

(September 2021)

PERFORMANCE CRITERIA  
FOR

**SECTION 10 50 00**

**STORAGE SPECIALTIES**  
09/21

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**GENERAL**

This Performance Criteria specifies the requirements for storage specialties.

**1.1 REFERENCE**

**1.1.1 Unified Facilities Criteria (UFC)**

Contractor must comply with the following:

- A. UFC 1-200-01 General Building Requirements
- B. UFC 1-200-02 High Performance and Sustainable Building Requirements
- C. UFC 3-120-10 Interior Design
- D. UFC 4-510-01 Military Medical Facilities

**1.1.2 Military Standard**

- A. MIL-STD 1691 Construction and Material Schedule for Medical, Dental, Veterinary and Medical Research Laboratories

**1.1.3 National Fire Protection Association (NFPA)**

- A. NFPA 30 Flammable and Combustible Liquids Code
- B. NFPA 99 Healthcare Facilities Code
- C. NFPA 101 Life Safety Code
- D. NFPA 400 Hazardous Materials Code

**1.1.4 Military Health Services Standards**

- A. Reserved for future

**1.1.5 American Society for Testing and Materials (ASTM)**

- A. ASTM E84 Standard Test Method for Surface Burning Characteristics of Building Materials
- B. ASTM 2503 Standard Practice for Marking Medical Devices and Other Items for Safety in the Magnetic Resonance Environment

### **1.1.6 Underwriters Laboratories (UL)**

- A. UL 60601-1 Medical and Electrical Equipment, Part 1: General Requirements for Safety

### **1.1.7 Food and Drug Administration**

- A. CFR Title 21, Chapter I

### **[1.1.8 Business & Institutional Furniture Manufacturers Association (BIFMA)**

- A. ANSI/BIFMA x5.9 – Storage]

### **1.1.9 Other Standards**

- A. CAL-117 (California Technical Bulletin 117-2013)

## **2.1 DESCRIPTION & MATERIALS**

All requirements within the MIL-STD 1691 JSN descriptions must be met as well as the performance guidelines listed in the following descriptions.

### **2.1.1 All JSN'S**

- A. Paints, fabrics, and finishes must be selected from the manufacturer's standard options for the specified model unless noted otherwise.
- B. All materials must meet the appropriate fire test associated with each type as outlined by testing within the reference standards.
- C. All product finishes and fabrics (upholstery or drapery) must meet industry standards for infection control and performance.
- D. All product finishes must be capable of maintaining sheen and color through warranty period when using industry standard cleaning and disinfection solutions.
- E. All display panel surfaces must maintain clarity through warranty period when using industry standard cleaning and disinfection solutions.
- F. All equipment that have components that are meant for reuse must be autoclavable or able to withstand industry standard cleaning and disinfection processes.
- G. Electrified equipment must be 115 Volt 15 amp maximum unless noted otherwise.
- H. Casters provided must be designed for use on the installed floor finish.
- I. All products that have interoperability capable hardware (i.e. internal storage, data transmission via wireless, Ethernet, LAN, or USB to PC or server connectivity) must meet Cybersecurity requirements in accordance with DoDI 8510.01 Risk Management Framework.
- J. DoDI 8510.01 applies to all DoD IT (medical devices included) that receive, process, store, display, or transmit DoD information. These technologies are broadly grouped as DoD IS, platform IT (PIT), IT services, and IT products. This includes IT supporting research, development, test and evaluation (T&E), and DoD-controlled IT operated by a contractor or other entity on behalf of the DoD.

### **2.1.2 Accessory Rail**

**A1132 – Rail, Accessory Mounting, Length As Required**

**E1500 – Rail, MOD, W/MNTD, HX144XD**

- A. Provide options for a wide variety of lengths.
- B. Material must be scratch resistant and easy to clean.
- C. Must accept a variety of medical equipment/accessories used in exam/patient areas.
- D. [Rails must comply with seismic requirements.]
- E. Rails can be field cut to a desired length.

### **2.1.3 Patient Records**

**A1140 – Shelving, File, Rotary, Patient Records**

**A1142 – Shelving, File, Vertical Carousel, Patient Records**

**A1145 – Shelving, Storage, Moveable Aisle, Manual**

**A1150 – Shelving, File, Open, Patient Records**

**A1155 – Shelving, Storage, Movable Aisle, Powered**

- A. Provide a minimum tested weight capacity of 350 lbs [159 kg].
- B. Base must be fully closed to prevent dust and dirt collection.

