp branches? <b>DEAD BRANCH ON TREE AT N END OF PLAY AREA.</b>			
<input checked="" type="checkbox"/>			4. Is the tree free from roots which may cause trip hazards?			
<input checked="" type="checkbox"/>			5. Is the tree free from branches that protrude into the pathway overhead at a height of 2000 mm (80 inches)?			
		<input checked="" type="checkbox"/>	6. Are stakes and guy wires adjusted and removed when appropriate to prevent plant damage?			
<input checked="" type="checkbox"/>			7. Is the tree pruned to maintain a natural looking appearance, maintain or reduce size, rejuvenate plants, and remove hazards?			
	<input checked="" type="checkbox"/>		8. Is a minimum 900 mm (36-inch) diameter bed of organic mulch maintained around the tree? <b>NO MULCH AROUND TREES.</b>			
	<input checked="" type="checkbox"/>		9. Is organic mulch maintained at a 100 mm (4-inch) depth? <b>NO MULCH AROUND TREES</b>			
<input checked="" type="checkbox"/>			10. Is insect infestation evaluated and treated by Certified Pesticide Applicators as described in AR 420-76?			
<input checked="" type="checkbox"/>			11. Is plant disease evaluated and treated by Certified Pesticide Applicators as described in AR 420-76?			
		<input checked="" type="checkbox"/>	12. Is the tree fertilized using a subsurface method to maintain a healthy condition?			
		<input checked="" type="checkbox"/>	13. Are proper planting techniques employed to prevent plant and trunk damage?			
<input checked="" type="checkbox"/>			14. Is the tree species nonpoisonous?			
<input checked="" type="checkbox"/>			15. Are trees free from fruit and berries?			

PAGE 2, DA FORM 7310-R, JAN 97

Figure 5-3: Sample of a completed DA Form 7310-R illustrating an actual inspection consisting of one set of inspection questions for multiple elements of one type.

## CHAPTER 6

### HAZARD MANAGEMENT AND INSPECTION REPORTING

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#### 6-1. Introduction

All hazards noted on the CDC outdoor play area require prompt corrective action. Children using the play area will not be exposed to known hazards. This chapter describes how to manage hazards and report inspection results.

#### 6-2. Managing hazards

For all hazards noted during inspection or operation of the play area, perform one of the following corrective actions:

*a. Immediately Perform a Maintenance Task.* Perform the maintenance task needed to correct the hazard. If repair by DEH is required, immediately notify the CDC Director.

*(1) Confirm the appropriate maintenance task.* Tasks required to correct hazards are listed on the site-adapted maintenance schedules. The maintenance schedules are included in the customized inspection and maintenance manual for that play area.

*(2) Ensure quality repairs.* Repairs must be made with appropriate tools and recommended parts. Staff must be qualified to complete repairs properly. Improper repairs are hazards themselves,

*b. Close the Play Area Element and Prepare a Work Order.* When hazards are present, the affected elements within the play area or, if necessary, the entire play area, will be closed to use until hazards can be corrected.

#### 6-3. Using the maintenance schedules to correct hazards

The site-adapted maintenance schedules should be used as a reference by inspectors, the Installation Safety Officer, DPW, and key staff to identify maintenance standards, maintenance tasks needed to correct hazards, and maintenance responsibilities. A sample site-adapted maintenance schedule is provided (fig 2-12).

*a. Maintenance Standards.* Maintenance standards describe the minimum acceptable condition that will be met for child health and safety.

*b. Maintenance Tasks.* Maintenance tasks describe the corrective action required to eliminate hazards and meet maintenance standards.

*c. Maintenance Responsibilities.* The staff responsible for performing each maintenance task is identified on the site-adapted maintenance schedule,

#### 6-4. Site-adapted baseline, periodic, and annual maintenance schedules

Separate site-adapted maintenance schedules address each element within the play area. These maintenance schedules are divided into three sections to correlate with scheduled inspections: baseline, periodic, and annual (fig 2-12).

*a. Site-adapted Baseline Maintenance Schedule.* The baseline inspection identifies play area elements which do not meet safety requirements or maintenance standards. If any hazard is noted during the baseline inspection, the play area may require redesign, the element may require replacement, or corrective maintenance may be needed. Specific maintenance tasks to correct hazards are not itemized on the site-adapted baseline maintenance schedule. Hazard management will be determined by the Installation Safety Officer, DEH, and key staff,

*b. Site-adapted Periodic and Annual Maintenance Schedules.* There is a one-to-one correlation between maintenance standards and tasks on the site-adapted maintenance schedules and the questions included on the site-adapted DA Form 731 O-R, Child Development Center (CDC) Play Area Checklist, for periodic and annual inspections. The same numbering system is used for inspection questions on the site-adapted forms and the corresponding maintenance standard and task on the site-adapted maintenance schedule. Use these schedules to correct hazards.

*(1) Figure 6-1.* Figure 6-1 provides a sample of a completed DA Form 731 O-R for periodic inspection. Hazards were noted during the inspection. Questions four and seven do not meet inspection requirements.

*(2) Using a maintenance schedule.* By referring to the maintenance standards and tasks numbered four and seven on the site-adapted periodic maintenance schedule (fig 6-2), the required maintenance standard and the task needed to correct hazards can be identified. The staff responsible for performing maintenance tasks are the DPW for number four and the CDC for number seven,

#### 6-5. Site-adapted daily maintenance schedule

The site-adapted daily maintenance schedule addresses maintenance standards, maintenance tasks, and maintenance responsibilities for all elements included in the play area. As is the case with the site-adapted periodic and annual maintenance schedules, there is a one-to-one correlation between maintenance

CHILD DEVELOPMENT CENTER (CDC) PLAY AREA CHECKLIST For use of this form, see TM 5-663; the proponent agency is USACE			Page <u>1</u> of <u>1</u>
<p><b>INSTRUCTIONS:</b> Use this form for inspections of Child Development Center (CDC) play areas. If any of the inspection questions are answered NO, the appropriate corrective action must be performed. A CDC Play Area Safety Inspection Summary, DA Form 7308-R, must be completed for each play area after every baseline, periodic, or annual inspection.</p>			
<p>1. CDC NAME <b>Ft. Strong CDC</b></p>		<p>2. PLAY AREA  <input type="checkbox"/> Infant   <input type="checkbox"/> Toddler   <input checked="" type="checkbox"/> Preschool   <input type="checkbox"/> School Age                 </p>	
<p>3. TYPE OF INSPECTION  <input type="checkbox"/> Baseline   <input type="checkbox"/> Annual  <input checked="" type="checkbox"/> Periodic: (Circle one)   <input checked="" type="checkbox"/> Monthly   <input type="checkbox"/> Bimonthly   <input type="checkbox"/> Quarterly                 </p>		<p>4. DATE OF INSPECTION <b>MAY 28, 1995</b></p>	
YES	NO	NA	5. INSPECTION QUESTIONS
			<b>1. Fencing and gates</b>
✓			1. Are the fencing and gates free from loose, missing, or broken parts?
✓			2. Are the fencing and gates free from vandalism?
✓			3. Are metal materials free from rust, corrosion or bending of members?
	✓		4. Are metal materials free from rough metal, sharp wires, and sharp edges or corners? <b>SHARP WIRE CENTER FENCE - WEST</b>
✓			5. Is all hardware present, securely attached and without significant wear?
			Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.
✓			6. Are fence fabrics intact with all tension wires and connections secure?
	✓		7. Are gates well-lubricated and locking components in working order? <b>GATE SQUEAKS</b>
✓			8. Is the distance between fence and gate materials and the ground surface less than 75 mm (3 inches)?
6. INSPECTORS' SIGNATURES			
a. <i>Ann Johns</i>		b. <i>Paul Strong</i>	
c. <i>George Perry</i>		d. <i>Janet Purger</i>	
e.		f.	
g.		h.	

DA FORM 7310-R, JAN 97

Figure 6-1: Sample of a completed DA Form 7310-R illustrating an actual periodic inspection.

**2. FENCING AND GATES**

<b>MAINTENANCE STANDARDS</b>		<b>MAINTENANCE TASKS</b>	
<b>BASELINE:</b>			
Fencing and gates will comply with baseline inspection criteria.		Repair deficiencies noted upon inspection or replace as needed.	CDC/DPW
<b>PERIODIC:</b>			
1. Fence and gate materials will be free from loose, missing, or broken parts.		Repair or replace loose, missing, or broken components.	DPW
2. Fence and gate materials will be free from vandalism.		Repair or replace vandalized components.	DPW
3. Metal materials will be free from rust, corrosion and bending of members.		Repair or replace damaged materials.	DPW
4. Metal materials will be free from rough metal, sharp wire, and sharp edges or corners.		Refinish or replace parts. Eliminate sharp wires, edges or corners.	DPW
5. All hardware will be present, securely attached, and without significant wear. (Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16 inch), rust, corrosion, or stripping.)		Tighten hardware or replace parts.	DPW
6. Fence fabric will be intact and all tension wires and connections will be secure.		Tighten or repair fence fabric or tension wires.	DPW
7. Gates will be well-lubricated with locking components in good working order.		Lubricate hinges, locks, and latches.	CDC
8. Fences and gates will be free from openings greater than 75 mm (3 inches) between the structure and the ground surface.		Fill gaps to eliminate openings under fences or gates greater than 75 mm (3 inches).	DPW

Figure 6-2: Sample of a completed appendix E maintenance schedule.

there is a one-to-one correlation between maintenance standards and tasks on the site-adapted maintenance schedule and the items included on the site-adapted daily visual inspection list. The same numbering system is used for inspection items on the site-adapted daily visual inspection list and the corresponding maintenance standard and task on the site-adapted daily maintenance schedule. Use these schedules to correct hazards. A sample site-adapted daily maintenance schedule is provided (fig 2-12).

### 6-6. Closing the play area or elements within the play area

When repairs cannot be made immediately, hazards will be closed to use until repairs are completed. The best method for preventing exposure to a hazard will depend on the hazard's location. Appropriate ways of closing hazardous elements within the play area must be decided on a case-by-case basis by the CDC Director and other key staff. Clear communication with both CDC staff and children about hazards is essential. Some suggestions for closing elements within the play area area as follows:

- a. *Closing an Element Within the Play Area.* If the hazard is located on one play element, all or part of the element can be roped off using construction tape.
- b. *Removing Broken or Worn Items.* Broken or worn items can sometimes be removed until repairs are made, e.g., a broken tricycle can be removed from the play area or a swing with rusted chains can be removed from the swing structure until new chains are obtained.
- c. *Closing the Entire Play Area.* If the entire play area must be closed, children must not be allowed to enter the play area. Make arrangements to allow these children to use another age appropriate play area during outdoor play.
- d. *Communicating About Hazards.* All CDC staff must be informed about hazards, procedures being used to restrict use, and the anticipated timeline for repairs. CDC staff must inform the children about their expected behavior. Consistently enforce use restrictions.

### 6-7. Reporting inspection results

The Child Development Center (CDC) Play Area Safety Inspection Summary, DA Form 7308-R, will be used to report play area inspection results, including hazards noted and corrective actions. This form is also used to verify that baseline, periodic, and annual inspections have been completed. A copy of this form is inserted inside the back cover of this manual. It will be locally reproduced.

a. *Baseline, Periodic, and Annual Inspections.* One copy of DA Form 7308-R will be completed for each

play area after every inspection whether or not any hazards were noted.

b. *Daily Visual Inspections.* Separate procedures apply for reporting no hazards and for reporting hazards:

(1) *Reporting no hazards.* When no hazards are noted during daily visual inspections, the daily visual inspection log will be initialed. Completing DA Form 7308-R is not required.

(2) *Reporting hazards.* If there are any hazards that CDC staff cannot immediately correct, CDC staff will notify the CDC Director and will complete DA Form 7308-R.

### 6-8. Completing the Child Development Center (CDC) Play Area Safety Inspection Summary, DA Form 7308-R

A sample of a completed Child Development Center Play Area Safety Inspection Summary, DA Form 7308-R, is included (fig 6-3). This form was filled out based on the sample completed site-adapted checklist provided (fig 6-1). Instructions for completing DA Form 7308-R are as follows:

- a. *CDC Name.* Fill in the name of the CDC in Block 1.
- b. *Play Area.* Check the play area name in Block 2.
- c. *Type of Inspection.* Check the type of inspection performed in Block 3.
- d. *Date of Inspection.* Indicate the date in Block 4.
- e. *Total Inspection Time.* Indicate the total number of minutes required to complete the play area inspection in Block 5.
- f. *Inspector.* Fill in the name(s) of the individuals conducting the inspection in Block 6.
- g. *Inspection Summary.* Block 7 of DA Form 7308-R is used to indicate whether or not hazards were found during inspection.
  - (1) *Recording no hazards.* If no hazards were found, check Box 7a.
  - (2) *Recording hazards.* If hazards were noted, check Box 7b. which states "The following hazards were noted and corrective actions taken." Each hazard and corrective action must then be described on the spaces provided in Columns 7c. and 7d.
  - (3) *Hazard(s) identified.* List each hazard identified during inspection in Column 7c. Note the location of the hazard as precisely as possible (e.g., "Sharp wire at the top of fence at center of West section").
  - (4) *Corrective actions.* For each hazard noted, either an immediate corrective maintenance task will be performed, or the area will be closed and a work order submitted. Corrective actions will be recorded in Column 7d.

CHILD DEVELOPMENT CENTER (CDC) PLAY AREA SAFETY INSPECTION SUMMARY			
For use of this form, see TM 5-663; the proponent agency is USACE			
1. CDC NAME <b>FT. STRONG CDC</b>		2. PLAY AREA <input type="checkbox"/> Infant <input type="checkbox"/> Toddler <input checked="" type="checkbox"/> Preschool <input type="checkbox"/> School Age	
3. TYPE OF INSPECTION <input type="checkbox"/> Baseline <input checked="" type="checkbox"/> Periodic <input type="checkbox"/> Annual <input type="checkbox"/> Daily Visual		4. DATE OF INSPECTION <b>MAY 28, 1995</b>	5. TOTAL INSPECTION TIME (in minutes) <b>60</b>
3. INSPECTORS <b>ANN JOHNS, GARY GREY, PAUL STRONG, JANET PURYEAR</b>			
7. INSPECTION SUMMARY <input type="checkbox"/> a. NO HAZARDS FOUND <input checked="" type="checkbox"/> b. THE FOLLOWING HAZARDS WERE NOTED AND FOLLOW-UP ACTIONS TAKEN:			
c. HAZARD(S) IDENTIFIED (Describe hazard and location)	d. CORRECTIVE ACTIONS		
	MAINTENANCE TASK PERFORMED (Describe)	AREA CLOSED (Enter date)	WORK ORDER SUBMITTED (Enter date)
1. SHARP WIRE TOP OF FENCE - CENTER WEST		5/28/95	5/28/95
2. GATE NEEDS LUBRICATION	Hinges Lubricated		
NOTE: Maintenance tasks required to correct deficiencies are contained in TM 5-663, CDC Play Area Inspection and Maintenance Program.			
3. I verify that I have completed the above inspection and noted all hazards and follow-up actions.			
a. SIGNATURE OF INSPECTOR <i>Ann Johns</i>		b. SIGNATURE OF CDC DIRECTOR <i>Paul Strong</i>	

DA FORM 7308-R, JAN 97

Figure 6-3: Sample of a completed DA Form 7308-R.

(a) *Maintenance task performed.* If the necessary maintenance task is performed, it will be described in this column.

(b) *Area closed.* If the area is closed, enter the date.

(c) *Work order submitted.* If the area is closed, a work order will be submitted. Enter the date submitted.

h. *Signature of Inspector.* The individual who completes DA Form 7308-R will sign in the space provided in Block 8a.

i. *Signature of CDC Director.* The CDC Director will be notified of all hazards and corrective actions. The

Director will sign in the space provided in Block 8b to verify that inspection results have been reviewed.

## **6-9. Managing multiple play area hazards**

In some cases, many hazards may be identified during an inspection. This may be the case following a baseline inspection when a play area has not been maintained to meet child safety requirements. When many hazards are identified and cannot be immediately corrected, key staff will prepare a prioritized list of hazards for DPW. DPW will then develop a timeline for repairs and maintenance. Hazardous elements will be closed to use.

## CHAPTER 7 STAFF TRAINING

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### 7-1. Introduction

This chapter provides staff training recommendations for the CDC play area inspection and maintenance program. The primary focus of this chapter is the training of CDC staff. It is important that a hands-on training program be conducted to provide CDC staff with direct experience in inspection techniques. In addition, all key staff involved in the inspection and maintenance of the outdoor play area must be trained to ensure the success of this program. These staff include CDS Coordinators, CDC Directors, Installation Safety Officers, and DPW. This chapter describes the training video *Playing It Safe* which provides training recommendations for key staff, and outlines a detailed training program for CDC staff.

### 7-2. The training video

The *Playing It Safe* video can be used in training sessions for key staff as well as in CDC staff training. It should be obtained from the CDC Director or CDS Coordinator. It consists of three parts which can be individually selected, as appropriate, for the audience and training topic. Part one provides an overview of the inspection and maintenance program and emphasizes the importance of play area safety. It is suitable for many audiences, including CDS Coordinator, CDC Directors, Installation Safety Officers, DPW, and CDC staff. Part two explains how to customize the inspection and maintenance program for each age appropriate play area at the CDC. It is intended for key staff, including CDS Coordinators, CDC Directors, installation Safety Officers, and DPW. Part three is intended for CDC staff and provides training in conducting daily visual inspections of the play area.

### 7-3. Key staff training needs

Training is required to help key staff successfully establish and manage the inspection and maintenance program. Training topics for key staff should include: customizing the inspection and maintenance program at the CDC; organizing the play area record keeping system; performing baseline inspections, daily visual inspections, periodic inspections, and annual inspections; hazard management; inspection reporting; training CDC staff; and using the video which accompanies this manual,

### 7-4. The CDC staff training session

The CDC staff training program uses the video and a hands-on training program to train staff to conduct daily

visual play area inspections. The training sessions are conducted by the CDC Director and the Installation Safety Officer, who must also be trained to effectively conduct these sessions. As the staff person responsible for play area safety, the Installation Safety Officer participates in the training program to ensure that CDC staff correctly perform inspection procedures.

### 7-5. Training goals and objectives

The goals of the CDC staff training program are to train staff to conduct daily visual inspections of the play area and to understand the importance of play area inspection and maintenance to child health and safety. This knowledge will increase staff motivation to conduct thorough inspections and to carefully follow procedures for eliminating play area hazards. The objectives of the training include the following:

- a. *Know the Rationale for the CDC Play Area Inspection and Maintenance Program.*
- b. *Identify Elements Within the Play Area.*
- c. *Know How to Use the Daily Visual Inspection Tools.*
- d. *Recognize Common Play Area Hazards.*
- e. *Complete an On-site Daily Visual Inspection.*
- f. *Know Procedures for Reporting Hazards.*

### 7-6. Preparing for the CDC staff training program

To prepare for the training session, the CDC Director should:

- a. *Assemble the Supplies Needed,* The CDC Director should photocopy the daily visual inspection tools and the Child Development Center (CDC) Play Area Safety Inspection Summary, DA form 7308-R, for use by staff during the training session.
- b. *Schedule the Training,* The CDC Director schedules the time and date of the training and notifies the Installation Safety Officer and CDC staff.
- c. *Pre-training Play Area Inspection.* Prior to the staff training program, the CDC Director should complete a daily visual inspection of all play areas which will be used during the training program using the procedures describe in this manual. By completing the same inspection that will be performed during the training program, the CDC Director will become familiar with any hazards present in the play area, be prepared to answer staff questions, and be able to assess the accuracy of CDC staff inspections during the training, If desired, the CDC Director can set-up "hazards" in the play area

just prior to the training program which CDC staff can discover during a play area inspection.

### 7-7. Training agenda

The following is a recommended CDC staff training program agenda:

*a. Introduction.* The CDC Director and Installation Safety Officer should provide an overview of the CDC play area inspection and maintenance program.

*b. Training Video.* The participants will view part one and part three of the training video.

*c. Hands-on Daily Visual Play Area Inspection.* After viewing the video, the CDC Director and installa-

tion Safety Officer should prepare the staff for a hands-on daily visual inspection of the play area. The CDC staff will conduct the inspection. The staff will complete daily visual inspection logs and CDC Play Area Safety Inspection Summary, DA Form 7308-R, as required.

*d. Inspection Debriefing.* When the hands-on inspection is completed, the training program should reconvene and inspection findings should be summarized.

*e. Staff Inspection Assignments.* The CDC Director should assign staff to conduct daily visual play area inspections.

*f. Next Steps.* Plans for additional or annual staff training sessions should be discussed.

## APPENDIX A

### REFERENCES

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#### Government Publications

*Department of the Army*  
AR 420-76

Pest Management

AR 608-10

Child Development Services

TM 5-630

*Natural Resource Land Management*

US Consumer Product Safety Commission (CPSC) US Consumer Product Safety Commission, Washington, DC 20207

Handbook for Public Playground Safety, Publication 325, 1994.

#### Nongovernment Publications

*American Society for Testing and Materials (ASTM)*, 1916 Race Street, Philadelphia, PA 19103

F 1292

Standard Specification for Impact Attenuation of Surface Systems Under and Around Playground Equipment (1991; R1993).

F 1487

Standard Consumer Safety Performance Specification for Playground Equipment for Public Use (1993).

*American Wood Preservers Association (AWPA)*, 1945 Gallows Road, Suite 550, Vienna, VA 22182

C 17

Consumer Information Sheet:  
Inorganic Arsenical Pressure-treated Wood

#### Playground Safety Inspection Tools

National Recreation and Park Association (NRPA), 2775 South Quincy St., Ste 300, Arlington, VA 22206-2204

Iron Mountain Forge  
Playground Safety Inspection Tools

*Underwriters Laboratories*, 1285 Walt Whitman Road, Melville, Long island, NY 11747

Articulated Web Stop Probe

#### Prescribed Forms

DA form 7308-R

Child Development Center (CDC) Play Area Safety Inspection Summary  
(Prescribed in paragraphs 1-10 and 6-8)

DA form 7309-R

Child Development Center (CDC) Play Area Inventory  
(Prescribed in chapter 2)

DA form 731 O-R

Child Development Center (CDC) Play Area Checklist  
(Prescribed in chapter 2)

## APPENDIX B

### RECOMMENDED BASELINE INSPECTION QUESTIONS

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#### **B-1. General**

This appendix contains a list of recommended baseline inspection questions for all elements addressed in this manual. The questions will be used to create a site-adapted baseline inspection checklist for the CDC on DA Form 731 O-R (chap 2). The completed CDC play area checklist, DA Form 731 O-R, will become the site-adapted CDC's customized inspection and maintenance manual. Directions for conducting a baseline play area inspection are provided in chapter 5.

#### **B-2. Elements addressed in the appendix**

This appendix contains baseline inspection questions for all elements within the play area. These include: general site elements (table B-1 through B-8); ground cover and plant material (table B-9 through B-13); utilities and drainage (table B-14 through B-17); safety surfacing (table B-18 through B-20); site furnishings (table B-21 through B-24); maintenance practices (table B-25); composite structure play equipment (table B-26 through B-42); play activity areas (table B-43 through B-55); and toys and loose parts (table B-56 and B-57).

*Table B-1: Boulder -Recommended baseline inspection questions.*

## **1. BOULDER - Baseline Inspection**

### Recommended Inspection Questions:

1. Is the boulder located outside of play equipment use zones (at least 2400 mm (96 inches) from play equipment)?
2. Is the boulder firmly set in the soil to at least 1/3 of its depth so that it will not rock or rotate in any direction?
3. Is the boulder surface free of loose or slippery material, such as crumbling rock, sand, wood chips, moss, or algae?
4. Is the boulder free of sharp, jagged or protruding edges?
5. Is the boulder free of ice or snow when children are brought outside to play?
6. Is the element age appropriate?

Table B-2: Fencing and Gates - Recommended baseline inspection questions.

## 2. FENCING AND GATES - Baseline Inspection

### Recommended Inspection Questions:

1. Are the fencing and gates free from loose, missing, or broken parts?
2. Are the fencing and gates free from vandalism?
3. Are metal materials free from rust, corrosion or bending of members?
4. Are metal materials free from rough metal, sharp wire, and sharp edges or corners?
5. Is all hardware present, securely attached, and without significant wear?  
Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.
6. Are fence fabrics intact with all tension wires and connections secure?
7. Are gates well-lubricated and locking components in working order?
8. Is the distance between fence and gate materials and the ground surface less than 75 mm (3 inches)?
9. Are fencing and gates free of head entrapments?  
Note: Openings must meet all entrapment inspection criteria (chap 4).
10. Do protrusions meet inspection criteria (chap 4)?
11. Are vertical angles greater than 55 degrees?  
Note: Horizontal angles, angles which slope downward from the apex, or angles which are infilled to prevent the large head template from touching both sides of the angle simultaneously are exempt.
12. Are fences and gates free of crush, pinch and shearing points?
13. Are paints free from lead (0.06% maximum lead by dry weight) as stated by the manufacturer?
14. Are metal materials galvanized, anodized or composed of other non-rusting material?
15. Is access provided for fire/ambulance/emergency response vehicles?

*Table B-3: Pathways -Hard Surfaced- Recommended baseline inspection questions.*

### **3. PATHWAYS - HARD SURFACED - Baseline Inspection**

Recommended Inspection Questions:

1. Are pathways free of toys and other foreign objects?
2. Are pathways free of debris and slippery materials, such as sand, wood chips, ice, algae, moss, etc.?
3. Are pathways free of abrupt changes in level greater than 6 mm (1/4-inch)?
4. Are the sides of the pathways free of ruts?
5. Are pathways free of objects which protrude into the pathway overhead at a height of 2000 mm (80 inches) or less, such as branches?
6. Are pathways smooth and free from rough surfaces or cracks?
7. Are the pavement markings bright, legible, and free of chipped, peeling, or worn paint?
8. Are pavement markings free of lead (0.06% maximum lead by dry weight), cadmium, or other toxic material as specified by the manufacturer?
9. Is the element age appropriate?

*Table B-4: Path ways - Wood Chip - Recommended baseline inspection questions.*

#### **4. PATHWAYS - WOOD CHIP - Baseline Inspection**

Recommended Inspection Questions:

1. Are pathways free of debris, such as stones, branches, and loose parts?
2. Are wood chips distributed evenly along the pathways to form a uniform surface?
3. Are pathways free from mold, mushrooms and other fungi?
4. Are pathways free of tree roots?
5. Are pathways free of pot holes?
6. Are pathways free from puddles and poor drainage?
7. Are pathways free from insect and rodent infestation?
8. Is the depth of wood chips from 50 to 150 mm (2 to 6 inches)?
9. Are pathways free of objects which protrude into the pathway overhead at a height of 2000 mm (80 inches) or less, such as branches?
10. Are wood chips replenished with material which is free of debris or foreign matter, such as stones, dirt, branches, soil, thorns or leaves?
11. Is the element age appropriate?

*Tab/e B-5: Planter -Recommended baseline inspection questions.*

## 5. PLANTER - Baseline Inspection

Recommended Inspection Questions:

1. Is the planter free from loose, missing, or broken parts?
2. Is the planter free from vandalism?
3. Are wood materials free from warping, wood rot, insect damage, and checking (cracks more than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width)?
4. Are concrete materials free from extensive cracking, rough surfaces, and sharp edges or comers?
5. Are wood materials free from splinters; loose or missing knots; and sharp edges or corners?
6. Is all hardware present, securely attached, and without significant wear?

Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.

7. Is the planter free from chipped, peeling or worn paint?
8. Is the planter free of head entrapments?  
Note: Openings must meet all entrapment inspection criteria (chap 4).
9. Are vertical angles greater than 55 degrees?

Note: Horizontal angles, angles which slope downward from the apex, or angles which are infilled to prevent the large head template from touching both sides of the angle simultaneously are exempt.

10. Do all protrusions meet inspection criteria (chap 4)?
11. If a wood preservative was used, has a non-toxic sealant been applied to treated area every two years?
12. Are paints free from lead (0.06% maximum lead by dry weight) as stated by the manufacturer?
13. Are wood materials naturally rot resistant or pressure treated with a wood preservative?

If pressure treated wood was used, list the preservative's name.

---

14. Is the wood preservative used in pressure treatment safe for use in children's play areas as specified by CPSC?

Table B-6: Shade Structure -Recommended baseline inspection questions.

## 6. SHADE STRUCTURE - Baseline Inspection

### Recommended Inspection Questions:

1. Is the shade structure and roof free from loose, missing, or broken parts?
2. Is the shade structure and roof free from vandalism?
3. Is the roof free from leaks?
4. Are wood materials free from warping, wood rot, insect damage, and checking (cracks more than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width)?
5. Are metal materials free from rust, corrosion or bending of members?
6. Are wood materials free from splinters; loose or missing knots; and sharp edges or corners?
7. Are metal materials free from rough metal and sharp edges or corners?
8. Is the shade structure free from chipped, peeling or worn paint?
9. Is all hardware present, securely attached, and without significant wear?  
Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.
10. Is the shade structure free of head entrapments?  
Note: Openings must meet all entrapment inspection criteria (chap 4).
11. Are vertical angles greater than 55 degrees?  
Note: Horizontal angles, angles which slope downward from the apex, or angles which are infilled to prevent the large head template from touching both sides of the angle simultaneously are exempt.
12. Do all protrusions meet inspection criteria (chap 4)?
13. If a wood preservative was used, has a non-toxic sealant been applied to treated areas every two years?
14. Are paints free from lead (0.06% maximum lead by dry weight) as stated by the manufacturer?
15. Are wood materials naturally rot resistant or pressure treated with a wood preservative?  
If pressure treated wood was used, list the preservative's name.

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16. Is the wood preservative used in pressure treatment safe for use in children's play areas as specified by CPSC?
17. Are metal materials galvanized, anodized or composed of other non-rusting materials?
18. Is the equipment free of cables, wires, or ropes which are suspended within 45 degrees of horizontal?

Table B-7: Sign -Recommended baseline inspection questions.

## 7. SIGN - Baseline Inspection

### Recommended Inspection Questions:

1. Is the sign free from loose, missing, or broken parts?
2. Is the sign free from vandalism?
3. Is the sign fully exposed with no vegetation obscuring its view?
4. Is the sign bright and readable with no peeling, chipped, or worn paint?
5. Are wood materials free of warping, wood rot, insect damage, and checking (cracks greater than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width)?
6. Are metal materials free of rust, corrosion or bending of members?
7. Are wood materials free of splinters, loose or missing knots, and sharp edges or corners?
8. Are metal materials free of rough metal and sharp edges or corners?
9. Is all hardware present, securely attached, and without significant wear?  
Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.
10. Is the sign free of head entrapments?  
Note: Openings must meet all entrapment inspection criteria (chap 4).
11. Are vertical angles greater than 55 degrees?  
Note: Horizontal angles, angles which slope downward from the apex, or angles which are infilled to prevent the large head template from touching both sides of the angle simultaneously are exempt.
12. Do protrusions meet inspection criteria (chap 4)?
13. If a wood preservative was used, has a non-toxic sealant been applied to treated areas every two years?
14. Are paints free from lead (0.06% maximum lead by dry weight) as stated by the manufacturer?
15. Are wood materials naturally rot resistant or pressure treated with a wood preservative?  
If pressure treated wood was used, list the preservative's name.

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16. Is the wood preservative used in pressure treatment safe for use in children's play areas as specified by CPSC?
17. Are metal materials galvanized, anodized or composed of other non-rusting material?

Table B-8: Trellis - Recommended baseline inspection questions.

## 8. TRELLIS - Baseline Inspection

### Recommended Inspection Questions:

1. Is the trellis free from loose, missing, or broken parts?
  2. Is the trellis free from vandalism?
  3. Are wood materials free from warping, wood rot, insect damage, and checking (cracks more than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width)?
  4. Are wood materials free from splinters; loose or missing knots; and sharp edges or corners?
  5. Is all hardware present, securely attached, and without significant wear?  
Note: Wear is indicated by visible elongation, deformation, indentation greater than 2mm (1/16-inch), rust, corrosion, or stripping.
  6. Is the trellis free from chipped, peeling or worn paint?
  7. Is the trellis free of head entrapments?  
Note: Openings must meet all entrapment inspection criteria (chap 4).
  8. Are vertical angles greater than 55 degrees?  
Note: Horizontal angles, angles which slope downward from the apex, or angles which are infilled to prevent the large head template from touching both sides of the angle simultaneously are exempt.
  9. Do all protrusions meet inspection criteria (chap 4)?
  10. If a wood preservative was used, has a non-toxic sealant been applied to treated areas every two years?
  11. Are paints free from lead (0.06% maximum lead by dry weight) as stated by the manufacturer?
  12. Are wood materials naturally rot resistant or pressure treated with a wood preservative?  
If pressure treated wood was used, list the preservative's name.
- 
13. Is the wood preservative used in pressure treatment safe for use in children's play areas as specified by CPSC?

Table B-9: Ground Cover -Recommended baseline inspection questions.

## 9. GROUND COVER - Baseline Inspection

### Recommended Inspection Questions:

1. Are ground cover beds free from debris?
2. Does ground cover receive sufficient water (25 mm (1 -inch) per week) for health and vigor?
3. Are planting beds free from species with thorns, and mushrooms and other fungi?
4. Are planting beds free from species with berries?
5. Are planting beds free from pending or puddles?
6. Are planting beds free from weeds?
7. Are weeds controlled by non-chemical means (see AR 608-10)?
8. Is insect infestation evaluated and treated by Certified Pesticide Applicators as described in AR 420-76?
9. Is plant disease evaluated and treated by Certified Pesticide Applicators as described in AR 420-76?
10. Is ground cover pruned to maintain a natural appearance, rejuvenate plants, and stimulate flower development?
11. Is ground cover fertilized using a subsurface method to maintain a healthy condition?
12. Are planting beds filled as needed to avoid settling?
13. Are planting beds free of poisonous species?

Table B-1 O: Mulch - Recommended baseline inspection questions.

## 10. MULCH - Baseline Inspection

### Recommended Inspection Questions:

1. Is the mulch free of debris such as stones, branches, and trash?
2. Is the mulch free from mold, rot, mildew, mushrooms and other fungi?
3. Is the mulch free from insect or rodent infestation?
4. Is the mulch free from puddling and poor drainage?
5. Is the mulch evenly distributed to a depth of 100 mm (4 inches) and free from potholes and low areas?
6. Is the depth of mulch 100 mm (4 inches)?
7. Is the mulch replenished with material which is free of debris or other foreign matter, such as stones, dirt, branches, soil, thorns, or leaves?

Table B-11: Shrubs -Recommended baseline inspection questions,

## 11. SHRUBS - Baseline Inspection

### Recommended Inspection Questions:

1. Are planting beds free from debris?
2. Are planting beds free from species with thorns, mushrooms and other fungi?
3. Do planting beds receive sufficient water (25 mm (1 -inch) per week) for health and vigor?
4. Are planting beds free from roots which may cause trip hazards?
5. Are shrubs free from broken, dead or sharp branches?
6. Are planting beds free from species with berries?
7. Are planting beds free from pending or puddles?
8. Are shrubs pruned to maintain a natural appearance, rejuvenate plants, and remove hazards?
9. Are stakes and guy wires adjusted and removed when appropriate to prevent plant damage?
10. Are planting beds free from weeds?
11. Are weeds controlled by non-chemical means (see AR 608-70)?
12. Is insect infestation evaluated and treated by Certified Pesticide Applicators as described in AR 420-76?
13. Is plant disease evaluated and treated by Certified Pesticide Applicators as described in AR 420-76?
14. Are shrubs fertilized using a subsurface method to maintain a healthy condition?
15. Is organic mulch maintained to a depth of 100 mm (4 inches) in plant beds and around individual shrubs?
16. Are proper planting techniques employed to prevent plant and trunk damage?
17. Are planting beds filled as needed to avoid settling?
18. Are planting beds free of poisonous species?

Table B-12: Tree - Recommended baseline inspection questions.

## 12. TREE - Baseline Inspection

### Recommended Inspection Questions:

1. Is the tree free from broken stakes and protruding wires?
2. Does the tree receive sufficient water (25 mm (1-inch) per week) for health and vigor?
3. Is the tree free from broken, dead, or sharp branches?
4. Is the tree free from roots which may cause trip hazards?
5. Is the tree free from branches that protrude into the pathway overhead at a height of 2000 mm (80 inches) or less?
6. Are stakes and guy wires adjusted and removed when appropriate to prevent plant damage?
7. Is the tree pruned to maintain a natural looking appearance, maintain or reduce size, rejuvenate plants, and remove hazards?
8. Is a minimum 900 mm (36-inch) diameter bed of organic mulch maintained around the tree?
9. Is organic mulch maintained at a 100 mm (4-inch) depth?
10. Is insect infestation evaluated and treated by Certified Pesticide Applicators as described in AR 420-76?
11. Is plant disease evaluated and treated by Certified Pesticide Applicators as described in AR 420-76?
12. Is the tree fertilized using a subsurface method to maintain a healthy condition?
13. Are proper planting techniques employed to prevent plant and trunk damage?
14. Is the tree species nonpoisonous?
15. Are trees free from fruit and berries?

*Table B-13: Turf -Recommended baseline inspection questions.*

**13. TURF - Baseline Inspection**

Recommended Inspection Questions:

1. Does the turf receive sufficient water (25 mm (1-inch) per week) for health and vigor?
2. Is the turf free of mushrooms and other fungi?
3. Is the turf mowed to a height of 25 to 50 mm (1 to 2 inches)?
4. Are the turf areas free from holes and trip hazards?
5. Is the turf free from poor drainage, ponding, and puddles?
6. Are weeds controlled by nonchemical means (see AR 608-10)?
7. Is insect infestation evaluated and treated by Certified Pesticide Applicators as described in AR 420-76?
8. Is plant disease evaluated and treated by Certified Pesticide Applicators as described in AR 420-78?
9. Is the turf fertilized using a subsurface method to maintain healthy growth?
10. Are the turf areas free from excessive settling?
11. Is the soil aerated to maintain a healthy growth?
12. Is the turf dethatched to maintain a healthy growth?
13. Are turf areas free of poisonous plant species?

*Table 6-12: Tree - Recommended baseline inspection questions.*

## 12. TREE - Baseline Inspection

### Recommended inspection Questions:

1. Is the tree free from broken stakes and protruding wires?
2. Does the tree receive sufficient water (25 mm (1-inch) per week) for health and vigor?
3. Is the tree free from broken, dead, or sharp branches?
4. Is the tree free from roots which may cause trip hazards?
5. Is the tree free from branches that protrude into the pathway overhead at a height of 2000 mm (80 inches) or less?
6. Are stakes and guy wires adjusted and removed when appropriate to prevent plant damage?
7. Is the tree pruned to maintain a natural looking appearance, maintain or reduce size, rejuvenate plants, and remove hazards?
8. Is a minimum 900 mm (36-inch) diameter bed of organic mulch maintained around the tree?
9. Is organic mulch maintained at a 100 mm (4-inch) depth?
10. Is insect infestation evaluated and treated by Certified Pesticide Applicators as described in AR 420-76?
11. Is plant disease evaluated and treated by Certified Pesticide Applicators as described in AR 420-76?
12. Is the tree fertilized using a subsurface method to maintain a healthy condition?
13. Are proper planting techniques employed to prevent plant and trunk damage?
14. Is the tree species nonpoisonous?
15. Are trees free from fruit and berries?

*Table B-15: Irrigation - Recommended baseline inspection questions.*

## **15. IRRIGATION - Baseline Inspection**

### Recommended Inspection Questions:

1. Is the system free from trip hazards such as unretracted sprinkler heads, exposed pipes, etc.?
2. Is irrigation maintained at the proper level to provide needed moisture (25 mm (1 -inch) per week) without over watering?
3. Are sprinkler heads free from dirt and debris?
4. Are pipes flushed out from the mainline through the quick coupling valves after cleaning sprinkler heads?
5. Are sprinkler heads set to finished grade?
6. Are valves maintained in proper working order?
7. Are irrigation pipes inspected for placement and leaks?
- & Is the system winterized each fall and started up each spring in cold climates?
9. Are backflow prevention devices installed to ensure water in the irrigation system does not back-siphon into the potable distribution system?
10. Are backflow prevention devices tested annually to ensure operability according to state and local laws and manufacturer's guidance?

*Table 8-12: Tree - Recommended baseline inspection questions.***12. TREE - Baseline Inspection**

## Recommended Inspection Questions:

1. Is the tree free from broken stakes and protruding wires?
2. Does the tree receive sufficient water (25 mm (1-inch) per week) for health and vigor?
3. Is the tree free from broken, dead, or sharp branches?
4. Is the tree free from roots which may cause trip hazards?
5. Is the tree free from branches that protrude into the pathway overhead at a height of 2000 mm (80 inches) or less?
6. Are stakes and guy wires adjusted and removed when appropriate to prevent plant damage?
7. Is the tree pruned to maintain a natural looking appearance, maintain or reduce size, rejuvenate plants, and remove hazards?
8. Is a minimum 900 mm (36-inch) diameter bed of organic mulch maintained around the tree?
9. Is organic mulch maintained at a 100 mm (4-inch) depth?
10. Is insect infestation evaluated and treated by Certified Pesticide Applicators as described in AR 420-76?
11. Is plant disease evaluated and treated by Certified Pesticide Applicators as described in AR 420-76?
12. Is the tree fertilized using a subsurface method to maintain a healthy condition?
13. Are proper planting techniques employed to prevent plant and trunk damage?
14. Is the tree species nonpoisonous?
15. Are trees free from fruit and berries?

*Table B-17: Storm Drain - Recommended baseline inspection questions.*

## **17. STORM DRAIN - Baseline Inspection**

Recommended Inspection Questions:

1. Are the storm drain inlets clear and free running with no water standing on the ground surface?
2. Are the storm drain covers securely fastened to the frame?
3. Are storm drain openings no greater than 15 mm (1/2-inch)?

Table B-14: Drinking Fountain -Recommended baseline inspection questions.

## 14. DRINKING FOUNTAIN - Baseline Inspection

### Recommended Inspection Questions:

1. Is the drinking fountain free from loose, missing, or broken parts?
  2. Is the drinking fountain free from vandalism?
  3. Are the basin, spigot, and handle cleaned and regularly disinfected as per AR 608-10?
  4. Are the hardware and plumbing in working order with the drain running free?
  5. Is the arch of water sufficient to hit the drinking fountain drain without overshooting?
  6. Are wood materials free from warping, wood rot, insect damage, and checking (cracks greater than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width)?
  7. Are metal materials free from rust, corrosion, or bending of members?
  8. Are wood materials free from splinters; loose or missing knots; and sharp edges or corners?
  9. Are metal materials free from rough metal and sharp edges or comers?
  10. Is all hardware present, securely attached, and without significant wear?  
Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion or stripping.
  11. Is the drinking fountain free from chipped, peeling or worn paint?
  12. Is the drinking fountain free of head entrapments?  
Note: Openings must meet all entrapment inspection criteria (chap 4).
  13. Are vertical angles greater than 55 degrees?  
Note: Horizontal angles, angles which slope downward from the apex, or angles which are infilled to prevent the large head template from touching both sides of the angle simultaneously are exempt.
  14. Do protrusions meet inspection criteria (chap 4)?
  15. If a wood preservative was used, has a non-toxic sealant been applied to treated areas every two years?
  16. Are metal materials galvanized, anodized or composed of other non-rusting material?
  17. Are paints free from lead (0.06% maximum lead by dry weight) as stated by the manufacturer?
  18. Are wood materials naturally rot resistant or pressure treated with a wood preservative?  
If pressure treated wood was used, list the preservative's name.
- 
19. Is the wood preservative used in pressure treatment safe for use in children's play areas as specified by CPSC?
  20. Is the wood preservative used in pressure treatment free from arsenals?

Table B-19: Synthetic Safety Surfacing (Within Use Zones) - Recommended baseline inspection questions.

## 19. SYNTHETIC SAFETY SURFACING (WITHIN USE ZONES) - Baseline Inspection

### Recommended Inspection Questions:

1. Is synthetic safety surfacing free of loose material and foreign objects, such as debris, sand, gravel, leaves, soil, and toys?
2. Is synthetic safety surfacing free from puddles, ice and snow when children are brought outdoors to play?
3. Is the play equipment area closed when the outdoor temperature is -4 degrees Celsius (25 degrees Fahrenheit) or less?
4. Is synthetic safety surfacing firmly attached to the underlying surface?
5. Is synthetic safety surfacing free of abrupt changes in level greater than 6 mm (1/4-inch)?
6. Is synthetic safety surfacing free of cuts, nicks or damaged areas?
7. Is synthetic safety surfacing free of exposed hardware and sharp edges?
8. Is the surfacing guaranteed by the manufacturer to meet ASTM F 1292 requirements for impact attenuation (a head first fall from the highest accessible point of the equipment onto the play area surface must result in a impact of 200 g's or less and a Head Injury Criteria value of no more than 1,000)?

