

SECTION 09 69 00
ACCESS FLOORING

SPEC WRITER NOTES:

1. Delete between // // if not applicable to project. Also delete any other item or paragraph not applicable in the section and renumber the paragraphs.
2. Use stringer type construction where floor height is more than 305 mm (12 inches) above sub-floor.
3. Where more than one type of access flooring system is required consider developing separate narrow scope sections for each. The most commonly used underfloor system consists of a welded steel casing filled with lightweight concrete screwed down to an adjustable pedestal system. For most office spaces, underfloor systems rated at 6894 to 8618 kPa (1000 to 1250 PSI) concentrated load are adequate. For heavier traffic loads at loading docks, elevator entrances, and corridors underfloor systems rated at 10342 kPa (1500 PSI) are appropriate. Underfloor systems rated at 8618 kPa (2500 PSI) are available for heavy equipment.
4. From the stand-point of static build-up, high pressure laminate is the most desirable floor covering, followed by carpet. Wax build up on vinyl tile is a prime cause of static problems.

PART 1 - GENERAL

1.1 DESCRIPTION

- A. Access flooring is to consist of a series of modular, removable, interchangeable panels on an elevated support system forming an accessible underfloor cavity to accommodate electrical and mechanical services. System is to be // bolted filled formed or cast panels on stringerless understructure // // gravity-held panels on stringerless understructure // // gravity-held panels on snap-on stringer understructure // // gravity-held panels on bolted stringer understructure. //

1.2 RELATED WORK

- A. //Section 01 81 13, SUSTAINABLE CONSTRUCTION REQUIREMENTS: Sustainable Design Requirements. //

- B. Section 09 06 00, SCHEDULE FOR FINISHES: Color and Texture of Finishes.
- C. Section 09 91 00, PAINTING: Concrete Floor Water-Based Curing and Sealing Compound.

SPEC WRITER NOTE: Verify with Mechanical for requirements of active underfloor fire suppression system and coordinate document requirements.

- D. Section 26 05 26, GROUNDING AND BONDING FOR ELECTRICAL SYSTEMS:
Connection of access flooring systems to building ground.
- E. Section 27 05 26, GROUNDING AND BONDING FOR COMMUNICATIONS SYSTEMS
Section 28 05 26, GROUNDING AND BONDING FOR ELECTRONIC SAFETY AND SECURITY.
- F. //Underfloor Fire Suppression System: Refer to applicable construction documents. //
- G. Electrical distribution components: Refer to applicable construction documents.

1.3 DESIGN CRITERIA

- A. Structural Performance per CISCA A/F: Provide access flooring systems capable of withstanding the following loads and stresses within limits and under conditions indicated, as determined by testing manufacturer's current standard products according to referenced procedures in CISCA:
 - 1. Ultimate-Load Performance: Provide access flooring systems capable of withstanding a minimum ultimate concentrated load equal to value obtained by multiplying specified concentrated floor panel design load by a factor of 2.5, without failing, according to CISCA A/F, Section II, "Ultimate Loading." Failure is defined as the point at which access flooring system will not take any additional load.
 - 2. Rolling-Load Performance: Provide access flooring systems capable of withstanding rolling loads of the following magnitude applied to non-perforated panels, with a combination of local and overall deformation not to exceed 1.02 mm (0.040 inch) after exposure to rolling load over CISCA A/F Path A or B, whichever path produces the greatest top-surface deformation, according to CISCA A/F, Section III, "Rolling Loads."

SPEC WRITER NOTE: Use below only when move-in rolling loads tested at 10 passes are anticipated.

- a. CISCA A/F Wheel 1 Rolling Load: // 2669 N (600 pound force) // //
 3559 N (800 pound force) // // 4448 N (1000 pound force) // //
 5338 N (1200 pound force) //.

SPEC WRITER NOTE: Use below when frequent rolling loads tested at 10,000 passes is anticipated.

- b. CISCA A/F Wheel 2 Rolling Load: // 2224 N (500 pound force // //
 2669 N (600 pound force) // // 3559 N (800 pound force) // //
 4448 N (1000 pound force) //.

B. Pedestal Assembly:

1. Pedestal Axial-Load Performance: Provide pedestal assemblies, without panels or other supports in place, capable of withstanding a // 22 kN (5000 pound force) // // // // kN (// // pound force) // axial load per pedestal, according to CISCA A/F, Section V, "Pedestal Axial Load Test."
2. Pedestal Overturning-Moment Performance: Provide pedestal assemblies, without panels or other supports in place, capable of withstanding an overturning moment per pedestal of // 113 N x meters (1000 pound force x inches) // // // // N x meters (// // pound force x inches) //, according to CISCA A/F, Section VI, "Pedestal Overturning Moment Test."
3. Provide a means of leveling and locking the assembly at a selected height which requires deliberate action to change height setting and which prevents vibrating displacement.
4. Height between the finish floor and underside of // panel //
 // stringer //:
 a. Not less than // // mm (// // inches).

C. // Stringer:

1. Stringer Concentrated-Load Performance: Provide stringers, without panels in place, capable of withstanding a concentrated load of // 890 N (200 pound force) // // // // N (// // pound force) // at center of span with a permanent set not to exceed 0.25 mm (0.010 inch), as determined per CISCA A/F, Section IV, "Stringer Load Testing." //

D. Panels:

1. All panels are to be interchangeable except those altered to meet special conditions.

SPEC WRITER NOTE: Concentrated load performance requirement is for filled formed steel panels and cast panels only.