- C. Tracks must include stop plates and accommodate uneven floors or ceilings.
- D. Stationary shelving must have options available for floor and wall anchoring.
- E. Movable storage components must lock in place to prevent unintentional movement.
- F. Suite of storage products must allow for selection of various lengths, widths, and heights.
- G. Storage capacity must be designed for letter/legal files as well as CD/DVD's and conform with HIPAA regulations.
- H. Steel components must be factory baked enamel or powder coated. Wood components must have laminate or phenolic finish.
- I. Vertical carousel units must have ability to record transactions via integrated or external hardware/software.

#### 2.1.4 Medication Storage

##### A. Secure Cabinets

###### **A5048 – Cabinet, Medication, Security, Wall Mounted**

###### **A5065 – Cabinet, Narcotic, U/C or Ctr, With Safe**

1. Cabinets must be modular in design with interchangeable components such as drawers, trays/inserts, shelves, bins/baskets etc.
2. Provide cabinet materials that include enamel/powder coated steel, stainless steel, chrome plated steel, ABS plastic, medical grade laminates (melamine). Doors and or shelves that include glass must be tempered. Materials must be resistant to damage by moisture.
3. Doors to be hinged, sliding, or tambour style and have locking capability.
4. Cabinets must have a variety of lock options.
5. [Provide software for added security and tracking of transactions.]

##### B. Medication Carts

###### **E0957 – Cart, Medication, Mobile, 66”H x 32”W x 22”D**

###### **M7250 – Cart, Medication, Unit Dose**

###### **M7255 – Cart, Medication, Unit Dose, Secure w/Computer**

1. Carts must be modular design with interchangeable components such as drawers, trays/inserts, cassettes etc.
2. Provide cart materials that include enamel/powder coated steel, aluminum, or polymer using seamless construction. [Finish must be antimicrobial.]
3. Drawers must be full extension [and soft closing].
4. Provide swivel casters with a minimum of two locking per cart.
5. Closed storage must be lockable. Provide a variety of lock options.
6. [Work surface must include raised edge top on all four sides and flip up shelf.]
7. [Work surface must be solid surface or match work surface provided in room.]
8. [Provide power and computer integration features.]
9. Carts must accept accessory items, such as accessory rails, brackets, and bins.

#### 2.1.5 Supply Storage Carts

##### A. General and Specialty Storage Carts

###### **E0936 – Cart, Machine, Mobile, 36”H x 32”W x 22”D**

###### **E0939 – Cart, Anesthesia, Mobile**

###### **E0942 – Cart, Cast, Mobile 26”H x 46”W x 22”D**

###### **E0948 – Cart, General Storage, Mobile, 42”H x 32”W x 22”D**

###### **E0949 – Cart, Malignant Hyperthermia**

###### **E0950 – Cart, Emergency, Mobile, Pediatric**

###### **E0951 – Cart, Proctology Treatment, Mobile**

###### **E0954 – Cart, Emergency, Mobile, 66”H x 32”W x 22”D**

###### **E0960 – Cart, Lockable, Mobile, 42”H x 29”W x 22”D**

###### **M3055 – Cart, Plaster**

###### **M8800 – Cart, Anesthesia**

1. Carts must be modular design with interchangeable components such as drawers, trays/inserts, cassettes etc.
2. Provide cart materials that include enamel/powder coated steel, aluminum, or polymer using seamless construction. [Finish must be antimicrobial.]
3. Drawers must be full extension [and soft closing].
4. Provide swivel casters with a minimum of two locking per cart.

5. [Closed storage must be lockable. Provide a variety of lock options.]
6. [Work surface must include raised edge top on all four sides and flip up shelf.]
7. [Provide power and computer integration features.]
8. [Carts must accept accessory items such as accessory rails, IV poles, hooks, brackets, and bins.]
9. [Provide a refrigerated compartment.]
10. [Provide a break away lock.]
11. [Provide cart covers to minimize soiling and dust.]

**B. MRI Compatible Carts**

**E0955 – Cart, Emergency, 6 Drawer, MRI Compatible**

**M8802 – Cart, Anesthesia, 6-Drawer, MRI Compatible**

1. Carts must be modular design with interchangeable components such as drawers, trays/inserts, cassettes etc.
2. MRI compatible carts must use non-ferrous and non-magnetic materials such as aluminum and plastic. Product must be labeled as safe for 3T MRI use in accordance to ASTM 2503.
3. Drawers must be full extension [and soft closing].
4. Provide swivel casters with a minimum of two locking per cart.
5. [Closed storage must be lockable.]
6. [Work surface must include raised edge top on all four sides and flip up shelf.]
7. [Finish must be antimicrobial.]