*Table B-20: Wood Product Safety Surfacing (Within Use Zones) - Recommended baseline inspection questions.*

## **20. WOOD PRODUCT SAFETY SURFACING (WITHIN USE ZONES) - Baseline Inspection**

### Recommended Inspection Questions:

1. Is wood product safety surfacing free of debris and foreign objects, such as stones, leaves, twigs or branches, toys, and wheeled toys?
2. Is wood product safety surfacing free of animal feces?
3. Is wood product safety surfacing free of mold, mushrooms, fungi, mildew, rot, and insect or rodent infestation?
4. Is wood product safety surfacing removed from adjacent areas and pathways?
5. Is wood product safety surfacing free from holes or low areas caused by digging or play activities?
6. Is the play equipment area closed when the wood product safety surfacing is frozen?
7. Is wood product safety surfacing free from puddles and poor drainage?
8. Is wood product safety surfacing depth a minimum of 300 mm (12 inches) over base materials and footings?
9. Are wood product safety surfacing areas free from asphalt or concrete subsurface materials?
10. Is wood product safety surfacing removed and replaced when impact attenuating ability deteriorates due to decomposition, dirt and debris?

Note: Wood product safety surfacing will be replaced when a headfirst fall from the highest point of the play equipment would not result in an impact of 200 g's or less and a Head Injury Criteria value no greater than 1,000 when tested in accordance to ASTM F 1292.

Table B-21: Bench -Recommended baseline inspection questions.

## 21. BENCH - Baseline Inspection

### Recommended Inspection Questions:

1. Is the bench free from loose, missing, or broken parts?
  2. Is the bench free from vandalism?
  3. Are wood materials free from warping, wood rot, insect damage, and checking (cracks more than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width)?
  4. Are concrete materials free from extensive cracking, rough surfaces, and sharp edges or corners?
  5. Are metal materials free from rust, corrosion, or bending of members?
  6. Are wood materials free from splinters; loose or missing knots; and sharp edges or corners?
  7. Are metal materials free from rough metal and sharp edges or corners?
  8. Is all hardware present, securely attached, and without significant wear?  
Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.
  9. Is the bench free from chipped, peeling or worn paint?
  10. Is the bench free of head entrapments?  
Note: Openings must meet all entrapment inspection criteria (chap 4).
  11. Are vertical angles greater than 55 degrees?  
Note: Horizontal angles, angles which slope downward from the apex, or angles which are infilled to prevent the large head template from touching both sides of the angle simultaneously are exempt.
  12. Do all protrusions meet inspection criteria (chap 4)?
  13. If a wood preservative was used, has a non-toxic sealant been applied to treated areas every two years?
  14. Are paints free from lead (0.06% maximum lead by dry weight) as stated by the manufacturer?
  15. Are wood materials naturally rot resistant or pressure treated with a wood preservative?  
If pressure treated wood was used, list the preservative's name.
- 
16. Is the wood preservative used in pressure treatment safe for use in children's play areas as specified by CPSC?
  17. Are metal materials galvanized, anodized or composed of other non-rusting material?

Table B-22: Removable Shade -Recommended baseline inspection questions.

## 22. REMOVABLE SHADE - Baseline Inspection

### Recommended Inspection Questions:

1. Is the removable shade element free from loose, missing, or broken parts?
2. Is the removable shade element free from vandalism?
3. Is the removable shade element clean?
4. Is all hardware present, securely attached, and without significant wear?  
Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust or corrosion.
5. Is the removable shade element free from sharp edges or corners?
6. Is the removable shade element free from rust, corrosion, or bending of members?
7. Is the shade element free of head entrapments?  
Note: Openings must meet all entrapment inspection criteria (chap 4).
8. Are vertical angles greater than 55 degrees?  
Note: Horizontal angles, angles which slope downward from the apex, or angles which are infilled to prevent the large head template from touching both sides of the angle simultaneously are exempt.
9. Do all protrusions meet inspection criteria (chap 4)?
10. Is the removable shade element free from crush, pinch and shearing points?
11. Are metal materials galvanized, anodized or composed of other non-rusting materials?
12. Is the equipment free of cables, wires, or ropes which are suspended within 45 degrees of horizontal?

Table B-23: Table -Recommended baseline inspection questions.

**23. TABLE - Baseline Inspection**

## Recommended Inspection Questions:

1. Is the table free from loose, missing, or broken parts?
  2. Is the table free from vandalism?
  3. Is the table clean and disinfected as per *AR 608-10*?
  4. Are wood materials free from warping, wood rot, insect damage, and checking (cracks more than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width)?
  5. Are wood materials free from splinters; loose or missing knots; and sharp edges or corners?
  6. Is the table free from chipped, peeling or worn paint?
  7. Is all hardware present, securely attached, and without significant wear?  
Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.
  8. Is the table free of head entrapments?  
Note: Openings must meet all entrapment inspection criteria (chap 4).
  9. Are vertical angles greater than 55 degrees?  
Note: Horizontal angles, angles which slope downward from the apex, or angles which are infilled to prevent the large head template from touching both sides of the angle simultaneously are exempt.
  10. Do ail protrusions meet inspection criteria (chap 4)?
  11. If a wood preservative was used, has a non-toxic sealant been applied to treated areas every two years?
  12. Are paints free from lead (0.06% maximum lead by dry weight) as stated by the manufacturer?
  13. Are wood materials naturally rot resistant or pressure treated with a wood preservative?  
If pressure treated wood was used, list the preservative's name.
- 
14. Is the wood preservative used in pressure treatment safe for use in children's play areas as specified by CPSC?

Table B-24: Trash Receptacle - Recommended baseline inspection questions.

## 24. TRASH RECEPTACLE - Baseline Inspection

### Recommended Inspection Questions:

1. Is the trash receptacle free from loose, missing, or broken parts?
  2. Is the trash receptacle free from vandalism?
  3. Are spills cleaned as they occur?
  4. Are wood materials free from warping, wood rot, insect damage, and checking (cracks greater than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width)?
  5. Are metal materials free rust, corrosion or bending of members?
  6. Are concrete materials free from extensive cracking, and sharp edges and corners?
  7. Are wood materials free from splinters; loose or missing knots; and sharp edges or corners?
  8. Are metal materials free from rough metal and sharp edges or comers?
  9. Is all hardware present, securely attached, and without significant west?  
Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.
  10. Is the trash receptacle free from chipped, peeling or worn paint?
  11. Is the trash receptacle cleaned with detergent, water and a disinfectant monthly as weather permits or more often if needed?
  12. Is the unit free of head entrapments?  
Note: Openings must meet all entrapment inspection criteria (chap 4).
  13. Are vertical angles greater than 55 degrees?  
Note: Horizontal angles, angles which slope downward from the apex, or angles which are infilled to prevent the large head template from touching both sides of the angle simultaneously are exempt.
  14. Do protrusions meet inspection criteria (chap 4)?
  15. Is the dumpster placed on a hard stand?
  16. Is the dumpster covered and closed?
  17. Are dumpster drain holes plugged or covered with mesh screening?
  18. Is the trash receptacle impermeable to moisture or lined with nonabsorbent materials and leakproof?
  19. Is the trash receptacle capable of being covered with a lid or closed when not in use?
  20. Are wood materials naturally rot resistant or pressure treated with a wood preservative?  
If pressure treated wood was used, list the preservative's name.
- 
21. Is the wood preservative used in pressure treatment safe for use in children's play areas as specified by CPSC?

*Table B-24: Trash Receptacle -Recommended baseline inspection questions (cont.).*

**24. TRASH RECEPTACLE - Baseline Inspection - continued**

- 22. If a wood preservative was used, has a non-toxic sealant been applied to treated areas every two years?
- 23. Are paints free from lead (0.06% maximum lead by dry weight) as stated by the manufacturer?
- 24. Are metal materials galvanized, anodized or composed of other non-rusting material?

Table B-25: Weed and Pest Management -Recommended baseline inspection questions.

## 25. WEED AND PEST MANAGEMENT - Baseline Inspection

### Recommended Inspection Questions:

1. Are weeds controlled by manual rather than chemical means?
2. Is insect infestation evaluated and treated by Certified Pesticide Applicators as described in *AR 420-76*?
3. Is plant disease evaluated and treated by Certified Pesticide Applicators as described in *AR 420-76*?
4. If chemical treatment for plant disease or insects is necessary, is approved treatment applied only when children will be absent from the CDC for an adequate period of time to avoid chemical exposure?
5. If bait stations are justified, are they tamper proof and inaccessible to children?
6. Are stinging insect nests removed by pest management personnel?
7. Are children prohibited from entering the area for 24 hours after the removal of stinging insect nests?
8. Are vertebrate pests handled by trapping?
9. Is the use of live animal traps prohibited when children are present?

Table B-26: Composite Structure - Recommended baseline inspection questions.

## 26. COMPOSITE STRUCTURE - Baseline Inspection

TYPE OF COMPOSITE STRUCTURE (please describe) \_\_\_\_\_

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Note: To inspect a composite structure, use this checklist and the checklist for each play event attached to the structure, e.g., slide checklist, horizontal ladder checklist, etc.

Recommended Inspection Questions:

1. Is the composite structure free of loose, missing, or broken parts?
2. Is the composite structure free from vandalism?
3. Is the composite structure free from wet or icy surfaces when children are brought outside to play?
4. *For metal composite structures, is the temperature above freezing when children are brought outdoors to play?*
5. Is the composite structure free from loose, slippery materials, such as sand and leaves on platforms, stairs and rungs?
6. Is the equipment layout free from two events that extend from the side of the structure to create side-by-side play events?
7. *For preschool and school age, is the composite structure's use zone free from obstructions when measured 2400 mm (96 inches) in any direction from the equipment?*
8. *For toddlers, is the composite structure's use zone free from obstructions when measured 1800 mm (72 inches) in any direction from the equipment?*
9. Are wood materials free from warping, wood rot, insect damage, and checking (cracks more than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width)?
10. Are metal materials free from rust, corrosion, or bending of members?
11. Are plastic parts unbroken and without chips or cracks, particularly at joints and connections?
12. Are wood materials free from splinters, loose or missing knots, or sharp edges or corners?
13. Are metal materials free from rough metal and sharp edges or corners?
14. Is all hardware present, securely attached, and without significant wear?  
Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.
15. Is the composite structure free from chipped, peeling or worn paint?
16. Are S-hooks and other connectors fully closed and secure?  
Note: The S-hook will be considered properly closed if hook openings are less than 1 mm (.04 inches) when tested with a feeler gauge. The lower loop will not cross over the upper loop.
17. Is the rope free of fraying or rot?

Table B-26: Composite Structure Recommended baseline inspection questions (cont.).

**26. COMPOSITE STRUCTURE - Baseline Inspection - continued**

- 18. Is chain without significant wear?  
 Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust or corrosion.
- 19. Is cable without visible wear and free of frayed or projecting wires?
- 20. Is the structure free of head entrapments?  
 Note: Openings must meet all entrapment inspection criteria (chap 4).
- 21. Are vertical angles greater than 55 degrees?  
 Note: Horizontal angles, angles which slope downward from the apex, or angles which are infilled to prevent the large head template from touching both sides of the angle simultaneously are exempt.
- 22. Do protrusions meet inspection criteria (chap 4)?
- 23. Is the equipment free from accessible crush, pinch, or shearing points (chap 4)?
- 24. Are equipment footings securely anchored?
- 25. *For toddlers*, is the the maximum platform height 900 mm (36 inches) from the ground surface?
- 26. *For preschool*, is the the maximum platform height 1200 mm (48 inches) from the ground surface?
- 27. *For school age*, is the the maximum platform height 1400 mm (56 inches) from the ground surface?
- 28. Is the maximum height of the composite structure vertical support 2400 mm (96 inches)?
- 29. Is the maximum nonclimbable roof height 2550 mm (102 inches) at the exterior ridge?  
 Note: Roofs are not recommended for school age composite structures.
- 30. *For toddlers*, are all platforms over 500 mm (20 inches) high surrounded by protective barriers 500 mm (20 inches) high?
- 31. *For preschool*, are all platforms over 500 mm (20 inches) high surrounded by protective barriers 725 mm (29 inches) high?
- 32. *For school age*, are all platforms over 750 mm (30 inches) high surrounded by protective barriers 950 mm (38 inches) high?
- 33. Is the composite structure free from play events or components in its interior onto which a child may fall from a height greater than 450 mm (18 inches)?
- 34. Are handrails or handgrips provided to ease the transition between platforms and attached play events?
- 35. Are handrails or handgrips between 25 to 40 mm (.95 to 1.55 inches) in diameter?
- 36. Are platforms level (within 2° of horizontal)?
- 37. Are openings provided in platforms to allow for drainage?
- 38. *For preschool*, is the maximum difference in height between stepped platforms 300 mm (12 inches)?
- 39. *For school age*, is the maximum difference in height between stepped platforms 450 mm (18 inches)?

Table B-26: Composite Structure - Recommended baseline inspection questions (cont.).

**26. COMPOSITE STRUCTURE - Baseline Inspection - continued**

40. *For school age*, when the distance between platforms exceeds 225 mm (9 inches) and the lower platform is over 1200 mm (48 inches) high, is the space between platforms infilled to less than 90 mm (3 1/2 inches)?
41. *For preschool*, when the distance between platforms exceeds 225 mm (9 inches) and the lower platform is over 750 mm (30 inches) high, is the space between platforms infilled to less than 90 mm (3 1/2 inches)?
42. *For toddler and preschool*, is there another means of equipment access (e.g., a ramp, stairway or stepladder) in addition to climbing apparatus?
43. Are paints free from lead (0.06% maximum lead by dry weight) as stated by the manufacturer?
44. If a wood preservative was used, has a non-toxic sealant been applied to treated areas every two years?
45. Are wood materials naturally rot resistant or pressure treated with a wood preservative?  
If pressure treated wood was used, list the preservative's name.
- 
46. Is the wood preservative used in pressure treatment safe for use in children's play areas as specified by CPSC?
47. Are metal materials galvanized, anodized or composed of other non-rusting materials?
48. Are lock washers, self-locking nuts or other locking means provided for all nuts and bolts to protect them from detachment?
49. Is the equipment free of cables, wires, or ropes which are suspended within 45 degrees of horizontal?
50. Is the equipment free of hollow wooden or metal support posts with open ends?
51. Is the play element age appropriate?

Table B-27: Arch Climber- Recommended baseline inspection questions.

## 27. ARCH CLIMBER - Baseline Inspection

### Recommended Inspection Questions:

1. Does the arch climber meet all requirements for composite structures (see composite structure checklist)?
2. Is the arch climber free from loose, missing, or broken parts?
3. Is the arch climber free from vandalism?
4. Do the arch climber rungs rotate?
5. *For preschool*, is the maximum height of the arch climber 1200 mm (48 inches)?
6. *For school* age, is the maximum height of the arch climber 1400 mm (56 inches)?
7. Is the rung size between 25 to 40 mm (.95 to 1.55 inches)?
8. Is the distance between rungs greater than 225 mm (9 inches) but not more than 300 mm (12 inches)?
9. Are all rungs evenly spaced?
10. Is the distance between the top rung and the platform equal to the distance between rungs?
11. *For school* age, are the rungs a minimum of 400 mm (16 inches) wide?
12. *For preschool*, are the rungs a minimum of 300 mm (12 inches) wide?
13. Is another less challenging means of equipment access provided, e.g., stairs, ramp, etc.?
14. Does the arch climber provide hand support during climbing and at the transition point where the climber connects to the composite structure platform?
15. Can interior climbing bars be struck during a free fall from a height greater than 450 mm (18 inches) to the surface?
16. Is the play element age appropriate?

Table B-28: Bubble Panel -Recommended baseline inspection questions.

## 28. BUBBLE PANEL - Baseline Inspection

### Recommended Inspection Questions:

1. Does the bubble panel meet all requirements for composite structures (see composite structure checklist)?
2. Is the bubble panel free from loose, missing, or broken parts?
3. Is the bubble panel free from vandalism?
4. Is the bubble panel free from scratches in the panel window which significantly obscure the view?
5. Do all openings between the bubble panel, vertical support, and the platform surface preclude the passage of the torso probe?
6. *For toddlers*, is the bubble panel 500 mm (20 inches) high?
7. *For preschool*, is the bubble panel 725 mm (29 inches) high?
8. *For school age*, is the bubble panel 950 mm (38 inches) high?
9. Is the play element age appropriate?

Table B-29: Clatter Bridge - Recommended baseline inspection questions.

**29. CLATTER BRIDGE - Baseline Inspection**

## Recommended Inspection Questions:

1. Does the clatter bridge meet all requirements for composite structures (see composite structure checklist)?
2. Is the clatter bridge free from loose, missing, or broken parts?
3. Is the clatter bridge free from vandalism?
4. Is the clatter bridge surface free from loose material, such as sand, wood chips and leaves?
5. Is the clatter bridge free from worn chain?  
Note: Wear is indicated by visible elongation, deformation, indentation greater than 2mm (1/16-inch), rust, or corrosion.
6. Is the clatter bridge free from open S-hooks?  
Note: The S-hook will be considered properly closed if hook openings are less than 1 mm (.04 inches) when tested with a feeler gauge. The lower loop will not cross over the upper loop.
7. Is all hardware present, securely attached, and without significant wear?  
Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.
8. Is the distance between the bridge and composite structure platform 50 mm (2 inches) maximum?
9. *For preschool*, Is the maximum height to the clatter bridge surface 750 mm (30 inches)?
10. *For school age*, is the maximum height to the clatter bridge surface 1200 mm (48 inches)?
11. Are guardrails provided to prevent children from falling from the clatter bridge?
12. *For preschool*, is the top edge of the guardrail 725 mm (29 inches) high and the lower edge no more than 575 mm (23 inches) above the bridge walking surface?
13. *For school age*, is the top edge of the guardrail 950 mm (38 inches) high and the lower edge no more than 700 mm (28 inches) above the bridge walking surface?
14. Is the play element age appropriate?

Table B-30: Cleated Ramp - Recommended baseline inspection questions.

### 30. CLEATED RAMP - Baseline Inspection

Recommended Inspection Questions:

1. Does the cleated ramp meet all requirements for composite structures (see composite structure checklist)?
2. Is the cleated ramp free from loose, missing, or broken parts?
3. Is the cleated ramp free from vandalism?
4. Is the cleated ramp free from loose material, such as sand, wood chips and leaves?
5. *For toddlers*, is the maximum height of the cleated ramp 900 mm (36 inches)?
6. *For toddlers*, is the slope of the ramp less than or equal to 1:8?
7. *For toddlers*, is ramp designed for single file use a minimum of 300 mm (12 inches) wide?
8. *For toddlers*, are ramps designed for use by two children abreast a minimum of 750 mm (30 inches) wide?
9. Is the play element age appropriate?

Table B-31: Game Panel -Recommended baseline inspection questions.

### 31. GAME PANEL - Baseline Inspection

Recommended Inspection Questions:

1. Does the game panel meet all requirements for composite structures (see composite structure checklist)?
2. Is the game panel free from loose, missing, or broken parts?
3. Is the game panel free from vandalism?
4. Are game component markings clearly visible?
5. Do all openings between the game panel, vertical supports, and the platform surface preclude the passage of the torso probe?
6. *For toddlers, is the the game panel 500 mm (20 inches) high?*
7. *For preschool, is the game panel 725 mm (29 inches) high?*
8. *For school age, is the game panel 950 mm (38 inches) high?*
9. Is the play element age appropriate?

Table B-32: Horizontal Ladder -Recommended baseline inspection questions.

## 32. HORIZONTAL LADDER - Baseline Inspection

### Recommended Inspection Questions:

Note: Horizontal ladders are recommended for use by children ages four and older.

1. Does the horizontal ladder meet all requirements for composite structures (see composite structure check-list)?
2. Is the horizontal ladder free from loose, missing, or broken parts?
3. Is the horizontal ladder free from vandalism?
4. Are ladder rungs securely attached and do not rotate?
5. *For preschool*, is the maximum height of the horizontal ladder 1500 mm (60 inches)?
6. *For school age*, is the maximum height of the horizontal ladder 2100 mm (84 inches)?
7. Is the first handhold on both ends of the horizontal ladder inset so that it is not directly above the platform or rungs used for equipment entry or exit?
8. Is the rung diameter 25 to 40 mm (.95 to 1.55 inches)?
9. Are rungs round in cross section?
10. Is the spacing between rungs greater than 225 mm (9 inches) apart but not more than 375 mm (15 inches) apart?
11. Is the horizontal distance from the leading edge of the takeoff/landing platform to the first handhold 250 mm (10 inches) maximum?
12. If access and egress is provided by means of rungs, is the horizontal distance from leading edge of takeoff/landing platform 200 mm (8 inches) minimum and 250 mm (10 inches) maximum?
13. Is maximum height of takeoff/landing platform 450 mm (18 inches)?
14. Is maximum distance from top surface of access and egress point to first handhold 1100 mm (45 inches) minimum?
15. Is the play element age appropriate?

Table B-33: Ladder and Stairs - Recommended baseline inspection questions.

### 33. LADDER AND STAIRS - Baseline Inspection

#### Recommended Inspection Questions:

1. Do ladders and stairs meet all requirements for composite structures (see composite structure checklist)?
2. Are ladders and stairs free from loose, missing, or broken parts?
3. Are ladders and stairs free from vandalism?
4. Are steps free from loose material, such as sand, wood chips, and leaves?
5. Are ladder rungs and steps securely attached?
6. Do ladder rungs rotate?
7. Are ladders and stairs free of head entrapments?  
Openings must meet all entrapment inspection criteria (chap 4).
8. Are closed risers and steps designed to prevent the accumulation of sand, water, or other materials?
9. Are ladder rungs and steps evenly spaced, including the space between the top rung or step and the platform?
10. *For toddlers*, is the maximum height of ladder and stairs 900 mm (36 inches)?
11. *For preschool*, is the maximum height of ladder and stairs 1200 mm (48 inches)?
12. *For school age*, is the maximum height of ladder and stairs 1400 mm (56 inches)?
13. Do rung ladders have a slope of 75 degrees to 90 degrees?
14. *For preschool*, are rung ladders a minimum of 300 mm (12 inches) wide?
15. *For school age*, are rung ladders a minimum of 400 mm (16 inches) wide?
16. *For rung ladders*, is the distance between rungs (tread to tread vertical rise) greater than 225 mm (9 inches) but not more than 300 mm (12 inches)?
17. *For rung ladders*, is the rung diameter between 25 to 40 mm (.95 to 1.55 inches)?
18. Do stepladders have a slope of 50 degrees to 75 degrees?
19. *For preschool*, do stepladder have a tread width between 300 mm (12 inches) and 525 mm (21 inches) wide for single file use?  
Note: Stepladders designed for use by two children abreast are not recommended for preschool.
20. *For school age*, do stepladders have a minimum tread width of 400 mm (16 inches) for single file use?
21. *For school age*, do stepladders have a minimum tread width of 1000 mm (40 inches) for use by two children abreast?
22. *For preschool*, do stepladders have a minimum tread depth of 175 mm (7 inches)?
23. *For school age*, do stepladders with open risers have minimum tread depth of 75 mm (3 inches)?

Table B-33: Ladder and Stairs - Recommended baseline inspection questions (cont.).

**33. LADDER AND STAIRS - Baseline Inspection - continued**

- 24. *For school age*, do stepladders with closed risers have minimum tread depth of 150 mm (6 inches)?
- 25. *For preschool*, is the distance between stepladder rungs (tread to tread vertical rise) a maximum of 225 mm (9 inches)?
- 26. *For preschool*, are closed risers provided for stepladders?
- 27. *For school age*, is the distance between stepladder rungs (tread to tread vertical rise) greater than 225 mm (9 inches) and a maximum of 300 mm (12 inches)?  
Note: Due to entrapment hazards, risers spaced between 90 and 225 mm (3-1/2 to 9 inches) apart must be closed risers.
- 28. Do stairways have a slope no greater than 35 degrees?
- 29. *For preschool*, do stairways have a minimum 300 mm (12-inch) tread width for single file use?
- 30. *For preschool*, do stairways have a minimum 750 mm (30-inch) tread width for use by two children abreast?
- 31. *For school age*, do stairways have a minimum tread width of 400 mm (16 inches) for single file use?
- 32. *For school age*, do stairways have a minimum tread width of 1000 mm (40 inches) for use by two children abreast?
- 33. *For preschool*, do stairways have a minimum tread depth of 175 mm (7 inches)?
- 34. *For school age*, do stairways have minimum tread depth of 200 mm (8 inches) for both open and closed risers?
- 35. *For preschool*, is the distance between steps (tread to tread vertical rise) a maximum of 225 mm (9 inches)?
- 36. *For preschool*, are closed risers provided for stairways?
- 37. *For school age*, is the distance between steps (tread to tread vertical rise) greater than 225 mm (9 inches) and a maximum of 300 mm (12 inches)?  
Note: Due to entrapment hazards, risers spaced between 90 and 225 mm (3-1/2 to 9 inches) apart must be closed risers.
- 38. Do stairways and stepladders have continuous handrails on both sides?  
Note: Rung ladders do not require handrails since the rungs or side supports serve this function.
- 39. Is the height of the handrail distance between 550 and 950 mm (22 to 38 inches) when measured from the top front edge of the step (tread nosing) to the handrail top surface?
- 40. Is the maximum handrail diameter between 25 to 40 mm (.95 to 1.55 inches)?

Table B-34: Net Climber - Recommended baseline inspection questions.

### 34. NET CLIMBER - Baseline Inspection

#### Recommended Inspection Questions:

1. Does the net climber meet all requirements for composite structures (see composite structure checklist)?
2. Is the net climber free from loose, missing, or broken parts?
3. Is the net climber free from vandalism?
4. Is the net climber free from worn cable?
5. Is all hardware present, securely attached, and without significant wear?  
Note: Wear is indicated by visible elongation, deformation or indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.
6. Is the net climber free from open S-hooks?  
Note: The S-hook will be considered properly closed if hook openings are less than 1 mm (.04 inches) when tested with a feeler gauge. The lower loop will not cross over the upper loop.
7. Is the net adjusted to eliminate loose cable?
8. Are anchoring devices at ground level buried below the playing surface?
9. Is the maximum height of the net climber 2400 mm (96 inches)?
10. Is the slope of the net climber 90 degrees?  
Note: Inclined or horizontal nets are not permitted.
11. Is the net climber securely attached at both ends?
12. Are connections fixed to prevent openings from changing size?
13. Is the net climber free from head entrapments?  
Note: Openings must meet entrapment test criteria for flexible openings (chap 4).
14. Is the cable diameter between 25 to 40 mm (.95 to 1.55 inches)?
15. Is a less challenging means of access/egress provided?
16. *For preschool*, does net climber allow users to bring both feet to the same level while ascending or descending?
17. Is the play element age appropriate?

*Table B-35: Protective Barrier- Recommended baseline inspection questions.*

### **35. PROTECTIVE BARRIER - Baseline Inspection**

Recommended Inspection Questions:

1. Does the protective barrier meet all requirements for composite structures (see composite structure check-list)?
2. Is the protective barrier free from loose, missing, or broken parts?
3. Is the protective barrier free from vandalism?
4. Do all openings between the the protective barrier, vertical supports, and the platform surface preclude the passage of the torso probe?
5. *For toddler and preschool*, are protective barriers provided on all sides of play equipment platforms which are over 500 mm (20 inches) in height?  
Note: Areas where children enter or exit the equipment or an attached play event are exempt.
6. *For school age*, are protective barriers provided on all sides of play equipment platforms which are over 750 mm (30 inches) in height?  
Note: Areas where children enter or exit the equipment or an attached play event are exempt.
7. *For toddlers*, is the the protective barrier 500 mm (20 inches) high?
8. *For preschool*, is the protective barrier 725 mm (29 inches) high?
9. *For school age*, is the protective barrier 950 mm (38 inches) high?

Table B-36: Ring Trek - Recommended baseline inspection questions.

### 36. RING TREK - Baseline Inspection

#### Recommended Inspection Questions:

1. Does the ring trek meet all requirements for composite structures (see composite structure checklist)?
2. Is the ring trek free from loose, missing, or broken parts?
3. Is the ring trek free from vandalism?
4. Are adjoining platforms free from loose material, such as sand, wood product safety surface and leaves?
5. Is the ring trek free from worn chain?  
Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, or corrosion.
6. Is the ring trek free from open S-hooks?  
Note: The S-hook will be considered properly closed if hook openings are less than 1 mm (.04 inches) when tested with a feeler gauge. The lower loop will not cross over the upper loop.
7. Is all hardware present, securely attached, and without significant wear?  
Note: Wear is indicated by visible elongation, deformation or indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping,
8. *For school age*, is the maximum height of the ring trek 2100 mm (84 inches)?
9. *For preschool*, is the maximum height of the ring trek 1800 mm (72 inches)?
10. Are grips between 25 and 40 mm (.95 to 1.55 inches) in diameter?
11. Are grips round in shape?
12. Is the chain length 300 mm (12 inches) or less between the ring and attachment point?
13. Is the first ring inset on both ends of the play event so that it is not directly above the platform or rungs used for equipment entry or exit?
14. Is horizontal distance from the leading edge of takeoff/landing platforms to the first handhold 250 mm (10 inches) maximum?
15. Is the maximum height of takeoff/landing structure 450 mm (18 inches)?
16. Is the maximum distance from takeoff/landing structures to first handhold 1100 mm (45 inches)?
17. Is the play element age appropriate?

*Table B-37: Roof -Recommended baseline inspection questions.*

### **37. ROOF - Baseline Inspection**

Recommended Inspection Questions:

1. Does the roof meet all requirements for composite structures (see composite structure checklist)?
2. Is the roof free from loose, missing or broken parts?
3. Is the roof free from vandalism?
4. Is the roof securely attached?
5. Is the maximum nonclimbable exterior height at the roof's ridge 2550mm (102 inches)?
6. Is the element age appropriate?

Table B-38: Slide -Recommended baseline inspection questions.

**38. SLIDE - Baseline Inspection**

## Recommended Inspection Questions:

1. Does the slide meet all requirements for composite structures (see composite structure checklist)?
2. Is the slide free from loose, missing, or broken parts?
3. Is the slide free from vandalism?
4. Are plastic slides free from breaks, cracks, or chips, particularly at joints and connections?
5. Is the slide securely attached?
6. Are the slide bed, platforms and stairs free from loose material, such as sand, wood product safety surface, and leaves?
7. Is the metal slide bed free from areas which are hot to the touch when children are brought outdoors to play?
8. Is the slide entrance, sliding surface, and slide chute rails free of any openings that may cause entrapment or entanglement?
9. Is all hardware present, securely attached, and without significant wear?  
Note: Wear is indicated by visible elongation, deformation or indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.
10. Is the slide free from sharp edges and corners?
11. *For toddlers*, is the maximum height of the slide entrance 900 mm (36 inches)?
12. *For preschool*, is the maximum height of the slide entrance 1200 mm (48 inches)?
13. *For school age*, is the maximum height of the slide entrance 1400 mm (56 inches)?
14. *For toddlers*, does the slide have an 1800 mm (72 inches) obstruction-free use zone in front of the exit region and to both sides of the slide bed?
15. *For preschool and school age*, does the slide have an 2400 mm (96 inches) obstruction-free use zone in front of the exit region and a 1800 mm (72 inches) obstruction-free use zone to both sides of the slide bed?
16. Does a barrier at the slide entry require children to assume a sitting position before sliding?
17. Is the slope of the slide throughout the slide bed 50 degrees or less?
18. Is the platform at the slide entry at least 550 mm (22 inches) in length and as wide as the inclined surface?
19. If the platform at the slide entry is wider than the sliding surface, are protective barriers provided to fully enclose the platform?
20. Are protective barriers which meet the required dimensions provided on all sides of the slide entry platform (see protective barrier baseline inspection checklist)?
21. Are handholds provided at the entrance to facilitate the transition from standing to sitting?
22. Are handholds at the slide entrance high enough to provide hand support to the largest child in a standing position?

Table B-38: Slide - Recommended baseline inspection questions (writ.).

**38. SLIDE - Baseline Inspection - continued**

- 23. Are handholds at the slide entrance low enough to provide hand support for the smallest child in a sitting position?
- 24. Are slide chute rails a minimum of 100 mm (4 inches) high?
- 25. Do slide chute rails extend along both sides of the chute for the entire length of the inclined sliding surface?
- 26. Are the slide chute rails an integral part of the chute without any gaps between the sides and the sliding surface?
- 27. Are metal slides installed in shaded areas or located to face north?
- 28. Is the slide exit region essentially horizontal and parallel to the ground (0 to -4 degrees)?
- 29. Does the slide exit region have a minimum length of 275 mm (11 inches)?
- 30. For slides no more than 1200 mm (48 inches) in height, is the height of the exit region a maximum of 275 mm (11 inches) from the protective surface?
- 31. For slides that are over 1200 mm (48 inches) in height, is the exit region at least 175 mm (7 inches) but not more than 375 mm (15 inches) above the protective surface?
- 32. Is the radius of curvature in the slide exit region 750 mm (30 inches) or greater?
- 33. Are slide exit edges rounded or curved?
- 34. Are clear sight lines provided from the top to the bottom of the slide?
- 35. Does slide height/length ratio meet ASTM F 1487 requirements?
- 36. *For preschool*, is minimum slide chute width 300 mm (12 inches) for slides designed for use by one child?
- 37. *For school age*, is minimum slide chute width 400 mm (16 inches) for slides designed for use by one child?
- 38. Is a slide clearance zone free of equipment which extends to a height of 1500 mm (60 inches) above the slide chute surface and 500 mm (21 inches) beyond sidewalls on each side (measured from inside of the sidewall) provided throughout the slide chute area?

Note: slide hoods, guardrails or other devices intended to channel user into sitting position are excluded.

- 39. Is the play element age appropriate?

Table B-39: Stationary Bridge - Recommended baseline inspection questions.

### 39. STATIONARY BRIDGE - Baseline Inspection

#### Recommended Inspection Questions:

1. Does the bridge meet all requirements for composite structures (see composite structure checklist)?
2. Is the bridge free from loose, missing, or broken parts?
3. Is the bridge free from vandalism?
4. Is the bridge and bridge enclosure securely attached?
5. Is the bridge surface free from loose materials such as sand, wood product safety surface and leaves?
6. *For toddlers*, is the maximum height of the bridge walking surface 900 mm (36 inches)?
7. *For preschool*, is the maximum height of the bridge walking surface 1200 mm (48 inches)?
8. *For school age*, is the maximum height of the bridge walking surface 1400 mm (56 inches)?
9. *For toddlers*, is the bridge fully enclosed with no potential for entrapment or falls?
10. Does the surface accumulate water or debris?
11. Does the surface material cut, scratch or burn when slid on?
12. Is the play element age appropriate?

Table B-40: Track Ride - Recommended baseline inspection questions.

## 40. TRACK RIDE - Baseline Inspection

### Recommended Inspection Questions:

1. Does the track ride meet all requirements for composite structures (see composite structure checklist)?
2. Is the track ride free from loose, missing, or broken parts?
3. Is the track ride free from vandalism?
4. Are adjoining platforms free from loose material, such as sand, wood product safety surface and leaves?
5. Is the track ride free from worn chain?  
Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust or corrosion.
6. Is the track ride free from open S-hooks?  
Note: The S-hook will be considered properly closed if hook openings are less than 1 mm (.04 inches) when tested with a feeler gauge. The lower loop will not cross over the upper loop.
7. Is all hardware present, securely attached, and without significant wear?  
Note: Wear is indicated by visible elongation, deformation or indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.
8. Is the track ride sliding mechanism free from wear?  
Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust or corrosion.
9. Is the sliding mechanism well lubricated?
10. Are the sliding mechanism and other moving parts disassembled annually and replaced as indicated for visible signs of wear?  
Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust or corrosion.
11. *For school age*, is the maximum height of the track ride 2400 mm (96 inches)?
12. Are grips between 25 and 40 mm (.95 to 1.55 inches) in diameter?
13. Are grips round in shape?
14. Is the chain length 300mm (12 inches) or less between the grip and attachment point?
15. Is the track inset on both ends of the play event so that it is not hung directly above the platform or rungs used for equipment entry or exit?
16. Is maximum horizontal distance from the leading edge of takeoff/landing platform to handhold 240 mm (10 inches)?
17. Is maximum height of takeoff/landing structure 450 mm (18 inches)?
18. Is maximum distance from handhold to takeoff/landing structure 1100 mm (45 inches)?
19. Is takeoff/landing area free of obstructions?

*Table 640: Track Ride - Recommended baseline inspection questions (cont.).*

**40. TRACK RIDE - Baseline Inspection - continued**

20. Does slope of track ride meet manufacturer's requirements?

Table B-41: Tunnel/Tunnel Slide - Recommended baseline inspection questions.

## 41. TUNNEL/TUNNEL SLIDE - Baseline Inspection

### Recommended Inspection Questions:

1. Does the tunnel meet all requirements for composite structures (see composite structure checklist)?
2. Is the tunnel free from loose, missing or broken parts?
3. Is the tunnel free from vandalism?
4. Is the tunnel securely attached?
5. Are plastic parts unbroken and without chips or cracks, particularly at joints and connections?
6. If the tunnel is composed of more than one piece, is it free from openings between pieces?
7. Is the tunnel free from loose material, such as sand, wood product safety surface and leaves?
8. If the tunnel is a slide, does it meet all requirements for slides (see slide checklist)?
9. Is all tunnel hardware present, securely attached and without significant wear?

Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.

10. *For preschool*, is the maximum height to the crawling/sliding surface 1200 mm (48 inches)?
11. *For school age*, is the maximum height to the crawling/sliding surface 1400 mm (56 inches)?
12. Are barriers provided or surfaces treated to prevent sliding on top of the tunnel?
13. Is the minimum diameter of the tunnel 600 mm (24 inches)?
14. Is the play element age appropriate?

*Table B-42: Wheel - Recommended baseline inspection questions.*

## 42. WHEEL - Baseline Inspection

### Recommended Inspection Questions:

1. Does the wheel meet all requirements for composite structures?
2. Is the wheel free from loose, missing or broken parts?
3. Is the wheel free from vandalism?
4. Is the wheel securely attached with free movement and minimal wobble?
5. Is all hardware present, securely attached, and without significant wear?

Note: Wear is indicated by visible elongation, deformation or indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.

6. Is the wheel structure free of accessible pinch, crush and shear points (chap 4)?
7. Is the wheel lubricated to allow free turning?
8. Is the structure free of head entrapments?

Note: Openings must meet all entrapment inspection criteria (chap 4).

Table 643: Amphitheater - Recommended baseline inspection questions.

**43. AMPHITHEATER - Baseline Inspection**

Note: Amphitheaters are optional elements which provide large group meeting space for the entire CDC.

## Recommended Inspection Questions:

1. is the amphitheater free from loose, missing, or broken parts?
  2. Is the amphitheater free from vandalism?
  3. Is the amphitheater free from debris?
  4. Are aisles and pathways of a continuous smooth surface without holes or abrupt changes in level greater than 6 mm (1/4-inch)?
  5. Are aisles and pathways free from weeds?
  6. Are aisles and pathways free from insect or rodent infestation?
  7. Are aisles and pathways free from rot or mold?
  8. Are wood seats free from warping, wood rot, insect damage, and checking (cracks more than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width)?
  9. Are concrete seats free from extensive cracking, rough surfaces, and sharp edges or corners?
  10. Are wood materials free from splinters; loose or missing knots; and sharp edges or corners?
  11. Is all hardware present, securely attached, and without significant wear?  
Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.
  12. Are seats free from chipped, peeling or worn paint?
  13. is the amphitheater free of head entrapments?  
Note: Openings must meet all entrapment inspection criteria (chap 4).
  14. Are vertical angles greater than 55 degrees?  
Note: Horizontal angles, angles which slope downward from the apex, or angles which are infilled to prevent the large head template from touching both sides of the angle simultaneously are exempt.
  15. Do all protrusions meet inspection criteria (chap 4)?
  16. If a wood preservative was used, has a non-toxic sealant been applied to treated areas every two years?
  17. Are paints free from lead (0.060/0 maximum lead by dry weight) as stated by the manufacturer?
  18. Are wood materials naturally rot resistant or pressure treated with a wood preservative?  
If pressure treated wood was used, list the preservative's name.
- 
19. Is the wood preservative used in pressure treatment safe for use in children's play areas as specified by CPSC?

*Table B44: Ball Play Area - Recommended baseline inspection questions.*

#### **44. BALL PLAY AREA - Baseline Inspection**

Recommended Inspection Questions:

1. Is the surface free of toys and other foreign objects?
2. Is the surface free of debris and slippery materials, such as sand, wood product safety surface, ice, algae, moss, etc., when children are brought outdoors to play?
3. Is the surface free of abrupt changes in level greater than 6 mm (1/4-inch)?
4. Is the surface smooth and free from rough areas or cracks?
5. Are the pavement markings bright, legible, and free of chipped, peeling, or worn paint?
6. Are pavement markings free of lead (0.060% maximum lead by dry weight), cadmium, or other toxic material?
7. Is the element age appropriate?

Table B-45: Ball Wall - Recommended baseline inspection questions.

## 45. BALL WALL - Baseline Inspection

### Recommended Inspection Questions:

1. Is the ball wall free from loose, missing, or broken parts?
2. Is the ball wall free from vandalism?
3. Are wood materials free from warping, wood rot, insect damage, and checking (cracks more than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width)?
4. Is concrete free from extensive cracking, rough surfaces, or sharp edges or corners?
5. Are wood materials free from splinters; loose or missing knots; and sharp edges or corners?
6. Is all hardware present, securely attached, and without significant wear?  
 Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.
7. Is the ball wall free from chipped, peeling or worn paint?
8. Is the ball wall free of head entrapments?  
 Note: Openings must meet all entrapment inspection criteria (chap 4).
9. Are vertical angles greater than 55 degrees?  
 Note: Horizontal angles, angles which slope downward from the apex, or angles which are infilled to prevent the large head template from touching both sides of the angle simultaneously are exempt.
10. Do all protrusions meet inspection criteria (chap 4)?
11. If a wood preservative was used, has a non-toxic sealant been applied to treated areas every two years?
12. Are paints free from lead (0.06% maximum lead by dry weight) as stated by the manufacturer?
13. Are wood materials naturally rot resistant or pressure treated with a wood preservative?  
 If pressure treated wood was used, list the preservative's name.

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14. Is the wood preservative used in pressure treatment safe for use in children's play areas as specified by CPSC?

Table B-46: Crawl Area - Recommended baseline inspection questions.

## 46. CRAWL AREA - Baseline Inspection

### Recommended Inspection Questions:

1. Is the crawl area free of loose material and foreign objects, such as debris, sand, wood product safety surface, gravel, leaves, soil, and toys?
2. Is the crawl area free from puddles, ice and snow when children are brought outside to play?
3. Is the crawl area surface disinfected daily as per AR 608-10?
4. Is the synthetic safety surface firmly attached to the underlying surface?
5. Is the synthetic safety surface free of abrupt changes in level greater than 6 mm (1/4-inch)?
6. Is the synthetic safety surface free of cuts, nicks or damaged areas?
7. Is the synthetic safety surface free of exposed hardware and sharp edges?
8. Is the surface guaranteed by the manufacturer to meet ASTM F 1292 requirements for impact attenuation for a fall from a height of 600 mm (24 inches)?
9. Is the play element age appropriate?

*Table B-47: Digging Area -Recommended baseline inspection questions.*

**47. DIGGING AREA - Baseline Inspection**

Recommended Inspection Questions:

1. Is the digging area free from debris, glass, nails or other sharp or foreign material?
2. Is the clay or soil free from debris, glass, nails or other sharp or foreign material?
3. Are adjacent surfaces or structures free from undercutting (digging beneath the adjacent element)?
4. Are tools and toys removed daily for cleaning and storage?
5. Is specified clay or soil replenished as needed to avoid settling?
6. Is the element age appropriate?

Table B-48: Platform - Recommended baseline inspection questions.