**B. Scope Carts**

**F0540 – Cart, Scope, Transport**

1. Carts must be able to accommodate scope trays.
2. Provide cart materials that include enamel/powder coated steel, aluminum, or polymer using seamless construction.
3. Provide clear identification of “clean” or “contaminated” scopes.
4. [Finish must be antimicrobial.]

**2.1.6 Supply Storage Lockers**

**E0903 – Locker, Supply, w/Shelves, Wall Mtd, 23”W x 20”D**

**E0906 – Locker, Supply, General, Wall Mtd, 23”W x 20”D**

**E0909 – Locker, Supply, Cassette, Wall Mtd, 23”W x 20”D**

**E0912 – Locker, Supply, Med Surg, Wall Mtd**

**E0915 – Locker, Supply, Medication, Wall Mtd, 23”W x 20”D**

**E0918 – Locker, Supply, Endoscopy, Wall Mtd, 24”W x 14”D**

**E0921 – Transporter, Locker, Supply, 27”W x 25”D**

**E0927 – Locker, Supply, Wire Shelves, Mobile**

**E0930 – Locker, Supply, 6 Drawers, Mobile, 29”W x 20”D**

**E0933 – Locker, Supply, Shelf & Drawer, Mbl, 29”W x 20”D**

**E0963 – Cart, General Storage, Mobile**

**E0966 – Cart, Storage, Dbl Width, Mbl, 72”H x 50”W x 22”D**

**E0969 – Cart, Bulk Supply, Mobile, 72”Hx 50”W x 22”D**

**E0987 – Cart, Closed, w/Totes, Mobile, 72”H x 48”W x 22”D**

**E0990 – Cart, Closed, w/Shelves, Mobile, 72”H x 48”W x 22”D**

- A. Provide lockers with a modular design with interchangeable components such as drawers, shelves, trays/inserts, cassettes, etc.
- B. Provide materials/finishes that include ABS plastic, medical grade laminate, enamel/powder coated steel, aluminum or polymer using seamless construction. [Finishes must be antimicrobial.]
- C. Drawers must be full extension [and soft closing].
- D. Doors must be hinged, or tambour style and have locking capability. Doors that include glass must be tempered. Materials must be resistant to damage by moisture.
- E. Free standing lockers must include minimum 2 locking swivel casters or legs. Wall mounted cabinets must be rail or permanently mounted as indicated by JSN.
- F. Provide a variety of lock options.

**2.1.7 Shelving Stationary & Mobile**

**E0975 – Cart, Wire, Mobile**

**E0978 – Cart, Wire, Mobile, 72”H x 38”W x 24”D**

E0981 – Cart, Wire, Mobile, 60”W x 64”H x 24”D  
E0984 – Cart, Wire, Mobile, 72”H x 60”W x 24”D  
M2035 – Rack, Storage, Mobile, Wire, CRS  
M2045 – Shelving, Storage, Beam Block Tray  
M2050 – Shelving, Storage, 75”H x 36”W x 14”D  
M2055 – Shelving, Storage, Wire, CRS, w/Adjustable Shelves  
M2070 – Shelving, Storage, 77hx36wx18d  
M2075 – Shelving, Storage, Enclosed  
M2080 – Shelving, Storage, Solid, CRS, w/Adjustable Shelves  
M2100 – Cart, Shelving, Storage, Mobile, SS

- A. Shelving must be modular design available in a variety of lengths, widths, and heights.
- B. Frame must be heavy duty steel construction.
- C. Provide shelving materials that include enamel/powder coated steel, chrome plated steel, stainless steel, and galvanized. [Finish must be antimicrobial].
- D. Shelves must be constructed using solid sheet steel or steel wire as indicated. [Shelves must include vertical adjustability with raised edges and dividers.]
- E. Mobile shelves must include minimum 2 locking swivel casters, and non-mobile units to include legs with leveling feet.
- F. Provide accessory items such as tote bins and drawers.

#### 2.1.8 Storage Racks

M2085 – Shelving, Storage, Pallet  
M2090 – Shelving, Storage, Warehouse

- A. Shelving must be modular in design and available in a variety of lengths, widths, and heights.
- B. Frame must be heavy duty steel construction.
- C. Provide shelving materials that include enamel/powder coated steel, chrome plated steel, wood decking, and galvanized steel.
- D. Shelves must be constructed using solid sheet steel or steel wire as indicated. [Shelves must include vertical adjustability.]
- E. Shelves must include ability to be anchored to floor or wall and meet seismic requirements where applicable.