## 48. PLATFORM - Baseline Inspection

### Recommended Inspection Questions:

1. Is the platform free from loose, missing, or broken parts?
  2. Is the platform free from vandalism?
  3. Does the platform have a clear zone for circulation free from any obstruction, including portable climbing equipment, trikes, and wheeled toys which extends 300 mm (36 inches) in all directions from the platform?
  4. Are wood materials free from warping, wood rot, insect damage, and checking (cracks more than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width)?
  5. Are wood materials free from splinters; loose or missing knots; and sharp edges or corners?
  6. Is all hardware present, securely attached, and without significant wear?  
Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.
  7. Is the platform free from chipped, peeling or worn paint?
  8. Is the platform free of head entrapments?  
Note: Openings must meet all entrapment inspection criteria (chap 4).
  9. Are vertical angles greater than 55 degrees?  
Note: Horizontal angles, angles which slope downward from the apex, or angles which are infilled to prevent the large head template from touching both sides of the angle simultaneously are exempt.
  10. Do all protrusions meet inspection criteria (chap 4)?
  11. Are equipment footings securely anchored?
  12. If a wood preservative was used, has a non-toxic sealant been applied to treated areas every two years?
  13. Are paints free from lead (0.06% maximum lead by dry weight) as stated by the manufacturer?
  14. Are wood materials naturally rot resistant or pressure treated with a wood preservative?  
If pressure treated wood was used, list the preservative's name.
- 
15. Is the wood preservative used in pressure treatment safe for use in children's play areas as specified by CPSC?
  16. Are lock washers, self-locking nuts, or other locking means provided for all nuts and bolts to protect them from detachment?
  17. Is the equipment free of cables, wires, or ropes which are suspended within 45 degrees of horizontal?
  18. Is the platform at ground level or a maximum of 300 mm (12 inches) high?
  19. Is the equipment free of hollow support posts with open ends?
  20. Is the play element age appropriate?

Table B-49: Playhouse - Recommended baseline inspection questions.

## 49. PLAYHOUSE - Baseline Inspection

### Recommended Inspection Questions:

1. Is the playhouse free from loose, missing, or broken parts?
2. Is the playhouse free from vandalism?
3. Is the playhouse free of wet or icy surfaces when children are brought outdoors to play?
4. Is the walking surface free from loose and slippery material, e.g., sand, wood product safety surface, leaves, etc.?
5. Does the playhouse have a 1800 mm (72-inch) use zone free from any obstruction, including portable climbing equipment, trikes, and wheeled toys?
6. Are wood materials free from warping, wood rot, insect damage, and checking (cracks more than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width)?
7. Are metal materials free from rust, corrosion or bending of members?
8. Are plastic materials unbroken and without chips or cracks, particularly at joints and connections?
9. Are wood materials free from splinters; loose or missing knots; and sharp edges or corners?
10. Are metal materials free from rough metal and sharp edges or corners?
11. Is all hardware present, securely attached, and without significant wear?  
Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.
12. Is the playhouse free from chipped, peeling or worn paint?
13. Is the playhouse free of head entrapments?  
Note: Openings must meet all entrapment inspection criteria (chap 4).
14. Are vertical angles greater than 55 degrees?  
Note: Horizontal angles, angles which slope downward from the apex, or angles which are infilled to prevent the large head template from touching both sides of the angle simultaneously are exempt.
15. Do all protrusions meet inspection criteria (chap 4)?
16. Are the equipment footings or surface mount devices securely anchored?
17. Is the equipment free of accessible crush, pinch, or shearing points (chap 4)?
18. Is the playhouse design not intended for climbing?
19. Is the maximum nonclimbable exterior height at the playhouse roof ridge 2550 mm (102 inches)?
20. Does the playhouse have a minimum of two exits?  
Note: Windows which can be climbed through by a child maybe considered exits.
21. Is the roof waterproof?

Table B-49: Playhouse - Recommended baseline inspection questions (cont.).

**49. PLAYHOUSE - Baseline Inspection - continued**

22. Is there an overhang on the roof?
23. Is the roof strong enough to be climbed upon?
24. Is there visibility from the outside into the structure?
25. If a wood preservative was used, has a non-toxic sealant been applied to treated areas every two years?
26. Are paints free from lead (0.06% maximum lead by dry weight) as stated by the manufacturer?
27. Are wood materials naturally rot resistant or pressure treated with a wood preservative?  
If pressure treated wood was used, list the preservative's name.

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28. Is the wood preservative used in pressure treatment safe for use in children's play areas as specified by CPSC?
29. Are lock washers, self-locking nuts, or other locking means provided for all nuts and bolts to protect them from detachment?
30. Are metal materials galvanized, anodized or composed of other non-rusting materials?
31. Is the equipment free of cables, wires, or ropes which are suspended within 45 degrees of horizontal?
32. Is the equipment free of hollow support posts with open ends?
33. Is the play element age appropriate?

Table B-50: Play Station - Recommended baseline inspection questions.

**50. PLAY STATION - Baseline Inspection**

## Recommended inspection Questions:

1. Is the play station free from loose, missing, or broken parts?
  2. Is the play station free from vandalism?
  3. Are wood materials free from warping, wood rot, insect damage, and checking (cracks more than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width)?
  4. Are metal materials free from rust, corrosion or bending of members?
  5. Are plastic materials unbroken and without chips or cracks, particularly at joints and connections?
  6. Are wood materials free from splinters; loose or missing knots; and sharp edges or corners?
  7. Are metal materials free from rough metal, and sharp edges or corners?
  8. Is all hardware present, securely attached, and without significant wear?  
Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.
  9. Is the play station free from chipped, peeling or worn paint?
  10. Is the play station free of head entrapments?  
Note: Openings must meet all entrapment inspection criteria (chap 4).
  11. Are vertical angles greater than 55 degrees?  
Note: Horizontal angles, angles which slope downward from the apex, or angles which are infilled to prevent the large head template from touching both sides of the angle simultaneously are exempt.
  12. Do all protrusions meet inspection criteria (chap 4)?
  13. Are equipment footings or surface mount devices securely anchored?
  14. Is the equipment free from accessible crush, pinch or shearing points (chap 4)?
  15. If a wood preservative was used, has a non-toxic sealant been applied to treated areas every two years?
  16. Are paints free from lead (0.06% maximum lead by dry weight) as stated by the manufacturer?
  17. Are wood materials naturally rot resistant or pressure treated with a wood preservative?  
If pressure treated wood was used, list the preservative's name.
- 
18. Is the wood preservative used in pressure treatment safe for use in children's play areas as specified by CPSC?
  19. Are lock washers, self-locking nuts, or other locking means provided for all nuts and bolts to protect them from detachment?
  20. Are metal materials galvanized, anodized or composed of other non-rusting materials?

*Table B-50: Play Station - Recommended baseline inspection questions (writ.).*

**50. PLAY STATION - Baseline Inspection - continued**

21. Is the equipment free of cables, wires, or ropes which are suspended within 45 degrees of horizontal?
22. Is the equipment free of hollow support posts with open ends?
23. Is the play element age appropriate?

Table B-51: Program Pole - Recommended baseline inspection questions.

**51. PROGRAM POLE - Baseline Inspection**

Recommended Inspection Questions:

1. Is the program pole free from loose, missing, or broken parts?
  2. Is the program pole free from vandalism?
  3. Is the program pole free of nails, staples and other connecting devices?
  4. Are wood materials free from warping, wood rot, insect damage, and checking (cracks more than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width)?
  5. Are wood materials free from splinters; loose or missing knots; and sharp edges or corners?
  6. Is all hardware present, securely attached, and without significant wear?  
 Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.
  7. Is the program pole free from chipped, peeling or worn paint?
  8. Is the program pole free of head entrapments?  
 Note: Openings must meet all entrapment inspection criteria (chap 4).
  9. Are vertical angles greater than 55 degrees?  
 Note: Horizontal angles, angles which slope downward from the apex, or angles which are infilled to prevent the large head template from touching both sides of the angle simultaneously are exempt.
  10. Do all protrusions meet inspection criteria (chap 4)?
  11. Are equipment footings securely anchored?
  12. If a wood preservative was used, has a non-toxic sealant been applied to treated areas every two years?
  13. Are paints free from lead (0.06% maximum lead by dry weight) as stated by the manufacturer?
  14. Are wood materials naturally rot resistant or pressure treated with a wood preservative?  
 If pressure treated wood was used, list the preservative's name.
- 
15. Is the wood preservative used in pressure treatment safe for use in children's play areas as specified by CPSC?
  16. Are lock washers, self-locking nuts, or other locking means provided for all nuts and bolts to protect them from detachment?
  17. Are metal materials galvanized, anodized or composed of other non-rusting materials?
  18. Is the equipment free of cables, wires, or ropes which are suspended within 45 degrees of horizontal?
  19. Is the equipment free of hollow support posts with open ends?
  20. Is the play element age appropriate?

Table B-52: Sand Play Area (Not Within Use Zones) - Recommended baseline inspection questions.

## 52. SAND PLAY AREA (NOT WITHIN USE ZONES) - Baseline Inspection

### Recommended Inspection Questions:

1. Is the sand play containment barrier free of loose, missing, or broken parts?
2. Is the sand play containment free from vandalism?
3. Is sand free of debris and foreign objects, such as stones, leaves, twigs or branches, toys, and wheeled toys?
4. Is sand free of animal feces?
5. Is sand removed from adjacent areas and pathways?
6. Is sand free from holes or low areas caused by digging or play activities?
7. Is sand free of insect infestation?
8. Is sand free from puddles and poor drainage?
9. Is sand depth a minimum of 450 mm (18 inches)?
10. Are wood materials free from warping, wood rot, insect damage, and checking (cracks more than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width)?
11. Are concrete materials free from extensive cracking, rough surfaces, or sharp edges or corners?
12. Are wood materials free from splinters; loose or missing knots; and sharp edges or corners?
13. Is all hardware present, securely attached, and without significant wear?  
Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.
14. Is the sand play area free from chipped, peeling or worn paint?
15. Is the sand play area free of head entrapments?  
Note: Openings must meet all entrapment inspection criteria (chap 4).
16. Are vertical angles greater than 55 degrees?  
Note: Horizontal angles, angles which slope downward from the apex, or angles which are infilled to prevent the large head template from touching both sides of the angle simultaneously are exempt.
17. Do all protrusions meet inspection criteria (chap 4)?
18. Has sand been thoroughly sifted for cleaning and aeration annually?
19. Has sand been removed and replaced when necessary for cleanliness?
20. If a wood preservative was used, has a non-toxic sealant been applied to treated areas every two years?
21. Are paints free from lead (0.6% maximum lead by dry weight) as stated by the manufacturer?

*Table B-52: Sand Play Area (Not Within Use Zones) - Recommended baseline inspection questions (cont.).*

**52. SAND PLAY AREA (NOT WITHIN USE ZONES) - Baseline Inspection - continued**

- 22. Are wood materials naturally rot resistant or pressure treated with a wood preservative?  
If pressure treated wood was used, list the preservative's name.  

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- 23. Is the wood preservative used in pressure treatment safe for use in children's play areas as specified by CPSC?
- 24. Is the element age appropriate?

*Table B-53: Sand and Water Table - Recommended baseline inspection questions.*

### 53. SAND AND WATER TABLE - Baseline Inspection

Recommended Inspection Questions:

1. Is the table free from loose, missing, or broken parts?
  2. Is the table free from vandalism?
  3. Has sand and water been cleaned and replaced to maintain sanitary conditions?
  4. Is the sand and water table covered when not in use?
  5. Is the ground surface near the sand and water table free from pooling of water or mud?
  6. Is the table's use zone free from any obstructions when measured 1800 mm (72 inches ) in any direction from the equipment?
  7. Are wood materials free from warping, wood rot, insect damage, and checking (cracks more than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width)?
  8. Are metal materials free from rust, corrosion or bending of members?
  9. Are concrete materials free from extensive cracking, rough surfaces, or sharp edges or corners?
  10. Are plastic materials unbroken and without chips or cracks, particularly at joints and connections?
  11. Are wood materials free from splinters; loose or missing knots; and sharp edges or corners?
  12. Are metal materials free from rough metal and sharp edges or corners?
  13. Is all hardware present, securely attached, and without significant wear?  
Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.
  14. Is the table free from chipped, peeling or worn paint?
  15. Is the table free of head entrapments?  
Note: Openings must meet all entrapment inspection criteria (chap 4).
  16. Are vertical angles greater than 55 degrees?  
Note: Horizontal angles, angles which slope downward from the apex, or angles which are infilled to prevent the large head template from touching both sides of the angle simultaneously are exempt.
  17. Do all protrusions meet inspection criteria (chap 4)? ‘
  18. If a wood preservative was used, has a non-toxic sealant been applied to treated areas every two years?
  19. Are paints free from lead (0.06% maximum lead by dry weight) as stated by the manufacturer?
  20. Is the table nonabsorbent?
  21. Are wood materials naturally rot resistant or pressure treated with a wood preservative?  
If pressure treated wood was used, list the preservative's name.
-

*Table B-53: Sand and Water Table - Recommended baseline inspection questions (writ.).*

**53. SAND AND WATER TABLE - Baseline Inspection - continued**

22. Is the wood preservative used in pressure treatment safe for use in children's play areas as specified by CPSC?
23. Are lock washers, self-locking nuts, or other locking means provided for all nuts and bolts to protect them from detachment?
24. Are metal materials galvanized, anodized or composed of other non-rusting materials?
25. Is the equipment free of cables, wires, or ropes which are suspended within 45 degrees of horizontal?
26. Is the equipment free of hollow support posts with open ends?
27. Is the play element age appropriate?

Table B-54: Storage/Pram Storage -Recommended baseline inspection questions.

**54. STORAGE/PRAM STORAGE - Baseline Inspection**

## Recommended Inspection Questions:

1. Is the storage unit and roof free from loose, missing, or broken parts?
  2. Is the storage unit free from vandalism?
  3. Is the roof free from leaks?
  4. Is the walking surface free from loose and slippery materials, e.g., sand, wood product safety surface, leaves, etc.?
  5. Is the storage unit free from chemicals, maintenance equipment or other hazardous materials?
  6. Are wood materials free from warping, wood rot, insect damage, and checking (cracks more than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width)?
  7. Are wood materials free from splinters; loose or missing knots; and sharp edges or corners?
  8. Is all hardware present, securely attached, and without significant wear?  
Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.
  9. Is the storage unit free from chipped, peeling or worn paint?
  10. Is the storage unit free of head entrapments?  
Note: Openings must meet all entrapment inspection criteria (chap 4).
  11. Are vertical angles greater than 55 degrees?  
Note: Horizontal angles, angles which slope downward from the apex, or angles which are infilled to prevent the large head template from touching both sides of the angle simultaneously are exempt.
  12. Do all protrusions meet inspection criteria (chap 4)?
  13. If a wood preservative was used, has a non-toxic sealant been applied to treated areas every two years?
  14. Are paints free from lead (0.060/0 maximum lead by dry weight) as stated by the manufacturer?
  15. Are wood materials naturally rot resistant or pressure treated with a wood preservative?  
If pressure treated wood was used, list the preservative's name.
- 
16. Is the wood preservative used in pressure treatment safe for use in children's play areas as specified by CPSC?

Table B-55: Swing - Recommended baseline inspection questions.

## 55. SWING - Baseline Inspection

### Recommended Inspection Questions:

1. Is the swing free from loose, missing, or broken parts?
2. Is the swing free from vandalism?
3. Is the swing use zone free from any obstruction, including portable climbing equipment, trikes, and wheeled toys?  
Note: The swing use zone is equal to two times the height of the swing crossbeam measured to both the front and back of the equipment from the swing seat and 1800 mm (72 inches) to both sides of the swing support ( chap 3).
4. Is the outdoor temperature above freezing when children are brought outdoors to play?
5. Are wood materials free from warping, wood rot, insect damage, and checking (cracks greater than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width)?
6. Are metal materials free from rust, corrosion, or bending of members?
7. Are wood materials free from splinters; loose or missing knots; and sharp edges or corners?
8. Are metal materials free from rough metal and sharp edges or corners?
9. Is all hardware present, securely attached, and without significant wear?  
Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.
10. Is the swing free from chipped, peeling or worn paint?
11. Is the swing free from worn chains, S-hooks, and swing seats?  
Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust or corrosion.
12. Is the swing free from open S-hooks?  
Note: The S-hook will be considered properly closed if hook openings are less than 1 mm (.04 inches) when tested with a feeler gauge. The lower loop will not cross over the upper loop.
13. Are swing bearings well lubricated?
14. Is the swing free of head entrapments?  
Note: Openings must meet all entrapment inspection criteria (chap 4).
15. Are vertical angles greater than 55 degrees?  
Note: Horizontal angles, angles which slope downward from the apex, or angles which are infilled to prevent the large head template from touching both sides of the angle simultaneously are exempt.
16. Do swing seat and hardware protrusions meet inspection criteria (chap 4)?
17. Are equipment footings securely anchored?
18. Is the swing free from accessible crush, pinch, or shearing points (chap 4)?
19. Are swing seats and tot seats the "slash proof" rubber belt type?

Table B-55: Swing - Recommended baseline inspection questions (cont.).

**55. SWING - Baseline Inspection - continued**

20. *For toddlers*, is the maximum height of the swing crossbeam 2100 mm (84 inches)?
  21. *For toddlers*, do tot seats provide 360 degree support and are they free from head and neck entrapments?
  22. Do swing seats accommodate only one user?
  23. *For preschool or school age*, is the maximum height of the swing crossbeam 2400 mm (96 inches)?
  24. Does the swing support frame design discourage climbing?
  25. Is the swing located on the outer edge of the play area to separate it from other equipment and activity areas?
  26. Are a maximum of two swings hung in each section of the support structure?
  27. Is the swing free standing and not attached to a composite structure?
  28. *For toddlers*, are tot swings suspended at the height of 600 mm (24 inches) from the playground surface?
  29. *For preschool*, are swing seats suspended at a height of 300 mm (12 inches) to 450 mm (18 inches) from the playground surface?
  30. *For school age*, are swing seats suspended at a minimum height of 450 mm (18 inches) from the playground surface?
  31. When occupied by the maximum user, are swing seats spaced a minimum of 600 mm (24 inches) apart?
  32. When occupied by the maximum user, are swing seats spaced a minimum of 750 mm (30 inches) from the swing support structure, measured from a height of 1400 mm (60 inches) above the safety surface?
  33. Are swing hangers spaced wider than the width of the swing when occupied by the maximum user, to reduce side-to-side motion, a minimum of 500 mm (20 inches)?  
Note: Swing hangers are the hardware from which the swing chains are suspended.
  34. If a wood preservative was used, has a non-toxic sealant been applied to treated areas every two years?
  35. Are paints free from lead (0.060/0 maximum lead by dry weight) as stated by the manufacturer?
  36. Are wood materials naturally rot resistant or pressure treated with a wood preservative?  
If pressure treated wood was used, list the preservative's name.
- 
37. Is the wood preservative used in pressure treatment safe for use in children's play areas as specified by CPSC?
  38. Are metal materials galvanized, anodized or composed of other non-rusting material?
  39. Are lock washers, self-locking nuts, or other locking means provided for all nuts and bolts to protect them from detachment?
  40. Is the equipment free of cables, wires, or ropes which are suspended within 45 degrees of horizontal?
  41. Is the equipment free of hollow wooden or metal support posts with open ends?
  42. Is the play element age appropriate?

*Table B-56: Toys and Scrap Material- Recommended baseline inspection questions.*

**56. TOYS AND SCRAP MATERIAL - Baseline Inspection**

Recommended Inspection Questions:

1. Are toys and scrap material removed from pathways or play areas daily for cleaning or storage as required?
2. Does the toy size and design prevent choke hazards?
3. Are toys and scrap material in good condition and free of missing, broken, loose or sharp components?
4. Are toys, scrap material, and fabric cleaned and disinfected as per *AR 608-10*?

Note: For children ages 3 and younger, toys and scrap material must be cleaned and disinfected daily. For children ages 3 and older, items must be cleaned and disinfected weekly. items which cannot be cleaned must be discarded after use.

5. is the item age appropriate?

Table B-57: Tricycle and Wheeled Toy - Recommended baseline inspection questions.

## 57. TRICYCLE AND WHEELED TOY - Baseline Inspection

### Recommended Inspection Questions:

1. is the tricycle or wheeled toy in operational condition with all hardware tight and secure?
2. Is the tricycle or wheeled toy free from sharp edges, rust, and cracked or broken components?
3. Are wheels, forks and cranks free of wobble?
4. Are tires excessively cracked?
5. Is the seat firmly attached?
6. Is the tricycle or wheeled toy removed from pathways and play areas and placed in designated storage areas when not in use?
7. Are bearings well lubricated?
8. Is the tricycle or wheeled toy age appropriate?

## APPENDIX C

### RECOMMENDED PERIODIC INSPECTION QUESTIONS

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#### **C-1. General**

This appendix contains a list of recommended periodic inspection questions for all elements addressed in this manual. The questions will be used to create site-adapted periodic inspection checklists for the CDC on DA Form 731 O-R (chap 2). The site-adapted DA form will become part of the CDC's customized inspection and maintenance manual. Directions for conducting periodic inspections are provided in chapter 5.

#### **C-2. Elements addressed in the appendix**

This appendix contains periodic inspection questions for all elements within the play area. These include: general site elements (table C-1 through C-8); ground cover and plant material (table C-9 through C-13); utilities and drainage (table C-14 through C-17); safety surfacing (table C-18 through C-20); site furnishings (table C-21 through C-24); maintenance practices (table C-25); composite structure play equipment (table C-26 through C-42); play activity areas (table C-43 through C-55); and toys and loose parts (table C-56 and C-57).

*Table C-1: Boulder - Recommended periodic inspection questions.*

**1. BOULDER - Periodic Inspection**

Recommended Inspection Questions:

1. Is the boulder located outside of play equipment use zones (at least 2400 mm (96 inches) from play equipment)?
2. Is the boulder firmly set in the soil to at least 1/3 of its depth so that it will not rock or rotate in any direction?
3. Is the boulder surface free of loose or slippery material, such as crumbling rock, sand, wood chips, moss, or algae?
4. Is the boulder free of sharp, jagged or protruding edges?

Table C-2: Fencing and Gates - Recommended periodic inspection questions.

## 2. FENCING AND GATES - Periodic Inspection

### Recommended Inspection Questions:

1. Are the fencing and gates free from loose, missing, or broken parts?
2. Are the fencing and gates free from vandalism?
3. Are metal materials free from rust, corrosion or bending of members?
4. Are metal materials free from rough metal, sharp wires, and sharp edges or corners?
5. Is all hardware present, securely attached, and without significant wear?  
Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.
6. Are fence fabrics intact with all tension wires and connections secure?
7. Are gates well-lubricated and locking components in working order?
8. Is the distance between fence and gate materials and the ground surface less than 75 mm (3 inches)?

*Table C-3: Pathways - Hard Surfaced - Recommended periodic inspection questions.*

### **3. PATHWAYS - HARD SURFACED - Periodic Inspection**

Recommended Inspection Questions:

1. Are pathways free of abrupt changes in level greater than 6 mm (1/4-inch)?
2. Are the sides of the pathways free of ruts?
3. Are pathways free of objects which protrude into the pathway overhead at a height of 2000 mm (80 inches) or less, such as branches?

*Table C-4: Pathways - Wood Chip - Recommended periodic inspection questions.*

#### **4. PATHWAYS - WOOD CHIP - Periodic Inspection**

Recommended Inspection Questions:

1. Are pathways free of debris, such as stones, branches, and loose parts?
2. Are wood products distributed evenly along the pathway to form a uniform surface?
3. Are pathways free from mold, mushrooms and other fungi?
4. Are pathways free of tree roots?
5. Are pathways free of pot holes?
6. Are pathways free from puddles and poor drainage?
7. Are pathways free from insect and rodent infestation?
8. Is the depth of wood products from 50 to 150 mm (2 -6 inches)?
9. Are pathways free of objects which protrude into the pathway overhead at a height of 2000 mm (80 inches) or less, such as branches?

*Table C-5: Planter - Recommended periodic inspection questions.*

## 5. PLANTER - Periodic Inspection

### Recommended Inspection Questions:

1. Is the planter free from loose, missing, or broken parts?
2. Is the planter free from vandalism?
3. Are wood materials free from warping, wood rot, insect damage, and checking (cracks more than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width)?
4. Are concrete materials free from extensive cracking, rough surfaces, and sharp edges or corners?
5. Are wood materials free from splinters; loose or missing knots; and sharp edges or corners?
6. Is all hardware present, securely attached, and without significant wear?  
Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.
7. Is the planter free from chipped, peeling or worn paint?

*Table C-6: Shade Structure - Recommended periodic inspection questions.*

## 6. SHADE STRUCTURE - Periodic Inspection

### Recommended Inspection Questions:

1. Is the shade structure and roof free from loose, missing, or broken parts?
2. Is the shade structure and roof free from vandalism?
3. Is the roof free from leaks?
4. Are wood materials free from warping, wood rot, insect damage, and checking (cracks more than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width)?
5. Are metal materials free from rust, corrosion or bending of members?
6. Are wood materials free from splinters; loose or missing knots; and sharp edges or corners?
7. Are metal materials free from rough metal and sharp edges or corners?
8. Is the shade structure free from chipped, peeling or worn paint?
9. Is all hardware present, securely attached, and without significant wear?

Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.

Table C-7: Sign - Recommended periodic inspection questions.

## 7. SIGN - Periodic Inspection

### Recommended Inspection Questions:

1. Is the sign free from loose, missing, or broken parts?
2. Is the sign free from vandalism?
3. Is the sign fully exposed with no vegetation obscuring its view?
4. Are signs bright and readable with no peeling, chipped, or worn paint?
5. Are wood materials free of warping, wood rot, insect damage, and checking (cracks greater than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width)?
6. Are metal materials free of rust, corrosion or bending of members?
7. Are wood materials free of splinters, loose or missing knots, and sharp edges or corners?
8. Are metal materials free of rough metal and sharp edges or corners?
9. Is all hardware present, securely attached, and without significant wear?

Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.

*Table C-8: Trellis - Recommended periodic inspection questions.*

## 8. TRELLIS - Periodic Inspection

### Recommended Inspection Questions:

1. Is the trellis free from loose, missing, or broken parts?
2. Is the trellis free from vandalism?
3. Are wood materials free from warping, wood rot, insect damage, and checking (cracks more than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width)?
4. Are wood materials free from splinters; loose or missing knots; and sharp edges or corners?
5. Is all hardware present, securely attached, and without significant wear?  
Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.
6. Is the trellis free from chipped, peeling or worn paint?

*Table C-9: Ground Cover - Recommended periodic inspection questions.*

## **9. GROUND COVER - Periodic Inspection**

Recommended Inspection Questions:

1. Does ground cover receive sufficient water (25 mm (1-inch) per week) for health and vigor?
2. Are planting beds free from species with thorns, and mushrooms and other fungi?
3. Are planting beds free from species with berries?
4. Are planting beds free from ponding or puddles?
5. Are planting beds free from weeds?
6. Are weeds controlled by non-chemical means (see *AR 608-10*)?

*Table C-10: Mulch - Recommended periodic inspection questions.*

## **10. MULCH - Periodic Inspection**

Recommended Inspection Questions:

1. Is the mulch free from mold, rot, mildew, mushrooms and other fungi?
2. Is the mulch free from insect or rodent infestation?
3. Is the mulch free from puddling and poor drainage?
4. Is the mulch evenly distributed to a depth of 100 mm (4 inches) and free from potholes and low areas?

*Table C-11: Shrubs - Recommended periodic inspection questions.*

## **11. SHRUBS - Periodic Inspection**

### Recommended Inspection Questions:

1. Are planting beds free from species with thorns, mushrooms and other fungi?
2. Do planting beds receive sufficient water (25 mm (1-inch) per week) for health and vigor?
3. Are planting beds free from roots which may cause trip hazards?
4. Are shrubs free from broken, dead or sharp branches?
5. Are planting beds free from species with berries?
6. Are planting beds free from weeds?
7. Are weeds controlled by non-chemical means (see *AR 608-10*)?
8. Are planting beds free from ponding or puddles?
9. Are shrubs pruned to maintain a natural appearance, rejuvenate plants, and remove hazards?
10. Are stakes and guy wires adjusted and removed when appropriate to prevent plant damage?

*Table C-12: Tree - Recommended periodic inspection questions.***12. TREE - Periodic Inspection**

## Recommended Inspection Questions:

1. Is the tree free from broken stakes and protruding wires?
2. Does the tree receive sufficient water (25 mm (1-inch) per week) for health and vigor?
3. Is the tree free from broken, dead, or sharp branches?
4. Is the tree free from branches that protrude into the pathway overhead at a height of 2000 mm (80 inches) or less?
5. Is the tree free from roots which may cause trip hazards?
6. Are stakes and guy wires adjusted and removed when appropriate to prevent plant damage?

*Table C-13: Turf - Recommended periodic inspection questions.*

### **13. TURF - Periodic Inspection**

Recommended Inspection Questions:

1. Does the turf receive sufficient water(25 mm (1-inch) per week) for health and vigor?
2. Is the turf free of mushrooms and other fungi?
3. Is the turf mowed to a height of 25 to 50 mm (1 to 2 inches)?
4. Are the turf areas free from holes and trip hazards?
5. Is the turf free from poor drainage, pending, and puddles?
6. Are weeds controlled by nonchemical means (see *AR 608-10*)?

Table C-14: Drinking Fountain - Recommended periodic inspection questions.

## 14. DRINKING FOUNTAIN - Periodic Inspection

### Recommended Inspection Questions:

1. Is the drinking fountain free from loose, missing, or broken parts?
2. Is the drinking fountain free from vandalism?
3. Are the basin, spigot, and handle cleaned and regularly disinfected as per *AR 608-10*?
4. Are the hardware and plumbing in working order with the drain running free?
5. Is the arch of water sufficient to hit the drinking fountain drain without overshooting?
6. Are wood materials free from warping, wood rot, insect damage, and checking (cracks greater than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width)?
7. Are metal materials free from rust, corrosion, or bending of members?
8. Are wood materials free from splinters; loose or missing knots; and sharp edges or corners?
9. Are metal materials free from rough metal, and sharp edges or corners?
10. Is all hardware present, securely attached, and without significant wear?  
Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion or stripping.
11. Is the drinking fountain free from chipped, peeling or worn paint?

*Table C-15: Irrigation - Recommended periodic inspection questions.*

## **15. IRRIGATION - Periodic Inspection**

### Recommended Inspection Questions:

1. Is the system free from trip hazards such as unretracted sprinkler heads, exposed pipes, etc. ?
2. Is irrigation maintained at the proper level to provide needed moisture (25 mm (1-inch) per week) without over watering?

Table C-16: Sink - Recommended periodic inspection questions.

## 16. SINK - Periodic Inspection

### Recommended Inspection Questions:

1. Are the sink, cabinet, and surface free from loose, missing, or broken parts?
2. Are the sink, cabinet, and surface free from vandalism?
3. Are the sink basin, cabinet, spigot, and handle cleaned and regularly disinfected as per *AR 608-10*?
4. Are the sink hardware and plumbing in working order with drain running free?
5. Are wood materials free from warping, wood rot, insect damage, and checking (cracks greater than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width)?
6. Are metal materials free from rust, corrosion, or bending of members?
7. Are wood materials free from splinters; loose or missing knots; and sharp edges or corners?
8. Are metal materials free from rough metal and sharp edges or comers?
9. Is all hardware present, securely attached, and without significant wear?  
Note: Wear is indicated by rust, corrosion or stripping.
10. Are the sink and cabinet free from chipped, peeling or worn paint?

*Table C-17: Storm Drain - Recommended periodic inspection questions.*

## **17. STORM DRAIN - Periodic Inspection**

Recommended Inspection Questions:

1. Are the storm drain inlets clear and free running with no water standing on the ground surface?
2. Are the storm drain covers securely fastened to the frame?

*Table C-18: Sand Safety Surfacing (Within Use Zones) - Recommended periodic inspection questions.*

## **18. SAND SAFETY SURFACING (WITHIN USE ZONES) - Periodic Inspection**

### Recommended Inspection Questions:

1. Is sand safety surfacing free of debris and foreign objects, such as stones, leaves, twigs or branches, toys, and wheeled toys?
2. Is sand safety surfacing free of animal feces?
3. Is sand safety surfacing removed from adjacent areas and pathways?
4. Is sand safety surfacing free from holes or low areas caused by digging or play activities?
5. Is sand safety surfacing free of insect infestation?
6. Is sand safety surfacing free from puddles and poor drainage?
7. Is sand safety surfacing depth a minimum of 300 mm (12 inches) over base materials and footings?
8. Is sand safety surfacing depth a minimum of 600 mm (24 inches) at slide exits and under swings?

*Table C-19: Synthetic Safety Surfacing (Within Use Zones) - Recommended periodic inspection questions.*

## **19. SYNTHETIC SAFETY SURFACING (WITHIN USE ZONES) - Periodic Inspection**

### Recommended Inspection Questions:

1. Is synthetic safety surfacing free of loose material and foreign objects, such as debris, sand, wood chips, gravel, leaves, soil, and toys?
2. Is synthetic safety surfacing firmly attached to the underlying surface?
3. Is synthetic safety surfacing free of abrupt changes in level greater than 6 mm (1/4-inch)?
4. Is synthetic safety surfacing free of cuts, nicks or damaged areas?
5. Is synthetic safety surfacing free of exposed hardware and sharp edges?

*Table C-20: Wood Product Safety Surfacing (Within Use Zones) - Recommended periodic inspection questions.*

## **20. WOOD PRODUCT SAFETY SURFACING (WITHIN USE ZONES) - Periodic Inspection**

### Recommended Inspection Questions:

1. Is wood product safety surfacing free of debris and foreign objects, such as stones, leaves, twigs or branches, toys, and wheeled toys?
2. Is wood product safety surfacing free of animal feces?
3. Is wood product safety surfacing free of mold, mushrooms, fungi, mildew, rot, and insect or rodent infestation?
4. Is wood product safety surfacing removed from adjacent areas and pathways?
5. Is wood product safety surfacing free from holes or low areas caused by digging or play activities?
6. Is wood product safety surfacing free from puddles and poor drainage?
7. Is wood product safety surfacing depth a minimum of 300 mm (12 inches) over base materials and footings?
8. Is wood product safety surfacing depth a minimum of 600 mm (24 inches) at slide exits and under swings?

*Table C-21: Bench - Recommended periodic inspection questions.*

**21. BENCH - Periodic Inspection**

Recommended Inspection Questions:

1. Is the bench free from loose, missing, or broken parts?
2. Is the bench free from vandalism?
3. Are wood materials free from warping, wood rot, insect damage, and checking (cracks more than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width)?
4. Are concrete materials free from extensive cracking, rough surfaces, and sharp edges or corners?
5. Are metal materials free from rust, corrosion, or bending of members?
6. Are wood materials free from splinters; loose or missing knots; and sharp edges or corners?
7. Are metal materials free from rough metal and sharp edges or corners?
8. Is all hardware present, securely attached, and without significant wear?

Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.

9. Is the bench free from chipped, peeling or worn paint?



Table C-22: Removable Shade - Recommended periodic inspection questions.

## 22. REMOVABLE SHADE - Periodic Inspection

### Recommended Inspection Questions:

1. Is the removable shade element free from loose, missing, or broken parts?
2. Is the removable shade element free from vandalism?
3. Is the removable shade element clean?
4. Is all hardware present, securely attached, and without significant wear?

Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust or corrosion.

5. Is the removable shade element free from sharp edges or corners?
6. Is the removable shade element free from rust, corrosion, or bending of members?

*Table C-23: Table - Recommended periodic inspection questions.*

### **23. TABLE - Periodic Inspection**

Recommended Inspection Questions:

1. Is the table free from loose, missing, or broken parts?
2. Is the table free from vandalism?
3. Are wood materials free from warping, wood rot, insect damage, and checking (cracks more than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width)?
4. Are wood materials free from splinters; loose or missing knots; and sharp edges or corners?
5. Is all hardware present, securely attached, and without significant wear?  
Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.
6. Is the table free from chipped, peeling or worn paint?

Table C-24: Trash Receptacle - Recommended periodic inspection questions.

## 24. TRASH RECEPTACLE - Periodic Inspection

### Recommended Inspection Questions:

1. Is the trash receptacle free from loose, missing, or broken parts?
2. Is the trash receptacle free from vandalism?
3. Are wood materials free from warping, wood rot, insect damage, and checking (cracks greater than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width)?
4. Are metal materials free rust, corrosion or bending of members?
5. Are concrete materials free from extensive cracking, and sharp edges and corners?
6. Are wood materials free from splinters; loose or missing knots; and sharp edges or corners?
7. Are metal materials free from rough metal and sharp edges or corners?
8. Is all hardware present, securely attached, and without significant wear?  
Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.
9. Is the trash receptacle free from chipped, peeling or worn paint?
10. Is the trash receptacle cleaned with detergent, water and a disinfectant monthly as weather permits or more often if needed?

*Table C-25: Weed and Pest Management -Recommended periodic inspection questions.*

## **25. WEED AND PEST MANAGEMENT - Periodic Inspection**

Recommended Inspection Questions:

1. Are weeds controlled by manual rather than chemical means?
2. Is insect infestation evaluated and treated by Certified Pesticide Applicators as described in *AR 420-76*?
3. Is plant disease evaluated and treated by Certified Pesticide Applicators as described in *AR 420-76*?

Table C-26: Composite Structure - Recommended periodic inspection questions.

## 26. COMPOSITE STRUCTURE - Periodic Inspection

### Recommended Inspection Questions:

1. Is the composite structure free of loose, missing, or broken parts?
2. Is the composite structure free from vandalism?
3. *For preschool and school age*, is the composite structure's use zone free from obstructions when measured 2400 mm (96 inches) in any direction from the equipment?
4. *For toddlers*, is the composite structure's use zone free from obstructions when measured 1800 mm (72 inches) in any direction from the equipment?
5. Are wood materials free from warping, wood rot, insect damage, and checking (cracks more than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width)?
6. Are metal materials free from rust, corrosion, or bending of members?
7. Are plastic parts unbroken and without chips or cracks, particularly at joints and connections?
8. Are wood materials free from splinters, loose or missing knots, or sharp edges or corners?
9. Are metal materials free from rough metal and sharp edges or corners?
10. Is all hardware present, securely attached, and without significant wear?  
Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.
11. Is the composite structure free from chipped, peeling or worn paint?
12. Are S-hooks and other connectors fully closed and secure?
13. Is rope free of fraying or rot?
14. Is chain without significant wear?  
Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust or corrosion.
15. Is cable without visible wear and free of frayed or projecting wires?

*Table C-27: Arch Climber - Recommended periodic inspection questions.*

**27. ARCH CLIMBER - Periodic Inspection**

Recommended Inspection Questions:

1. Does the arch climber meet all requirements for composite structures (see composite structure checklist)?
2. Is the arch climber free from loose, missing, or broken parts?
3. Is the arch climber free from vandalism?
4. Do the arch climber rungs rotate?

*Table C-28: Bubble Panel - Recommended periodic inspection questions.*

## **28. BUBBLE PANEL - Periodic Inspection**

Recommended Inspection Questions:

1. Does the bubble panel meet all requirements for composite structures (see composite structure checklist)?
2. Is the bubble panel free from loose, missing, or broken parts?
3. Is the bubble panel free from vandalism?

*Table C-29: Clatter Bridge - Recommended periodic inspection questions.*

## **29. CLATTER BRIDGE - Periodic Inspection**

### Recommended Inspection Questions:

1. Does the clatter bridge meet all requirements for composite structures (see composite structure checklist)?

2. Is the clatter bridge free from loose, missing, or broken parts?

3. Is the clatter bridge free from vandalism?

4. Is the clatter bridge free from worn chain?

Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, or corrosion.

5. Is the clatter bridge free from open S-hooks?

6. Is all hardware present, securely attached, and without significant wear?

Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.

7. Is the distance between the bridge and composite structure platform between 50 mm (2 inches) maximum?

*Table C-30: Cleated Ramp - Recommended periodic inspection questions.*

### **30. CLEATED RAMP - Periodic Inspection**

Recommended Inspection Questions:

1. Does the cleated ramp meet all requirements for composite structures (see composite structure checklist)?
2. Is the cleated ramp free from loose, missing, or broken parts?
3. Is the cleated ramp free from vandalism?

*Table C-31: Game Panel - Recommended periodic inspection questions.*

### **31. GAME PANEL - Periodic Inspection**

Recommended Inspection Questions:

1. Does the game panel meet all requirements for composite structures (see composite structure checklist)?
2. Is the game panel free from loose, missing, or broken parts?
3. Is the game panel free from vandalism?
4. Are game component markings clearly visible?

*Table C-32: Horizontal Ladder- Recommended periodic inspection questions.*

### **32. HORIZONTAL LADDER - Periodic Inspection**

Recommended Inspection Questions:

1. Does the horizontal ladder meet all requirements for composite structures (see composite structure check-list)?
2. Is the horizontal ladder free from loose, missing, or broken parts?
3. Is the horizontal ladder free from vandalism?
4. Are ladder rungs securely attached and do not rotate?

*Table C-33: Ladder and Stairs - Recommended periodic inspection questions.*

### **33. LADDER AND STAIRS - Periodic Inspection**

Recommended Inspection Questions:

1. Do ladders and stairs meet all requirements for composite structures (see composite structure checklist)?
2. Are ladders and stairs free from loose, missing, or broken parts?
3. Are ladders and stairs free from vandalism?
4. Are ladder rungs and steps securely attached?
5. Do ladder rungs rotate?

*Table C-34: Net Climber- Recommended periodic inspection questions.***34. NET CLIMBER - Periodic Inspection**

## Recommended Inspection Questions:

1. Does the net climber meet all requirements for composite structures (see composite structure checklist)?
2. Is the net climber free loose, missing, or broken parts?
3. Is the net climber free from vandalism?
4. Is the net climber free from worn cable?
5. Is all hardware present, securely attached, and without significant wear?

Note: Wear is indicated by visible elongation, deformation or indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.

6. Is the net climber free from open S-hooks?
7. Is the net adjusted to eliminate loose cable?
8. Are anchoring devices which are connected to the ground buried below the playing surface?

*Table C-35: Protective Barrier- Recommended periodic inspection questions.*

### **35. PROTECTIVE BARRIER - Periodic Inspection**

Recommended Inspection Questions:

1. Does the protective barrier meet all requirements for composite structures (see composite structure checklist)?
2. Is the protective barrier free from loose, missing, or broken parts?
3. Is the protective barrier free from vandalism?

Table C-36: Ring Trek - Recommended periodic inspection questions.

### 36. RING TREK - **Periodic Inspection**

#### Recommended Inspection Questions:

1. Does the ring trek meet all requirements for composite structures (see composite structure checklist)?
2. Is the ring trek free from loose, missing, or broken parts?
3. Is the ring trek free from vandalism?
4. Is the ring trek free from worn chain?

Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, or corrosion.

5. Is the ring trek free from open S-hooks?
6. Is all hardware present, securely attached, and without significant wear?

Note: Wear is indicated by visible elongation, deformation or indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.

*Table C-37: Roof - Recommended periodic inspection questions.*

### **37. ROOF - Periodic Inspection**

Recommended Inspection Questions:

1. Does the roof meet all requirements for composite structures (see composite structure checklist)?
2. Is the roof free from loose, missing or broken parts?
3. Is the roof free from vandalism?
4. Is the roof securely attached?

*Table C-38: Slide - Recommended periodic inspection questions.***38. SLIDE - Periodic Inspection**

## Recommended Inspection Questions:

1. Does the slide meet all requirements for composite structures (see composite structure checklist)?
2. Is the slide free from loose, missing, or broken parts?
3. Is the slide free from vandalism?
4. Are plastic slides free from breaks, cracks, or chips, particularly at joints and connections?
5. Is the slide securely attached?
6. Is the slide free of any openings between the platform and the start of the sliding surface?
7. Is all hardware present, securely attached, and without significant wear?

Note: Wear is indicated by visible elongation, deformation or indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.

8. Is the slide free from sharp edges and corners?

*Table C-39: Stationary Bridge - Recommended periodic inspection questions.*

### **39. STATIONARY BRIDGE - Periodic Inspection**

Recommended Inspection Questions:

1. Does the bridge meet all requirements for composite structures (see composite structure checklist)?
2. Is the bridge free from loose, missing, or broken parts?
3. Is the bridge free from vandalism?
4. Is the bridge and bridge enclosure securely attached?

*Table C-40: Track Ride - Recommended periodic inspection questions.***40. TRACK RIDE - Periodic Inspection**

## Recommended Inspection Questions:

1. Does the track ride meet all requirements for composite structures (see composite structure checklist)?
2. Is the track ride free from loose, missing, or broken parts?
3. Is the track ride free from vandalism?
4. Is the track ride free from worn chain?  
Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust or corrosion.
5. Is the track ride free from open S-hooks?
6. Is all hardware present, securely attached, and without significant wear?  
Note: Wear is indicated by visible elongation, deformation or indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.
7. Is the track ride sliding mechanism free from wear?  
Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust or corrosion.
8. Is the sliding mechanism well lubricated?

*Table C41: Tunnel/Tunnel Slide - Recommended periodic inspection questions.*

**41. TUNNEL/TUNNEL SLIDE - Periodic Inspection**

Recommended Inspection Questions:

1. Does the tunnel meet all requirements for composite structures (see composite structure checklist)?
2. Is the tunnel free from loose, missing or broken parts?
3. Is the tunnel free from vandalism?
4. Is the tunnel securely attached?
5. Are plastic parts unbroken and without chips or cracks, particularly at joints and connections?
6. If the tunnel is composed of more than one piece, is it free from openings between pieces?
7. If the tunnel is a slide, does it meet all requirements for slides (see slide checklist)?
8. Is all tunnel hardware present, securely attached and without significant wear?

Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.

*Table C-42: Wheel - Recommended periodic inspection questions.***42. WHEEL - Periodic Inspection**

## Recommended Inspection Questions:

1. Does the wheel meet all requirements for composite structures?
2. Is the wheel free from loose, missing or broken parts?
3. Is the wheel free from vandalism?
4. Is the wheel securely attached with free movement and minimal wobble?
5. Is all hardware present, securely attached, and without significant wear?

Note: Wear is indicated by visible elongation, deformation or indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.

6. Is the wheel structure free of pinch and crush points?
7. Is the wheel lubricated to allow free turning?

*Table C-43: Amphitheater - Recommended periodic inspection questions.*

**43. AMPHITHEATER - Periodic Inspection**

**Recommended Inspection Questions:**

1. Is the amphitheater free from loose, missing, or broken parts?
2. Is the amphitheater free from vandalism?
3. Are aisles and pathways of a continuous smooth surface without holes or abrupt changes in level greater than 6 mm (1/4-inch)?
4. Are aisles and pathways free from weeds?
5. Are aisles and pathways free from insect or rodent infestation?
6. Are aisles and pathways free from rot and mold?
7. Are wood seats free from warping, wood rot, insect damage, and checking (cracks more than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width)?
8. Are concrete seats free from extensive cracking, rough surfaces, and sharp edges or corners?
9. Are wood materials free from splinters; loose or missing knots; and sharp edges or corners?
10. Is all hardware present, securely attached, and without significant wear?

Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.

11. Are seats free from chipped, peeling or worn paint?

*Table C-44: Ball Play Area - Recommended periodic inspection questions.*

#### **44. BALL PLAY AREA - Periodic Inspection**

Recommended Inspection Questions:

1. Is the surface free of abrupt changes in level greater than 6 mm (1/4-inch)?
2. Is the surface smooth and free from rough areas or cracks?
3. Are the pavement markings bright, legible, and free of chipped, peeling, or worn paint?

*Table C45: Ball Wall- Recommended periodic inspection questions.*

**45. BALL WALL - Periodic Inspection**

Recommended Inspection Questions:

1. Is the ball wall free from loose, missing, or broken parts?
2. is the ball wall free from vandalism?
3. Are wood materials free from warping, wood rot, insect damage, and checking (cracks more than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width)?
4. Is concrete free from extensive cracking, rough surfaces, and sharp edges or corners?
5. Are wood materials free from splinters; loose or missing knots; and sharp edges or corners?
6. Is all hardware present, securely attached, and without significant wear?

Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.

7. Is the ball wall free from chipped, peeling or worn paint?

*Table C-46: Crawl Area - Recommended periodic inspection questions.*

## **46. CRAWL AREA - Periodic Inspection**

Recommended Inspection Questions:

1. Is the resilient surface firmly attached to the underlying surface?
2. Is the resilient surface free of abrupt changes in level greater than 6 mm (1/4-inch)?
3. Is the resilient surface free of cuts, nicks or damaged areas?
4. Are resilient tiles free of exposed hardware and sharp edges?

*Table C-47: Digging Area - Recommended periodic inspection questions.*

**47. DIGGING AREA - Periodic Inspection**

Recommended Inspection Questions:

1. Is the digging area free from debris, glass, nails or other sharp or foreign material?
2. Is the clay or soil free from debris, glass, nails or other sharp or foreign material?
3. Are adjacent surfaces or structures free from undercutting (digging beneath the adjacent element)?

*Table C-48: Platform - Recommended periodic inspection questions.***48. PLATFORM - Periodic Inspection**

## Recommended Inspection Questions:

1. Is the platform free from loose, missing, or broken parts?
2. Is the platform free from vandalism?
3. Is the platform circulation zone free from any obstruction, including portable climbing equipment, trikes, and wheeled toys?  
Note: The platform circulation zone extends 900 mm (36 inches) in all directions from the platform.
4. Are wood materials free from warping, wood rot, insect damage, and checking (cracks more than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width)?
5. Are wood materials free from splinters; loose or missing knots; and sharp edges or corners?
6. Is all hardware present, securely attached, and without significant wear?  
Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.
7. Is the platform free from chipped, peeling or worn paint?

Table C-49: Playhouse - Recommended periodic inspection questions.

**49. PLAYHOUSE - Periodic Inspection**

Recommended Inspection Questions:

1. Is the playhouse free from loose, missing, or broken parts?
2. Is the playhouse free from vandalism?
3. Does the playhouse have a 1800 mm (72-inch) circulation zone free from any obstruction, including portable climbing equipment, trikes, and wheeled toys?
4. Are wood materials free from warping, wood rot, insect damage, and checking (cracks more than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width)?
5. Are metal materials free from rust, corrosion or bending of members?
6. Are plastic materials unbroken and without chips or cracks, particularly at joints and connections?
7. Are wood materials free from splinters; loose or missing knots; and sharp edges or corners?
8. Are metal materials free from rough metal and sharp edges or corners?
9. Is all hardware present, securely attached, and without significant wear?  
Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.
10. Is the playhouse free from chipped, peeling or worn paint?

*Table C-50: Play Station - Recommended periodic inspection questions.***50. PLAY STATION - Periodic Inspection**

## Recommended Inspection Questions:

1. Is the play station free from loose, missing, or broken parts?
2. Is the play station free from vandalism?
3. Are wood materials free from warping, wood rot, insect damage, and checking (cracks more than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width)?
4. Are metal materials free from rust, corrosion or bending of members?
5. Are plastic materials unbroken and without chips or cracks, particularly at joints and connections?
6. Are wood materials free from splinters; loose or missing knots; and sharp edges or corners?
7. Are metal materials free from rough metal and sharp edges or corners?
8. Is all hardware present, securely attached, and without significant wear?

Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.

9. Is the play station free from chipped, peeling or worn paint?

*Table C-51: Program Pole - Recommended periodic inspection questions.*

## **51. PROGRAM POLE - Periodic Inspection**

### Recommended Inspection Questions:

1. Is the program pole free from loose, missing, or broken parts?
2. Is the program pole free from vandalism?
3. Is the program pole free of nails, staples and other connecting devices?
4. Are wood materials free from warping, wood rot, insect damage, and checking (cracks more than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width)?
5. Are wood materials free from splinters; loose or missing knots; and sharp edges or corners?
6. Is all hardware present, securely attached, and without significant wear?

Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.

7. Is the program pole free from chipped, peeling or worn paint?

*Table C-52: Sand Play Area (Not Within Use Zones) - Recommended periodic inspection questions.*

## **52. SAND PLAY AREA (NOT WITHIN USE ZONES) - Periodic Inspection**

### Recommended Inspection Questions:

1. Is the sand play containment barrier free of loose, missing, or broken parts?
2. Is the sand play containment barrier free from vandalism?
3. Is sand free of debris and foreign objects, such as stones, leaves, twigs or branches, toys, and wheeled toys?
4. Is sand free of animal feces?
5. Is sand free of insect infestation?
6. Is sand free from puddles and poor drainage?
7. Is sand depth a minimum of 450 mm (18 inches)?
8. Are wood materials free from warping, wood rot, insect damage, and checking (cracks more than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width)?
9. Are concrete materials free from extensive cracking, rough surfaces, or sharp edges or corners?
10. Are wood materials free from splinters; loose or missing knots; and sharp edges or corners?
11. Is all hardware present, securely attached, and without significant wear?  
 Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.
12. Is the sand play area free from chipped, peeling or worn paint?

*Table C-53: Sand and Water Table - Recommended periodic inspection questions.*

**53. SAND AND WATER TABLE - Periodic Inspection**

Recommended Inspection Questions:

1. Is the table free from loose, missing, or broken parts?
2. Is the table free from vandalism?
3. Has sand and water been cleaned and replaced to maintain sanitary conditions?
4. Is the sand and water table covered when not in use?
5. Is the ground surface near the sand and water table free from pooling of water or mud?
6. Are wood materials free from warping, wood rot, insect damage, and checking (cracks more than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width)?
7. Are metal materials free from rust, corrosion or bending of members?
8. Are concrete materials free from extensive cracking, rough surfaces, or sharp edges or corners?
9. Are plastic materials unbroken and without chips or cracks, particularly at joints and connections?
10. Are wood materials free from splinters; loose or missing knots; and sharp edges or corners?
11. Are metal materials free from rough metal and sharp edges or corners?
12. Is all hardware present, securely attached, and without significant wear?  
Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.
13. Is the table free from chipped, peeling or worn paint?

*Table C-54: Storage/Pram Storage - Recommended periodic inspection questions.***54. STORAGE/PRAM STORAGE - Periodic Inspection**

## Recommended Inspection Questions:

1. Is the storage unit and roof free from loose, missing, or broken parts?
2. Is the storage unit and roof free from vandalism?
3. Is the roof free from leaks?
4. Is the storage unit free from chemicals, maintenance equipment or other hazardous materials?
5. Are wood materials free from warping, wood rot, insect damage, and checking (cracks more than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width)?
6. Are wood materials free from splinters; loose or missing knots; and sharp edges or corners?
7. Is all hardware present, securely attached, and without significant wear?  
Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.
8. Is the storage unit free from chipped, peeling or worn paint?

*Table C-55: Swing - Recommended periodic inspection questions.*

**55. SWING - Periodic Inspection**

Recommended Inspection Questions:

1. Is the swing free from loose, missing, or broken parts?
2. Is the swing free from vandalism?
3. Is the swing use zone free from any obstruction, including portable climbing equipment, trikes, and wheeled toys?  
Note: The swing use zone is equal to two times the height of the swing crossbeam measured to both the front and back of the equipment from the swing seat and 1800 mm (72 inches) to both sides of the swing support.
4. Are wood materials free from warping, wood rot, insect damage, and checking (cracks greater than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width)?
5. Are metal materials free from rust, corrosion, or bending of members?
6. Are wood materials free from splinters; loose or missing knots; and sharp edges or corners?
7. Are metal materials free from rough metal and sharp edges or corners?
8. Is all hardware present, securely attached, and without significant wear?  
Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.
9. Is the swing free from chipped, peeling or worn paint?
10. Is the swing free from worn chains, S-hooks, and swing seats?  
Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust or corrosion.
11. Is the swing free from open S-hooks?
12. Are swing bearings well lubricated?

*Table C-56: Toys and Scrap Material - Recommended periodic inspection questions.*

## **56. TOYS AND SCRAP MATERIAL - Periodic Inspection**

### Recommended Inspection Questions:

1. Are toys and scrap material removed from pathways or play areas daily for cleaning or storage as required?
2. Does the toy size and design prevent choke hazards?
3. Are toys and scrap material in good condition and free of missing, broken, loose or sharp components?
4. Are toys, scrap material, and fabric cleaned and disinfected as per AR 608-1 O?

Note: For children ages 3 and younger, toys and scrap material must be cleaned and disinfected daily. For children ages 3 and older, items must be cleaned and disinfected weekly. Items which cannot be cleaned must be discarded after use.

*Table C-57: Tricycle and Wheeled Toy - Recommended periodic inspection questions.*

**57. TRICYCLE AND WHEELED TOY - Periodic Inspection**

Recommended Inspection Questions:

1. Is the tricycle or wheeled toy in operational condition with all hardware tight and secure?
2. Is the tricycle or wheeled toy free from sharp edges, rust, and cracked or broken components?
3. Are wheels, forks and cranks free of wobble?
4. Are tires excessively cracked?
5. Is the seat firmly attached?
6. Is the tricycle or wheeled toy removed from pathways and play areas and placed in designated storage areas when not in use?
7. Are bearings well lubricated?

## APPENDIX D

### RECOMMENDED ANNUAL INSPECTION QUESTIONS

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#### **D-1. General**

This appendix contains a list of recommended annual inspection questions for all elements addressed in this manual. The questions will be used to create a site-adapted annual inspection checklist for the CDC on DA Form 731 O-R (chap 2). The site-adapted inspection checklist will become part of the CDC's customized inspection and maintenance manual. Directions for conducting an annual inspection are provided in chapter 5.

#### **D-2. Elements addressed in the appendix**

This appendix contains annual inspection checklist questions for all elements within the play area. These include: general site elements (table D-1 through D-8); ground cover and plant material (table D-9 through D-13) utilities and drainage (table D-14 through D-17); safety surfacing (table D-18 through D-20); site furnishings (table D-21 through D-24); maintenance practices (table 25); composite structure play equipment (table D-26 through D-42); play activity areas (table D-43 through D-55); and toys and loose parts (table D-56 and D-57).

*Table D-1: Boulder - Recommended annual inspection questions.*

**1. BOULDER - Annual Inspection**

Recommended inspection Questions

1. Is the boulder located outside of play equipment use zones (at least 2400 mm (96 inches) from play equipment)?
2. Is the boulder firmly set in the soil to at least 1/3 of its depth so that it will not rock or rotate in any direction?
3. Is the boulder surface free of loose or slippery material, such as crumbling rock, sand, wood product safety surface, moss, or algae?
4. Is the boulder free of ice or snow when children are brought outside to play?
5. Is the boulder free of sharp, jagged or protruding edges?

*Table D-2: Fencing and Gates - Recommended annual inspection questions.*

## 2. FENCING AND GATES - Annual Inspection

### Recommended Inspection Questions:

1. Are the fencing and gates free from loose, missing, or broken parts?
2. Are the fencing and gates free from vandalism?
3. Are metal materials free from rust, corrosion or bending of members?
4. Are metal materials free from rough metal, sharp wires, and sharp edges or corners?
5. Is all hardware present, securely attached, and without significant wear?  
Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.
6. Are fence fabrics intact with all tension wires and connections secure?
7. Are gates well-lubricated and locking components in working order?
8. Is the distance between fence and gate materials and the ground surface less than 75 mm (3 inches)?
9. Are fencing and gates free of head entrapments?  
Note: Openings must meet all entrapment inspection criteria (chap 4).
10. Do protrusions meet inspection criteria (chap 4)?
11. Are paints free from lead (0.060\% maximum lead by dry weight) as stated by the manufacturer?

*Table D-3: Pathways - Hard Surfaced - Recommended annual inspection questions.*

**3. PATHWAYS - HARD SURFACED - Annual Inspection**

Recommended Inspection Questions:

1. Are pathways free of toys and other foreign objects?
2. Are pathways free of debris and slippery materials, such as sand, wood product safety surface, ice, algae, moss, etc. ?
3. Are pathways free of abrupt changes in level greater than 6 mm (1/4-inch)?
4. Are the sides of the pathways free of ruts?
5. Are pathways free of objects which protrude into the pathway overhead at a height of 2000 mm (80 inches) or less, such as branches?
6. Are pathways smooth and free from rough surfaces or cracks?
7. Are the pavement markings bright, legible, and free of chipped, peeling, or worn paint?
8. Are pavement markings free of lead (0.06% maximum lead by dry weight), cadmium, or other toxic material as specified by the manufacturer?

*Table D-4: Pathways - Wood Chip - Recommended annual inspection questions.*

#### **4. PATHWAYS - WOOD CHIP - Annual Inspection**

Recommended Inspection Questions:

1. Are pathways free of debris, such as stones, branches, and loose parts?
2. Are wood chips distributed evenly along the pathway to form a uniform surface?
3. Are pathways free from mold, mushrooms and other fungi?
4. Are pathways free of tree roots?
5. Are pathways free of pot holes?
6. Are pathways free from puddles and poor drainage?
7. Are pathways free from insect and rodent infestation?
8. Is the depth of wood chips from 50 to 150 mm (2 to 6 inches)?
9. Are pathways free of objects which protrude into the pathway overhead at a height of 2000 mm (80 inches) or less, such as branches?
10. Are wood chips replenished with material which is free of debris or foreign matter, such as stones, dirt, branches, soil, thorns or leaves?

Table D-5: Planter - Recommended annual inspection questions.

## 5. PLANTER - Annual Inspection

### Recommended Inspection Questions:

1. Is the planter free from loose, missing, or broken parts?
2. Is the planter free from vandalism?
3. Are wood materials free from warping, wood rot, insect damage, and checking (cracks more than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width)?
4. Are concrete materials free from extensive cracking, rough surfaces, and sharp edges or corners?
5. Are wood materials free from splinters; loose or missing knots; and sharp edges or corners?
6. Is all hardware present, securely attached, and without significant wear?  
Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.
7. Is the planter free from chipped, peeling or worn paint?
8. Is the planter free of head entrapments?  
Note: Openings must meet all entrapment inspection criteria (chap 4).
9. Do all protrusions meet test criteria (chap 4)?
10. If a wood preservative was used, has a non-toxic sealant been applied to treated areas every two years?
11. Are paints free from lead (0.06% maximum lead by dry weight) as stated by the manufacturer?

*Table D-6: Shade Structure - Recommended annual inspection questions.*

## 6. SHADE STRUCTURE - Annual Inspection

### Recommended Inspection Questions:

1. Is the shade structure and roof free from loose, missing, or broken parts?
2. Is the shade structure and roof free from vandalism?
3. Is the roof free from leaks?
4. Are wood materials free from warping, wood rot, insect damage, and checking (cracks more than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width)?
5. Are metal materials free from rust, corrosion or bending of members?
6. Are wood materials free from splinters; loose or missing knots; and sharp edges or corners?
7. Are metal materials free from rough metal and sharp edges or corners?
8. Is the shade structure free from chipped, peeling or worn paint?
9. Is all hardware present, securely attached, and without significant wear?  
Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.
10. Is the shade structure free of head entrapments?  
Note: Openings must meet all entrapment inspection criteria (chap 4).
11. Do all protrusions meet test criteria (chap 4)?
12. If a wood preservative was used, has a non-toxic sealant been applied to treated areas every two years?
13. Are paints free from lead (0.06% maximum lead by dry weight) as stated by the manufacturer?

Table D-7: Sign - Recommended annual inspection questions.

## 7. SIGN - Annual Inspection

### Recommended Inspection Questions:

1. Is the sign free from loose, missing, or broken parts?
2. Is the sign free from vandalism?
3. Is the sign fully exposed with no vegetation obscuring its view?
4. Is the sign bright and readable with no peeling, chipped, or worn paint?
5. Are wood materials free of warping, wood rot, insect damage, and checking (cracks greater than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width)?
6. Are metal materials free of rust, corrosion or bending of members?
7. Are wood materials free of splinters, loose or missing knots, and sharp edges or corners?
8. Are metal materials free of rough metal and sharp edges or corners?
9. Is all hardware present, securely attached, and without significant wear?  
Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.
10. Is the sign free of head entrapments?  
Note: Openings must meet all entrapment inspection criteria (chap 4).
11. Do protrusions meet inspection criteria (chap 4)?
12. If a wood preservative was used, has a non-toxic sealant been applied to treated areas every two years?
13. Are paints free from lead (0.06% maximum lead by dry weight) as stated by the manufacturer?

*Table D-8: Trellis - Recommended annual inspection questions.***8. TRELIS - Annual Inspection**

## Recommended Inspection Questions:

1. Is the trellis free from loose, missing, or broken parts?
2. Is the trellis free from vandalism?
3. Are wood materials free from warping, wood rot, insect damage, and checking (cracks more than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width)?
4. Are wood materials free from splinters; loose or missing knots; and sharp edges or corners?
5. Is all hardware present, securely attached, and without significant wear?  
Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.
6. Is the trellis free from chipped, peeling or worn paint?
7. Is the trellis free of head entrapments?  
Note: Openings must meet all entrapment inspection criteria (chap 4).
8. Do all protrusions meet test criteria (chap 4)?
9. If a wood preservative was used, has a non-toxic sealant been applied to treated areas every two years?
10. Are paints free from lead (0.06% maximum lead by dry weight) as stated by the manufacturer?

Table D-9: Ground Cover - Recommended annual inspection questions.

## 9. GROUND COVER - Annual Inspection

### Recommended Inspection Questions:

1. Are ground cover beds free from debris?
2. Does ground cover receive sufficient water (25 mm (1-inch) per week) for health and vigor?
3. Are planting beds free from species with thorns, mushrooms and other fungi?
4. Are planting beds free from species with berries?
5. Are planting beds free from pending or puddles?
6. Are planting beds free from weeds?
7. Are weeds controlled by non-chemical means (see *AR 608-10*)?
8. Is insect infestation evaluated and treated by Certified Pesticide Applicators as described in *AR 420-76*?
9. Is plant disease evaluated and treated by Certified Pesticide Applicators as described in *AR 420-76*?
10. Is ground cover pruned to maintain a natural appearance, rejuvenate plants, and stimulate flower development?
11. Is ground cover fertilized using a subsurface method to maintain a healthy condition?
12. Are planting beds filled as needed to avoid settling?
13. Are planting beds free of poisonous species?

*Table D-10: Mulch - Recommended annual inspection questions.***10. MULCH - Annual Inspection**

## Recommended Inspection Questions:

1. Is the mulch free of debris such as stones, branches, and trash?
2. Is the mulch free from mold, rot, mildew, mushrooms and other fungi?
3. Is the mulch free from insect or rodent infestation?
4. Is the mulch free from puddling and poor drainage?
5. Is the mulch evenly distributed to a depth of 100 mm (4 inches) and free from potholes and low areas?
6. Is the depth of mulch 100 mm (4 inches)?
7. Is the mulch replenished with material which is free of debris or other foreign matter, such as stones, dirt, branches, soil, thorns, or leaves?

Table D-11: Shrubs-Recommended annual inspection questions.

## 11. SHRUBS - Annual Inspection

### Recommended Inspection Questions:

1. Are planting beds free from debris?
2. Are planting beds free from species with thorns, mushrooms and other fungi?
3. Do planting beds receive sufficient water (25 mm (1 -inch) per week) for health and vigor?
4. Are planting beds free from roots which may cause trip hazards?
5. Are shrubs free from broken, dead or sharp branches?
6. Are planting beds free from species with berries?
7. Are planting beds free from pending or puddles?
8. Are shrubs pruned to maintain a natural appearance, rejuvenate plants, and remove hazards?
9. Are stakes and guy wires adjusted and removed when appropriate to prevent plant damage?
10. Are planting beds free from weeds?
11. Are weeds controlled by non-chemical means (see AR 608-10)?
12. Is insect infestation evaluated and treated by Certified Pesticide Applicators as described in AR 420-76?
13. Is plant disease evaluated and treated by Certified Pesticide Applicators as described in AR 420-76?
14. Are shrubs fertilized using a subsurface method to maintain a healthy condition?
15. Is organic mulch maintained in plant beds and around individual shrubs to a depth of 100 mm (4 inches)?
16. Are proper planting techniques employed to prevent plant and trunk damage?
17. Are planting beds filled as needed to avoid settling?
18. Are planting beds free of poisonous species?

Table D-12: Tree - Recommended annual inspection questions.

## 12. TREE - Annual Inspection

### Recommended Inspection Questions:

1. Is the tree free from broken stakes and protruding wires?
2. Does the tree receive sufficient water (25 mm (1-inch) per week) for health and vigor?
3. Is the tree free from broken, dead, or sharp branches?
4. Is the tree free from branches that protrude into the pathway overhead at a height of 2000 mm (80 inches) or less?
5. Is the tree free from roots which may cause trip hazards?
6. Are stakes and guy wires adjusted and removed when appropriate to prevent plant damage?
7. Is the tree pruned to maintain a natural looking appearance, maintain or reduce size, rejuvenate plants, and remove hazards?
8. Is a minimum 900 mm (36-inch) diameter bed of organic mulch maintained around individual trees?
9. Is organic mulch maintained at a 100 mm (4-inch) depth?
10. Is insect infestation evaluated and treated by Certified Pesticide Applicators as described in AR 420-76?
11. Is plant disease evaluated and treated by Certified Pesticide Applicators as described in AR 420-76?
12. Is the tree fertilized using a subsurface method to maintain a healthy condition?
13. Are proper planting techniques employed to prevent plant and trunk damage?
14. Is the tree species nonpoisonous?
15. Are trees free from fruit and berries?

Table D-13: Turf - Recommended annual inspection questions.

### 13. TURF - Annual Inspection

Recommended Inspection Questions:

1. Does the turf receive sufficient water (25 mm (1-inch) per week) for health and vigor?
2. Is the turf free of mushrooms and other fungi?
3. Is the turf mowed to a height of 25 to 50 mm (1 to 2 inches)?
4. Are the turf areas free from holes and trip hazards?
5. Is the turf free from poor drainage, pending, and puddles?
6. Are weeds controlled by nonchemical means (see *AF 608-10*)?
7. Is insect infestation evaluated and treated by Certified Pesticide Applicators as described in *AR 420-76*?
8. Is plant disease evaluated and treated by Certified Pesticide Applicators as described in *AR 420-76*?
9. Is the turf fertilized using a subsurface method to maintain healthy growth?
10. Are the turf areas free from excessive settling?
11. Is the soil aerated to maintain a healthy growth?
12. Is the turf dethatched to maintain a healthy growth?
13. Are turf areas free of poisonous plant species?

Table D-14: Drinking Fountain - Recommended annual inspection questions.

## 14. DRINKING FOUNTAIN - Annual Inspection

### Recommended Inspection Questions:

1. Is the drinking fountain free from loose, missing, or broken parts?
2. Is the drinking fountain free from vandalism?
3. Are the basin, spigot, and handle cleaned and regularly disinfected as per *AR 608-10*?
4. Are the hardware and plumbing in working order with the drain running free?
5. Is the arch of water sufficient to hit the drinking fountain drain without overshooting?
6. Are wood materials free from warping, wood rot, insect damage, and checking (cracks greater than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width)?
7. Are metal materials free from rust, corrosion, or bending of members?
8. Are wood materials free from splinters; loose or missing knots; and sharp edges or corners?
9. Are metal materials free from rough metal and sharp edges or corners?
10. Is all hardware present, securely attached, and without significant wear?  
Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion or stripping.
11. Is the drinking fountain free from chipped, peeling or worn paint?
12. Is the drinking fountain free of head entrapments?  
Note: Openings must meet all entrapment inspection criteria (chap 4).
13. Do protrusions meet inspection criteria (chap 4)?
14. If a wood preservative was used, has a non-toxic sealant been applied to treated areas every two years?
15. Are paints free from lead (0.06% maximum lead by dry weight) as stated by the manufacturer?

Table D- 15: Irrigation - Recommended annual inspection questions.

## 15. IRRIGATION - Annual Inspection

### Recommended Inspection Questions:

1. Is the system free from trip hazards such as unretracted sprinkler heads, exposed pipes, etc.?
2. Is irrigation maintained at the proper level to provide needed moisture (25 mm (1-inch) per week) without over watering?
3. Are sprinkler heads free from dirt and debris?
4. Are pipes flushed out from the mainline through the quick coupling valves after cleaning sprinkler heads?
5. Are sprinkler heads set to finished grade?
6. Are valves maintained in proper working order?
7. Are irrigation pipes inspected for placement and leaks?
8. Is the system winterized each fall and started up each spring in cold climates?
9. Are backflow prevention devices installed to ensure water in the irrigation system does not back-siphon into the potable distribution system?
10. Are backflow prevention devices tested annually to ensure operability according to state and local laws and manufacturer's guidance?

Table D-16: Sink - Recommended annual inspection questions.

## 16. SINK - Annual Inspection

### Recommended Inspection Questions:

1. Are the sink, cabinet, and surface free from loose, missing, or broken parts?
2. Are the sink, cabinet, and surface free from vandalism?
3. Are the sink basin, cabinet, spigot, and handle cleaned and regularly disinfected as per *AR 608-10*?
4. Are the sink hardware and plumbing in working order with drain running free?
5. Are wood materials free from warping, wood rot, insect damage, and checking (cracks greater than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width)?
6. Are metal materials free from rust, corrosion, or bending of members?
7. Are wood materials free from splinters; loose or missing knots; and sharp edges or corners?
8. Are metal materials free from rough metal and sharp edges or corners?
9. Is all hardware present, securely attached, and without significant wear?  
Note: Wear is indicated by rust, corrosion or stripping.
10. Are the sink and cabinet free from chipped, peeling or worn paint?
11. Is the sink free of head entrapments?  
Note: Openings must meet all entrapment inspection criteria (chap 4).
12. Do protrusions meet inspection criteria (chap 4)?
13. If a wood preservative was used, has a non-toxic sealant been applied to treated areas every two years?
14. Are paints free from lead (0.06% maximum lead by dry weight) as stated by the manufacturer?

*Table D-17: Storm Drain - Recommended annual inspection questions.*

## **17. STORM DRAIN - Annual Inspection**

Recommended Inspection Questions:

1. Are the storm drain inlets clear and free running with no water standing on the ground surface?
2. Are the storm drain covers securely fastened to the frame?

Table D-18: Sand Safety Surfacing (Within Use Zones) - Recommended annual inspection questions.

## 18. SAND SAFETY SURFACING (WITHIN USE ZONES) - Annual Inspection

### Recommended Inspection Questions:

1. Is sand safety surfacing free of debris and foreign objects, such as stones, leaves, twigs or branches, toys, and wheeled toys?
2. Is sand safety surfacing free of animal feces?
3. Is sand safety surfacing removed from adjacent areas and pathways?
4. Is sand safety surfacing free from holes or low areas caused by digging or play activities?
5. Is the play equipment area closed when the sand safety surfacing is frozen?
6. Is sand safety surfacing free of insect infestation?
7. Is sand safety surfacing free from puddles and poor drainage?
8. Is sand safety surfacing depth a minimum of 450 mm (18 inches) over base materials and footings?
9. Has sand safety surfacing been thoroughly sifted for cleaning and aeration annually?
10. Is sand safety surfacing removed and replaced when impact attenuating ability deteriorates due to dirt and debris?

Note: Sand safety surfacing will be replaced when a headfirst fall from the highest point of the play equipment would not result in an impact of 200 g's or less and a Head Injury Criteria value no greater than 1.000 when tested in accordance to ASTM F 1292.

*Table D- 19: Synthetic Safety Surfacing (Within Use Zones) - Recommended annual inspection questions.*

**19. SYNTHETIC SAFETY SURFACING (WITHIN USE ZONES) - Annual Inspection**

Recommended Inspection Questions:

1. Is synthetic safety surfacing free of loose material and foreign objects, such as debris, sand, gravel, leaves, soil, and toys?
2. Is synthetic safety surfacing free from puddles, ice and snow when children are brought outdoors to play?
3. Is the play equipment area closed when the outdoor temperature is -4° Celsius (25° F) or less?
4. Is synthetic safety surfacing firmly attached to the underlying surface?
5. Is synthetic safety surfacing free of abrupt changes in level greater than 6 mm (1/4-inch)?
6. Is synthetic safety surfacing free of cuts, nicks or damaged areas?
7. Is synthetic safety surfacing free of exposed hardware and sharp edges?

Table D-20: Wood Product Safety Surfacing (Within Use Zones) - Recommended annual inspection questions.

## 20. WOOD PRODUCT SAFETY SURFACING (WITHIN USE ZONES) - Annual Inspection

### Recommended Inspection Questions:

1. Is wood product safety surfacing free of debris and foreign objects, such as stones, leaves, twigs or branches, toys, and wheeled toys?
2. Is wood product safety surfacing free of animal feces?
3. Is wood product safety surfacing free of mold, mushrooms, fungi, mildew, rot, and insect or rodent infestation?
4. Is wood product safety surfacing removed from adjacent areas and pathways?
5. Is wood product safety surfacing free from holes or low areas caused by digging or play activities?
6. Is the play equipment area closed when wood product safety surfacing is frozen?
7. Is wood product safety surfacing free from puddles and poor drainage?
8. Is wood product safety surfacing depth a minimum of 300 mm (12 inches) over base materials and footings?
9. Is wood product safety surfacing removed and replaced when impact attenuating ability deteriorates due to decomposition, dirt and debris?

Note: Wood product safety surfacing will be replaced when a headfirst fall from the highest point of the play equipment would not result in an impact of 200 g's or less and a Head Injury Criteria value no greater than 1,000 when tested in accordance to ASTM F 1292.

Table D-21: Bench - Recommended annual inspection questions.

## 21. BENCH - Annual Inspection

### Recommended Inspection Questions:

1. Is the bench free from loose, missing, or broken parts?
2. Is the bench free from vandalism?
3. Are wood materials free from warping, wood rot, insect damage, and checking (cracks more than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width)?
4. Are concrete materials free from extensive cracking, rough surfaces, and sharp edges or corners?
5. Are metal materials free from rust, corrosion, or bending of members?
6. Are wood materials free from splinters; loose or missing knots; and sharp edges or corners?
7. Are metal materials free from rough metal and sharp edges or corners?
8. Is all hardware present, securely attached, and without significant wear?  
Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.
9. Is the bench free from chipped, peeling or worn paint?
10. Is the bench free of head entrapments?  
Note: Openings must meet all entrapment inspection criteria (chap 4).
11. Do all protrusions meet test criteria (chap 4)?
12. If a wood preservative was used, has a non-toxic sealant been applied to treated areas every two years?
13. Are paints free from lead (0.060/0 maximum lead by dry weight) as stated by the manufacturer?

Table D-22: Removable Shade - Recommended annual inspection questions.

## 22. REMOVABLE SHADE - Annual Inspection

### Recommended Inspection Questions:

1. Is the removable shade element free from loose, missing, or broken parts?
2. Is the removable shade element free from vandalism?
3. Is the removable shade element clean?
4. Is all hardware present, securely attached, and without significant wear?

Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust or corrosion.

5. Is the removable shade element free from sharp edges or corners?
6. Is the removable shade element free from rust, corrosion, or bending of members?
7. Is the shade element free of head entrapments?

Note: Openings must meet all entrapment inspection criteria (chap 4).

8. Do all protrusions meet test criteria (chap 4)?

Table D-23: Table - Recommended annual inspection questions.

## 23. TABLE - Annual Inspection

### Recommended Inspection Questions:

1. Is the table free from loose, missing or broken parts?
2. Is the table free from vandalism?
3. Is the table clean and disinfected as per *AR 608-10*?
4. Are wood materials free from warping, wood rot, insect damage, and checking (cracks more than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width)?
5. Are wood materials free from splinters; loose or missing knots; and sharp edges or corners?
6. Is all hardware present, securely attached, and without significant wear?  
Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.
7. Is the table free from chipped, peeling or worn paint?
8. Is the table free of head entrapments?  
Note: Openings must meet all entrapment inspection criteria (chap 4).
9. Do all protrusions meet test criteria (chap 4)?
10. If a wood preservative was used, has a non-toxic sealant been applied to treated areas every two years?
11. Are paints free from lead (0.6% maximum lead by dry weight) as stated by the manufacturer?

Table D-24: Trash Receptacle - Recommended annual inspection questions.

## 24. TRASH RECEPTACLE - Annual Inspection

### Recommended Inspection Questions:

1. Is the trash receptacle free from loose, missing, or broken parts?
2. Is the trash receptacle free from vandalism?
3. Are spills cleaned as they occur?
4. Are wood materials free from warping, wood rot, insect damage, and checking (cracks greater than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width)?
5. Are metal materials free rust, corrosion or bending of members?
6. Are concrete materials free from extensive cracking, and sharp edges and corners?
7. Are wood materials free from splinters; loose or missing knots; and sharp edges or corners?
8. Are metal materials free from rough metal and sharp edges or corners?
9. Is all hardware present, securely attached, and without significant wear?  
Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.
10. Is the unit free from chipped, peeling or worn paint?
11. Is the trash receptacle cleaned with detergent, water and a disinfectant monthly as weather permits or more often if needed?
12. Is the trash receptacle free of head entrapments?  
Note: Openings must meet all entrapment inspection criteria (chap 4).
13. Do protrusions meet inspection criteria (chap 4)?
14. Is the dumpster covered and closed?
15. Are dumpster drain holes plugged or covered with mesh screening?
16. Is the trash receptacle impermeable to moisture or lined with nonabsorbent materials and leakproof?
17. Is the trash receptacle capable of being covered with a lid or closed when not in use?
18. If a wood preservative was used, has a non-toxic sealant been applied to treated areas every two years?
19. Are paints free from lead (0.06% maximum lead by dry weight) as stated by the manufacturer?

*Table D-25: Weed and Pest Management - Recommended annual inspection questions.*

## **25. WEED AND PEST MANAGEMENT - Annual Inspection**

### Recommended Inspection Questions:

1. Are weeds controlled by manual rather than chemical means?
2. Is insect infestation evaluated and treated by Certified Pesticide Applicators as described in *AR 420-76*?
3. Is plant disease evaluated and treated by Certified Pesticide Applicators as described in *AR 420-76*?
4. If chemical treatment for plant disease or insects is necessary, is approved treatment applied only when children will be absent from the CDC for an adequate period of time to avoid chemical exposure?
5. If bait stations are justified, are they tamper proof and inaccessible to children?
6. Are stinging insect nests removed by pest management personnel?
7. Are children prohibited from entering the area for 24 hours after the removal of stinging insect nests?
8. Are vertebrate pests handled by trapping?
9. Is the use of live animal traps prohibited when children are present?

Table D-26: Composite Structure - Recommended annual inspection questions.

## 26. COMPOSITE STRUCTURE - Annual Inspection

### Recommended Inspection Questions:

1. Is the composite structure free of loose, missing, or broken parts?
2. Is the composite structure free of vandalism?
3. Is the composite structure free from wet or icy surfaces when children are brought outside to play?
4. For metal composite structures, is the temperature above freezing when children are brought outdoors to play?
5. Is the composite structure free from loose, slippery materials, such as sand, wood product safety surface, and leaves on platforms, stairs and rungs?
6. For preschool and school age, is the composite structure's use zone free from obstructions when measured 2400 mm (96 inches) in any direction from the equipment?
7. For toddlers, is the composite structure's use zone free from obstructions when measured 1800 mm (72 inches) in any direction from the equipment?
8. Are wood materials free from warping, wood rot, insect damage, and checking (cracks more than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width)?
9. Are metal materials free from rust, corrosion, or bending of members?
10. Are plastic parts unbroken and without chips or cracks, particularly at joints and connections?
11. Are wood materials free from splinters, loose or missing knots, or sharp edges or corners?
12. Are metal materials free from rough metal and sharp edges or corners?
13. Is all hardware present, securely attached, and without significant wear?  
Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.
14. Is the composite structure free from chipped, peeling or worn paint?
15. Are S-hooks and other connectors fully closed and secure?  
Note: The S-hook will be considered properly closed if hook openings are less than 1 mm (.04 inches) when tested with a feeler gauge. The lower loop will not cross over the upper loop.
16. Is rope free of fraying or rot?
17. Is chain without significant wear?  
Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust or corrosion.
18. Is cable without visible wear and free of frayed or projecting wires?
19. Is the structure free of head entrapments?  
Note: Openings must meet all entrapment inspection criteria (chap 4).
20. Do protrusions meet inspection criteria (chap 4)?

*Table D-26: Composite Structure - Recommended annual inspection questions (cont.).*

**26. COMPOSITE STRUCTURE - Annual Inspection - continued**

21. Are equipment footings and surface mount devices securely anchored?
22. Are paints free from lead (0.06% maximum lead by dry weight) as stated by the manufacturer?
23. If a wood preservative was used, has a non-toxic sealant been applied to treated areas every two years?

*Table D-27: Arch Climber - Recommended annual inspection questions.*

## **27. ARCH CLIMBER - Annual Inspection**

Recommended Inspection Questions:

1. Does the arch climber meet all requirements for composite structures (see composite structure checklist)?
2. Is the arch climber free from loose, missing, or broken parts?
3. Is the arch climber free from vandalism?
4. Do the arch climber rungs rotate?

*Table D-28: Bubble Panel -Recommended annual inspection questions.*

## **28. BUBBLE PANEL - Annual Inspection**

### Recommended Inspection Questions:

1. Does the bubble panel meet all requirements for composite structures (see composite structure checklist)?
2. Is the bubble panel free from loose, missing, or broken parts?
3. Is the bubble panel free from vandalism?
4. Is the bubble panel free from scratches in the panel window which significantly obscure the view?

Table D-29: Clatter Bridge - Recommended annual inspection questions.

## 29. CLATTER BRIDGE - Annual Inspection

### Recommended Inspection Questions:

1. Does the clatter bridge meet all requirements for composite structures (see composite structure checklist)?
2. Is the clatter bridge free from loose, missing, or broken parts?
3. Is the clatter bridge free from vandalism?
4. Is the clatter bridge surface free from loose material, such as sand, wood product safety surface and leaves?
5. Is the clatter bridge free from worn chain?  
 Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, or corrosion.
6. Is the clatter bridge free from open S-hooks?  
 Note: The S-hook will be considered properly closed if hook openings are less than 1 mm (.04 inches) when tested with a feeler gauge. The lower loop will not cross over the upper loop.
7. Is all hardware present, securely attached, and without significant wear?  
 Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.
8. Is the distance between the bridge and composite structure platform between 50 mm (2 inches) maximum?

*Table D-30: Cleated Ramp - Recommended annual inspection questions.*

### **30. CLEATED RAMP - Annual Inspection**

Recommended Inspection Questions:

1. Does the cleated ramp meet all requirements for composite structures (see composite structure checklist)?
2. Is the cleated ramp free from loose, missing, or broken parts?
3. Is the cleated ramp free from vandalism?
4. Is the cleated ramp free from loose material, such as sand and leaves?

*Table D-31: Game Panel- Recommended annual inspection questions.*

### **31. GAME PANEL - Annual Inspection**

Recommended Inspection Questions:

1. Does the game panel meet all requirements for composite structures (see composite structure checklist)?
2. Is the game panel free from loose, missing, or broken parts?
3. Is the game panel free from vandalism?
4. Are game component markings clearly visible?

*Table D-32: Horizontal Ladder -Recommended annual inspection questions.*

## **32. HORIZONTAL LADDER - Annual Inspection**

Recommended Inspection Questions:

1. Does the horizontal ladder meet all requirements for composite structures (see composite structure check-list)?
2. Is the horizontal ladder free from loose, missing, or broken parts?
3. Is the horizontal ladder free from vandalism?
4. Are ladder rungs securely attached and do not rotate?

*Table D-33: Ladder and Stairs - Recommended annual inspection questions.*

### **33. LADDER AND STAIRS - Annual Inspection**

Recommended Inspection Questions:

1. Do ladders and stairs meet all requirements for composite structures (see composite structure checklist)?
2. Are ladders and stairs free from loose, missing, or broken parts?
3. Are ladders and stairs free from vandalism?
4. Are steps free from loose material, such as sand and leaves?
5. Are ladder rungs and steps securely attached?
6. Do ladder rungs rotate?
7. Are ladders and stairs free of head entrapments?

Note: Openings must meet all entrapment inspection criteria (chap 4).

*Table D-34: Net Climber - Recommended annual inspection questions.*

### **34. NET CLIMBER - Annual Inspection**

Recommended Inspection Questions:

1. Does the net climber meet all requirements for composite structures (see composite structure checklist)?
2. Is the net climber free from loose, missing, or broken parts?
3. Is the net climber free from vandalism?
4. Is the net climber free from worn cable?
5. Is all hardware present, securely attached, and without significant wear?  
Note: Wear is indicated by visible elongation, deformation or indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.
6. Is the net climber free from open S-hooks?  
Note: The S-hook will be considered properly closed if hook openings are less than 1 mm (.04 inches) when tested with a feeler gauge. The lower loop will not cross over the upper loop.
7. Is the net adjusted to eliminate loose cable?
8. Are anchoring devices at ground level buried below the playing surface?

*Table D-35: Protective Barrier - Recommended annual inspection questions.*

### **35. PROTECTIVE BARRIER - Annual Inspection**

Recommended Inspection Questions:

1. Does the protective barrier meet all requirements for composite structures (see composite structure check-list)?
2. Is the protective barrier free from loose, missing, or broken parts?
3. Is the protective barrier free from vandalism?

Table D-36: Ring Trek - Recommended annual inspection questions.

### 36. RING TREK - Annual Inspection

Recommended Inspection Questions:

1. Does the ring trek meet all requirements for composite structures (see composite structure checklist)?
2. is the ring trek free from loose, missing, or broken parts?
3. Is the ring trek free from vandalism?
4. Are adjoining platforms free from loose material, such as sand, wood product safety surface and leaves?
5. Is the ring trek free from worn chain?

Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, or corrosion.