#### 2.1.9 Orthopedics Cart

M3065 – Cart, Traction Appliances, Mobile

- A. Provide materials/finishes that include ABS plastic, medical grade laminate, enamel/powder coated steel, aluminum or polymer using seamless construction. [Finishes must be antimicrobial.]
- B. Drawers must be full extension [and soft closing].

#### 2.1.10 Radiology Film Filing

X1160 – Cabinet, Filing, Film, 5 Shelves With Doors  
X1170 – Cabinet, Filing, Film, 5 Shelves, 88x36x18  
X1171 – Cabinet, Filing, Film, Modular, Auto, 92x84x18  
X1360 – Cabinet, Filing, Film, 5 Shelves, 88x48x18

- A. Candidate for deletion.

### 3.1 SUBMITTALS

#### 3.1.1 Submittals required for government review

- A. Submittal requirements are outlined in [Division 01] [PWS SOW] [\_\_\_]
- B. [Product Information must include manufacturer’s installation instructions, sizing (including required clearance for access and maintenance), utility requirements, isometric drawings, tagged floorplans showing placement for count accountability and accessories/options/consumables lists.]
- C. All submittals require Government approval prior to procurement. Submit all listed items herein, with information sufficient to show full compliance with the criteria. Submit all product selections for review and approval, including but not limited to: materials, finishes, colors, options, accessories, and complimentary products. Provide for review all warranties and service contracts and any available extended warranty or service options.
- D. Samples: Furnish material samples and full range of color selection options for all items that offer material and color

selections.

E. Submit and highlight all applicable options for Government review for all items which optional accessories are provided.

F. [Joint Interoperability Test Command (JTIC) Approval Documentation.]

## **3.2 QUALITY ASSURANCE**

### **3.2.1 Materials and Equipment**

A. Materials and equipment must be standard products of a manufacturer regularly engaged in the manufacture of products which are of a similar material, design, and workmanship and are offered for sale on the commercial market through advertisements, manufacturer's catalogs, or sales brochures. The products must have been in commercial or industrial use under similar circumstances and of similar size for 2 years prior to selection for approval/procurement. Products must be supportable for at least three years after government acceptance.

### **3.2.2 Alternative Service Record**

A. Products having less than a 2-year field service record will be acceptable if a certified record of the manufacturer's factory or laboratory tests demonstrating performance compliance is provided to the Contracting Officer.

### **3.2.3 Service Support**

A. Equipment items must be supported by service organizations located near the equipment installation, able to service the equipment on a regular basis and respond to emergency calls throughout the warranty period.

### **3.2.4 Manufacturer's Nameplate**

A. Each item of equipment must have an attached nameplate that is securely affixed in a conspicuous space. A nameplate listing only the name of the distributing agent is not acceptable. The nameplate must contain the following fields in English:

1. Manufacturer's name and address
2. Model and Serial Number
3. Item's utility ranges and/or capacities
4. Voltage, amperage, and applicable Underwriters Laboratory (UL) or Conformité Européenne (CE) rating if electrically powered
5. Date of manufacture

### **3.2.5 Factory Inspection**

A. Arrange and perform all quality control and quality assurance inspections required by the technical sections of the criteria, unless otherwise specified. Report these inspections in the daily report to the Government inspector.

### **3.2.6 Product Qualifications**

A. The products specified in the technical sections of this criteria establish standards for each item.

### **3.2.7 Design Parameters**

A. It is not the intention of this Criteria to limit consideration to products of specific manufacturers. The product standards establish the characteristics for which submitted items of equipment will be reviewed and approved by the Government. Equipment furnished must meet each of the following parameters specified in the technical sections:

1. Size of equipment
2. Function of equipment
3. Standard and listed accessories and options
4. Equipment controls and performance of equipment
5. Construction of equipment
6. Finish

## **3.3 STANDARDS DEVIATIONS**

### **3.3.1 Reporting and Submission for Approval**

- A. Submit for approval a record of deviations from the standards listed in section (3.2.7.A.) established for each specified product, before ordering equipment.

### **3.4 DELIVERY, STORAGE AND PROTECTION**

#### **3.4.1 Packaging and Transporting**

- A. Each unit of equipment must be placed in a substantial shipping container or crate for safe transportation to final destination. The shipping container or crate for heavy equipment must be on skid construction to facilitate handling by lift equipment.

#### **3.4.2 Packing List**

- A. Clearly and legibly indicate on exterior of each container or crate the shipping address and a brief description of contents. Fasten to outside of container a packing list and complete instructions for uncrating equipment and setting it in place. Protect such information in a weatherproof envelope.

#### **3.4.3 Protection**

- A. Properly protect all materials and equipment from injury and damage during storage, installation, and acceptance.