6. Is the ring trek free from open S-hooks?

Note: The S-hook will be considered properly closed if hook openings are less than 1 mm (.04 inches) when tested with a feeler gauge. The lower loop will not cross over the upper loop.

7. Is all hardware present, securely attached, and without significant wear?

Note: Wear is indicated by visible elongation, deformation or indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.

*Table D-37: Roof - Recommended annual inspection questions.*

### **37. ROOF - Annual Inspection**

Recommended Inspection Questions:

1. Does the roof meet all requirements for composite structures (see composite structure checklist)?
2. Is the roof free from loose, missing or broken parts?
3. Is the roof free from vandalism?
4. Is the roof securely attached?

Table D-38: Slide - Recommended annual inspection questions.

### 38. SLIDE - Annual Inspection

Recommended Inspection Questions:

1. Does the slide meet all requirements for composite structures (see composite structure checklist)?
2. Is the slide free from loose, missing, or broken parts?
3. Is the slide free from vandalism?
4. Are plastic slides free from breaks, cracks, or chips, particularly at joints and connections?
5. Is the slide securely attached?
6. Are the slide bed, platforms and stairs free from loose material, such as sand, wood product safety surface, and leaves?
7. Is the metal slide bed free from areas which are hot to the touch when children are brought outdoors to play?
8. Is the slide entrance, sliding surface, and slide chute rails free of any openings that may cause entrapment or entanglement?
9. Is all hardware present, securely attached, and without significant wear?  
Note: Wear is indicated by visible elongation, deformation or indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.
10. Is the slide free from sharp edges and corners?

*Table D-39: Stationary Bridge - Recommended annual inspection questions.*

### **39. STATIONARY BRIDGE - Annual Inspection**

Recommended Inspection Questions:

1. Does the bridge meet all requirements for composite structures (see composite structure checklist)?
2. Is the bridge free from loose, missing, or broken parts?
3. Is the bridge free from vandalism?
4. Is the bridge and bridge enclosure securely attached?
5. Is the bridge surface free from loose materials such as sand, wood product safety surface and leaves?

*Table D-40: Track Ride - Recommended annual inspection questions.*

## **40. TRACK RIDE - Annual Inspection**

### Recommended Inspection Questions:

1. Does the track ride meet all requirements for composite structures (see composite structure checklist)?
2. Is the track ride free from loose, missing, or broken parts?
3. Is the track ride free from vandalism?
4. Are adjoining platforms free from loose material, such as sand, wood product safety surface and leaves?
5. Is the track ride free from worn chain?  
Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust or corrosion.
6. Is the track ride free from open S-hooks?  
Note: The S-hook will be considered properly closed if hook openings are less than 1 mm (.04 inches) when tested with a feeler gauge. The lower loop will not cross over the upper loop.
7. Is all hardware present, securely attached, and without significant wear?  
Note: Wear is indicated by visible elongation, deformation or indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.
8. Is the track ride sliding mechanism free from wear?  
Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust or corrosion.
9. Is the sliding mechanism well lubricated?
10. Are the sliding mechanism and other moving parts disassembled annually and replaced as indicated for visible signs of wear?  
Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust or corrosion.

*Table D-41: Tunnel/Tunnel Slide - Recommended annual inspection questions.***41. TUNNEL/TUNNEL SLIDE - Annual Inspection**

## Recommended Inspection Questions:

1. Does the tunnel meet all requirements for composite structures (see composite structure checklist)?
2. Is the tunnel free from loose, missing or broken parts?
3. Is the tunnel free from vandalism?
4. Is the tunnel securely attached?
5. Are plastic parts unbroken and without chips or cracks, particularly at joints and connections?
6. If the tunnel is composed of more than one piece, is it free from openings between pieces?
7. Is the tunnel free from loose material, such as sand, wood product safety surface and leaves?
8. If the tunnel is a slide, does it meet all requirements for slides (see slide checklist)?
9. Is all tunnel hardware present, securely attached and without significant wear?

Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.

*Table D-42: Wheel - Recommended annual inspection questions.*

## **42. WHEEL - Annual Inspection**

### Recommended Inspection Questions:

1. Does the wheel meet all requirements for composite structures?
2. Is the wheel free from loose, missing or broken parts?
3. Is the wheel free from vandalism?
4. Is the wheel securely attached with free movement and minimal wobble?
5. Is all hardware present, securely attached, and without significant wear?  
Note: Wear is indicated by visible elongation, deformation or indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.
6. Is the wheel structure free of accessible pinch, crush and shear points (chap 4)?
7. Is the wheel lubricated to allow free turning?
8. Is the structure free of head entrapments?  
Note: Openings must meet all entrapment inspection criteria (chap 4).

Table D43: Amphitheater -Recommended annual inspection questions.

**43. AMPHITHEATER - Annual Inspection**

## Recommended Inspection Questions:

1. Is the amphitheater free from loose, missing, or broken parts?
2. Is the amphitheater free from vandalism?
3. Is the amphitheater free from debris?
4. Are aisles and pathways of a continuous smooth surface without holes or abrupt changes in level greater than 6 mm (1/4-inch)?
5. Are aisles and pathways free from weeds?
6. Are aisles and pathways free from insect or rodent infestation?
7. Are aisles and pathways free from rot or mold?
8. Are wood seats free from warping, wood rot, insect damage, and checking (cracks more than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width)?
9. Are concrete seats free from extensive cracking, rough surfaces, and sharp edges or corners?
10. Are wood materials free from splinters; loose or missing knots; and sharp edges or corners?
11. Is all hardware present, securely attached, and without significant wear?  
Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping,
12. Are seats free from chipped, peeling or worn paint?
13. Is the amphitheater free of head entrapments?  
Note: Openings must meet all entrapment inspection criteria (chap 4),
14. Do all protrusions meet inspection criteria (chap 4)?
15. If a wood preservative was used, has a non-toxic sealant been applied to treated areas every two years?
16. Are paints free from lead (0.06% maximum lead by dry weight) as stated by the manufacturer?

*Table D-44: Ball Play Area - Recommended annual/ inspection questions.*

#### **44. BALL PLAY AREA - Annual Inspection**

Recommended Inspection Questions:

1. Is the surface free of toys and other foreign objects?
2. Is the surface free of debris and slippery materials, such as sand, wood product safety surface, ice, algae, moss, etc., when children are brought outdoors to play?
3. Is the surface free of abrupt changes in level greater than 6 mm (1/4-inch)?
4. Is the surface smooth and free from rough areas or cracks?
5. Are the pavement markings bright, legible, and free of chipped, peeling, or worn paint?
6. Are pavement markings free of lead (0.06% maximum lead by dry weight), cadmium, or other toxic material?

*Table D-45: Ball Wall- Recommended annual inspection questions.*

## 45. BALL WALL - Annual Inspection

### Recommended Inspection Questions:

1. Is the ball wall free from loose, missing, or broken parts?
2. Is the ball wall free from vandalism?
3. Are wood materials free from warping, wood rot, insect damage, and checking (cracks more than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width)?
4. Is concrete free from extensive cracking, rough surfaces, and sharp edges or corners?
5. Are wood materials free from splinters; loose or missing knots; and sharp edges or corners?
6. Is all hardware present, securely attached, and without significant wear?  
Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.
7. Is the ball wall free from chipped, peeling or worn paint?
8. Is the ball wall free of head entrapments?  
Note: Openings must meet all entrapment inspection criteria (chap 4).
9. Do all protrusions meet inspection criteria (chap 4)?
10. If a wood preservative was used, has a non-toxic sealant been applied to treated areas every two years?
11. Are paints free from lead (0.06% maximum lead by dry weight) as stated by the manufacturer?

Table D-46; Crawl Area - Recommended annual inspection questions.

## 46. CRAWL AREA - Annual Inspection

### Recommended Inspection Questions:

1. Is the crawl area free of loose material and foreign objects, such as debris, sand, wood product safety surface, gravel, leaves, soil, and toys?
2. Is the crawl area free from puddles, ice and snow when children are brought outside to play?
3. Is the crawl area surface disinfected daily as per *AR 608-10*?
4. Is the synthetic safety surface firmly attached to the underlying surface?
5. Is the synthetic safety surface free of abrupt changes in level greater than 6 mm (1/4-inch)?
6. Is the synthetic safety surface free of cuts, nicks or damaged areas?
7. is the synthetic safety surface free of exposed hardware and sharp edges?

*Table D47: Digging Area - Recommended annual inspection questions.*

## **47. DIGGING AREA - Annual Inspection**

### Recommended Inspection Questions:

1. Is the digging area free from debris, glass, nails or other sharp or foreign material?
2. Is the clay or soil free from debris, glass, nails or other sharp or foreign material?
3. Are adjacent surfaces or structures free from undercutting (digging beneath the adjacent element)?
4. Are tools and toys removed daily for cleaning and storage?
5. Is specified clay or soil replenished as needed to avoid settling?

Table D-48: Platform - Recommended annual inspection questions.

## 48. PLATFORM - Annual Inspection

### Recommended Inspection Questions:

1. is the platform free from loose, missing, or broken parts?
2. Is the platform free from vandalism?
3. Does the platform have a clear area for circulation free from any obstruction, including portable climbing equipment, trikes, and wheeled toys, which extends 300 mm (36 inches) in all directions from the platform?
4. Are wood materials free from warping, wood rot, insect damage, and checking (cracks more than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width)?
5. Are wood materials free from splinters; loose or missing knots; and sharp edges or corners?
6. Is all hardware present, securely attached, and without significant wear?  
Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.
7. Is the platform free from chipped, peeling or worn paint?
8. Is the platform free of head entrapments?  
Note: Openings must meet all entrapment inspection criteria (chap 4).
9. Do all protrusions meet inspection criteria (chap 4)?
10. Are equipment footings securely anchored?
11. If a wood preservative was used, has a non-toxic sealant been applied to treated areas every two years?
12. Are paints free from lead (0.060/0 maximum lead by dry weight) as stated by the manufacturer?

Table D-49: Playhouse - Recommended annual inspection questions.

**49. PLAYHOUSE - Annual Inspection**

## Recommended Inspection Questions:

1. Is the playhouse free from loose, missing, or broken parts?
2. Is the playhouse free from vandalism?
3. Is the playhouse free of wet or icy surfaces when children are brought outdoors to play?
4. Is the walking surface free from loose and slippery material, e.g., sand, leaves, etc.?
5. Does the playhouse have a 1800 mm (72-inch) use zone free from any obstruction, including portable climbing equipment, trikes, and wheeled toys?
6. Are wood materials free from warping, wood rot, insect damage, and checking (cracks more than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width)?
7. Are metal materials free from rust, corrosion or bending of members?
8. Are plastic materials unbroken and without chips or cracks, particularly at joints and connections?
9. Are wood materials free from splinters; loose or missing knots; and sharp edges or corners?
10. Are metal materials free from rough metal, and sharp edges or corners?
11. Is all hardware present, securely attached, and without significant wear?  
Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.
12. Is the playhouse free from chipped, peeling or worn paint?
13. Is the playhouse free of head entrapments?  
Note: Openings must meet all entrapment inspection criteria (chap 4).
14. Do all protrusions meet inspection criteria (chap 4)?
15. Are the equipment footings or surface mount devices securely anchored?
16. Is the roof strong enough to be climbed upon?
17. If a wood preservative was used, has a non-toxic sealant been applied to treated areas every two years?
18. Are paints free from lead (0.06% maximum lead by dry weight) as stated by the manufacturer?

Table 0-50: Play Station - Recommended annual inspection questions.

## 50. PLAY STATION - Annual Inspection

### Recommended Inspection Questions:

1. Is the play station free from loose, missing, or broken parts?
2. Is the play station free from vandalism?
3. Are wood materials free from warping, wood rot, insect damage, and checking (cracks more than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width)?
4. Are metal materials free from rust, corrosion or bending of members?
5. Are plastic materials unbroken and without chips or cracks, particularly at joints and connections?
6. Are wood materials free from splinters; loose or missing knots; and sharp edges or corners?
7. Are metal materials free from rough metal, and sharp edges or corners?
8. Is ail hardware present, securely attached, and without significant wear?  
Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.
9. Is the play station free from chipped, peeling or worn paint?
10. Is the play station free of head entrapments?  
Note: Openings must meet all entrapment inspection criteria (chap 4).
11. Do all protrusions meet inspection criteria (chap 4)?
12. Are equipment footings or surface mount devices securely anchored?
13. If a wood preservative was used, has a non-toxic sealant been applied to treated areas every two years?
14. Are paints free from lead (0.06% maximum lead by dry weight) as stated by the manufacturer?

Table D-51: Program Pole - Recommended annual inspection questions.

**51. PROGRAM POLE - Annual Inspection**

## Recommended Inspection Questions:

1. Is the program pole free from loose, missing, or broken parts?
2. Is the program pole free from vandalism?
3. Is the program pole free of nails, staples and other connecting devices?
4. Are wood materials free from warping, wood rot, insect damage, and checking (cracks more than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width)?
5. Are wood materials free from splinters; loose or missing knots; and sharp edges or corners?
6. Is all hardware present, securely attached, and without significant wear?  
Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.
7. Is the program pole free from chipped, peeling or worn paint?
8. Is the program pole free of head entrapments?  
Note: Openings must meet all entrapment inspection criteria (chap 4).
9. Do all protrusions meet inspection criteria (chap 4)?
10. Are equipment footings securely anchored?
11. If a wood preservative was used, has a non-toxic sealant been applied to treated areas every two years?
12. Are paints free from lead (0.06% maximum lead by dry weight) as stated by the manufacturer?

Table D-52: Sand Play Area (Not Within Use Zones) - Recommended annual inspection questions.

## 52. SAND PLAY AREA (NOT WITHIN USE ZONES) - Annual Inspection

### Recommended Inspection Questions:

1. Is the sand play containment barrier free of loose, missing, or broken parts?
2. Is the sand play containment barrier free from vandalism?
3. Is sand free of debris and foreign objects, such as stones, leaves, twigs or branches, toys, and wheeled toys?
4. Is sand free of animal feces?
5. Is sand removed from adjacent areas and pathways?
6. Is sand free from holes or low areas caused by digging or play activities?
7. Is sand free of insect infestation?
8. Is sand free from puddles and poor drainage?
9. Is sand depth a minimum of 450 mm (18 inches)?
10. Are wood materials free from warping, wood rot, insect damage, and checking (cracks more than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width)?
11. Are concrete materials free from extensive cracking, rough surfaces, or sharp edges or corners?
12. Are wood materials free from splinters; loose or missing knots; and sharp edges or corners?
13. Is all hardware present, securely attached, and without significant wear?  
Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.
14. Is the sand play area free from chipped, peeling or worn paint?
15. Is the sand play area free of head entrapments?  
Note: Openings must meet all entrapment inspection criteria (chap 4).
16. Do all protrusions meet inspection criteria (chap 4)?
17. Has sand been thoroughly sifted for cleaning and aeration annually?
18. Has sand been removed and replaced when necessary for cleanliness?
19. If a wood preservative was used, has a non-toxic sealant been applied to treated areas every two years?
20. Are paints free from lead (0.06% maximum lead by dry weight) as stated by the manufacturer?

Table D-53: Sand and Water Table - Recommended annual inspection questions.

**53. SAND AND WATER TABLE - Annual Inspection**

## Recommended Inspection Questions:

1. Is the table free from loose, missing, or broken parts?
2. Is the table free from vandalism?
3. Has sand and water been cleaned and replaced to maintain sanitary conditions?
4. Is the sand and water table covered when not in use?
5. Is the ground surface near the sand and water table free from pooling of water or mud?
6. Is the table's use zone free from any obstructions when measured 1800 mm (72 inches) in any direction from the equipment?
7. Are wood materials free from warping, wood rot, insect damage, and checking (cracks more than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width)?
8. Are metal materials free from rust, corrosion or bending of members?
9. Are concrete materials free from extensive cracking, rough surfaces, or sharp edges or corners?
10. Are plastic materials unbroken and without chips or cracks, particularly at joints and connections?
11. Are wood materials free from splinters; loose or missing knots; and sharp edges or corners?
12. Are metal materials free from rough metal and sharp edges or corners?
13. Is all hardware present, securely attached, and without significant wear?  
Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.
14. Is the table free from chipped, peeling or worn paint?
15. Is the table free of head entrapments?  
Note: Openings must meet all entrapment inspection criteria (chap 4).
16. Do all protrusions meet inspection criteria (chap 4)?
17. If a wood preservative was used, has a non-toxic sealant been applied to treated areas every two years?
18. Are paints free from lead (0.060/0 maximum lead by dry weight) as stated by the manufacturer?

Table D-54: Storage/Pram Storage - Recommended annual inspection questions.

## 54. STORAGE/PRAM STORAGE - Annual Inspection

### Recommended Inspection Questions:

1. Is the storage unit and roof free from loose, missing, or broken parts?
2. Is the storage unit and roof free from vandalism?
3. Is the roof free from leaks?
4. Is the walking surface free from loose and slippery materials, e.g., sand, wood product safety surface, leaves, etc.?
5. Is the storage unit free from chemicals, maintenance equipment or other hazardous materials?
6. Are wood materials free from warping, wood rot, insect damage, and checking (cracks more than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width)?
7. Are wood materials free from splinters; loose or missing knots; and sharp edges or corners?
8. Is all hardware present, securely attached, and without significant wear?  
Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.
9. Is the storage unit free from chipped, peeling or worn paint?
10. Is the storage unit free of head entrapments?  
Note: Openings must meet all entrapment inspection criteria (chap 4).
11. Do all protrusions meet inspection criteria (chap 4)?
12. If a wood preservative was used, has a non-toxic sealant been applied to treated areas every two years?
13. Are paints free from lead (0.06% maximum lead by dry weight) as stated by the manufacturer?

Table D-55: Swing - Recommended annual inspection questions.

## 55. SWING - Annual Inspection

### Recommended Inspection Questions:

1. Is the swing free from loose, missing, or broken parts?
2. Is the swing free from vandalism?
3. Is the swing use zone free from any obstruction, including portable climbing equipment, trikes, and wheeled toys?  
 Note: The swing use zone is equal to two times the height of the swing crossbeam measured to both the front and back of the equipment from the swing seat and 1800 mm (72 inches) to both sides of the swing support (chap 3).
4. Is the outdoor temperature above freezing when children are brought outdoors to play?
5. Are wood materials free from warping, wood rot, insect damage, and checking (cracks greater than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width)?
6. Are metal materials free from rust, corrosion, or bending of members?
7. Are wood materials free from splinters; loose or missing knots; and sharp edges or corners?
8. Are metal materials free from rough metal and sharp edges or corners?
9. Is all hardware present, securely attached, and without significant wear?  
 Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.
10. Is the swing free from chipped, peeling or worn paint?
11. Is the swing free from worn chains, S-hooks, and swing seats?  
 Note: Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust or corrosion.
12. Is the swing free from open S-hooks?  
 Note: The S-hook will be considered properly closed if hook openings are less than 1 mm (.04 inches) when tested with a feeler gauge. The lower loop will not cross over the upper loop.
13. Are swing bearings well lubricated?
14. Is the swing free of head entrapments?  
 Note: Openings must meet all entrapment inspection criteria (chap 4).
15. Do swing seat and hardware protrusions meet test criteria (chap 4)?
16. Are equipment footings securely anchored?
17. Are swing seats and tot seats the "slash proof" rubber belt type?
18. If a wood preservative was used, has a non-toxic sealant been applied to treated areas every two years?
19. Are paints free from lead (0.060/0 maximum lead by dry weight) as stated by the manufacturer?

Table D-56: Toys and Scrap Material- Recommended annual inspection questions.

## 56. TOYS AND SCRAP MATERIAL - Annual Inspection

### Recommended Inspection Questions:

1. Are toys and scrap material removed from pathways or play areas daily for cleaning or storage as required?
2. Does the toy size and design prevent choke hazards?
3. Are toys and scrap material in good condition and free of missing, broken, loose or sharp components?
4. Are toys, scrap material, and fabric cleaned and disinfected as per *AR 608-10*?

Note: For children ages 3 and younger, toys and scrap material must be cleaned and disinfected daily. For children ages 3 and older, items must be cleaned and disinfected weekly. Items which cannot be cleaned must be discarded after use.

*Table D-57: Tricycle and Wheeled Toy - Recommended annual inspection questions.*

## **57. TRICYCLE AND WHEELED TOY - Annual Inspection**

### Recommended Inspection Questions:

1. Is the tricycle or wheeled toy in operational condition with all hardware tight and secure?
2. Is the tricycle or wheeled toy free from sharp edges, rust, and cracked or broken components?
3. Are wheels, forks and cranks free of wobble?
4. Are tires excessively cracked?
5. Is the seat firmly attached?
6. Is the tricycle or wheeled toy removed from pathways and play areas and placed in designated storage areas when not in use?
7. Are bearings well lubricated?

## APPENDIX E

### MAINTENANCE SCHEDULES

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#### **E-1. General**

This appendix contains maintenance schedules for all elements within the CDC play area. These tables will be used to assemble a customized inspection and maintenance manual (chap 2). Each table indicates the minimum acceptable condition for an element within the play area and maintenance tasks which will correct any deficiencies. These tables are to be used as a maintenance task guide for correcting identified hazards. Directions for using these tables are provided (chap 6).

#### **E-2. Elements addressed in the appendix**

Elements addressed in this appendix include: general site elements (table E-1 through E-8); ground cover and plant material (table E-9 through E-13); utilities and drainage (table E-14 through E-17); safety surfacing (table E-18 through E-20); site furnishings (table E-21 through E-24); maintenance practices (table E-25); composite structure play equipment (table E-26 through E-42); play activity areas (table E-43 through E-55); and toys and loose parts (table E-56 and E-57).

Table E-1: Boulder - Maintenance schedule.

1. BOULDER

MAINTENANCE STANDARDS	MAINTENANCE TASKS
<b>BASELINE:</b>	
The boulder will comply with baseline inspection criteria.	Repair deficiencies noted upon inspection or replace as needed.
<b>PERIODIC:</b>	
1. The boulder will be located outside of play equipment use zones (at least 2400 mm (96 inches) from play equipment).	Remove boulders located in play equipment use zones.
2. The boulder will be firmly set in the soil to at least 1/3 of its depth and will not rock or rotate in any direction.	Reset improperly secured boulders.
3. The boulder surface will be free of loose or slippery material, such as crumbling rock, sand, moss, or algae.	Sweep or remove loose or slippery material from the boulder surface.
4. The boulder will be free of sharp, jagged or protruding edges.	Smooth and round the boulder or remove and replace the boulder.
<b>ANNUAL:</b>	
1. The boulder will be located outside of play equipment use zones (at least 2400 mm (96 inches) from play equipment).	Remove boulders located in play equipment use zones.
2. The boulder will be firmly set in the soil to at least 1/3 of its depth and will not rock or rotate in any direction.	Reset improperly secured boulders.
3. The boulder surface will be free of loose or slippery material, such as crumbling rock, sand, moss, or algae.	Sweep or remove loose or slippery material from the boulder surface.
4. The boulder will be free of ice or snow when children are brought outside to play.	Close the boulder and do not allow children to climb on it when ice or snow is present.
5. The boulder will be free of sharp, jagged or protruding edges.	Smooth and round the boulder or remove and replace the boulder.

Table E-2: Fencing and Gates - Maintenance schedule.

2. FENCING AND GATES

MAINTENANCE STANDARDS	MAINTENANCE TASKS
<b>BASELINE:</b>	
Fencing and gates will comply with baseline inspection criteria.	Repair deficiencies noted upon inspection or replace <b>as</b> needed.
<b>PERIODIC:</b>	
1. Fence and gate materials will be free from loose, missing, or broken parts.	Repair or replace loose, missing, or broken components.
2. Fence and gate materials will be free from vandalism.	Repair or replace vandalized components.
3. Metal materials will be free from rust, corrosion and bending of members.	Repair or replace damaged materials.
4. Metal materials will be free from rough metal, sharp wire, and sharp edges or corners.	Refinish or replace parts. Eliminate sharp wires, edges or corners.
5. All hardware will be present, securely attached, and without significant wear. (Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.)	Tighten hardware or replace parts.
6. Fence fabric will be intact and all tension wires and connections will be secure.	Tighten or repair fence fabric or tension wires.
7. Gates will be well-lubricated with locking components in good working order.	Lubricate hinges, locks, and latches.
8. Fences and gates will be free from openings greater than 75 mm (3 inches) between the structure and the ground surface.	Fill gaps to eliminate openings under fences or gates greater than 75 mm (3 inches).

Table E-2: Fencing and Gates - Maintenance schedule (Writ.).

2. FENCING AND GATES - continued

MAINTENANCE STANDARDS ANNUAL:	MAINTENANCE TASKS
1. Fence and gate materials will be free from loose, missing or broken parts.	Repair or replace loose, missing, or broken components.
2. Fence and gate materials will be free from vandalism.	Repair or replace vandalized components.
3. Metal materials will be free from rust, corrosion and bending of members.	Repair or replace damaged materials.
4. Metal materials will be free from rough metal, sharp wire, and sharp edges or corners.	Refinish or replace parts. Eliminate sharp wires, edges or corners.
5. All hardware will be present, securely attached, and without significant wear . (Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.)	Tighten hardware or replace parts.
6. Fence fabric will be intact and all tension wires and connections will be secure.	Tighten or repair fence fabric or tension wires.
7. Gates will be well-lubricated, with locking components in good working order.	Lubricate hinges, locks, and latches.
8. Fences and gates will be free from openings greater than 75 mm (3 inches) between the structure and the ground surface.	Fill gaps to eliminate openings under fences or gates greater than 75 mm (3 inches).
9. Fences and gates will be free of head entrapments. Openings must meet all entrapment inspection criteria (chap 4).	Repair areas of entrapment by tightening components or with replacement parts as required.
10. All protrusions will meet inspection criteria (chap 4).	Eliminate protrusions.

Table E-3: Pathways - Hard Surfaced - Maintenance schedule.

## 3. PATHWAYS - HARD SURFACED

MAINTENANCE STANDARDS	MAINTENANCE TASKS
<b>BASELINE:</b>	
Hard surfaced pathways will comply with baseline inspection criteria.	Repair deficiencies noted upon inspection or replace as needed.
<b>PERIODIC:</b>	
1. The pathways will be free of abrupt changes in level greater than 6 mm (1/4-inch).	Repair changes in level greater than 6 mm (1/4-inch).
2. The pathways will be free of ruts at the side of path.	Fill in ruts that may form at edges of pathways from pedestrian or wheeled toy use.
3. The pathways will be free of objects which protrude into the pathway overhead at a height of 2000 mm (80 inches) or less, such as branches.	Remove branches and other objects protruding into the pathway overhead at a height of 2000 mm (80 inches) or less.
<b>ANNUAL:</b>	
1. Pathways will be free of toys and other foreign objects.	Remove toys and other objects.
2. The pathways will be free of debris and slippery materials, such as sand, ice, algae, moss, etc.	Sweep loose debris, such as sand, and gravel, from pavement; remove snow, ice, or other slippery material.
3. The pathways will be free of abrupt changes in level greater than 6 mm (1/4-inch).	Repair changes in level greater than 6 mm (1/4-inch).
4. The pathways will be free of ruts at the side of path.	Fill in ruts that may form at edges of pathways from pedestrian or wheeled toy use.
5. The pathways will be free of objects which protrude into the pathway overhead at a height of 2000 mm (80 inches) or less, such as branches.	Remove branches and other objects protruding into the pathway overhead at a height of 2000 mm (80 inches) or less.
6. The pathways will be smooth and without rough surfaces or cracks.	Replace hard surfaced areas that have extensive cracks or rough surfaces.
7. Pavement markings will be bright, legible, and free of chipped, peeling, or worn paint.	Repaint paving surface, striping, or coating with paint free from lead (0.06% maximum lead by dry weight), cadmium or other toxic material.
8. All paints will be free of lead (0.060/0 maximum lead by dry weight) cadmium, or other toxic material .	Refinish and repaint with paint free from lead (0.06% maximum lead by dry weight), cadmium, or other toxic materials.

Table E-4: Pathways - Wood Chip - Maintenance schedule.

4. PATHWAYS - WOOD CHIP

MAINTENANCE STANDARDS	MAINTENANCE TASKS
<b>BASELINE:</b>	
Wood chip pathways will comply with baseline inspection criteria.	Repair deficiencies noted upon inspection or replace as needed.
<b>PERIODIC:</b>	
1. Pathways will be free of debris, such as stones, branches, and loose parts.	Remove debris and toys from wood chips.
2. Wood chips will be distributed evenly along the pathway to form a uniform surface.	Redistribute wood chips to an even depth with a steel tine rake.
3. Pathways will be free from mold, mushrooms and other fungi.	Remove mold, mushrooms and other fungi.
4. Pathways will be free of tree roots.	Remove tree roots that may cause a tripping hazard.
5. Pathways will be free of pot holes.	Fill pot holes.
6. Pathways will be free from puddles and poor drainage.	Repair areas to eliminate puddles and poor drainage.
7. Pathways will be free from insect and rodent infestation.	Remove insect infested areas and rodent nests.
8. The depth of wood chips will be from 50 to 150 mm (2 to 6 inches).	Replenish wood chips to maintain a 50 to 150 mm (2 to 6 inches) depth.
9. Pathways will be free of objects which protrude into the pathway overhead at a height of 2000 mm (80 inches) or less, such as branches.	Remove branches and other objects protruding into the pathway overhead at a height of 2000 mm (80 inches) or less.
<b>ANNUAL:</b>	
1. Pathways will be free of debris, such as stones, branches, and loose parts.	Remove debris and toys from wood chips.
2. Wood chips will be distributed evenly along the pathway to form a uniform surface.	Redistribute wood chips to an even depth with a steel tine rake.
3. Pathways will be free from mold, mushrooms and other fungi.	Remove mold, mushrooms and other fungi.
4. Pathways will be free of tree roots.	Remove tree roots that may cause a tripping hazard.
5. Pathways will be free of pot holes.	Fill potholes.
6. Pathways will be free from puddles and poor drainage.	Repair areas to eliminate puddles and poor drainage.
7. Pathways will be free from insect and rodent infestation.	Remove insect infested areas and rodent nests.
8. The depth of wood chips will be from 50 to 150 mm (2 to 6 inches).	Replenish wood chips to maintain a 50 to 150 mm (2 to 6 inches).
9. Pathways will be free of objects which protrude into the pathway overhead at a height of 2000 mm (80 inches) or less, such as branches.	Remove branches and other objects protruding into the pathway overhead at a height of 2000 mm (80 inches) or less.
10. Wood chips will be replenished with material which is free of debris or foreign matter, such as stones, dirt branches, soil, thorns or leaves.	Replenish wood chips with material which is free of debris or foreign matter, such as stones, dirt, branches, soil, thorns or leaves.

Table E-5: Planter - Maintenance schedule.

## 5. PLANTER

MAINTENANCE STANDARDS	MAINTENANCE TASKS
<b>BASELINE:</b>	
The planter will comply with baseline inspection criteria.	Repair deficiencies noted upon inspection or replace as needed.
<b>PERIODIC:</b>	
1. The planter will be free from loose, missing, or broken parts.	Repair or replace loose, missing, or broken components.
2. The planter will be free from vandalism.	Repair or replace vandalized components.
3. Wood materials will be free from warping, wood rot, insect damage, and checking (cracks more than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width).	Repair or replace damaged materials.
4. Concrete components will be free from extensive cracking, and sharp edges or corners.	Repair or replace concrete components as needed. Eliminate sharp edges or corners.
5. Wood materials will be free from splinters; loose or missing knots; and sharp edges or corners.	Refinish or replace parts. Eliminate sharp edges or corners.
6. All hardware will be present, securely attached, and without significant wear. (Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.)	Tighten hardware or replace parts.
7. The planter will be free from chipped, peeling or worn paint.	Repaint the planters with lead free paint (0.06% maximum lead by dry weight).

Table E-5: Planter - Maintenance schedule (cont.).

5. **PLANTER - continued**

MAINTENANCE STANDARDS	MAINTENANCE TASKS
<b>ANNUAL:</b>	
1. The planter will be free from loose, missing, or broken parts.	Repair or replace loose, missing, or broken components.
2. The planter will be free from vandalism.	Repair or replace vandalized components.
3. Wood materials will be free from warping, wood rot, insect damage, and checking (cracks more than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width).	Repair or replace damaged materials.
4. Concrete components will be free from extensive cracking, and sharp edges or corners.	Repair or replace concrete components as needed. Eliminate sharp edges or corners.
5. Wood materials will be free from splinters; loose or missing knots; and sharp edges or corners.	Refinish or replace parts. Eliminate sharp edges or corners.
6. All hardware will be present, securely attached, and without significant wear. (Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.)	Tighten hardware or replace.
7. The planter will be free from chipped, peeling or worn paint.	Repaint the planters with lead free paint (0.06% maximum lead by dry weight).
8. The planter will be free from head entrapments. Openings must meet all entrapment inspection criteria (Chap 4).	Repair areas of entrapment by tightening components or with replacement parts as required.
9. All protrusions will meet inspection criteria (chap 4).	Eliminate protrusions.
10. Pressure treated wood materials will be coated with a non-toxic sealant every two years.	Coat pressure treated wood materials with a non-toxic sealant every two years.
11. All paints will be free from lead (0.06% maximum lead by dry weight).	Refinish and repaint with lead free paint (0.06% maximum lead by dry weight).

Table E-6: Shade Structure - Maintenance schedule.

## 6. SHADE STRUCTURE

MAINTENANCE STANDARDS	MAINTENANCE TASKS
<b>BASELINE:</b>	
The shade structure will comply with baseline inspection criteria.	Repair deficiencies noted upon inspection or replace as needed.
<b>PERIODIC:</b>	
1. The shade structure will be free from loose, missing, or broken parts.	Repair or replace loose, missing, or broken components.
2. The shade structure will be free from vandalism.	Repair or replace vandalized components.
3. The roof will be free from leaks.	Repair roof or replace.
4. Wood materials will be free from warping, wood rot, insect damage, and checking (cracks more than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width).	Repair or replace damaged materials.
5. Metal materials will be free from rust, corrosion or bending of members.	Repair or replace damaged materials.
6. Wood materials will be free from splinters; loose or missing knots; and sharp edges or corners.	Refinish or replace parts. Eliminate sharp edges or corners.
7. Metal materials will be free from rough metal and sharp edges or corners.	Refinish or replace parts. Eliminate sharp edges or corners.
8. The shade structure will be free from chipped, peeling or worn paint.	Repaint the structure with lead free paint (0.06% maximum lead by dry weight).
9. All hardware will be present, securely attached, and without significant wear. (Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.)	Tighten hardware or replace.

Table E-6: Shade Structure - Maintenance schedule (cont.).

6. SHADE STRUCTURE - continued

MAINTENANCE STANDARDS	MAINTENANCE TASKS
<b>ANNUAL:</b>	
1. The shade structure will be free from loose, missing or broken parts.	Repair or replace loose, missing, or broken components.
2. The shade structure will be free from vandalism.	Repair or replace vandalized components.
3. The roof will be free from leaks.	Repair roof or replace.
4. Wood materials will be free from warping, wood rot, insect damage, and checking (cracks more than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width).	Repair or replace damaged materials.
5. Metal materials will be free from rust, corrosion or bending of members.	Repair or replace damaged materials.
6. Wood materials will be free from splinters; loose or missing knots; and sharp edges or corners.	Refinish or replace parts. Eliminate sharp edges or corners.
7. Metal materials will be free from rough metal and sharp edges or corners.	Refinish or replace parts. Eliminate sharp edges or corners.
8. The shade structure will be free from chipped, peeling or worn paint.	Repaint the structure with lead free paint (0.06% maximum lead by dry weight).
9. All hardware will be present, securely attached, and without significant wear. (Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.)	Tighten hardware or replace.
10. The shade structure will be free from head entrapments. Openings must meet all entrapment inspection criteria (chap 4).	Repair areas of entrapment by tightening components or with replacement parts as required.
11. All protrusions will meet inspection criteria (chap 4).	Eliminate protrusions.
12. Pressure treated wood materials will be coated with a non-toxic sealant every two years.	Coat pressure treated wood materials with a non-toxic sealant every two years.
13. All paints will be free from lead (0.06% maximum lead by dry weight).	Refinish and repaint with lead free paint (0.06% maximum lead by dry weight).

Table E-7: Sign - Maintenance schedule.

## 7. SIGN

MAINTENANCE STANDARDS	MAINTENANCE TASKS
<b>BASELINE:</b>	
The sign will comply with baseline inspection criteria	Repair deficiencies noted upon inspection or replace as needed.
<b>PERIODIC:</b>	
1. The sign will be free from loose, missing or broken parts.	Repair or replace loose, missing, or broken components.
2. The sign will be free from vandalism.	Repair or replace vandalized components.
3. The sign will be fully exposed with no vegetation obscuring its visibility.	Trim trees or shrubs to maintain visibility.
4. The sign will be bright and readable, with no peeling, chipped, or worn paint.	Repair or repaint the sign; replace as needed.
5. Wood materials will be free from warping, wood rot, insect damage, and checking (cracks more than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width).	Repair or replace damaged materials.
6. Metal materials will be free from rust, corrosion and bending of members.	Repair or replace damaged materials.
7. Wood materials will be free from splinters; loose or missing knots; and sharp edges or corners.	Refinish or replace parts. Eliminate sharp edges or corners.
8. Metal materials will be free from rough metal and sharp edges or corners.	Refinish or replace parts. Eliminate sharp edges or corners.
9. All hardware will be present, securely attached, and without significant wear. (Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.)	Tighten or replace hardware.

Table E-7: Sign - Maintenance schedule (cont.).

7. SIGN - continued

MAINTENANCE STANDARDS ANNUAL:	MAINTENANCE TASKS
1. The sign will be free from loose, missing or broken parts.	Repair or replace loose, missing, or broken components.
2. The sign will be free from vandalism.	Repair or replace vandalized components.
3. The sign will be fully exposed with no vegetation obscuring its visibility.	Trim trees or shrubs to maintain visibility.
4. The sign will be bright and readable, with no peeling, chipped, or worn paint.	Repair or repaint the sign; replace as needed.
5. Wood materials will be free from warping, wood rot, insect damage, and checking (cracks more than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width).	Repair or replace damaged materials.
6. Metal materials will be free from rust, corrosion and bending of members.	Repair or replace damaged materials.
7. Wood materials will be free from splinters; loose or missing knots; and sharp edges or corners.	Refinish or replace parts. Eliminate sharp edges or corners.
8. Metal materials will be free from rough metal and sharp edges or corners.	Refinish or replace parts. Eliminate sharp edges or corners.
9. All hardware will be present, securely attached, and without significant wear. (Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.)	Tighten or replace hardware.
10. The sign will be free from head entrapments. Openings must meet all entrapment inspection criteria (chap 4).	Repair areas of entrapment by tightening components or with replacement parts as required.
11. All protrusions will meet inspection criteria (chap 4).	Eliminate protrusions.
12. Pressure treated wood materials will be coated with a non-toxic sealant every two years.	Coat pressure treated wood materials with a non-toxic sealant every two years.
13. All paints will be free from lead (0.06% maximum lead by dry weight).	Refinish and repaint with lead free paint (0.06% maximum lead by dry weight).

Table E-8: Trellis - Maintenance schedule.

8. TRELLIS

MAINTENANCE STANDARDS	MAINTENANCE TASKS
<b>BASELINE:</b>	
The trellis will comply with baseline inspection criteria.	Repair deficiencies noted upon inspection or replace as needed. 1
<b>PERIODIC:</b>	
1. The trellis will be free from loose, missing or broken parts.	Repair or replace loose, missing, or broken components.
2. The trellis will be free from vandalism.	Repair or replace vandalized components. 1
3. Wood materials will be free from warping, wood rot, insect damage, and checking (cracks more than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width).	Repair or replace damaged materials.
4. Wood materials will be free from splinters; loose or missing knots; and sharp edges or corners.	Refinish or replace parts. Eliminate sharp edges or corners. 1
5. All hardware will be present, securely attached, and without significant wear. (Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.)	Tighten hardware or replace.
6. The trellis will be free from chipped, peeling or worn paint.	Repaint the structure with lead free paint (0.06% maximum lead by dry weight). 1

Table E-8: Trellis - Maintenance schedule (cont.).

8. TRELIS - continued

MAINTENANCE STANDARDS	MAINTENANCE TASKS
<b>ANNUAL:</b>	
1. The trellis will be free from loose, missing or broken parts.	Repair or replace loose, missing, or broken components.
2. The trellis will be free from vandalism.	Repair or replace vandalized components.
3. Wood materials will be free from warping, wood rot, insect damage, and checking (cracks more than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width).	Repair or replace damaged materials.
4. Wood materials will be free from splinters; loose or missing knots; and sharp edges or corners.	Refinish or replace parts. Eliminate sharp edges or corners.
5. All hardware will be present, securely attached, and without significant wear. (Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.)	Tighten hardware or replace.
6. The trellis will be free from chipped, peeling or worn paint.	Repaint the structure with lead free paint (0.06% maximum lead by dry weight).
7. The trellis will be free from head entrapments. Openings must meet all entrapment inspection criteria (chap 4).	Repair areas of entrapment by tightening components or with replacement parts as required.
8. All protrusions will meet inspection criteria (chap 4).	Eliminate protrusions.
9. Pressure treated wood materials will be coated with a non-toxic sealant every two years.	Coat pressure treated wood materials with a non-toxic sealant every two years.
10. All paints will be free from lead (0.060/0 maximum lead by dry weight).	Refinish and repaint with lead free paint (0.06% maximum lead by dry weight).

Table E-9: Ground Cover - Maintenance schedule.

9. GROUND COVER

MAINTENANCE STANDARDS	MAINTENANCE TASKS
<b>BASELINE:</b>	
Ground cover will comply with baseline inspection criteria.	Remedy deficiencies noted upon inspection or replace as needed.
<b>PERIODIC:</b>	
1. Ground cover will receive sufficient water (25 mm (1-inch) per week) to remain healthy and vigorous.	Water plantings to 25 mm (1-inch) rainfall per week as necessary to maintain plant health.
2. Planting beds will be free from species with thorns, mushrooms and other fungi.	Remove species with thorns, mushrooms and other fungi from planting beds.
3. Planting beds will be free from species with berries.	Remove species with berries.
4. Planting beds will be free from pending or puddles.	Adjust watering schedule, improve drainage or re-evaluate planting plan as necessary.
5. Planting beds will be free from weeds.	Remove weeds manually.
6. Weeds will be controlled by non-chemical means (see AR 608-10).	Remove weeds manually.

Table E-9: Ground Cover - Maintenance schedule (cont.).

9. GROUND COVER - continued

MAINTENANCE STANDARDS	MAINTENANCE TASKS
<b>ANNUAL:</b>	
1. Ground cover beds will be free from debris.	Remove debris from planting beds.
2. Ground cover will receive sufficient water (25 mm (1-inch) per week) to remain healthy and vigorous.	Water plantings to 25 mm (1-inch) rainfall per week as necessary to maintain plant health.
3. Planting beds will be free from species with thorns, mushrooms and other fungi.	Remove species with thorns, mushrooms and other fungi from planting beds.
4. Planting beds will be free from species with berries.	Remove species with berries.
5. Planting beds will be free from pending or puddles.	Adjust watering schedule, improve drainage or re-evaluate planting plan as necessary.
6. Planting beds will be free from weeds.	Remove weeds manually.
7. Weeds will be controlled by non-chemical means (see AR 608-10).	Remove weeds manually.
8. Insect infestation will be evaluated and treated by Certified Pesticide Applicators as described in AR 420-76.	Contact installation pest management personnel for appropriate insect treatment.
9. Plant disease will be evaluated and treated by Certified Pesticide Applicators as described in AR 420-76.	Contact installation pest management personnel for appropriate disease treatment.
10. Ground cover will be pruned to maintain a natural appearance, rejuvenate plants, and stimulate flower development.	Prune ground cover.
11. Ground cover will be fertilized using a sub-surface method to maintain a healthy condition.	Fertilize ground cover.
12. Ground cover beds will be filled as needed to avoid settling.	Fill beds as needed.
13. Planting beds will be free of poisonous species.	Evaluate plant materials prior to any plantings and annually for poisonous species; eliminate poisonous species.

Table E-10: Mulch - Maintenance schedule.