### **3.5 INSTALLATION, VERIFICATION AND ACCEPTANCE TESTING**

#### **3.5.1 Qualifications of Installers and Inspectors**

- A. If required by product warranty, use installers that are approved and licensed by the manufacturer. When required to complete installation, all electricians and plumbers used must be bonded and licensed in the project's jurisdiction.
- B. [Company specializing in installing the products specified in this section must have a minimum 5 years of documented experience.]
- C. [Company specializing in installing the products specified in this section must be within 200 miles or 4 hours travel time.]

#### **3.5.2 Installation, Operation, Testing and Certification**

- A. Products must be delivered in manufacturer's original packaging with manufacturer's installation instructions. Include clearly marked project reference.
- B. Prior to installation, thoroughly examine the equipment, materials, and components for both visual defects and conformance with criteria.
- C. Install all equipment in compliance with manufacturer's written instructions and installation procedures.
- D. After installation, the equipment must be inspected and tested under operating conditions. If the equipment fails an inspection or test, such defects/failures must be corrected. Upon correction of defects/failures, inspect and retest all affected functions related directly and indirectly to the defect or failure. Corrections, replacement, and retesting must be made at no additional expense to the Government.
- E. Provide all items necessary to make equipment fully functional.
- F. Provide appropriately trained personnel to energize, commission, inspect, electrical safety check, calibrate, certify, and provide all required technical testing for equipment and systems. Contractor must provide documentation, test reports and certification documentation attesting that the equipment is properly installed, functional, safe, calibrated, and ready for its intended use.
- G. An equipment item will be considered defective if it cannot be made to meet all established criteria consistent with the activities listed in section (F).
- H. Provide two sets of special tools, software, and any other item/s for each equipment [item] [item type] if required for maintenance and/or future reconfiguration of the item.
- I. Contractor to supply all start-up supplies for medical equipment for a fully operational installation. Contractor must supply to the Government a listing of all needed supplies for ongoing equipment operation for each item of equipment requiring additional supplies for operation.
- J. Engage a factory-authorized service representative to train Government's staff and maintenance personnel to adjust, operate, and maintain medical equipment.
- K. [Confirm functionality of required interfaces to other systems and networks.]

### **3.6 WARRANTY**

#### **3.6.1 Minimum Requirements**

- A. Warranty requirements are outlined in [Division 01] [PWS SOW] [\_\_\_\_].
- B. [Provide manufacturer's written warranty for all items listed. Provide warranty for a minimum of (1) year against defects in materials and workmanship. Warranty must provide for material, labor and all associated replacement and/or repair costs required to provide for a fully operational equipment replacement or repair. Submit manufacturers and installers standard service contract beyond the warranty period for Government review. Warranty must be transferrable to the final owner without risk of being voided. All warranty certification and documentation must be provided to the final owner after date of acceptance.]
- C. Provide routine warranty service in accordance with manufacturer's warranty requirements, for a period of [12 months (minimum)] [\_\_\_\_] after the open for business date. Perform work during regular working hours. Perform service only by factory trained personnel. Maintain a maintenance log of all service orders performed during the warranty period.

### **3.7 OPERATIONS AND MAINTENANCE (O & M)**

#### **3.7.1 Provide the following to the final owner**

- A. Provide O & M data for all FFE-LVS as outlined in [Division 01] [PWS SOW] [\_\_\_\_].
- B. Upon completion of equipment installation, furnish [two (2)] copies of operators/service/maintenance manuals for each type of equipment which will require service or maintenance
- C. Each manual must contain operating instructions and information required for performing periodic maintenance on the equipment. Each service manual must include an illustrated parts breakdown which identifies each part of the unit with manufacturer's part number, wiring diagrams, and a list of necessary service parts, tools, and equipment needed to support maintenance requirements.
- D. Accessory Catalogs: Upon completion of the Project, furnish two copies of the manufacturer's catalogs containing optional accessory items available for all equipment relative to the procured equipment/system delivered herein.
- E. Provide instruction video for cleaning and maintenance, when available.
- F. Provide cleaning requirements for all items to prevent void of warranty.
- G. [Provide contact information for Repair Technician or Emergency Repair Company]
- H. Provide contact information to [Logistics, Pharmacy, Laboratory, and Biomedical Equipment Services.]
- I. Train designated staff in the operation and maintenance of the provided equipment/system. Provide two training sessions for equipment/system users and two training sessions for maintenance personnel scheduled to accommodate shift work. [Provide training certificates that can be executed up to eleven months after the system is installed, in order to provide a refresher course for each group of trainees.] Provide DVD copy of the training with the O & M data.

**--End of Section--**