10. MULCH

MAINTENANCE STANDARDS	MAINTENANCE TASKS
<b>BASELINE:</b>	
Mulch will comply with baseline inspection criteria.	Remedy deficiencies noted upon inspection or replace as needed.
<b>PERIODIC:</b>	
1. The mulch will be free from mold, rot, mildew, mushrooms and other fungi.	Remove mulch areas with mold, rot, mildew, mushrooms and other fungi.
2. The mulch will be free from insect and rodent infestation.	Remove mulch areas with insect infestation. Remove rodent nests.
3. The mulch will be free from puddling and poor drainage.	Redesign or repair area to improve drainage as necessary.
4. The mulch will be distributed to an even depth of 100 mm (4 inches) and be free from potholes and low areas.	Redistribute mulch to an even depth of 100 mm (4 inches) with a rake.
<b>ANNUAL:</b>	
1. The mulch will be free of debris such as stones, branches, and trash.	Remove debris from mulch.
2. The mulch will be free from mold, rot, mildew, mushrooms and other fungi.	Remove mulch areas with mold, rot, mildew, mushrooms and other fungi.
3. The mulch will be free from insect and rodent infestation.	Remove mulch areas with insect infestation. Remove rodent nests.
4. The mulch will be free from puddling and poor drainage.	Redesign or repair area to improve drainage as necessary.
5. The mulch will be distributed to an even depth of 100 mm (4 inches) and be free from potholes and low areas.	Redistribute mulch to an even depth of 100 mm (4 inches) with a rake.
6. The depth of mulch will be 100 mm (4 inches).	Replenish mulch lost to dispersal or decay to maintain a minimum depth of 100 mm (4 inches).
7. The mulch will be replenished with material which is free of debris or other foreign matter, such as stones, dirt branches, soil, thorns, or leaves.	Replenish the mulch with material which is free of debris or other foreign matter, such as stones, dirt branches, soil, thorns, or leaves.

Table E-11: Shrubs - Maintenance schedule.

11. SHRUBS

MAINTENANCE STANDARDS	MAINTENANCE TASKS
<b>BASELINE:</b>	
Shrubs will comply with baseline inspection criteria.	Remedy deficiencies noted upon inspection or replace as needed.
<b>PERIODIC:</b>	
1. Planting beds will be free from species with thorns, mushrooms and other fungi.	Remove species with thorns, mushrooms and other fungi from planting beds.
2. Shrubs will receive sufficient water (25 mm (1-inch) per week) to remain healthy and vigorous.	Water plantings to 25 mm (1-inch) of rainfall per week as necessary to maintain plant health.
3. Planting beds will be free from roots which may cause trip hazards.	Remove roots which may cause trip hazards.
4. Shrubs will be free from broken, dead or sharp branches.	Remove broken, dead or sharp branches.
5. Planting beds will be free from species with berries.	Remove species with berries.
6. Planting bed will be free from weeds.	Remove weeds manually.
7. Weeds will be controlled by non-chemical means (see AR 608-10).	Remove weeds manually.
8. Planting beds will be free from pending or puddles.	Adjust watering schedule or improve drainage; re-evaluate planting plan as necessary.
9. Shrubs will be pruned to maintain a natural appearance, rejuvenate plants, and remove hazards.	Prune shrubs to maintain a natural looking appearance, maintain or reduce shrub size, rejuvenate plants, and remove hazards. Remove roots that may be trip hazards; dead, diseased, weak, and rubbing branches; sharp and broken branches; limbs which protrude into pathways at a height of 2000 mm (80 inches) or less; weak limbs; and limbs that interfere with supervision of children or play activity.
10. Stakes and guy wires will be adjusted and removed when appropriate to prevent trunk damage.	Adjust guy wires, remove guy wires and stakes after second growing season.

Table E-11: Shrubs - Maintenance schedule (cont.).

## 11. SHRUBS - continued

MAINTENANCE STANDARDS	MAINTENANCE TASKS
<b>ANNUAL:</b>	
1. Planting beds will be free from debris.	Remove debris from planting beds.
2. Planting beds will be free from species with thorns, mushrooms and other fungi.	Remove species with thorns, mushrooms and other fungi from planting beds.
3. Shrubs will receive sufficient water (25 mm (1-inch) per week) to remain healthy and vigorous.	Water plantings to one inch of rainfall per week as necessary to maintain plant health.
4. Planting beds will be free from roots which may cause trip hazards.	Remove roots which may cause trip hazards.
5. Shrubs will be free from broken, dead or sharp branches.	Remove broken, dead or sharp branches.
6. Planting beds will be free from species with berries.	Remove species with berries.
7. Planting beds will be free from pending or puddles.	Adjust watering schedule or improve drainage; re-evaluate planting plan as necessary.
8. Shrubs will be pruned to maintain a natural appearance, rejuvenate plants, and remove hazards.	Prune shrubs to maintain a natural looking appearance, maintain or reduce shrub size, rejuvenate plants, and remove hazards. Remove roots that may be trip hazards; dead, diseased, weak, and rubbing branches; sharp and broken branches; limbs which protrude into pathways at a height of 2000 mm (80 inches) or less; weak limbs; and limbs that interfere with supervision of children or play activity.
9. Stakes and guy wires will be adjusted and removed when appropriate to prevent plant damage.	Adjust guy wires, remove guy wires and stakes after second growing season.
10. Planting bed will be free from weeds.	Remove weeds manually.
11. Weeds will be controlled by non-chemical means (see AR 608-10).	Remove weeds manually.
12. Insect infestation will be evaluated and treated by Certified Pesticide Applicators as described in AR 420-76.	Contact installation pest management personnel for appropriate insect treatment.
13. Plant disease will be evaluated and treated by Certified Pesticide Applicators as described in AR 420-76.	Contact installation pest management personnel for appropriate disease treatment.
14. Shrubs will be fertilized using a sub-surface method to maintain a healthy condition.	Fertilize shrubs.
15. Organic mulch will be maintained in plant beds and around individual shrubs to a depth of 100 mm (4 inches).	Maintain 100 mm (4 inches) of organic mulch in plant beds and around individual shrubs.
16. Employ proper planting techniques to prevent plant and trunk damage.	Remove plastic or other material from root ball; trim or spread roots which are wrapping around root ball.
17. Planting beds will be filled as need to avoid settling.	Fill beds as needed.
18. Planting beds will be free of poisonous species.	Evaluate plant materials prior to any plantings and annually for poisonous species; eliminate poisonous species.

Table E-12: Tree - Maintenance schedule.

12. TREE

MAINTENANCE STANDARDS	MAINTENANCE TASKS
<b>BASELINE:</b>	
The tree will comply with baseline inspection criteria.	Remedy deficiencies noted upon inspection or replace tree.
<b>PERIODIC:</b>	
1. The tree will be free from broken stakes and protruding wires.	Replace broken stakes and eliminate protruding wires.
2. The tree will receive sufficient water (25 mm (1-inch) per week) to remain healthy and vigorous.	Water the tree to 25 mm (1 -inch) of rainfall per week as necessary to maintain plant health.
3. The tree will be free from broken, dead, or sharp branches.	Remove broken, dead or sharp branches.
4. The tree will be free from branches that protrude into the pathway overhead at a height of 2000 mm (80 inches) or less.	The tree will be free from branches that protrude into the pathway overhead at a height of 2000 mm (80 inches) or less.
5. The tree will be free from roots which may cause trip hazards.	Remove roots which may cause trip hazards.
6. Stakes and guy wires will be adjusted and removed when appropriate to prevent plant damage.	Adjust guy wires; remove guy wires and stakes after second growing season,

Table E-12: Tree - Maintenance schedule (cont.).

## 12. TREE - continued

MAINTENANCE STANDARDS	MAINTENANCE TASKS
<b>ANNUAL:</b>	
1. The tree will be free from broken stakes and protruding wires.	Replace broken stakes and eliminate protruding wires.
2. The tree will receive sufficient water (25 mm (1-inch) per week) to remain healthy and vigorous.	Water the tree to 25 mm (1-inch) of rainfall per week as necessary to maintain plant health.
3. The tree will be free from broken, dead, or sharp branches.	Remove broken, dead or sharp branches.
4. The tree will be free from branches that protrude into the pathway overhead at a height of 2000 mm (80 inches) or less.	The tree will be free from branches that protrude into the pathway overhead at a height of 2000 mm (80 inches) or less.
5. The tree will be free from roots which may cause trip hazards.	Remove roots which may cause trip hazards.
6. Stakes and guy wires will be adjusted and removed when appropriate to prevent plant damage.	Adjust guy wires; remove guy wires and stakes after second growing season.
7. The tree will be pruned to maintain a natural looking appearance, maintain or reduce size, rejuvenate plants, and remove hazards.	Prune the tree. Remove rubbing branches; weak limbs; limbs that interfere with supervision of children or play activity; and branches that encourage climbing.
8. A minimum 900 mm (36 inches) diameter bed of organic mulch will be maintained around individual trees.	Maintain a bed of organic mulch around individual trees for a minimum diameter of 900 mm (36 inches).
9. Organic mulch will be maintained at a 100 mm (4-inch) depth.	Replenish mulch to maintain a 100 mm (4-inch) depth. Use material which is free of debris or other foreign matter, such as stones, dirt branches, soil, thorns, or leaves.
10. Insect infestation will be evaluated and treated by Certified Pesticide Applicators as described in AR 420-76.	Contact installation pest management personnel for appropriate insect treatment.
11. Plant disease will be evaluated and treated by Certified Pesticide Applicators as described in AR 420-76.	Contact installation pest management personnel for appropriate plant disease treatment.
12. The tree will be fertilized using a sub-surface method to maintain a healthy condition.	Fertilize the tree.
13. Proper planting techniques will be employed to prevent plant and trunk damage.	Remove plastic or other material from root ball; trim or spread roots which are wrapping around root ball.
14. The play area will be free from poisonous tree species.	Evaluate plant materials prior to any plantings and annually for poisonous species; eliminate poisonous species.
15. Trees with fruit and berries will not be provided.	I Remove trees with fruit or berries.

Table E-13: Turf - Maintenance schedule.

13. TURF

MAINTENANCE STANDARDS	MAINTENANCE TASKS
<b>BASELINE:</b>	
Turf will comply with baseline inspection criteria.	Remedy deficiencies noted upon inspection.
<b>PERIODIC:</b>	
1. Turf will receive sufficient water (25 mm (1-inch) per week) to remain healthy and vigorous.	Irrigate turf to 25 mm (1-inch) of rainfall per week as necessary during growing season.
2. Turf will be free from mushrooms and other fungi.	Remove mushrooms and other fungi.
3. Turf will be mowed to a height of 25 to 50 mm (1 to 2 inches).	Mow and edge the turf to maintain a height of 25 to 50 mm (1 to 2 inches).
4. Turf areas will be free from holes and trip hazards.	Fill holes and remove trip hazards as needed.
5. Turf will be free from poor drainage, pending, and puddles.	Improve drainage or re-evaluate planting plan as necessary.
6. Weeds will be controlled by nonchemical means (see AR 608-10).	Remove weeds from turf areas using manual means.
<b>ANNUAL:</b>	
1. Turf will receive sufficient water (25 mm (1-inch) per week) to remain healthy and vigorous.	Irrigate turf to 25 mm (1-inch) of rainfall per week as necessary during growing season.
2. Turf will be free from mushrooms and other fungi.	Remove mushrooms and other fungi.
3. Turf will be mowed to a height of 25 to 50 mm (1 to 2 inches).	Mow and edge the turf to maintain a height of 25 to 50 mm (1 to 2 inches).
4. Turf areas will be free from holes and trip hazards.	Fill holes and remove trip hazards as needed.
5. Turf will be free from poor drainage, pending, and puddles.	Improve drainage or re-evaluate planting plan as necessary.
6. Weeds will be controlled by non-chemical means (see AR 608-10).	Remove weeds from turf areas using manual means.
7. Insect infestation will be evaluated and treated by Certified Pesticide Applicators as described in AR 420-76.	Contact installation pest management personnel for appropriate insect treatment.
8. Plant disease will be evaluated and treated by Certified Pesticide Applicators as described in AR 420-76.	Contact installation pest management personnel for appropriate plant disease treatment.
9. Turf will be fertilized using a sub-surface method to maintain healthy growth.	Fertilize turf.
10. Turf areas will be free from excessive settling.	Fill low areas with topsoil, and re-seed or sod as necessary.
11. Soil will be aerated to maintain a healthy growth.	Aerate the soil.
12. Turf will be dethatched to maintain a healthy growth.	Dethatch the turf.
13. Turf areas will be free of poisonous plant species.	Evaluate plant materials prior to any plantings and annually for poisonous species; eliminate poisonous species.

Table E-14: Drinking Fountain - Maintenance schedule.

14. DRINKING FOUNTAIN

MAINTENANCE STANDARDS	MAINTENANCE TASKS
<b>BASELINE:</b>	
The drinking fountain will comply with baseline inspection criteria.	Repair deficiencies noted upon inspection or replace as needed.
<b>PERIODIC:</b>	
1. The drinking fountain will be free from loose, missing or broken parts.	Repair or replace loose, missing, or broken components.
2. The drinking fountain will be free from vandalism.	Repair or replace vandalized components.
3. The drinking fountain basin, spigot, and handle will be cleaned and regularly disinfected as per AR 608-10.	Clean and disinfect the basin, spigot, and handle.
4. The fountain hardware and plumbing will be in good working order, with the drain running free.	Repair leaks and clear drain by manual means as needed.
5. The arch of water will be sufficient to hit the drinking fountain drain without overshooting.	Adjust the arch of water.
6. Wood materials will be free from warping, wood rot, insect damage, and checking (cracks more than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width).	Repair or replace damaged materials.
7. Metal materials will be free from rust, corrosion and bending of members.	Repair or replace damaged materials.
8. Wood materials will be free from splinters; loose or missing knots; and sharp edges or corners.	Refinish or replace parts. Eliminate sharp edges or corners.
9. Metal materials will be free from rough metal and sharp edges or corners.	Refinish or replace parts. Eliminate sharp edges or corners.
10. All hardware will be present, securely attached, and without significant wear. (Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.)	Tighten hardware or replace parts.
11. The drinking fountain will be free from chipped, peeling or worn paint.	Repaint the fountain with lead free paint (0.06% maximum lead by dry weight).

Table E-14: Drinking Fountain - Maintenance schedule (cont.).

14. DRINKING FOUNTAIN - continued

MAINTENANCE STANDARDS	MAINTENANCE TASKS
<b>ANNUAL:</b>	
1. The drinking fountain will be free from loose, missing, or broken parts.	Repair or replace loose, missing, or broken components.
2. The drinking fountain will be free from vandalism.	Repair or replace vandalized components.
3. The drinking fountain basin, spigot, and handle will be cleaned and regularly disinfected as per AR 608-10.	Clean and disinfect the basin, spigot, and handle.
4. The fountain hardware and plumbing will be in good working order with the drain running free.	Repair leaks and clear drain by manual means as needed.
5. The arch of water will be sufficient to hit the drinking fountain drain without overshooting.	Adjust the arch of water.
6. Wood materials will be free from warping, wood rot, insect damage, and checking (cracks more than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width),	Repair or replace damaged materials.
7. Metal materials will be free from rust, corrosion and bending of members.	Repair or replace damaged materials.
8. Wood materials will be free from splinters; loose or missing knots; and sharp edges or corners.	Refinish or replace parts. Eliminate sharp edges or corners.
9. Metal materials will be free from rough metal and sharp edges or corners.	Refinish or replace parts. Eliminate sharp edges or corners,
10. All hardware will be present, securely attached, and without significant wear. (Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.)	Tighten hardware or replace parts.
11. The drinking fountain will be free from chipped, peeling or worn paint.	Repaint the fountain with lead free paint (0.06% maximum lead by dry weight).
12. The drinking fountain will be free of head entrapments. Openings must meet all entrapment inspection criteria (chap 4).	Repair areas of entrapment by tightening components or with replacement parts as required.
13. All protrusions will meet inspection criteria (chap 4).	Eliminate protrusions.
14. Pressure treated wood materials will be coated with a non-toxic sealant every two years.	Coat pressure treated wood materials with a non-toxic sealant every two years.
15. All paints will be free from lead (0.06% maximum lead by dry weight).	Refinish and repaint with lead free paint (0.060/0 maximum lead by dry weight).

Table E-15: Irrigation - Maintenance schedule.

15. IRRIGATION

MAINTENANCE STANDARDS	MAINTENANCE TASKS
<b>BASELINE:</b> The irrigation system will comply with baseline inspection criteria.	Repair deficiencies noted upon inspection or replace as needed.
<b>PERIODIC:</b>	
1. The irrigation system will be free from trip hazards, such as unretracted sprinkler heads, exposed pipes, etc.	Eliminate trip hazards.
2. Irrigation will be maintained at the proper level to provide needed moisture (25 mm (1-inch) of rainfall per week) without over watering.	Check sprinklers for proper adjustment; minimize overflow.
<b>ANNUAL:</b>	
1. The irrigation system will be free from trip hazards, such as unretracted sprinkler heads, exposed pipes, etc.	Eliminate trip hazards.
2. Irrigation will be maintained at the proper level to provide needed moisture (25 mm (1-inch) of rainfall per week) without over watering.	Check sprinklers for proper adjustment; minimize overflow.
3. Sprinkler heads will be free from dirt and debris,	Remove dirt from the sprinkler heads by disassembling, cleaning and re-assembly or replace sprinkler head as needed.
4. Pipes will be flushed out from the mainline through the quick coupling valves after cleaning sprinkler heads.	Flush out the pipes from the mainline through the quick coupling valves.
5. Sprinkler heads will be set to finished grade.	Dig up improperly placed heads and raise or lower them to the proper grade.
6. Valves will be maintained in proper working order,	Disassemble and thoroughly clean malfunctioning valves; replace as needed.
7. Inspect irrigation pipes for placement and leaks.	Repair irrigation pipes when possible, taking care to keep dirt out of the system; replace pipes as needed.
8. Systems will be winterized each fall and started up each spring in cold climates,	Winterize the system each fall in cold climates and start up the system in spring.
9. Backflow prevention devices will be installed to ensure water in the irrigation system does not back-siphon into the potable distribution system,	Install backflow prevention devices.
10. The backflow prevention devices will be tested annually to ensure operability according to state and local laws and manufacturer's guidance.	Test backflow prevention devices annually to ensure operability.

Table E-16: Sink - Maintenance schedule.

16. SINK

MAINTENANCE STANDARDS	MAINTENANCE TASKS
<b>BASELINE:</b>	
The sink will comply with baseline inspection criteria	Repair deficiencies noted upon inspection or replace as needed.
<b>PERIODIC:</b>	
1. The sink, cabinet, and surface will be free from loose, missing, or broken parts.	Repair or replace loose, missing, or broken components.
2. The sink, cabinet, and surface will be free from vandalism.	Repair or replace vandalized components,
3. The sink basin, cabinet, spigot, and handle will be cleaned and regularly disinfected as per AR 608-10.	Clean and disinfect the sink basin, cabinet, spigot, and handle.
4. The sink hardware and plumbing will be in good working order, with drain running free.	Repair leaks; clear drain by manual means as required.
5. Wood materials will be free from warping, wood rot, insect damage, and checking (cracks more than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width).	Repair or replace damaged materials.
6. Metal materials will be free from rust, corrosion and bending of members.	Repair or replace damaged materials.
7. Wood materials will be free from splinters; loose or missing knots; and sharp edges or corners.	Refinish or replace parts. Eliminate sharp edges or corners.
8. Metal materials will be free from rough metal and sharp edges or corners.	Refinish or replace parts. Eliminate sharp edges or corners.
9. All hardware will be present, securely attached, and without significant wear. (Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.)	Tighten hardware or replace parts.
10. The sink and cabinet will be free from chipped, peeling or worn paint.	Repaint with lead free paint (0.06% maximum lead by dry weight).

Table E-16: Sink - Maintenance schedule (cont.).

## 16. SINK - continued

MAINTENANCE STANDARDS	MAINTENANCE TASKS
<b>ANNUAL:</b>	
1. The sink, cabinet, and surface will be free from loose, missing or broken parts.	Repair or replace loose, missing, or broken components.
2. The sink, cabinet, and surface will be free from vandalism.	Repair or replace vandalized components.
3. The sink basin, cabinet, spigot, and handle will be cleaned and regularly disinfected as per AR 608-10	Clean and disinfect the sink basin, cabinet, spigot, and handle.
4. The sink hardware and plumbing will be in good working order with drain running free.	Repair leaks; clear drain by manual means as required.
5. Wood materials will be free from warping, wood rot, insect damage, and checking (cracks more than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width).	Repair or replace damaged materials.
6. Metal materials will be free from rust, corrosion and bending of members.	Repair or replace damaged materials.
7. Wood materials will be free from splinters; loose or missing knots; and sharp edges or corners.	Refinish or replace parts. Eliminate sharp edges or corners.
8. Metal materials will be free from rough metal and sharp edges or corners.	Refinish or replace parts. Eliminate sharp edges or corners.
9. All hardware will be present, securely attached, and without significant wear. (Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.)	Tighten hardware or replace parts.
10. The sink and cabinet will be free from chipped, peeling or worn paint.	Repaint with lead free paint (0.06% maximum lead by dry weight).
11. The sink and cabinet will be free from head entrapments. Openings must meet all entrapment inspection criteria (chap 4).	Repair areas of entrapment by tightening components or with replacement parts as required.
12. All protrusions will meet inspection criteria (chap 4).	Eliminate protrusions,
13. Pressure treated wood materials will be coated with a non-toxic sealant every two years.	Coat pressure treated wood materials with a non-toxic sealant every two years.
14. All paints will be free from lead (0.060/0 maximum lead by dry weight).	Refinish and repaint with lead free paint (0.06% maximum lead by dry weight).

Table E-17: Storm Drain - Maintenance schedule.

17. STORM DRAIN

MAINTENANCE STANDARDS	MAINTENANCE TASKS
<b>BASELINE:</b>	
The storm drain will comply with baseline inspection criteria.	Repair deficiencies noted upon inspection or replace as needed.
<b>PERIODIC:</b>	
1. Storm drain inlets will be clear and free running so that water is not standing on the ground surface.	Clear the inlet of debris, sand, leaves, or other material to prevent standing water; clear out drain as needed.
2. Storm drain covers will be securely fastened to the frame.	Tighten or replace cover hardware as needed.
<b>ANNUAL:</b>	
1. Storm drain inlets will be clear and free running so that water is not standing on the ground surface.	Clear the inlet of debris, sand, leaves, or other material to prevent standing water; clear out drain as needed.
2. Storm drain covers will be securely fastened to the frame.	Tighten or replace cover hardware as needed.

Table E-18: Sand Safety Surfacing (Within Use Zones) - Maintenance schedule.

**18. SAND SAFETY SURFACING (WITHIN USE ZONES)**

MAINTENANCE STANDARDS	MAINTENANCE TASKS
<b>BASELINE:</b>	
Sand safety surfacing will comply with baseline inspection criteria.	Repair deficiencies noted upon inspection or replace with required material as needed.
<b>PERIODIC:</b>	
1. Sand safety surfacing will be free of debris, such as stones, leaves, twigs or branches, toys, and wheeled toys.	Remove toys, wheeled toys, foreign objects, and debris. Rake to expose hidden debris; remove debris manually or with a shovel.
2. Sand safety surfacing will be free of animal feces.	Rake to expose hidden feces. Remove feces with a shovel.
3. Sand safety surfacing will be removed from adjacent areas and pathways.	Sweep/shovel sand from pathways and adjacent areas back into sand area.
4. Sand safety surfacing will be free from holes caused by digging or play activities.	Shovel or rake sand to fill low areas or holes caused by digging or play activities.
5. Sand safety surfacing will be free of insect infestation.	Sieve sand to thoroughly clean and remove insect infestation.
6. Sand safety surfacing will be free from puddles and poor drainage.	Redesign sub-base to improve drainage if necessary.
7. Sand safety surfacing will be maintained at a minimum depth of 450 mm (18 inches) over base materials and footings.	Replace sand to maintain the minimum 450 mm (18-inch) depth. A headfirst fall from the highest point of the play equipment onto the play area surface must result in an impact not to exceed 200 g's and a Head Injury Criteria value of no more than 1,000 as specified by the ASTM F 1292.

Table E-18: Sand Safety Surfacing (Within Use Zones) - Maintenance schedule (cont.).

18. SAND SAFETY SURFACING (WITHIN USE ZONES) - continued

MAINTENANCE STANDARDS	MAINTENANCE TASKS
<b>ANNUAL:</b>	
1. Sand safety surfacing will be free of debris, such as stones, leaves, twigs or branches, toys, and wheeled toys.	Remove toys, wheeled toys, foreign objects, and debris. Rake to expose hidden debris; remove debris with a shovel.
2. Sand safety surfacing will be free of animal feces.	Rake to expose hidden feces. Remove feces with a shovel.
3. Sand safety surfacing will be removed from adjacent areas and pathways.	Sweep/shovel sand from pathways and adjacent areas back into sand area.
4. Sand safety surfacing will be free from holes caused by digging or play activities.	Shovel or rake sand to fill low areas or holes caused by digging or play activities.
5. Sand safety surfacing will be monitored for freezing conditions which will reduce impact attenuation.	Close the play equipment area if sand safety surface is frozen.
6. Sand safety surfacing will be free of insect infestation.	Sieve sand to thoroughly clean and remove insect infestation.
7. Sand safety surfacing will be free from puddles and areas of poor drainage.	Redesign sub-base to improve drainage if necessary.
8. Sand safety surfacing will be maintained at a minimum depth of 450 mm (18 inches) over base materials and footings.	Replace sand to maintain the minimum 450 mm (18-inch) depth. A headfirst fall from the highest point of the play equipment onto the play area surface must result in an impact not to exceed 200 g's and a Head Injury Criteria value of no more than 1,000 as specified by the ASTM F 1292.
9. Sand safety surfacing will be thoroughly cleaned and aerated annually.	Sieve sand annually to thoroughly clean and aerate
10. Sand safety surfacing will be removed and replaced when impact attenuating ability deteriorates due to dirt and debris.	Completely remove and replace sand when a headfirst fall from the highest point of the play equipment onto the play area surface does not result in an impact not to exceed 200 g's and a HIC value of no more than 1,000 as specified by the ASTM F 1292.

Table E-19: Synthetic Safety Surfacing (Within Use Zones) - Maintenance schedule,

**19. SYNTHETIC SAFETY SURFACING (WITHIN USE ZONES)**

MAINTENANCE STANDARDS	MAINTENANCE TASKS
<p><b>BASELINE:</b></p> <p>Synthetic safety surfacing will comply with baseline inspection criteria.</p>	<p>Repair deficiencies noted upon inspection or replace as needed.</p>
<p><b>PERIODIC:</b></p> <ol style="list-style-type: none"> <li>1. Synthetic safety surfacing will be free of loose material and foreign objects such as debris, sand, gravel, leaves, soil, and toys.</li> <li>2. Synthetic safety surfacing will be firmly attached to the underlying surface.</li> <li>3. Synthetic safety surfacing will be free of abrupt changes in level greater than 6 mm (1/4-inch).</li> <li>4. Synthetic safety surfacing will be free of cuts, nicks or damaged areas.</li> <li>5. Synthetic safety surfacing will be free from exposed hardware and sharp edges.</li> </ol>	<p>Pick up debris, toys, and wheeled toys; sweep surfacing to remove loose materials such as sand, gravel, leaves, and soil.</p> <p>Repair surfacing with materials and techniques recommended by the product manufacturer.</p> <p>Repair surfacing with materials and techniques recommended by the product manufacturer.</p> <p>Repair surfacing with materials and techniques recommended by the product manufacturer.</p> <p>Repair surfacing with materials and techniques recommended by the product manufacturer.</p>
<p><b>ANNUAL:</b></p> <ol style="list-style-type: none"> <li>1. Synthetic safety surfacing will be free of loose material and foreign objects such as debris, sand, gravel, leaves, soil, and toys.</li> <li>2. Synthetic safety surfacing will be free from puddles, ice, and snow when children are brought outdoors to play .</li> <li>3. Synthetic safety surfacing will be monitored for cold temperatures which will reduce impact attenuation.</li> <li>4. Synthetic safety surfacing will be firmly attached to the underlying surface.</li> <li>5. Synthetic safety surfacing will be free of abrupt changes in level greater than 6 mm (1/4-inch).</li> <li>6. Synthetic safety surfacing will be free of cuts, nicks or damaged areas.</li> <li>7. Synthetic safety surfacing will be free from exposed hardware and sharp edges.</li> </ol>	<p>Pick up debris, toys, and wheeled toys; sweep surfacing to remove loose materials such as sand, gravel, leaves, and soil.</p> <p>Remove puddles, ice, and snow.</p> <p>Close the play equipment area when the outdoor temperature is -4 degrees Celsius (25 degrees Fahrenheit) or less.</p> <p>Repair surfacing with materials and techniques recommended by the product manufacturer.</p> <p>Repair surfacing with materials and techniques recommended by the product manufacturer.</p> <p>Repair surfacing with materials and techniques recommended by the product manufacturer.</p> <p>Repair surfacing with materials and techniques recommended by the product manufacturer.</p>

Table E-20: Wood Product Safety Surfacing (Within Use Zones) - Maintenance schedule.

**20. WOOD PRODUCT SAFETY SURFACING (WITHIN USE ZONES)**

MAINTENANCE STANDARDS	MAINTENANCE TASKS
<b>BASELINE:</b>	
Wood product safety surfacing will comply with baseline inspection criteria.	Repair deficiencies noted upon inspection or replace as needed.
<b>PERIODIC:</b>	
1. Wood product safety surfacing will be free of debris, such as stones, leaves, twigs or branches, toys, and wheeled toys.	Remove toys, wheeled toys, foreign objects, and debris; rake to remove hidden debris. Remove debris manually or with a shovel.
2. Wood product safety surfacing will be free of animal feces.	Rake to expose hidden feces. Remove feces with a shovel.
3. Wood product safety surfacing will be free of mold, mushrooms and fungi, mildew, rot, and insect or rodent infestation.	Remove wood product with mold, mildew, rot, or insect infestation; remove rodent nests, mushrooms, and fungi.
4. Wood product safety surfacing will be removed from adjacent areas and pathways.	Sweep/shovel wood product from pathways and adjacent areas back into wood chip area.
5. Wood product safety surfacing will be free from holes or low areas caused by digging or play activities.	Shovel or rake wood product to fill low areas or holes caused by digging or play activities.
6. Wood product safety surfacing will be free from puddles and areas of poor drainage.	Redesign sub-base to improve drainage if necessary.
7. Wood product safety surfacing will be maintained at a minimum depth of 300 mm (12 inches) over base materials .	Replace wood product to maintain the minimum 300 mm (12-inch) material depth. A headfirst fall from the highest point of the play equipment onto the play area surface must result in an impact not to exceed 200 g's and a Head Injury Criteria value of no more than 1,000 as specified by the ASTM F 1292.

Table E-20: Wood Product Safety Surfacing (Within Use Zones) - Maintenance schedule (cont.).

**20. WOOD PRODUCT SAFETY SURFACING (WITHIN USE ZONES) - continued**

MAINTENANCE STANDARDS	MAINTENANCE TASKS
<p><b>ANNUAL:</b></p> <p>1. Wood products will be free of debris, such as stones, leaves, twigs or branches, toys, and wheeled toys.</p>	<p>Remove toys, wheeled toys, foreign objects, and debris; rake to remove hidden debris. Remove debris manually or with a shovel.</p>
<p>2. Wood products will be free of animal feces.</p>	<p>Rake to expose hidden feces. Remove feces manually or with a shovel.</p>
<p>3. Wood products will be free of mold, mushrooms and fungi, mildew, rot, and insect or rodent infestation.</p>	<p>Remove wood chip areas with mold, mildew, rot, or insect infestation; remove rodent nests, mushrooms, and fungi.</p>
<p>4. Wood products will be removed from adjacent areas and pathways.</p>	<p>Sweep/shovel wood products from pathways and adjacent areas back into wood chip area.</p>
<p>5. Wood products will be free from holes or low areas caused by digging or play activities.</p>	<p>Shovel or rake wood products to fill low areas or holes caused by digging or play activities.</p>
<p>6. Wood products will be monitored for freezing conditions which will reduce impact attenuation.</p>	<p>Close the play equipment area if the safety surface is frozen when children are brought outside to play.</p>
<p>7. Wood products will be free from puddles and areas of poor drainage.</p>	<p>Redesign subbase to improve drainage if necessary.</p>
<p>8. Wood products will be maintained at a minimum depth of 300 mm (12 inches) over base materials.</p>	<p>Replace wood products to maintain the minimum 300 mm (12-inch) material depth. A headfirst fall from the highest point of the play equipment onto the play area surface must result in an impact not to exceed 200 g's and a HIC value of no more than 1,000 as specified by the ASTM F 1292.</p>
<p>9. Wood products will be removed and replaced when impact attenuating ability deteriorates due to decomposition, dirt and debris.</p>	<p>Completely remove and replace wood products when a headfirst fall from the highest point of the play equipment onto the play area surface does not result in an impact not to exceed 200 g's and a HIC value of no more than 1,000 as specified by the ASTM F 1292.</p>

Table E-21: Bench - Maintenance schedule.

21. BENCH

MAINTENANCE STANDARDS	MAINTENANCE TASKS
<b>BASELINE:</b>	
The bench will comply with baseline inspection criteria.	Repair deficiencies noted upon inspection or replace as needed.
<b>PERIODIC:</b>	
1. The bench will be free from loose, missing or broken parts.	Repair or replace loose, missing, or broken components.
2. The bench will be free from vandalism.	Repair or replace vandalized components.
3. Wood materials will be free from warping, wood rot, insect damage, and checking (cracks more than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width).	Repair or replace damaged materials.
4. Concrete materials will be free from extensive cracking, rough surfaces, and sharp edges or corners.	Repair or replace concrete components as needed; eliminate sharp edges and corners.
5. Metal materials will be free from rust, corrosion and bending of members.	Repair or replace damaged materials.
6. Wood materials will be free from splinters; loose or missing knots; and sharp edges or corners.	Refinish or replace parts. Eliminate sharp edges or corners.
7. Metal materials will be free from rough metal, and sharp edges or corners.	Refinish or replace parts. Eliminate sharp edges or corners.
8. All hardware will be present, securely attached, and without significant wear. (Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.)	Tighten hardware or replace with parts recommended by the manufacturer.
9. The bench will be free from chipped, peeling or worn paint.	Repaint with lead free paint (0.060\ maximum lead by dry weight).

Table E-21: Bench - Maintenance schedule (writ.).

## 21. BENCH - continued

MAINTENANCE STANDARDS ANNUAL:	MAINTENANCE TASKS
1. The bench will be free from loose, missing or broken parts.	Repair or replace loose, missing, or broken components.
2. The bench will be free from vandalism.	Repair or replace vandalized components.
3. Wood materials will be free from warping, wood rot, insect damage, and checking (cracks more than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width).	Repair or replace damaged materials.
4. Concrete materials will be free from extensive cracking, rough surfaces, and sharp edges or corners.	Repair or replace concrete components as needed; eliminate sharp edges and corners.
5. Metal materials will be free from rust, corrosion and bending of members.	Repair or replace damaged materials.
6. Wood materials will be free from splinters; loose or missing knots; and sharp edges or corners.	Refinish or replace parts. Eliminate sharp edges or corners.
7. Metal materials will be free from rough metal and sharp edges or corners.	Refinish or replace parts. Eliminate sharp edges or corners.
8. All hardware will be present, securely attached, and without significant wear. (Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.)	Tighten hardware or replace parts.
9. The bench will be free from chipped, peeling or worn paint.	Repaint with lead free paint (0.06% maximum lead by dry weight).
10. The bench will be free from head entrapments. Openings must meet all entrapment inspection criteria (chap 4).	Repair areas of entrapment by tightening components or with replacement parts as required.
11. All protrusions will meet inspection criteria (chap 4).	Eliminate protrusions.
12. Pressure treated wood materials will be coated with a non-toxic sealant every two years.	Coat pressure treated wood materials with a non-toxic sealant every two years.
13. All paints will be free from lead (0.06% maximum lead by dry weight).	Refinish and repaint with lead free paint (0.06% maximum lead by dry weight).

Table E-22: Removable Shade - Maintenance schedule.

22. REMOVABLE SHADE

MAINTENANCE STANDARDS	MAINTENANCE TASKS
<b>BASELINE:</b>	
The removable shade element will comply with baseline inspection criteria.	Repair deficiencies noted upon inspection or replace as needed.
<b>PERIODIC:</b>	
1. The removable shade element will be free from loose, missing or broken parts.	Repair or replace loose, missing, or broken components.
2. The removable shade element will be free from vandalism.	Repair or replace vandalized components.
3. Shade elements will be clean.	Clean the shade element.
4. All hardware will be present, securely attached, and without significant wear. (Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.)	Tighten hardware or replace with parts recommended by the manufacturer.
5. The removable shade element will be free from sharp edges or corners.	Replace parts.
6. The removable shade element will be free from rust, corrosion, or bending of members.	Repair or replace parts.
<b>ANNUAL:</b>	
1. The removable shade element will be free from loose, missing or broken parts.	Repair or replace loose, missing or broken components.
2. The removable shade element will be free from vandalism.	Repair or replace vandalized components.
3. Shade elements will be clean.	Clean the shade element.
4. All hardware will be present, securely attached, and without significant wear. (Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.)	Tighten hardware or replace with parts recommended by the manufacturer.
5. The removable shade element will be free from sharp edges or corners.	Replace parts.
6. The removable shade element will be free from rust, corrosion, or bending of members.	Repair or replace parts.
7. The removable shade element will be free of head entrapments. Openings must meet all entrapment inspection criteria (chap 4).	Repair areas of entrapment by tightening components or with replacement parts as required.
8. All protrusions will meet inspection criteria (chap 4).	Eliminate protrusions.

Table E-23: Table - Maintenance schedule.

23. TABLE

MAINTENANCE STANDARDS	MAINTENANCE TASKS
<b>BASELINE:</b>	
The table will comply with baseline inspection criteria.	Repair deficiencies noted upon inspection or replace as needed.
<b>PERIODIC:</b>	
1. The table will be free from loose, missing or broken parts.	Repair or replace loose, missing or broken components.
2. The table will be free from vandalism.	Repair or replace vandalized components.
3. Wood materials will be free from warping, wood rot, insect damage, and checking (cracks more than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width).	Repair or replace damaged materials.
4. Wood materials will be free from splinters; loose or missing knots; and sharp edges or corners.	Refinish or replace parts. Eliminate sharp edges or corners.
5. All hardware will be present, securely attached, and without significant wear. (Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.)	Tighten hardware or replace parts.
6. The table will be free from chipped, peeling or worn paint.	Repaint with lead free paint (0.060/0 maximum lead by dry weight).

Table E-23: Table - Maintenance schedule (cont.).

23. TABLE - continued

MAINTENANCE STANDARDS	MAINTENANCE TASKS
<b>ANNUAL:</b>	
1. The table will be free from loose, missing or broken Darts.	Repair or replace loose, missing or broken components.
2. The table will be free from vandalism.	Repair or replace vandalized components.
3. The table will be clean and disinfected as per AR 608-10.	Clean and disinfect the table.
4. Wood materials will be free from warping, wood rot, insect damage, and checking (cracks more than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width).	Repair or replace damaged materials.
5. Wood materials will be free from splinters; loose or missing knots; and sharp edges or corners.	Refinish or replace parts. Eliminate sharp edges or corners.
6. All hardware will be present, securely attached, and without significant wear. (Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.)	Tighten hardware or replace parts.
7. The table will be free from chipped, peeling or worn paint.	Repaint with lead free paint (0.06% maximum lead by dry weight).
8. The table will be free of head entrapments. Openings must meet all entrapment inspection criteria (chap 4).	Repair areas of entrapment by tightening components or with replacement parts as required.
9. All protrusions will meet inspection criteria (chap 4).	Eliminate protrusions.
10. Pressure treated wood materials will be coated with a non-toxic sealant every two years.	Coat pressure treated wood materials with a non-toxic sealant every two years.
11. All paints will be free from lead (0.06% maximum lead by dry weight).	Refinish and repaint with lead free paint (0.06% maximum lead by dry weight).

Table E-24: Trash Receptacle - Maintenance schedule.

**24. TRASH RECEPTACLE**

MAINTENANCE STANDARDS	MAINTENANCE TASKS
<b>BASELINE:</b>	
The trash receptacle will comply with baseline inspection criteria.	Repair deficiencies noted upon inspection or replace as needed.
<b>PERIODIC:</b>	
1. The trash receptacle will be free from loose, missing, or broken parts.	Repair or replace loose, missing or broken components.
2. The trash receptacle will be free from vandalism.	Repair or replace vandalized components.
3. Wood materials will be free from warping, wood rot, insect damage, and checking (cracks more than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width).	Repair or replace damaged materials.
4. Metal materials will be free from rust, corrosion and bending of members.	Repair or replace damaged materials.
5. Concrete materials will be free from extensive cracking, rough surface, and sharp edges and corners.	Repair or replace concrete components as needed. Eliminate sharp edges or corners.
6. Wood materials will be free from splinters; loose or missing knots; and sharp edges or corners.	Refinish or replace parts as recommended by manufacturer. Eliminate sharp edges or corners.
7. Metal materials will be free from rough metal and sharp edges or corners.	Refinish or replace parts as recommended by manufacturer. Eliminate sharp edges or corners.
8. All hardware will be present, securely attached, and without significant wear. (Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.)	Tighten hardware or replace parts.
9. The trash receptacle will be free from chipped, peeling or worn paint.	Repaint with lead free paint (0.06% maximum lead by dry weight).
10. All trash receptacles will be cleaned with detergent, water and a disinfectant monthly as weather permits or more often if needed.	Clean trash receptacles with detergent, water and a disinfectant monthly as weather permits or more often if needed.

Table E-22: Removable Shade - Maintenance schedule.

**22. REMOVABLE SHADE**

MAINTENANCE STANDARDS	MAINTENANCE TASKS
<b>BASELINE:</b>	
The removable shade element will comply with baseline inspection criteria.	Repair deficiencies noted upon inspection or replace as needed.
<b>PERIODIC:</b>	
1. The removable shade element will be free from loose, missing or broken parts.	Repair or replace loose, missing, or broken components.
2. The removable shade element will be free from vandalism.	Repair or replace vandalized components.
3. Shade elements will be clean.	Clean the shade element.
4. All hardware will be present, securely attached, and without significant wear. (Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.)	Tighten hardware or replace with parts recommended by the manufacturer.
5. The removable shade element will be free from sharp edges or corners.	Replace parts.
6. The removable shade element will be free from rust, corrosion, or bending of members.	Repair or repate parts.
<b>ANNUAL:</b>	
1. The removable shade element will be free from loose, missing or broken parts.	Repair or replace loose, missing or broken components.
2. The removable shade element will be free from vandalism.	Repair or replace vandalized components.
3. Shade elements will be clean.	Clean the shade element.
4. All hardware will be present, securely attached, and without significant wear. (Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.)	Tighten hardware or replace with parts recommended by the manufacturer.
5. The removable shade element will be free from sharp edges or corners.	Replace parts.
6. The removable shade element will be free from rust, corrosion, or bending of members.	Repair or replace parts.
7. The removable shade element will be free of head entrapments. Openings must meet all entrapment inspection criteria (chap 4).	Repair areas of entrapment by tightening components or with replacement parts as required.
8. All protrusions will meet inspection criteria (chap 4).	Eliminate protrusions.

Table E-25: Weed and Pest Management - Maintenance schedule,

25. WEED AND PEST MANAGEMENT

MAINTENANCE STANDARDS	MAINTENANCE TASKS
<b>BASELINE:</b>	
Weed and pest management practices will comply with baseline inspection criteria.	Repair deficiencies noted upon inspection.
<b>PERIODIC:</b>	
1. Weeds will be controlled by manual rather than chemical means (see AR 608-10).	Remove weeds manually.
2. Insect infestation must be evaluated and treated by Certified Pesticide Applicators as described in AR 420-76.	Contact installation pest management personnel for appropriate insect treatment.
3. Plant disease must be evaluated and treated by Certified Pesticide Applicators as described in AR 420-76.	Contact installation pest management personnel for appropriate disease treatment.
<b>ANNUAL:</b>	
1. Weeds will be controlled by manual rather than chemical means (see AR 608-10).	Remove weeds manually.
2. Insect infestation must be evaluated and treated by Certified Pesticide Applicators as described in AR 420-76.	Contact installation pest management personnel for appropriate insect treatment.
3. Plant disease must be evaluated and treated by Certified Pesticide Applicators as described in AR 420-76.	Contact installation pest management personnel for appropriate disease treatment.
4. If chemical treatment for plant disease or insects is necessary, the approved treatment will be applied only when children will be absent from the CDC for an adequate period of time to avoid chemical exposure.	Approved treatment will be applied by Certified Pesticide Applicator only when children are absent from the CDC for an adequate period of time to avoid chemical exposure (e.g., over a weekend or vacation break).
5. Bait stations, if justified, will be tamper proof and inaccessible to children.	Use bait stations which are tamper proof and inaccessible to children.
6. Stinging insect nests will be removed by pest management personnel.	Pest management personnel will remove stinging insect nests.
7. Children will not re-enter the play area for 24 hours after the removal of stinging insect nests.	Close the play area for 24 hours after the removal of stinging insect nests.
8. Vertebrate pests will be managed by trapping.	Trap vertebrates.
9. Live animal traps will not be used when children are present.	Do not use traps when children are present.

Table E-23: Table - Maintenance schedule (writ.).

23. TABLE - continued

MAINTENANCE STANDARDS	MAINTENANCE TASKS
<b>ANNUAL:</b>	
1. The table will be free from loose, missing or broken parts.	Repair or replace loose, missing or broken components.
2. The table will be free from vandalism.	Repair or replace vandalized components.
3. The table will be clean and disinfected as per AR 608-10.	Clean and disinfect the table.
4. Wood materials will be free from warping, wood rot, insect damage, and checking (cracks more than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width).	Repair or replace damaged materials.
5. Wood materials will be free from splinters; loose or missing knots; and sharp edges or corners.	Refinish or replace parts. Eliminate sharp edges or corners.
6. All hardware will be present, securely attached, and without significant wear. (Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.)	Tighten hardware or replace parts.
7. The table will be free from chipped, peeling or worn paint.	Repaint with lead free paint (0.060/0 maximum lead by dry weight).
8. The table will be free of head entrapments. Openings must meet all entrapment inspection criteria (chap 4).	Repair areas of entrapment by tightening components or with replacement parts as required.
9. All protrusions will meet inspection criteria (chap 4).	Eliminate protrusions.
10. Pressure treated wood materials will be coated with a non-toxic sealant every two years.	Coat pressure treated wood materials with a non-toxic sealant every two years.
11. All paints will be free from lead (0.06% maximum lead by dry weight).	Refinish and repaint with lead free paint (0.06% maximum lead by dry weight).

Table E-26: Composite Structure - Maintenance schedule (writ.).

## 26. COMPOSITE STRUCTURE - continued

MAINTENANCE STANDARDS	MAINTENANCE TASKS
<b>ANNUAL:</b>	
1. The composite structure will be free from loose, missing or broken parts.	Repair or replace loose, missing, or broken components with parts recommended by the manufacturer.
2. The composite structure will be free from vandalism.	Repair or replace vandalized components with parts recommended by the manufacturer.
3. The composite structure will be free from wet or icy surfaces when children are brought outside to play.	Dry the structure if necessary.
4. Metal composite structures will be closed when the temperature is freezing or below.	Close metal composite structures if the temperature is freezing or below.
5. Composite structure surfaces, such as platforms, rungs, and steps, will be free from loose and slippery materials, e.g., sand, leaves, etc.	Sweep loose and slippery material, such as sand and leaves, from the composite structure surfaces.
6. For preschool and school age, the composite structure's use zone will be free from obstructions when measured 2400 mm (96 inches) in any direction from the equipment.	Remove obstructions in the use zone or close the structure.
7. For toddlers, the composite structure's use zone will be free from obstructions when measured 1800 mm (72 inches) in any direction from the equipment.	Remove obstructions in the use zone or close the structure.
8. Wood materials will be free from warping, wood rot, insect damage, and checking (cracks more than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width).	Repair or replace damaged materials with parts recommended by the manufacturer.
9. Metal materials will be free from rust, corrosion and bending of members.	Repair or replace damaged materials with parts recommended by the manufacturer.
10. Plastic parts will be unbroken and without chips or cracks, particularly at joints and connections.	Repair or replace damaged materials with parts recommended by the manufacturer.
11. Wood materials will be free from splinters; loose or missing knots; and sharp edges or corners.	Refinish or replace parts as recommended by manufacturer. Eliminate sharp edges or corners.
12. Metal materials will be free from rough metal and sharp edges or corners.	Refinish or replace parts as recommended by manufacturer. Eliminate sharp edges or corners.
13. All hardware will be present, securely attached, and without significant wear. (Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.)	Tighten hardware or replace with parts recommended by the manufacturer.
14. The composite structure will be free from chipped, peeling, or worn paint.	Repaint with lead free paint (0.06% maximum lead by dry weight).
15. All S-hooks and other connectors will be fully closed and secure. The S-hook will be considered properly closed if hook openings are less than 1 mm (.04 inches) when tested with a feeler gauge. The lower loop will not cross over the upper loop.	Tighten loose hardware and connections, close open S-hooks and replace worn hardware.
16. Rope will be free of fraying or rot.	I Replace with parts recommended by the manufacturer.
17. Chain will be without significant wear. (Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, or corrosion.)	Replace with parts recommended by the manufacturer.

Table E-24: Trash Receptacle - Maintenance schedule (cont.).

**24. TRASH RECEPTACLE - continued**

MAINTENANCE STANDARDS	MAINTENANCE TASKS
<b>ANNUAL:</b>	
1. The trash receptacle will be free from loose, missing or broken parts.	Repair or replace loose, missing or broken components.
2. The trash receptacle will be free from vandalism.	Repair or replace vandalized components.
3. Spills will be cleaned as they occur.	Clean spills as they occur.
4. Wood materials will be free from warping, wood rot, insect damage, and checking (cracks more than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width).	Repair or replace damaged materials.
5. Metal materials will be free from rust, corrosion and bending of members.	Repair or replace damaged materials.
6. Concrete materials will be free from extensive cracking, rough surface, and sharp edges and corners.	Repair or replace concrete components as needed. Eliminate sharp edges or corners.
7. Wood materials will be free from splinters; loose or missing knots; and sharp edges or corners.	Refinish or replace parts as recommended by manufacturer. Eliminate sharp edges or corners.
8. Metal materials will be free from rough metal and sharp edges or corners.	Refinish or replace pans as recommended by manufacturer. Eliminate sharp edges or corners.
9. All hardware will be present, securely attached, and without significant wear. (Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.)	Tighten hardware or replace parts.
10. The trash receptacle will be free from chipped, peeling or worn paint.	Repaint with lead free paint (0.06% maximum lead by dry weight).
11. All trash receptacles will be cleaned with detergent, water and a disinfectant monthly as weather permits or more often if needed.	Clean trash receptacles with detergent, water and a disinfectant monthly as weather permits or more often if needed.
12. The unit will be free of head entrapments. Openings must meet all entrapment inspection criteria (chap 4).	Repair areas of entrapment by tightening components or with replacement parts as required.
13. All protrusions will meet inspection criteria (chap 4).	Eliminate protrusions.
14. All dumpster type trash receptacles will be covered and closed.	Cover and close all dumpsters.
15. Dumpster drain holes will be plugged or covered with mesh screening to prevent pest infestation.	Plug drain holes or cover with mesh screening to prevent pest infestation.
16. Trash receptacles will be impermeable to moisture or lined with leakproof, nonabsorbent materials.	Repair leaks; replace trash receptacle; or line with leakproof, nonabsorbent material
17. Trash receptacles will be covered with a lid or closed when not in use.	Cover trash receptacle with a lid or close when not in use; or replace receptacle.
18. Pressure treated wood materials will be coated with a non-toxic sealant every two years.	Coat pressure treated wood materials with a non-toxic sealant every two years.
19. All paints will be free from lead (0.06% maximum lead by dry weight).	Refinish and repaint with lead free paint (0.06% maximum lead by dry weight).

Table E-27: Arch Climber - Maintenance schedule.

**27. ARCH CLIMBER**

<b>MAINTENANCE STANDARDS</b>	<b>MAINTENANCE TASKS</b>
<b>BASELINE:</b>	
1. The arch climber will comply with baseline inspection criteria.	Repair deficiencies noted upon inspection or replace as needed.
2. The arch climber will meet all requirements for composite structures.	Follow maintenance standards and procedures specified for composite structures.
<b>PERIODIC:</b>	
1. The arch climber will meet all requirements for composite structures.	Follow maintenance standards and procedures specified for composite structures.
2. The arch climber will be free from loose, missing or broken parts.	Repair or replace loose, missing or broken components with parts recommended by the manufacturer.
3. The arch climber will be free from vandalism.	Repair or replace vandalized components with parts recommended by the manufacturer.
4. The arch climber rungs will not rotate.	Tighten rungs or repair with manufacturer's recommended parts.
<b>ANNUAL:</b>	
1. The arch climber will meet all requirements for composite structures.	Follow maintenance standards and procedures specified for composite structures.
2. The arch climber will be free from loose, missing or broken parts.	Repair or replace loose, missing or broken components with parts recommended by the manufacturer.
3. The arch climber will be free from vandalism.	Repair or replace vandalized components with parts recommended by the manufacturer.
4. The arch climber rungs will not rotate.	Tighten rungs or repair with manufacturer's recommended parts.

Table E-26: Composite Structure - Maintenance schedule.

26. COMPOSITE STRUCTURE

MAINTENANCE STANDARDS	MAINTENANCE TASKS
<b>BASELINE:</b>	
The composite structure will comply with baseline inspection criteria.	Repair deficiencies noted upon inspection or replace as needed.
<b>PERIODIC:</b>	
1. The composite structure will be free from loose, missing or broken parts.	Repair or replace loose, missing or broken components with parts recommended by the manufacturer.
2. The composite structure will be free from vandalism.	Repair or replace vandalized components with parts recommended by the manufacturer.
3. <i>For preschool and school age</i> , the composite structure's use zone will be free from obstructions when measured 2400 mm (96 inches) in any direction from the equipment.	Remove obstructions in the use zone or close the structure.
4. <i>For toddlers</i> , the composite structure's use zone will be free from obstructions when measured 1800 mm (72 inches) in any direction from the equipment.	Remove obstructions in the use zone or close the structure.
5. Wood materials will be free from warping, wood rot, insect damage, and checking (cracks more than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width).	Repair or replace damaged materials with parts recommended by the manufacturer.
6. Metal materials will be free from rust, corrosion and bending of members.	Repair or replace damaged materials with parts recommended by the manufacturer.
7. Plastic parts will be unbroken and without chips or cracks, particularly at joints and connections.	Repair or replace damaged materials with parts recommended by the manufacturer.
8. Wood materials will be free from splinters; loose or missing knots; and sharp edges or corners.	Refinish or replace parts as recommended by manufacturer. Eliminate sharp edges or corners.
9. Metal materials will be free from rough metal, and sharp edges or corners.	Refinish or replace parts as recommended by manufacturer. Eliminate sharp edges or corners.
10. All hardware will be present, securely attached, and without significant wear. (Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.)	Tighten hardware or replace with parts recommended by the manufacturer.
11. The composite structure will be free from chipped, peeling, or worn paint.	Repaint with lead free paint (0.060/0 maximum lead by dry weight).
12. All S-hooks and other connectors will be fully closed and secure. The S-hook will be considered properly closed if hook openings are less than 1 mm (.04 inches) when tested with a feeler gauge. The lower loop will not cross over the upper loop.	Tighten loose hardware and connections, close open S-hooks and replace worn hardware.
13. Rope will be free of fraying or rot.	Replace with parts recommended by the manufacturer.
14. Chain will be without significant wear. (Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, or corrosion.)	Replace with parts recommended by the manufacturer.
15. Cable will be free from visible wear and frayed or projecting wires.	Replace with parts recommended by the manufacturer.

Table E-29: Clatter Bridge - Maintenance schedule.

**29. CLATTER BRIDGE**

<b>MAINTENANCE STANDARDS</b>	<b>MAINTENANCE TASKS</b>
<b>BASELINE:</b>	
1. The clatter bridge will comply with baseline inspection criteria.	Repair deficiencies noted upon inspection or replace as needed.
2. The clatter bridge will meet all requirements for composite structures.	Follow maintenance standards and procedures specified for composite structures.
<b>PERIODIC:</b>	
1. The clatter bridge will meet all requirements for composite structures.	Follow maintenance standards and procedures specified for composite structures..
2. The clatter bridge will be free from loose, missing or broken parts.	Repair or replace loose, missing or broken components with parts recommended by the manufacturer.
3. The clatter bridge will be free from vandalism.	Repair or replace vandalized components with parts recommended by the manufacturer.
4. The clatter bridge will be free from worn chain. (Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, or corrosion.)	Replace chain with parts recommended by manufacturer.
5. The clatter bridge will be free from open S-hooks. The S-hook will be considered properly closed if hook openings are less than 1 mm (.04 inches) when tested with a feeler gauge. The lower loop will not cross over the upper loop.	Close S-hooks.
6. All hardware will be present, securely attached, and without significant wear. (Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.)	Tighten hardware or replace with parts recommended by the manufacturer.
7. The distance between the bridge and composite structure platform will be 50 mm (2 inches) maximum.	Adjust the gap between the clatter bridge and composite structure platform as needed.

Table E-28: Bubble Panel - Maintenance schedule.

**28. BUBBLE PANEL**

<b>MAINTENANCE STANDARDS</b>	<b>MAINTENANCE TASKS</b>
<b>BASELINE:</b>	
1. The bubble panel will comply with baseline inspection criteria.	Repair deficiencies noted upon inspection or replace as needed.
2. The bubble panel will meet all requirements for composite structures.	Follow maintenance standards and procedures specified for composite structures.
<b>PERIODIC:</b>	
1. The bubble panel will meet all requirements for composite structures.	Follow maintenance standards and procedures specified for composite structures.
2. The bubble panel will be free from loose, missing or broken parts.	Repair or replace loose, missing or broken components with parts recommended by the manufacturer.
3. The bubble panel will be free from vandalism.	Repair or replace vandalized components with parts recommended by the manufacturer.
<b>ANNUAL:</b>	
1. The bubble panel will meet all requirements for composite structures.	Follow maintenance standards and procedures specified for composite structures.
2. The bubble panel will be free from loose, missing or broken parts.	Repair or replace loose, missing or broken components with parts recommended by the manufacturer.
3. The bubble panel will be free from vandalism.	Repair or replace vandalized components with parts recommended by the manufacturer.
4. The bubble panel will be free from scratches in the panel window which significantly obscure the view.	Replace the bubble panel when scratches significantly obscure the view.

Table E-30: Cleated Ramp - Maintenance schedule.

**30. CLEATED RAMP**

MAINTENANCE STANDARDS	MAINTENANCE TASKS
<b>BASELINE:</b>	
1. The cleated ramp will comply with baseline inspection criteria.	Repair deficiencies noted upon inspection or replace as needed.
2. The cleated ramp will meet all requirements for composite structures.	Follow maintenance standards and procedures specified for composite structures.
<b>PERIODIC:</b>	
1. The cleated ramp will meet all requirements for composite structures.	Follow maintenance standards and procedures specified for composite structures.
2. The cleated ramp will be free from loose, missing or broken parts.	Repair or replace loose, missing or broken components with parts recommended by the manufacturer.
3. The cleated ramp will be free from vandalism.	Repair or replace vandalized components with parts recommended by the manufacturer.
<b>ANNUAL:</b>	
1. The cleated ramp will meet all requirements for composite structures.	Follow maintenance standards and procedures specified for composite structures.
2. The cleated ramp will be free from loose, missing or broken parts.	Repair or replace loose, missing or broken components with parts recommended by the manufacturer.
3. The cleated ramp will be free from vandalism.	Repair or replace vandalized components with parts recommended by the manufacturer.
4. The cleated ramp will be free from loose material, such as sand and leaves.	Sweep loose material, such as sand and leaves, from the ramp.

Table E-29: Clatter Bridge - Maintenance schedule (cont.).

29. CLATTER BRIDGE - continued

MAINTENANCE STANDARDS	MAINTENANCE TASKS
<b>ANNUAL:</b>	
1. The clatter bridge will meet all requirements for composite structures.	Follow maintenance standards and procedures specified for composite structures.
2. The clatter bridge will be free from loose, missing or broken parts.	Repair or replace loose, missing or broken components with parts recommended by the manufacturer.
3. The clatter bridge will be free from vandalism.	Repair or replace vandalized components with parts recommended by the manufacturer.
4. The clatter bridge will be free from loose material, such as sand, wood products, and leaves.	Sweep loose material, such as sand, wood products, and leaves from the clatter bridge.
5. The clatter bridge will be free from worn chain. (Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, or corrosion.)	Replace chain with parts recommended by manufacturer.
6. The clatter bridge will be free from open S-hooks. The S-hook will be considered properly closed if hook openings are less than 1 mm (.04 inches) when tested with a feeler gauge. The lower loop will not cross over the upper loop.	Close S-hooks.
7. All hardware will be present, securely attached, and without significant wear. (Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.)	Tighten hardware or replace with parts recommended by the manufacturer.
8. The distance between the bridge and composite structure platform will be 50 mm (2 inches) maximum.	Adjust the gap between the clatter bridge and composite structure platform as needed.

Table E-32: Horizontal Ladder- Maintenance schedule.

**32. HORIZONTAL LADDER**

<b>MAINTENANCE STANDARDS</b>	<b>MAINTENANCE TASKS</b>
<b>BASELINE:</b>	
1. The horizontal ladder will comply with baseline inspection criteria.	Repair deficiencies noted upon inspection or replace as needed.
2. The horizontal ladder will meet all requirements for composite structures.	Follow maintenance standards and procedures specified for composite structures.
<b>PERIODIC:</b>	
1. The horizontal ladder will meet all requirements for composite structures.	Follow maintenance standards and procedures specified for composite structures.
2. The horizontal ladder will be free from loose, missing or broken parts.	Repair or replace loose, missing or broken components with parts recommended by the manufacturer.
3. The horizontal ladder will be free vandalism.	Repair or replace vandalized components with parts recommended by the manufacturer.
4. The horizontal ladder rungs will not rotate.	Tighten rungs or repair with manufacturer's recommended parts.
<b>ANNUAL:</b>	
1. The horizontal ladder will meet all requirements for composite structures.	Follow maintenance standards and procedures specified for composite structures.
2. The horizontal ladder will be free from loose, missing or broken parts.	Repair or replace loose, missing or broken components with parts recommended by the manufacturer.
3. The horizontal ladder will be free from vandalism.	Repair or replace vandalized components with parts recommended by the manufacturer.
4. The horizontal ladder rungs will not rotate,	Tighten rungs or repair with manufacturer's recommended parts.

Table E-33: Ladders and Stairs - Maintenance schedule.

33. LADDERS AND STAIRS

MAINTENANCE STANDARDS	MAINTENANCE TASKS
<b>BASELINE:</b>	
1. The ladder and stairs will comply with baseline inspection criteria.	Repair deficiencies noted upon inspection or replace as needed.
2. The ladder and stairs will meet all requirements for composite structures.	Follow maintenance standards and procedures specified for composite structures.
<b>PERIODIC:</b>	
1. The ladder and stairs will meet all requirements for composite structures.	Follow maintenance standards and procedures specified for composite structures.
2. The ladder and stairs will be free from loose, missing or broken parts.	Repair or replace loose, missing or broken components with parts recommended by the manufacturer.
3. The ladder and stairs will be free from vandalism.	Repair or replace vandalized components with parts recommended by the manufacturer.
4. Steps will be free from loose material, such as sand, wood products, and leaves.	Sweep loose material, such as sand, wood products, and leaves from ladders with stairs.
5. The ladder rungs and steps will be securely attached.	Tighten hardware or repair with manufacturer's recommended parts.
6. The ladder rungs will not rotate.	Tighten hardware or repair with manufacturer's recommended parts.
<b>ANNUAL:</b>	
1. The ladder and stairs will meet all requirements for composite structures.	Follow maintenance standards and procedures specified for composite structures.
2. The ladder and stairs will be free from loose, missing or broken parts.	Repair or replace loose, missing or broken components with parts recommended by the manufacturer.
3. The ladder and stairs will be free from vandalism.	Repair or replace vandalized components with parts recommended by the manufacturer.
4. Steps will be free from loose material, such as sand, wood products, and leaves.	Sweep loose material, such as sand, wood products, and leaves from ladders with stairs.
5. The ladder rungs and steps will be securely attached.	Tighten hardware or repair with manufacturer's recommended parts.
6. The ladder rungs will not rotate.	Tighten hardware or repair with manufacturer's recommended parts.
7. The ladder and stairs will be free from head entrapments. Openings must meet all entrapment inspection criteria (chap 4).	Repair areas of entrapment by tightening components or with replacement parts recommended by the manufacturer.

Table E-34: Net Climber - Maintenance schedule.

**34. NET CLIMBER**

MAINTENANCE STANDARDS	MAINTENANCE TASKS
<b>BASELINE:</b>	
1. The net climber will comply with baseline inspection criteria.	Repair deficiencies noted upon inspection or replace as needed.
2. The net climber will meet all requirements for <b>composite structures</b> .	Follow maintenance standards and procedures specified for composite structures.
<b>PERIODIC:</b>	
1. The net climber will meet all requirements for composite structures.	Follow maintenance standards and procedures specified for composite structures.
2. The net climber will be free from loose, missing or broken parts.	Repair or replace loose, missing or broken components with parts recommended by the manufacturer.
3. The net climber will be free from vandalism.	Repair or replace vandalized components with parts recommended by the manufacturer.
4. The net climber will be free from worn cable.	Replace with parts recommended by the manufacturer
5. All hardware will be present, securely attached, and without significant wear. (Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.)	Tighten hardware or replace with parts recommended by the manufacturer.
6. The net climber will be free from open S-hooks. The S-hook will be considered properly closed if hook openings are less than 1 mm (.04 inches) when tested with a feeler gauge. The lower loop will not cross over the upper loop.	Close S-hooks.
7. The net will be adjusted to eliminate loose chain or cable.	Adjust the net to eliminate loose chain or cable.
8. Anchoring devices which are connected to the around will be buried below the playing surface.	Replenish safety surfacing.

Table E-34: Net Climber - Maintenance schedule (rent.).

**34. NET CLIMBER - continued**

<b>ANNUAL:</b>	
1. The net climber will meet all requirements for composite structures.	Follow maintenance standards and procedures specified for composite structures.
2. The net climber will be free from loose, missing or broken parts.	Repair or replace loose, missing or broken components with parts recommended by the manufacturer.
3. The net climber will be free from vandalism.	Repair or replace vandalized components with parts recommended by the manufacturer.
4. The net climber will be free from worn cable.	Replace with parts recommended by the manufacturer.
5. All hardware will be present, securely attached, and without significant wear. (Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.)	Tighten hardware or replace with parts recommended by the manufacturer.
6. The net climber will be free from open S-hooks. The S-hook will be considered properly closed if hook openings are less than 1 mm (.04 inches) when tested with a feeler gauge. The lower loop will not cross over the upper loop.	Close S-hooks.
7. The net will be adjusted to eliminate loose chain or cable.	Adjust the net to eliminate loose chain or cable.
8. Anchoring devices which are connected to the around will be buried below the playing surface.	Replenish safety surfacing.

Table E-35: Protective Barrier- Maintenance schedule.

**35. PROTECTIVE BARRIER**

<b>MAINTENANCE STANDARDS</b>	<b>MAINTENANCE TASKS</b>
<b>BASELINE:</b>	
1. The protective barrier will comply with baseline inspection criteria.	Repair deficiencies noted upon inspection or replace as needed.
2. The protective barrier will meet all requirements for composite structures.	Follow maintenance standards and procedures specified for composite structures.
<b>PERIODIC:</b>	
1. The protective barrier will meet all requirements for composite structures.	Follow maintenance standards and procedures specified for composite structures.
2. The protective barrier will be free from loose, missing or broken parts.	Repair or replace loose, missing or broken components with parts recommended by the manufacturer.
3. The protective barrier will be free from vandalism.	Repair or replace vandalized components with parts recommended by the manufacturer.
<b>ANNUAL:</b>	
1. The protective barrier will meet all requirements for composite structures.	Follow maintenance standards and procedures specified for composite structures.
2. The protective barrier will be free from loose, missing or broken parts.	Repair or replace loose, missing or broken components with parts recommended by the manufacturer.
3. The protective barrier will be free from vandalism.	Repair or replace vandalized components with parts recommended by the manufacturer.

Table E-36: Ring Trek - Maintenance schedule.

36. RING TREK

MAINTENANCE STANDARDS	MAINTENANCE TASKS
<b>BASELINE:</b>	
1. The ring trek will comply with baseline inspection criteria.	Repair deficiencies noted upon inspection or replace as needed.
2. The ring trek will meet all requirements for composite structures.	Follow maintenance standards and procedures specified for composite structures.
<b>PERIODIC:</b>	
1. The ring trek will meet all requirements for composite structures.	Follow maintenance standards and procedures specified for composite structures.
2. The ring trek will be free from loose, missing, or broken parts.	Repair or replace hose, missing or broken components with parts recommended by the manufacturer.
3. The ring trek will be free from vandalism.	Repair or replace vandalized components with parts recommended by the manufacturer.
4. The ring trek will be free from worn chain. (Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, or corrosion.)	Replace with parts recommended by the manufacturer.
5. The ring trek will be free from open S-hooks. The S-hook will be considered properly closed if hook openings are less than 1 mm (.04 inches) when tested with a feeler gauge. The lower loop will not cross over the upper loop.	Close S-hooks.
6. All hardware will be present, securely attached, and without significant wear. (Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.)	Tighten hardware or replace with parts recommended by the manufacturer.
<b>ANNUAL:</b>	
1. The ring trek will meet all requirements for composite structures.	Follow maintenance standards and procedures specified for composite structures.
2. The ring trek will be free from loose, missing, or broken parts.	Repair or replace loose, missing or broken components with parts recommended by the manufacturer.
3. The ring trek will be free from vandalism.	Repair or replace vandalized components with parts recommended by the manufacturer.
4. The adjoining platforms will be free from loose material, such as sand, wood products, and leaves.	Sweep loose material, such as sand, wood products, and leaves, from adjoining platforms.
5. The ring trek will be free from worn chain. (Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, or	Replace with parts recommended by the manufacturer.
6. The ring trek will be free from open S-hooks. The S-hook will be considered closed if hook openings are less than 1 mm (.04 inches) when tested with a feeler gauge, The lower loop will not cross over the upper loop.	Close S-hooks.
7. All hardware will be present, securely attached, and without significant wear. (Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or shipping.)	Tighten hardware or replace with parts recommended by the manufacturer.

Table E-37: Roof - Maintenance schedule.

## 37. ROOF

MAINTENANCE STANDARDS	MAINTENANCE TASKS
<b>BASELINE:</b>	
1. The roof will comply with baseline inspection criteria.	Repair deficiencies noted upon inspection or replace as needed.
2. The roof will meet all requirements for composite structures.	Follow maintenance standards and procedures specified for composite structures.
<b>PERIODIC:</b>	
1. The roof will meet all requirements for composite structures.	Follow maintenance standards and procedures specified for composite structures.
2. The roof will be free from loose, missing, or broken parts.	Repair or replace loose, missing or broken components with parts recommended by the manufacturer.
3. The roof will be free from vandalism.	Repair or replace vandalized components with parts recommended by the manufacturer.
4. The roof will be securely attached.	Repair or replace roof with parts recommended by the manufacturer.
<b>ANNUAL:</b>	
1. The roof will meet all requirements for composite structures.	Follow maintenance standards and procedures specified for composite structures.
2. The roof will be free from loose, missing, or broken parts.	Repair or replace loose, missing or broken components with parts recommended by the manufacturer.
3. The roof will be free from vandalism.	Repair or replace vandalized components with parts recommended by the manufacturer.
4. The roof will be securely attached.	Repair or replace roof with parts recommended by the manufacturer.

Table E-38: Slide - Maintenance schedule.

38. SLIDE

MAINTENANCE STANDARDS	MAINTENANCE TASKS
<b>BASELINE:</b>	
1. The slide will comply with baseline inspection criteria.	Repair deficiencies noted upon inspection or replace as needed.
2. The slide will meet all requirements for composite structures.	Follow maintenance standards and procedures specified for composite structures.
<b>PERIODIC:</b>	
1. The slide will meet all requirements for composite structures.	Follow maintenance standards and procedures specified for composite structures.
2. <i>The</i> slide will be free from loose, missing, or broken parts.	Repair or replace loose, missing or broken components with parts recommended by the manufacturer.
3. The slide will be free from vandalism.	Repair or replace vandalized components with parts recommended by the manufacturer.
4. Plastic slides will be free from breaks, cracks, or chips, particularly at joints and connections.	Repair broken and cracked components with manufacturer's recommended parts.
5. The slide will be securely attached and free from damage.	Repair with manufacturer's recommended parts.
6. The slide will be free of openings or gaps between materials that could entrap fingers, hair, or clothing.	Tighten hardware or repair with manufacturer's recommended parts to eliminate openings in the slide structure.
7. All hardware will be present, securely attached, and without significant wear. (Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or striping.).	Tighten hardware or repair parts with manufacturer's recommended parts.
8. <i>The</i> slide will be free from sharp edges and corners.	Eliminate sharp edges or corners.

Table E-38: Slide - Maintenance schedule (cont.).

**38. SLIDE - continued**

ANNUAL:	
1. The slide will meet all requirements for composite structures.	Follow maintenance standards and procedures specified for composite structures.
2. The slide will be free from loose, missing, or broken parts.	Repair or replace loose, missing or broken components with parts recommended by the manufacturer.
3. The slide will be free from vandalism.	Repair or replace vandalized components with parts recommended by the manufacturer.
4. Plastic slides will be free from breaks, cracks, or chips, particularly at joints and connections.	Repair broken and cracked components with manufacturer's recommended parts.
5. The slide will be securely attached.	Repair with manufacturer's recommended parts.
6. The slide bed, platforms, and stairs will be free from loose material, such as sand, wood products, and leaves.	Sweep loose material, such as sand, leaves, and wood products, from the slide bed, platform, and stairs.
7. Metal slides will be closed when the sliding surface is excessively hot to touch.	Close the slide when excessively hot to touch.
8. The slide will be free of openings or gaps between materials that could entrap fingers, hair, or clothing.	Tighten hardware or repair with manufacturer's recommended parts to eliminate openings in the slide structure.
9. All hardware will be present, securely attached, and without significant wear. (Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or striping.).	Tighten hardware or repair parts with manufacturer's recommended parts.
10. The slide will be free from sharp edges and corners.	Eliminate sharp edges or corners.

Table E-39: Stationary Bridge - Maintenance schedule.

**39. STATIONARY BRIDGE**

MAINTENANCE STANDARDS	MAINTENANCE TASKS
<b>BASELINE:</b>	
1. The stationary bridge will comply with baseline inspection criteria.	Repair deficiencies noted upon inspection or replace as needed.
2. The stationary bridge will meet all requirements for composite structures.	Follow maintenance standards and procedures specified for composite structures.
<b>PERIODIC:</b>	
1. The stationary bridge will meet all requirements for composite structures.	Follow maintenance standards and procedures specified for composite structures.
2. The bridge will be free from loose, missing, or broken parts.	Repair or replace loose, missing or broken components with parts recommended by the manufacturer.
3. The bridge will be free from vandalism.	Repair or replace vandalized components with parts recommended by the manufacturer.
4. The bridge and bridge enclosures will be securely attached.	Tighten hardware or repair with manufacturer's recommended parts.
<b>ANNUAL:</b>	
1. The stationary bridge will meet all requirements for composite structures.	Follow maintenance standards and procedures specified for composite structures.
2. The bridge will be free from loose, missing, or broken parts.	Repair or replace loose, missing or broken components with parts recommended by the manufacturer.
3. The bridge will be free from vandalism.	Repair or replace vandalized components with parts recommended by the manufacturer.
4. The bridge and bridge enclosures will be securely attached.	Tighten hardware or repair with manufacturer's recommended parts.
5. The bridge surface will be free from loose materials, such as sand, wood Products, and leaves.	Sweep the bridge surface to remove loose materials, such as sand, wood products, and leaves.

Table E-40: Track Ride - Maintenance schedule.

**40. TRACK RIDE**

MAINTENANCE STANDARDS	MAINTENANCE TASKS
<b>BASELINE:</b>	
1. The track ride will comply with baseline inspection criteria.	Repair deficiencies noted upon inspection or replace as needed.
2. The track ride will meet all requirements for composite structures.	Follow maintenance standards and procedures specified for composite structures.
<b>PERIODIC:</b>	
1. The track ride will meet all requirements for composite structures.	Follow maintenance standards and procedures specified for composite structures.
2. The track ride will be free from loose, missing, or broken parts.	Repair or replace loose, missing or broken components with parts recommended by the manufacturer.
3. The track ride will be free from vandalism.	Repair or replace vandalized components with parts recommended by the manufacturer.
4. The track ride will be free from worn chain. (Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, or corrosion.)	Replace with parts recommended by the manufacturer.
5. The track ride will be free from open S-hooks. The S-hook will be considered properly closed if hook openings are less than 1 mm (.04 inches) when tested with a feeler gauge. The lower loop will not cross over the upper loop.	Close S-hooks.
6. All hardware will be present, securely attached, and without significant wear. (Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.;	Tighten hardware or replace with parts recommended by the manufacturer.
7. The track ride sliding mechanism will be free from wear. (Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, or corrosion.)	Replace with parts recommended by the manufacturer.
8. The sliding mechanism will be well lubricated.	Lubricate sliding mechanism.

Table E-40: Track Ride - Maintenance schedule (cont.).

40. TRACK RIDE - continued

MAINTENANCE STANDARDS ANNUAL:	MAINTENANCE TASKS
1. The track ride will meet all requirements for composite structures.	Follow maintenance standards and procedures specified for composite structures.
2. The track ride will be free from loose, missing, or broken parts.	Repair or replace loose, missing or broken components with parts recommended by the manufacturer.
3. The track ride will be free from vandalism.	Repair or replace vandalized components with parts recommended by the manufacturer.
4. The adjoining platforms will be free from loose material, such as sand, wood products, and leaves.	Sweep loose material, such as sand, wood products, and leaves from adjoining platforms.
5. The track ride will be free from worn chain. (Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, or corrosion.)	Replace with parts recommended by the manufacturer.
6. The track ride will be free from open S-hooks. The S-hook will be considered properly closed if hook openings are less than 1 mm (.04 inches) when tested with a feeler gauge. The lower loop will not cross over the upper loop.	Close S-hooks.
7. All hardware will be present, securely attached, and without significant wear. (Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.)	Tighten hardware or replace with parts recommended by the manufacturer.
8. The track ride sliding mechanism will be free from wear. (Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, or corrosion.)	Replace with parts recommended by the manufacturer.
9. The sliding mechanism will be well lubricated.	Lubricate sliding mechanism.
10. The sliding mechanism and other moving parts will be disassembled annually and replaced as indicated for visible signs of wear. (Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, or corrosion.)	Replace with parts recommended by the manufacturer as needed for wear.

Table E-41: Tunnel/Tunnel Slide - Maintenance schedule.

**41. TUNNEL/TUNNEL SLIDE**

<b>MAINTENANCE STANDARDS</b>	<b>MAINTENANCE TASKS</b>
<b>BASELINE:</b>	
1. The tunnel will comply with baseline inspection criteria.	Repair deficiencies noted upon inspection or replace as needed.
2. The tunnel will meet all requirements for composite structures.	Follow maintenance standards and procedures specified for composite structures.
<b>PERIODIC:</b>	
1. The tunnel will meet all requirements for composite structures.	Follow maintenance standards and procedures specified for composite structures.
2. The tunnel will be free from loose, missing, or broken parts.	Repair or replace loose, missing or broken components with parts recommended by the manufacturer.
3. The tunnel will be free from vandalism.	Repair or replace vandalized components with parts recommended by the manufacturer.
4. The tunnel will be securely attached.	Tighten hardware or repair with manufacturer's recommended parts.
5. Plastic parts will be unbroken, and without chips or cracks, particularly at joints and connections.	Repair broken and cracked components with manufacturer's recommended parts.
6. If the tunnel is composed of more than one piece, it will be free from openings between pieces.	Tighten tunnel components or repair with manufacturer's recommended parts.
7. If the tunnel is a slide, it will meet all requirements for slides.	Follow maintenance standards and procedures specified for slides.
3. All hardware will be present, securely attached, and without significant wear. (Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.)	Tighten hardware or replace with parts recommended by the manufacturer.

Table E-41: Tunnel/Tunnel Slide - Maintenance schedule (writ.).

41. TUNNEL/TUNNEL SLIDE - continued

MAINTENANCE STANDARDS	MAINTENANCE TASKS
<b>ANNUAL:</b>	
1. The tunnel will meet all requirements for composite structures.	Follow maintenance standards and procedures specified for composite structures.
2. The tunnel will be free from loose, missing, or broken parts.	Repair or replace loose, missing or broken components with parts recommended by the manufacturer.
3. The tunnel will be free from vandalism.	Repair or replace vandalized components with parts recommended by the manufacturer.
4. The tunnel will be securely attached.	Tighten hardware or repair with manufacturer's recommended parts.
5. Plastic parts will be unbroken, and without chips or cracks, particularly at joints and connections.	Repair broken and cracked components with manufacturer's recommended parts.
6. If the tunnel is composed of more than one piece, it will be free from openings between pieces.	Tighten tunnel components or repair with manufacturer's recommended parts.
7. The tunnel will be free from loose material, such as sand, wood products, and leaves.	Sweep loose material, such as sand, wood products, and leaves from the tunnel.
B. If the tunnel is a slide, it will meet all requirements for slides.	Follow maintenance standards and procedures specified for slides.
9. All hardware will be present, securely attached, and without significant wear. (Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.)	Tighten hardware or replace with parts recommended by the manufacturer.

Table E-42: Wheel - Maintenance schedule.

42. WHEEL

MAINTENANCE STANDARDS	MAINTENANCE TASKS
<b>BASELINE:</b>	
1. The wheel will comply with baseline inspection criteria.	Repair deficiencies noted upon inspection or replace as needed.
2. The wheel will meet all requirements for composite structures.	Follow maintenance standards and procedures specified for composite structures.
<b>PERIODIC:</b>	
1. The wheel will meet all requirements for composite structures.	Follow maintenance standards and procedures specified for composite structures.
2. The wheel will be free from loose, missing, or broken parts.	Repair or replace loose, missing or broken components with parts recommended by the manufacturer.
3. The wheel will be free from vandalism.	Repair or replace vandalized components with parts recommended by the manufacturer.
4. The wheel will be securely attached with free movement and minimal wobble.	Tighten loose hardware and connections.
5. All hardware will be present, securely attached, and without significant wear. (Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.)	Tighten hardware or replace with parts recommended by the manufacturer.
6. The wheel will be free of accessible pinch, crush and shearing points (chap 4).	Tighten hardware or replace parts as recommended by the manufacturer.
7. The wheel will be lubricated to allow free turning.	Lubricate the wheel.

Table E-42: Wheel - Maintenance schedule (cont.).

42. WHEEL - continued

MAINTENANCE STANDARDS	MAINTENANCE TASKS
<b>ANNUAL:</b>	
1. The wheel will meet all requirements for composite structures.	I Follow maintenance standards and procedures I specified for composite structures.
2. The wheel will be free from loose, missing, or broken parts.	Repair or replace loose, missing or broken components with parts recommended by the manufacturer.
3. The wheel will be free from vandalism.	Repair or replace vandalized components with parts recommended by the manufacturer.
4. The wheel will be securely attached with free movement and minimal wobble.	Tighten loose hardware and connections.
5. All hardware will be present, securely attached, and without significant wear. (Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.)	Tighten hardware or replace with parts recommended by the manufacturer.
6. The wheel will be free of accesible pinch, crush and shearing points (chap 4).	Tighten hardware or replace parts as recommended by the manufacturer.
7. The wheel will be lubricated to allow free turning.	I Lubricate the wheel.
8. The wheel will be free from head entrapments. Openings must meet all entrapment inspection criteria {chap 4}.	Repair areas of entrapment by tightening components or with replacement parts recommended by the manufacturer.

Table E-43: Amphitheater - Maintenance schedule.

## 43. AMPHITHEATER

MAINTENANCE STANDARDS	MAINTENANCE TASKS
<b>BASELINE:</b>	
The amphitheater will comply with baseline inspection criteria.	Repair deficiencies noted upon inspection or replace as needed.
<b>PERIODIC:</b>	
1. The amphitheater will be free from loose, missing, or broken parts.	Repair or replace loose, missing or broken components.
2. The amphitheater will be free from vandalism.	Repair or replace vandalized components.
3. Aisles and pathways will be of a continuous smooth surface without holes or abrupt changes in level greater than 6 mm (1/4-inch).	Fill holes and remove abrupt changes in level.
4. Aisles and pathways will be free from weeds.	Remove weeds manually.
5. Aisles and pathways will be free from insect or rodent infestation.	Remove insect infested material and rodent nests.
6. Aisles and pathways will be free from rot and mold.	Remove molded or rotten surfacing material.
7. Wood seats will be free from warping, wood rot, insect damage, and checking (cracks more than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width).	Repair or replace damaged materials.
8. Concrete seats will be free from extensive cracking, rough surfaces, and sharp edges or corners.	Repair or replace concrete components as needed.
9. Wood materials will be free from splinters; loose or missing knots; and sharp edges or corners.	Refinish or replace parts. Eliminate sharp edges or corners.
10. All hardware will be present, securely attached, and without significant wear. (Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.)	Tighten hardware or replace.
11. Seats will be free from chipped, peeling, or worn paint.	Repaint seats with lead free paint (0.060/0 maximum lead by dry weight).

Table E-43: Amphitheater - Maintenance schedule (cont.).

43. AMPHITHEATER - continued

MAINTENANCE STANDARDS ANNUAL:	MAINTENANCE TASKS
1. The amphitheater will be free from loose, missing, or broken parts.	Repair or replace loose, missing or broken components.
2. The amphitheater will be free from vandalism.	Repair or replace vandalized components.
3. The amphitheater will be free from debris.	Remove debris.
4. Aisles and pathways will be of a continuous smooth surface without holes or abrupt changes in level greater than 6 mm (1/4-inch).	Fill holes and remove abrupt changes in level.
5. Aisles and pathways will be free from weeds.	Remove weeds manually.
6. Aisles and pathways will be free from insect or rodent infestation.	Remove insect infested material and rodent nests.
7. Aisles and pathways will be free from rot and mold.	Remove molded or rotten surfacing material.
8. Wood seats will be free from warping, wood rot, insect damage, and checking (cracks more than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width).	Repair or replace damaged materials.
9. Concrete seats will be free from extensive cracking, rough surfaces, and sharp edges or corners.	Repair or replace concrete components as needed.
10. Wood materials will be free from splinters; loose or missing knots; and sharp edges or corners.	Refinish or replace parts. Eliminate sharp edges or corners.
11. All hardware will be present, securely attached, and without significant wear. (Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.)	Tighten hardware or replace.
12. Seats will be free from chipped, peeling, or worn paint.	Repaint seats with lead free paint (0.06% maximum lead by dry weight).
13. The amphitheater will be free of head entrapments. Openings must meet all entrapment inspection criteria (chap 4).	Repair areas of entrapment by tightening components or with replacement parts as required.
14. All protrusions will meet inspection criteria (chap 4).	Eliminate protrusions.
15. Pressure treated wood materials will be coated with a non-toxic sealant every two years.	Coat pressure treated wood materials with a non-toxic sealant every two years.
16. All paints will be free from lead (0.06% maximum lead by dry weight).	Refinish and repaint with lead free paint (0.06% maximum lead by dry weight).

Table E-44: Ball Play Area - Maintenance schedule.

**44. BALL PLAY AREA**

MAINTENANCE STANDARDS	MAINTENANCE TASKS
<p><b>BASELINE:</b></p> <p>The ball play area will comply with baseline inspection criteria.</p>	<p>Repair deficiencies noted upon inspection or replace as needed.</p>
<p><b>PERIODIC:</b></p>	
<p>1. The surface will be free of abrupt changes in level greater than 6 mm (1/4-inch).</p>	<p>Repair changes in level greater than 6 mm (1/4-inch).</p>
<p>2. The surface will be smooth and free from rough areas or cracks.</p>	<p>Replace areas that have extensive cracks or rough surface.</p>
<p>3. Pavement markings will be bright, legible, and free of chipped, peeling, or worn paint.</p>	<p>Repaint paving surface, striping, or coating. Use paint free from lead (0.06% maximum lead by dry weight), cadmium, or other toxic material.</p>
<p><b>ANNUAL:</b></p>	
<p>1. The surface will be free of toys and other foreign objects.</p>	<p>Remove toys and other objects.</p>
<p>2. The surface will be free of debris and slippery materials, such as sand, wood products, ice, algae, moss, etc., when children are brought outdoors to play</p>	<p>Sweep loose debris, such as sand, wood products, and gravel from surface; remove snow, ice and other slippery material.</p>
<p>3. The surface will be free of abrupt changes in level greater than 6 mm (1/4-inch).</p>	<p>Repair changes in level greater than 6 mm (1/4-inch).</p>
<p>4. The surface will be smooth and free from rough areas or cracks.</p>	<p>Replace areas that have extensive cracks or rough surface.</p>
<p>5. Pavement markings will be bright, legible, and free of chipped, peeling, or worn paint.</p>	<p>Repaint paving surface, striping, or coating. Use paint free from lead (0.06% maximum lead by dry weight), cadmium, or other toxic material.</p>
<p>6. All paints will be free from lead (0.06% maximum lead by dry weight), cadmium, or other toxic material.</p>	<p>Refinish and repaint with paint free from lead (0.06% maximum lead by dry weight), cadmium, or other toxic material.</p>

Table E-45: Ball Wall - Maintenance schedule.

45. BALL WALL

MAINTENANCE STANDARDS	MAINTENANCE TASKS
<p><b>BASELINE:</b> The ball wall will comply with baseline inspection criteria.</p>	<p>Repair deficiencies noted upon inspection or replace as needed.</p>
<p><b>PERIODIC:</b></p>	
<p>1. The ball wall will be free from loose, missing or broken parts.</p>	<p>Repair or replace loose, missing or broken components.</p>
<p>2. The ball wall will be free from vandalism.</p>	<p>Repair or replace vandalized components.</p>
<p>3. Wood materials will be free from warping, wood rot, insect damage, and checking (cracks more than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width).</p>	<p>Repair or replace damaged materials.</p>
<p>4. Concrete will be free from extensive cracking, rough surfaces, and sharp edges or comers.</p>	<p>Repair or replace concrete components as needed.</p>
<p>5. Wood materials will be free from splinters; loose or missing knots; and sharp edges or comers.</p>	<p>Refinish or replace parts. Eliminate sharp edges or comers.</p>
<p>6. All hardware will be present, securely attached, and without significant wear. (Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.)</p>	<p>Tighten hardware or replace.</p>
<p>7. The ball wall will be free from chipped, peeling, or worn paint.</p>	<p>Repaint with lead free paint (0.06% maximum lead by dry weight).</p>

Table E-47: Digging Area - Maintenance schedule.

**47. DIGGING AREA**

MAINTENANCE STANDARDS	MAINTENANCE TASKS
<b>BASELINE:</b> The digging area will comply with baseline inspection criteria.	Repair deficiencies noted upon inspection.
<b>PERIODIC:</b>	
1. The digging area will be free from debris, glass, nails, or other sharp or foreign material.	<b>Remove debris and sharp and foreign objects.</b>
2. The clay or soil will be free from debris, glass, nails, or other sharp or foreign material.	Remove debris and sharp and foreign objects.
3. Adjacent surfaces or structures will be free from undercutting (digging beneath the adjacent element).	Fill undercut areas with specified material.
<b>ANNUAL:</b>	
1. The digging area will be free from debris, glass, nails, or other sharp or foreign material.	Remove debris and sharp and foreign objects.
2. The clay or soil will be free from debris, glass, nails, or other sharp or foreign material.	Remove debris and sharp and foreign objects.
3. Adjacent surfaces or structures will be free from undercutting (digging beneath the adjacent element).	Fill undercut areas with specified material.
4. Tools and toys will be removed daily for cleaning and storage.	Remove toys and digging equipment from the area for storage or cleaning.
5. Specified clay or soil will be replenished as needed to avoid settling.	Add additional specified clay or soil as needed.

Table E-46: Crawl Area - Maintenance schedule.

**46. CRAWL AREA**

MAINTENANCE STANDARDS	MAINTENANCE TASKS
<b>BASELINE:</b>	
The crawl area will comply with baseline inspection criteria.	Repair deficiencies noted upon inspection or replace as needed.
<b>PERIODIC:</b>	
1. The synthetic safety surface will be firmly attached to the underlying surface.	Repair surfacing with materials and techniques recommended by the product manufacturer.
2. The synthetic safety surface will be free of abrupt changes in level greater than 6 mm (1/4-inch).	Repair surfacing with materials and techniques recommended by the product manufacturer.
3. The synthetic safety surface will be free of cuts, nicks, or damaged areas.	Repair surfacing with materials and techniques recommended by the product manufacturer.
4. Synthetic safety surface will be free of exposed hardware and sharp edges.	Repair surfacing with materials and techniques recommended by the product manufacturer.
<b>ANNUAL:</b>	
1. The crawl area surface will be free of loose material and foreign objects, such as debris, sand, wood products, gravel, leaves, soil, and toys.	Pick up debris, toys, and wheeled toys; sweep surfacing to remove loose materials, such as sand, wood products, gravel, leaves, and soil.
2. The surface will be free from puddles, ice, and snow when children are brought outside to play.	Remove puddles, ice, and snow.
3. The surface will be disinfected as per <i>AR 608-70</i> .	Disinfect the surface as required by <i>AR 608-10</i> .
4. The synthetic safety surface will be firmly attached to the underlying surface.	Repair surfacing with materials and techniques recommended by the product manufacturer.
5. The synthetic safety surface will be free of abrupt changes in level greater than 6 mm (1/4-inch).	Repair surfacing with materials and techniques recommended by the product manufacturer.
6. The synthetic safety surface will be free of cuts, nicks, or damaged areas.	Repair surfacing with materials and techniques recommended by the product manufacturer.
7. The synthetic safety surface will be free of exposed hardware and sharp edges.	Repair surfacing with materials and techniques recommended by the product manufacturer.

Table E-48: Platform - Maintenance schedule (cont.).

**48. PLATFORM - continued**

MAINTENANCE STANDARDS	MAINTENANCE TASKS
<p><b>ANNUAL:</b></p> <ol style="list-style-type: none"> <li>1. The platform will be free from loose, missing or broken parts.</li> <li>2. The platform will be free from vandalism.</li> <li>3. A clear area for circulation will be provided free from any obstruction, such as portable climbing equipment, trikes, and wheeled toys. (The circulation area extends 900 mm (36 inches) in all directions from the platform.)</li> </ol>	<p>Repair or replace loose, missing or broken components.</p> <p>Repair or replace vandalized components.</p> <p>Remove obstructions or close the structure.</p>
<ol style="list-style-type: none"> <li>4. Wood materials will be free from warping, wood rot, insect damage, and checking (cracks more than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width).</li> <li>5. Wood materials will be free from splinters; loose or missing knots; and sharp edges or comers.</li> </ol>	<p>Repair or replace damaged materials.</p> <p>Refinish or replace parts as recommended by manufacturer. Eliminate sharp edges or corners.</p>
<ol style="list-style-type: none"> <li>6. All hardware will be present, securely attached, and without significant wear. (Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.)</li> </ol>	<p>Tighten hardware or replace parts.</p>
<ol style="list-style-type: none"> <li>7. The platform will be free from chipped, peeling or worn paint.</li> <li>8. The platform will be free of head entrapments. Openings must meet all entrapment inspection criteria (chap 4).</li> </ol>	<p>Repaint with lead free paint (0.06% maximum lead by dry weight).</p> <p>Repair areas of entrapment by tightening components or with replacement parts as required.</p>
<ol style="list-style-type: none"> <li>9. All protrusions will meet inspection criteria (chap 4).</li> </ol>	<p>Eliminate protrusions.</p>
<ol style="list-style-type: none"> <li>10. Equipment footings will be securely anchored.</li> </ol>	<p>Repair footings.</p>
<ol style="list-style-type: none"> <li>11. Pressure treated wood materials will be coated with a non-toxic sealant every two years.</li> </ol>	<p>Coat pressure treated wood materials with a non-toxic sealant every two years.</p>
<ol style="list-style-type: none"> <li>12. All paints will be free from lead (0.06% maximum lead by dry weight).</li> </ol>	<p>Refinish and repaint with lead free paint (0.06% maximum lead by dry weight).</p>

Table E-48: Platform - Maintenance schedule.

48. PLATFORM

MAINTENANCE STANDARDS	MAINTENANCE TASKS
<p><b>BASELINE:</b></p> <p>The platform will comply with baseline inspection criteria.</p>	<p>Repair deficiencies noted upon inspection or replace as needed.</p>
<p><b>PERIODIC:</b></p>	
<p>1. The platform will be free from loose, missing or broken parts.</p>	<p>Repair or replace loose, missing or broken components.</p>
<p>2. The platform will be free from vandalism.</p>	<p>Repair or replace vandalized components.</p>
<p>3. A clear area for circulation will be provided free from any obstruction, such as portable climbing equipment, trikes, and wheeled toys. (The circulation area extends 900 mm (36 inches) in all directions from the platform.)</p>	<p>Remove obstructions or close the structure.</p>
<p>4. Wood materials will be free from warping, wood rot, insect damage, and checking (cracks more than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width).</p>	<p>Repair or replace damaged materials.</p>
<p>5. Wood materials will be free from splinters; loose or missing knots; and sharp edges or comers.</p>	<p>Refinish or replace parts as recommended by manufacturer. Eliminate sharp edges or corners.</p>
<p>6. All hardware will be present, securely attached, and without significant wear. (Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.)</p>	<p>Tighten hardware or replace parts.</p>
<p>7. The platform will be free from chipped, peeling or worn paint.</p>	<p>Repaint with lead free paint (0.06% maximum lead by dry weight).</p>

Table E-49: Playhouse - Maintenance schedule (cont.).

## 49. PLAYHOUSE - continued

MAINTENANCE STANDARDS	MAINTENANCE TASKS
<b>ANNUAL:</b>	
1. The playhouse will be free from loose, missing, or broken parts.	Repair or replace loose, missing or broken components.
2. The playhouse will be free from vandalism.	Repair or replace vandalized components.
3. The playhouse will be free of wet or icy surfaces when children are brought outside to play.	Remove ice and snow. Dry the structure if necessary.
4. The playhouse walking surface will be free from loose and slippery materials, e.g., sand, leaves, etc.	Sweep loose and slippery material, such as sand and leaves, from the playhouse walking surface.
5. The playhouse use zone will be free from any obstruction, including portable climbing equipment, trikes, and wheeled toys. (The use zone extends 1800 mm (72 inches) in all directions from the playhouse.)	Remove obstructions or close the structure.
6. Wood materials will be free from warping, wood rot, insect damage, and checking (cracks more than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width).	Repair or replace damaged materials with manufacturer's recommended parts.
7. Metal materials will be free from rust, corrosion and bending of members.	Repair or replace damaged materials with manufacturer's recommended parts.
B. Plastic material will be unbroken and without chips or cracks, particularly at joints and connections.	Repair or replace damaged materials with manufacturer's recommended parts.
9. Wood materials will be free from splinters; loose or missing knots; and sharp edges or comers.	Refinish or replace parts as recommended by manufacturer. Eliminate sharp edges or corners.
10. Metal materials will be free from rough metal and sharp edges or comers.	Refinish or replace parts as recommended by manufacturer. Eliminate sharp edges or corners.
11. All hardware will be present, securely attached, and without significant wear. (Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.)	Tighten hardware or replace with manufacturer's recommended parts.
12. The playhouse will be free from chipped, peeling or worn paint.	Repaint with lead free paint (0.06% maximum lead by dry weight).
13. The playhouse will be free of head entrapments. Openings must meet all entrapment inspection criteria (chap 4).	Repair areas of entrapment by tightening components or with replacement parts as required.
14. All protrusions will meet inspection criteria (chap 4).	Eliminate protrusions.
15. Equipment footings or surface mount devices will be securely anchored.	Repair footings or mounting devices.
16. The roof will be strong enough to be climbed upon.	Repair or replace damaged materials with manufacturer's recommended parts.
17. Pressure treated wood materials will be coated with a non-toxic sealant every two years.	Coat pressure treated wood materials with a non-toxic sealant every two years.
18. All paints will be free from lead (0.06% maximum lead by dry weight).	Refinish and repaint with lead free paint (0.06% maximum lead by dry weight).

Table E-49: Playhouse - Maintenance schedule.

49. PLAYHOUSE

MAINTENANCE STANDARDS	MAINTENANCE TASKS
<p><b>BASELINE:</b></p> <p>The playhouse will comply with baseline inspection criteria.</p>	<p>Repair deficiencies noted upon inspection or replace as needed.</p>
<p><b>PERIODIC:</b></p>	
<p>1. The playhouse will be free from loose, missing, or broken parts.</p>	<p>Repair or replace loose, missing or broken components.</p>
<p>2. The playhouse will be free from vandalism.</p>	<p>Repair or replace vandalized components.</p>
<p>3. The playhouse use zone will be free from any obstruction, including portable climbing equipment, trikes, and wheeled toys. (The use zone extends 1800 mm (72 inches) in all directions from the playhouse.)</p>	<p>Remove obstructions or close the structure.</p>
<p>4. Wood materials will be free from warping, wood rot, insect damage, and checking (cracks more than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width).</p>	<p>Repair or replace damaged materials with manufacturer's recommended parts.</p>
<p>5. Metal materials will be free from rust, corrosion and bending of members.</p>	<p>Repair or replace damaged materials with manufacturer's recommended parts.</p>
<p>6. Plastic material will be unbroken and without chips or cracks, particularly at joints and connections.</p>	<p>Repair or replace damaged materials with manufacturer's recommended parts.</p>
<p>7. Wood materials will be free from splinters; loose or missing knots; and sharp edges or comers.</p>	<p>Refinish or replace parts as recommended by manufacturer. Eliminate sharp edges or corners.</p>
<p>8. Metal materials will be free from rough metal and sharp edges or comers.</p>	<p>Refinish or replace parts as recommended by manufacturer. Eliminate sharp edges or corners.</p>
<p>9. All hardware will be present, securely attached, and without significant wear. (Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.)</p>	<p>Tighten hardware or replace with manufacturer's recommended parts.</p>
<p>10. The playhouse will be free from chipped, peeling or worn paint.</p>	<p>Repaint with lead free paint (0.06% maximum lead by dry weight).</p>

Table E-50: Play Station - Maintenance schedule (cont.).

**50. PLAY STATION - continued**

MAINTENANCE STANDARDS	MAINTENANCE TASKS
<p><b>ANNUAL:</b></p> <p>1. The play station will be free from loose, missing or broken parts.</p> <p>2. The play station will be free from vandalism.</p>	<p>Repair or replace loose, missing or broken components.</p> <p>Repair or replace vandalized components.</p>
<p>3. Wood materials will be free from warping, wood rot, insect damage, and checking (cracks more than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width).</p> <p>4. Metal materials will be free from rust, corrosion and bending of members.</p>	<p>Repair or replace damaged materials.</p> <p>Repair or replace damaged materials.</p>
<p>5. Plastic material will be unbroken and without chips or cracks, particularly at joints and connections.</p> <p>6. Wood materials will be free from splinters; loose or missing knots; and sharp edges or comers.</p> <p>7. Metal materials will be free from rough metal and sharp edges or comers.</p> <p>8. All hardware will be present, securely attached, and without significant wear. (Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.)</p>	<p>Repair or replace damaged materials.</p> <p>Refinish or replace parts. Eliminate sharp edges or comers.</p> <p>Refinish or replace parts. Eliminate sharp edges or comers.</p> <p>Tighten hardware or replace parts.</p>
<p>9. The play station will be free from chipped, peeling or worn paint.</p> <p>10. The play station will be free of head entrapments. Openings must meet all entrapment inspection criteria (chap 4).</p>	<p>Repaint with lead free paint (0.06% maximum lead by dry weight).</p> <p>Repair areas of entrapment by tightening components or with replacement parts as required.</p>
<p>11. All protrusions will meet inspection criteria (chap 4).</p> <p>12. Equipment footings or surface mount devices will be securely anchored.</p>	<p>Eliminate protrusions.</p> <p>Repair footings or surface mount devices.</p>
<p>13. Pressure treated wood materials will be coated with a non-toxic sealant every two years.</p> <p>14. All paints will be free from lead (0.06% maximum lead by dry weight).</p>	<p>Coat pressure treated wood materials with a non-toxic sealant every two years.</p> <p>Refinish and repaint with lead free paint (0.06% maximum lead by dry weight).</p>

Table E-50: Play Station - Maintenance schedule.

50. PLAY STATION

MAINTENANCE STANDARDS	MAINTENANCE TASKS
<b>BASELINE:</b> The play station will comply with baseline inspection criteria.	Repair deficiencies noted upon inspection or replace as needed.
<b>PERIODIC:</b>	
1. The play station will be free from loose, missing or broken parts.	Repair or replace loose, missing or broken components.
2. The play station will be free vandalism.	Repair or replace vandalized components.
3. Wood materials will be free from warping, wood rot, insect damage, and checking (cracks more than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width).	Repair or replace damaged materials.
4. Metal materials will be free from rust, corrosion and bending of members.	Repair or replace damaged materials.
5. Plastic material will be unbroken and without chips or cracks, particularly at joints and connections.	Repair or replace damaged materials.
6. Wood materials will be free from splinters; loose or missing knots; and sharp edges or comers.	Refinish or replace parts. Eliminate sharp edges or comers.
7. Metal materials will be free from rough metal and sharp edges or comers.	Refinish or replace parts. Eliminate sharp edges or comers.
8. All hardware will be present, securely attached, and without significant wear. (Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.)	Tighten hardware or replace parts.
9. The play station will be free from chipped, peeling or worn paint.	Repaint with lead free paint (0.06% maximum lead by dry weight).

Table E-51: Program Pole - Maintenance schedule (cont.).

**51. PROGRAM POLE - continued**

MAINTENANCE STANDARDS	MAINTENANCE TASKS
<b>ANNUAL:</b>	
1. The program pole will be free from loose, missing or broken parts.	Repair or replace loose, missing or broken components.
2. The program pole will be free from vandalism.	Repair or replace vandalized components.
3. The program pole will be free of nails, staples, and other connecting devices.	Remove nails, staples, and other connecting devices.
4. Wood materials will be free from warping, wood rot, insect damage, and checking (cracks more than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width).	Repair or replace damaged materials.
5. Wood materials will be free from splinters; loose or missing knots; and sharp edges or comers.	Refinish or replace parts. Eliminate sharp edges or corners.
6. All hardware will be present, securely attached, and without significant wear. (Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.)	Tighten hardware or replace.
7. The program pole will be free from chipped, peeling or worn paint.	Repaint with lead free paint (0.06% maximum lead by dry weight).
8. The program pole will be free of head entrapments. Openings must meet all entrapment inspection criteria (chap 4).	Repair areas of entrapment by tightening components or with replacement parts as required.
9. All protrusions will meet inspection criteria (chap 4).	Eliminate protrusions.
10. Equipment footings will be securely anchored.	Repair footings.
11. Pressure treated wood materials will be coated with a non-toxic sealant every two years.	Coat pressure treated wood materials with a non-toxic sealant every two years.
12. All paints will be free from lead (0.06% maximum lead by dry weight).	Refinish and repaint with lead free paint (0.06% maximum lead by dry weight).

Table E-51: Program Pole - Maintenance schedule.

**51. PROGRAM POLE**

MAINTENANCE STANDARDS	MAINTENANCE TASKS
<b>BASELINE:</b>	
The program pole will comply with baseline inspection criteria.	Repair deficiencies noted upon inspection or replace as needed.
<b>PERIODIC:</b>	
1. The program pole will be free from loose, missing or broken parts.	Repair or replace loose, missing or broken components.
2. The program pole will be free from vandalism.	Repair or replace vandalized components.
3. The program pole will be free of nails, staples, and other connecting devices.	Remove nails, staples, and other connecting devices.
4. Wood materials will be free from warping, wood rot, insect damage, and checking (cracks more than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width).	Repair or replace damaged materials.
5. Wood materials will be free from splinters; loose or missing knots; and sharp edges or corners.	Refinish or replace parts. Eliminate sharp edges or corners.
6. All hardware will be present, securely attached, and without significant wear. (Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.)	Tighten hardware or replace.
7. The program pole will be free from chipped, peeling or worn paint.	Repaint with lead free paint (0.06% maximum lead by dry weight).

Table E-52: Sand Play Area (Not Within Use Zones) - Maintenance schedule (cont.).

**52. SAND PLAY AREA (NOT WITHIN USE ZONES) - continued**

MAINTENANCE STANDARDS	MAINTENANCE TASKS
<b>ANNUAL:</b>	
1. The sand play containment barrier will be free from loose, missing or broken parts.	Repair or replace loose, missing or broken components.
2. The sand play containment barrier will be free from vandalism.	Repair or replace vandalized components.
3. Sand will be free of debris, such as stones, leaves, twigs or branches. toys, and wheeled toys.	Remove toys, wheeled toys, foreign objects, and debris; rake to remove hidden debris.
4. Sand will be free of animal feces.	Rake to expose buried feces; remove animal feces.
5. Sand will be removed from adjacent areas and pathways.	Sweep/shovel sand from pathways and adjacent areas back into sand area.
6. Sand will be free from holes or low areas caused by digging or play activities.	Shovel or rake sand to fill low areas or holes caused by digging or play activities, even out surface, and redistribute depth.
7. Sand will be free of insect infestation.	Sieve sand to thoroughly clean and remove insect infestation.
B. Sand will be free from puddles and areas of poor drainage.	Redesign subbase to improve drainage if necessary.
9. Sand will be maintained at a minimum depth of 450 mm (18 inches).	Replace sand with specified material to maintain the minimum material depth of 450 mm (18 inches).
10. Wood materials will be free from warping, wood rot, insect damage, and checking (cracks more than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width).	Repair or replace damaged materials.
11. Concrete will be free from extensive cracking, rough surfaces, and sharp edges or corners.	Repair or replace concrete components as needed. Eliminate sharp edges or corners.
12. Wood materials will be free from splinters; loose or missing knots; and sharp edges or comers.	Refinish or replace parts. Eliminate sharp edges or corners.
13. The sand play area will be free from chipped, peeling, or worn paint.	Repaint with lead free paint (0.06% maximum lead by dry weight).
14. All hardware will be present, securely attached, and without significant wear. (Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.)	Tighten hardware or replace.
15. The sand play area will be free from head entrapments. Openings must meet all entrapment inspection criteria (chap 4).	Repair areas of entrapment by tightening components; repair or replacement as required.
16. All protrusions will meet inspection criteria (chap 4).	Eliminate protrusions.
17. Sand will be thoroughly cleaned and aerated annually.	Sieve sand annually to thoroughly clean and aerate.
18. Sand will be removed and replaced when necessary for cleanliness.	Completely remove and replace sand when necessary for cleanliness.
19. Pressure treated wood materials will be coated with a non-toxic sealant every two years.	Coat pressure treated wood materials with a non-toxic sealant every two years.
20. All paints will be free from lead (0.06% maximum lead by dry weight).	Refinish and repaint with lead free paint (0.06% maximum lead by dry weight).

Table E-52: Sand Play Area (Not Within Use Zones) - Maintenance schedule.

**52. SAND PLAY AREA (NOT WITHIN USE ZONES)**

MAINTENANCE STANDARDS	MAINTENANCE TASKS
<p><b>BASELINE:</b></p> <p>The sand play area will comply with baseline inspection criteria.</p>	<p>Repair deficiencies noted upon inspection .</p>
<p><b>PERIODIC:</b></p>	
<p>1. The sand play containment barrier will be free from loose, missing or broken parts.</p>	<p><b>Repair or replace loose, missing or broken components.</b></p>
<p>2. The sand play containment barrier will be free from vandalism.</p>	<p>Repair or replace vandalized components,</p>
<p>3. Sand will be free of debris, such as stones, leaves, twigs or branches, toys, and wheeled toys.</p>	<p>Remove toys, wheeled toys, foreign objects, and debris; rake to remove hidden debris.</p>
<p>4. Sand will be free of animal feces.</p>	<p>Rake to expose buried feces; remove animal feces.</p>
<p>5. Sand will be free of insect infestation.</p>	<p>Sieve sand to thoroughly clean and remove insect infestation.</p>
<p>6. Sand will be free from puddles and areas of poor drainage.</p>	<p>Redesign subbase to improve drainage if necessary.</p>
<p>7. Sand will be maintained at a minimum depth of 450 mm (18 inches).</p>	<p>Replace sand with specified material to maintain the minimum material depth of 450 mm (18 inches).</p>
<p>8. Wood materials will be free from warping, wood rot, insect damage, and checking (cracks more than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width).</p>	<p>Repair or replace damaged materials.</p>
<p>9. Concrete will be free from extensive cracking, rough surfaces, and sharp edges or comers.</p>	<p>Repair or replace concrete components as needed. Eliminate sharp edges or corners.</p>
<p>10. Wood materials will be free from splinters; loose or missing knots; and sharp edges or comers.</p>	<p>Refinish or replace parts. Eliminate sharp edges or corners.</p>
<p>11. All hardware will be present, securely attached, and without significant wear. (Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.)</p>	<p>Tighten hardware or replace.</p>
<p>12. The sand play area will be free from chipped, peeling, or worn paint.</p>	<p>Repaint with lead free paint (0.06% maximum lead by dry weight).</p>

Table E-52: Sand Play Area (Not Within Use Zones) - Maintenance schedule (cont.).

**52. SAND PLAY AREA (NOT WITHIN USE ZONES) - continued**

MAINTENANCE STANDARDS	MAINTENANCE TASKS
<b>ANNUAL:</b>	
1. The sand play containment barrier will be free from loose, missing or broken parts.	Repair or replace loose, missing or broken components.
2. The sand play containment barrier will be free from vandalism.	Repair or replace vandalized components.
3. Sand will be free of debris, such as stones, leaves, twigs or branches, toys, and wheeled toys.	Remove toys, wheeled toys, foreign objects, and debris; rake to remove hidden debris.
4. Sand will be free of animal feces.	Rake to expose buried feces; remove animal feces.
5. Sand will be removed from adjacent areas and pathways.	Sweep/shovel sand from pathways and adjacent areas back into sand area.
6. Sand will be free from holes or low areas caused by digging or play activities.	Shovel or rake sand to fill low areas or holes caused by digging or play activities, even out surface, and redistribute depth.
7. Sand will be free of insect infestation.	Sieve sand to thoroughly clean and remove insect infestation,
8. Sand will be free from puddles and areas of poor drainage.	Redesign subbase to improve drainage if necessary.
9. Sand will be maintained at a minimum depth of 450 mm (18 inches).	Replace sand with specified material to maintain the minimum material depth of 450 mm (18 inches).
10. Wood materials will be free from warping, wood rot, insect damage, and checking (cracks more than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width).	Repair or replace damaged materials.
11. Concrete will be free from extensive cracking, rough surfaces, and sharp edges or corners.	Repair or replace concrete components as needed. Eliminate sharp edges or corners.
12. Wood materials will be free from splinters; loose or missing knots; and sharp edges or corners.	Refinish or replace parts. Eliminate sharp edges or corners.
13. The sand play area will be free from chipped, peeling, or worn paint.	Repaint with lead free paint (0.06% maximum lead by dry weight).
14. All hardware will be present, securely attached, and without significant wear. (Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.)	Tighten hardware or replace.
15. The sand play area will be free from head entrapments. Openings must meet all entrapment inspection criteria (chap 4).	Repair areas of entrapment by tightening components; repair or replacement as required.
16. All protrusions will meet inspection criteria (chap 4).	Eliminate protrusions.
17. Sand will be thoroughly cleaned and aerated annually.	Sieve sand annually to thoroughly clean and aerate.
18. Sand will be removed and replaced when necessary for cleanliness.	Completely remove and replace sand when necessary for cleanliness.
19. Pressure treated wood materials will be coated with a non-toxic sealant every two years.	Coat pressure treated wood materials with a non-toxic sealant every two years.
20. All paints will be free from lead (0.06% maximum lead by dry weight).	Refinish and repaint with lead free paint (0.06% maximum lead by dry weight).

Table E-53: Sand and Water Table - Maintenance schedule.

53. SAND AND WATER TABLE

MAINTENANCE STANDARDS	MAINTENANCE TASKS
<b>BASELINE:</b>	
The sand and water table will comply with baseline inspection criteria.	Repair deficiencies noted upon inspection or replace as needed.
<b>PERIODIC:</b>	
1. The sand and water table will be free from loose, missing or broken parts.	Repair or replace loose, missing or broken components.
2. The sand and water table will be free from vandalism.	Repair or replace vandalized components.
3. Water and sand will be cleaned and replaced to maintain sanitary conditions.	Empty water from the table; remove debris from sand; replace sand with specified material as needed for cleanliness; disinfect the table when emptied.
4. Sand and water tables will be covered when not in use.	Cover the table when not in use.
5. Drainage under sand and water tables will not permit pooling of water or the creation of mud.	Improve drainage.
6. The table's use zone will be free from obstructions, including portable climbing equipment, trikes, and wheeled toys. (The use zone extends 1800 mm (72 inches) in all directions from the table.)	Remove obstructions or close the structure.
7. Wood materials will be free from warping, wood rot, insect damage, and checking (cracks more than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width).	Repair or replace damaged materials.
8. Metal materials will be free from rust, corrosion and bending of members.	Repair or replace damaged materials.
9. Concrete components will be free from extensive cracking, rough surfaces and sharp edges or corners.	Repair or replace concrete components; eliminate sharp edges or corners.
10. Plastic material will be unbroken and without chips or cracks, particularly at joints and connections.	Repair or replace damaged materials.
11. Wood materials will be free from splinters; loose or missing knots; and sharp edges or corners.	Refinish or replace parts. Eliminate sharp edges or corners.
12. Metal materials will be free from rough metal and sharp edges or corners.	Refinish or replace parts. Eliminate sharp edges or corners.
13. All hardware will be present, securely attached, and without significant wear. (Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.)	Tighten hardware or replace.
14. The table will be free from chipped, peeling or worn paint.	Repaint with lead free paint (0.06% maximum lead by dry weight).

Table E-53: Sand and Water Table - Maintenance schedule (cont.).

**53. SAND AND WATER TABLE - continued**

MAINTENANCE STANDARDS	MAINTENANCE TASKS
<b>ANNUAL:</b>	
1. The sand and water table will be free from loose, missing or broken parts.	Repair or replace loose, missing or broken components.
2. The sand and water table will be free from vandalism.	Repair or replace vandalized components.
3. Water and sand will be cleaned and replaced to maintain sanitary conditions.	Empty water from the table; remove debris from sand; replace sand with specified material as needed for cleanliness; disinfect the table when emptied.
4. Sand and water tables will be covered when not in use.	Cover the table when not in use.
5. Drainage under sand and water tables will not permit pooling of water or the creation of mud.	Improve drainage.
6. The table's use zone will be free from obstructions, including portable climbing equipment, trikes, and wheeled toys. (The use zone extends 1800 mm (72 inches) in all directions from the table.)	Remove obstructions or close the structure.
7. Wood materials will be free from warping, wood rot, insect damage, and checking (cracks more than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width).	Repair or replace damaged materials.
B. Metal materials will be free from rust, corrosion and bending of members.	Repair or replace damaged materials.
9. Concrete components will be free from extensive cracking, rough surfaces or sharp edges or corners.	Repair or replace concrete components; eliminate sharp edges or comers.
10. Plastic material will be unbroken and without chips or cracks. particularly at joints and connections.	Repair or replace damaged materials.
11. Wood materials will be free from splinters; loose or missing knots; and sharp edges or comers.	Refinish or replace parts. Eliminate sharp edges or corners.
12. Metal materials will be free from rough metal and sharp edges or comers.	Refinish or replace parts. Eliminate sharp wires, edges or comers.
13. All hardware will be present, securely attached, and without significant wear. (Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.)	Tighten hardware or replace.
14. The table will be free from chipped, peeling or worn paint.	Repaint with lead free paint (0.06% maximum lead by dry weight).
15. The table will be free of head entrapments. Openings must meet all entrapment inspection criteria (chap 4).	Repair areas of entrapment by tightening components or with replacement parts as required.
16. All protrusions will meet inspection criteria (chap 4).	Eliminate protrusions.
17. Pressure treated wood materials will be coated with a non-toxic sealant every two years.	Coat pressure treated wood materials with a non-toxic sealant every two years
18. All paints will be free from lead (0.06% maximum lead by dry weight).	Refinish and repaint with lead free paint (0.06% maximum lead by dry weight).

Table E-54: Storage/Pram Storage - Maintenance schedule.

**54. STORAGE/PRAM STORAGE**

MAINTENANCE STANDARDS	MAINTENANCE TASKS
<p><b>BASELINE:</b></p> <p>The storage unit will comply with baseline inspection criteria.</p>	<p>Repair deficiencies noted upon inspection or replace as needed.</p>
<p><b>PERIODIC:</b></p>	
<p>1. The storage unit will be free from loose, missing or broken parts.</p>	<p>Repair or replace loose, missing or broken components.</p>
<p>2. The storage unit will be free from vandalism.</p>	<p>Repair or replace vandalized components.</p>
<p>3. The storage unit roof will be free from leaks.</p>	<p>Repair or replace roof.</p>
<p>4. Storage units used by children will not be used to store chemicals, maintenance equipment, or other hazardous material.</p>	<p>Remove chemicals, maintenance equipment, or other hazardous material.</p>
<p>5. Wood materials will be free from warping, wood rot, insect damage, and checking (cracks more than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width).</p>	<p>Repair or replace damaged materials.</p>
<p>6. Wood materials will be free from splinters; loose or missing knots; and sharp edges or comers.</p>	<p>Refinish or replace parts. Eliminate sharp edges or corners.</p>
<p>7. All hardware will be present, securely attached, and without significant wear. (Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.)</p>	<p>Tighten hardware or replace.</p>
<p>8. The storage unit will be free from chipped, peeling or worn paint.</p>	<p>Repaint with lead free paint (0.06% maximum lead by dry weight).</p>

Table E-54: Storage/Pram Storage - Maintenance schedule (cont.).

## 54. STORAGE/PRAM STORAGE - continued

MAINTENANCE STANDARDS	MAINTENANCE TASKS
<b>ANNUAL:</b>	
1. The storage unit will be free from loose, missing or broken parts.	Repair or replace loose, missing or broken components.
2. The storage unit will be free from vandalism.	Repair or replace vandalized components.
3. The storage unit roof will be free from leaks.	Repair or replace roof.
4. The storage unit walking surface will be free from loose and slippery materials, e.g., sand, wood products, leaves, etc.	Sweep loose and slippery material, such as sand, wood products, and leaves from the walking surface.
5. Storage units used by children will not be used to store chemicals, maintenance equipment, or other hazardous material.	Remove chemicals, maintenance equipment, or other hazardous material.
6. Wood materials will be free from warping, wood rot, insect damage, and checking (cracks more than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width).	Repair or replace damaged materials.
7. Wood materials will be free from splinters; loose or missing knots; and sharp edges or corners.	Refinish or replace parts. Eliminate sharp edges or corners.
8. All hardware will be present, securely attached, and without significant wear. (Wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.)	Tighten hardware or replace parts.
9. The storage unit will be free from chipped, peeling or worn paint.	Repaint with lead free paint (0.06% maximum lead by dry weight).
10. The storage unit will be free of head entrapments. Openings must meet all entrapment inspection criteria (chap 4).	Repair areas of entrapment by tightening components or with replacement parts as required.
11. All protrusions will meet inspection criteria (chap 4).	Eliminate protrusions.
12. Pressure treated wood materials will be coated with a non-toxic sealant every two years.	Coat pressure treated wood materials with a non-toxic sealant every two years.
13. All paints will be free from lead (0.06% maximum lead by dry weight).	Refinish and repaint with lead free paint (0.06% maximum lead by dry weight).

Table E-55: Swing - Maintenance schedule.

55. SWING

MAINTENANCE STANDARDS	MAINTENANCE TASKS
<b>BASELINE:</b> The swing will comply with baseline inspection criteria.	Repair deficiencies noted upon inspection or replace as needed.
<b>PERIODIC:</b>	
1. The swing will be free from loose, missing or broken parts.	Repair or replace loose, missing or broken components with manufacturer's recommended parts.
2. The swing will be free from vandalism.	Repair or replace vandalized components with manufacturer's recommended parts.
3. The swing use zone will be free from any obstruction, including portable climbing equipment, trikes, and wheeled toys. (The use zone is equal to two times the height of the swing crossbeam measured to both the front and back of the equipment from the swing seat and 1800 mm (72 inches) to both sides of the swing support (chap 3).)	Remove use zone obstructions.
4. Wood materials will be free from warping, wood rot, insect damage and checking (cracks greater than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width).	Repair the swing with parts recommended by the manufacturer or remove and replace swings.
5. Metal materials will be free from rust, corrosion, or bending of members.	Repair the swing with parts recommended by the manufacturer or remove and replace swings.
6. Wood materials will be free from splinters; loose or missing knots; and sharp edges or comers.	Refinish the swing or replace parts as recommended by manufacturer,
7. Metal materials will be free from rough metal and sharp edges or comers.	Refinish the swing or replace parts as recommended by manufacturer.
8. Swing hardware will be present, securely attached, and without significant wear (wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping.)	Tighten hardware or replace with parts recommended by manufacturer.
9. The swing will be free from chipped, peeling, or worn paint.	Repaint the swing with lead free paint (0.06% maximum lead by dry weight).
10. The swing will be free from worn chains, S-hooks, and swing seats (wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch). rust or corrosion).	Replace chains, S-hooks, and swing seats with parts recommended by manufacturer.
11. Swing S-hooks will be closed. The S-hook will be considered properly closed if hook openings are less than 1 mm (.04 inches) when tested with a feeler gauge. The lower loop will not cross over the upper loop.	Close all S-hooks.
12. Swing bearings will be well lubricated.	Lubricate swing bearings.

Table E-55: Swing - Maintenance schedule (cont.).

## 55. SWING - continued

MAINTENANCE STANDARDS ANNUAL:	MAINTENANCE TASKS
1. The swing will be free from loose, missing or broken parts.	Repair or replace loose, missing or broken components with manufacturer's recommended parts.
2. The swing will be free from loose, missing or broken parts and vandalism.	Repair or replace vandalized components with manufacturer's recommended parts.
3. The swing use zone will be free from any obstruction, including portable climbing equipment, trikes, and wheeled toys (The use zone is equal to two times the height of the swing crossbeam measured to both the front and back of the equipment from the swing seat and 1800 mm (72 inches) to both sides of the swing support (chap 3).) 4. The swing will be closed when temperatures are freezing or below when children go outdoors to play.	Remove use zone obstructions.  Close the swing when temperatures are freezing or below.
5. Wood materials will be free from warping, wood rot, insect damage and checking (cracks greater than 600 mm (24 inches) in length and/or 6 mm (1/4-inch) in width).	Repair the swing with parts recommended by the manufacturer or remove and replace swings.
& Metal materials will be free from rust, corrosion, or bending of members.	Repair the swing with parts recommended by the manufacturer or remove and replace swings.
7. Wood materials will be free from splinters; loose or missing knots; and sharp edges or comers.	Refinish the swing or replace parts as recommended by manufacturer.
8. Metal materials will be free from rough metal and sharp edges or comers,	Refinish the swing or replace parts as recommended by manufacturer.
9. Swing hardware will be present, securely attached, and without significant wear (wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust, corrosion, or stripping)	Tighten hardware or replace with parts recommended by manufacturer.
10. The swing will be free from chipped, peeling, or worn paint.	Repaint the swing with lead free paint (0.06% maximum lead by dry weight).
11. The swing will be free from worn chains, S-hooks, and swing seats (wear is indicated by visible elongation, deformation, indentation greater than 2 mm (1/16-inch), rust or corrosion).	Replace chains, S-hooks, and swing seats with parts recommended by manufacturer.
12. Swing S-hooks will be closed. The S-hook will be considered properly closed if hook openings are less than 1 mm (.04 inches) when tested with a feeler gauge. The lower loop will not cross over the upper loop.	Close all S-hooks.
13. Swing bearings will be well lubricated.	Lubricate swing bearings.
14. Swings will be free from head entrapments. Openings must meet all entrapment inspection criteria (chap 4).	Eliminate entrapments by tightening hardware or replacing parts as specified by the manufacturer.
15. Swing seats and hardware will be free from protrusions, Protrusions must meet all test criteria (chap 4).	Eliminate protrusions or replace swing seat.
16. Equipment footings will be securely anchored.	Repair footings.
17. Swing seats and tot seats will be "slash proof" rubber belt type,	Replace swing seat.

Table 55: Swing - Maintenance schedule (cont.).

55. SWING - continued

MAINTENANCE STANDARDS	MAINTENANCE TASKS
<b>ANNUAL:</b> 18. Pressure treated wood materials will be coated with a non-toxic sealant every two years.	Coat pressure treated wood materials with a non-toxic sealant every two years.
19. All paints will be free from lead (0.06% maximum lead by dry weight).	Refinish and repaint with lead free paint (0.06% maximum lead by dry weight).

Table E-56: Toys and Scrap Material - Maintenance schedule.

**56. TOYS AND SCRAP MATERIAL**

<b>MAINTENANCE STANDARDS</b>	<b>MAINTENANCE TASKS</b>
<p><b>BASELINE:</b></p> <p>Toys and scrap material will comply with baseline inspection criteria.</p>	<p>Repair deficiencies noted upon inspection or replace as needed.</p>
<p><b>PERIODIC:</b></p> <ol style="list-style-type: none"> <li>1. Toys and scrap material will be removed from pathways or play areas daily for cleaning or storage as required.</li> <li>2. Toys used by children age 3 and younger will not present a choke hazard.</li> <li>3. Toys and scrap material will be free from broken, loose or sharp components.</li> <li>4. Toys and scrap material will be cleaned and disinfected as per AR 608-70.</li> </ol>	<p>Remove toys and scrap material from pathways and play areas for cleaning or storage as required.</p> <p>Discard toys which present a choke hazard or reserve for age appropriate groups.</p> <p>Replace worn or damaged parts when appropriate; remove from service until repairs can be made; or discard.</p> <p>Clean and disinfect toys as prescribed by AR 608-10. Items used by children ages 3 and younger must be cleaned and disinfected daily. Items used by children ages 3 and older must be cleaned and disinfected weekly. Items which cannot be cleaned must be discarded.</p>
<p><b>ANNUAL:</b></p> <ol style="list-style-type: none"> <li>1. Toys and scrap material will be removed from pathways or play areas daily for cleaning or storage as required.</li> <li>2. Toys used by children age 3 and younger will not present a choke hazard.</li> <li>3. Toys and scrap material will be free from broken, loose or sharp components.</li> <li>4. Toys and scrap material will be cleaned and disinfected as per AR 608-10.</li> </ol>	<p>Remove toys and scrap material from pathways and play areas for cleaning or storage as required.</p> <p>Discard toys which present a choke hazard or reserve for age appropriate groups.</p> <p>Replace worn or damaged parts when appropriate; remove from service until repairs can be made; or discard.</p> <p>Clean and disinfect toys as prescribed by AR 608-10. Items used by children ages 3 and younger must be cleaned and disinfected daily. Items used by children ages 3 and older must be cleaned and disinfected weekly. Items which cannot be cleaned must be discarded.</p>

Table E-57: Tricycle and Wheeled Toy- Maintenance schedule.

**57. TRICYCLE AND WHEELED TOY**

MAINTENANCE STANDARDS	MAINTENANCE TASKS
<b>BASELINE:</b>	
The tricycle or wheeled toy will comply with baseline inspection criteria.	Repair deficiencies noted upon inspection or replace as needed.
<b>PERIODIC:</b>	
1. The tricycle or wheeled toy will be in operational condition with all hardware tight and secure.	Repair with parts recommended by manufacturer or remove damaged unit from service.
2. The tricycles or wheeled toy will be free from sharp edges, rust, and cracked or broken components.	Repair with parts recommended by manufacturer or remove damaged unit from service.
3. Wheels, forks, and cranks will be free of wobble.	Tighten all hardware and components; repair with parts recommended by manufacturer or remove damaged units from service.
4. The tricycles or wheeled toy will be free from excessively cracked tires.	Replace tires.
5. Seats will be firmly attached.	Tighten all hardware and components; repair with parts recommended by manufacturer or remove damaged unit from service.
6. The tricycle or wheeled toy will be removed from pathways and play areas and placed in designated storage areas when not in use.	Remove the unit from paths and play areas and place in designated storage area.
7. Bearings will be well lubricated.	Lubricate bearings, sleeves, cranks, forks, or other components as recommended by the manufacturer.
<b>ANNUAL:</b>	
1. The tricycle or wheeled toy will be in operational condition with all hardware tight and secure.	Repair with parts recommended by manufacturer or remove damaged unit from service.
2. The tricycles or wheeled toy will be free from sharp edges, rust, and cracked or broken components.	Repair with parts recommended by manufacturer or remove damaged unit from service.
3. Wheels, forks, and cranks will be free of wobble.	Tighten all hardware and components; repair with parts recommended by manufacturer or remove damaged units from service.
4. The tricycles or wheeled toy will be free from excessively cracked tires.	Replace tires.
5. Seats will be firmly attached.	Tighten all hardware and components; repair with parts recommended by manufacturer or remove damaged unit from service.
6. The tricycle or wheeled toy will be removed from pathways and play areas and placed in designated storage areas when not in use.	Remove the unit from paths and play areas and place in designated storage area.
7. Bearings will be well lubricated.	Lubricate bearings, sleeves, cranks, forks, or other components as recommended by the manufacturer.

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