2. Concentrated-Load Performance: Provide floor panels, including those with cutouts, capable of withstanding a concentrated design load of the following magnitude, with a top-surface deflection under load and a permanent set not to exceed, respectively, 2.03 and 0.25 mm (0.080 inch and 0.010 inch), according to CISCA A/F, Section I, "Concentrated Loads."

a. // 4448 N (1000 pound force) // // 5560 N (1250 pound force) //
// 5783 N (1300 pound force) // // 6672 N (1500 pound force) //.

SPEC WRITER NOTE: Use below when routine impact loading is anticipated. This is not a CISCA tested characteristic.

3. // Floor Panel Impact-Load Performance: Provide access flooring system capable of withstanding an impact load of // 334 N (75 pound force) // // 445 N (100 pound force) // // 566 N (125 pound force) // // 667 N (150 pound force) // // 778 N (175 pound force) // when dropped from 914 mm (36 inches) onto a 6.5-square cm (1-square inch) area located anywhere on the panel, without failing. Failure is defined as collapse of access flooring system. //

- E. Installed access floor is to be level within plus or minus 1.59 mm in 3.05 m (1/16 inch in 10 feet), and plus or minus 3.18 mm (1/8 inch) over the entire area. Floor assembly to be rigid, free of vibration, rocking panels, rattles and squeaks.

SPEC WRITER NOTE: Use following subparagraph only when the air space below the finish floor is to serve as a plenum.

- F. // Leakage: Air leakage through the joints between panels and around the perimeter of the floor system not to exceed .057 cubic meters (2 cubic feet) of air per minute per linear 305 mm (1 foot) of joint subjected to 125 Pa (0.5 inch, water gauge) positive pressure in the plenum. //

- G. Grounding: Components to be in direct positive contact for safe continuous electrical grounding of the entire floor system.

1. Panel to Understructure Resistance: Not more than 10 ohms.

SPEC WRITER NOTES:

1. For computer rooms, electronic offices, data centers and control

rooms provide resistance within range of 0.5 to 20,000 megaohms.

2. For clean rooms and laboratories provide resistance range of 0.2 to 2.0 megaohms.
3. For hospitals the resistance range is 0.025 to 1.0 megaohms.

H. Static Electricity Control: The acceptable resistance range is from not less than // // mega ohms minimum to not more than // // mega ohms maximum. Maximum electrical resistance is to be measured from the top of the panel to the grounded subfloor. Exposed metal will not be allowed at the wearing surface of the floor.

I. Submit seismic calculations which demonstrate that the proposed access floor system meets requirements of seismic loading in accordance with H-18-8, VA "Seismic Design Handbook". Calculations are to be signed and sealed by a Professional Engineer licensed in the state where the project is located and performed using a current seismic program.

J. // Flame Spread Rating: Provide assembly flame spread of 25 or less using ASTM E84 test method. //

SPEC WRITER NOTES:

1. Where elimination of interference from external radio signals, inductance caused by switching equipment, and electromagnetic effects of current flowing in wires is a design issue, specifying a reference grid may be a solution.
2. Before specifying a reference grid or grounding system, obtain the advice of an engineer responsible for establishing specification requirements to be referenced here.

K. // Electromagnetic Shielding:

1. Radio frequency shielding.
2. Equipment inductance shielding. //

1.4 SUBMITTALS

A. Submit in accordance with Section 01 33 23, SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES.

B. // Sustainable Design Submittals, as described below:

1. // Volatile organic compounds per volume as specified in PART 2 - PRODUCTS.//
2. // For composite wood products, documentation indicating product contains no urea formaldehyde.// //

- C. Samples: Full sized floor panel and each understructure component.
- D. Shop Drawings:
 - 1. Floor panel layout, including railing, step and ramp location.
 - 2. Detail components of assembly, anchoring methods and edge details, including cut-out details, method of grounding.
- E. Manufacturer's Literature and Data: Access floor.
- F. Manufacturer's Certificates: Flame spread rating.
- G. Floor System Test Reports: Submit certified test reports, from a testing laboratory satisfactory to the COR, attesting that the floor system proposed for installation meets all specified requirements. Submit test reports with shop drawings.
- H. Manufacturer's Qualifications.
- I. Installer's Qualifications.
- J. Seismic Calculations.

1.5 QUALITY ASSURANCE

- A. Manufacturer's Qualifications: Manufacturer with three (3) years' experience in providing items of type specified.
- B. Installer's Qualifications: Installers who are trained and approved by manufacturer and have a minimum of three (3) years' experience installation of units required for this project.
- C. Obtain access flooring from single manufacturer.

SPEC WRITER NOTE: Mockup must be approved by Contracting Officer Representative (COR) in the project's design phase before including requirement in specification.

- D. // Mockup: Build mockup of typical access flooring assembly five (5) floor panels in length and five (5) floor panels in width. If approved by COR, approved mockups may become part of the completed work if undisturbed at the time of Substantial Completion.//

1.6 DELIVERY, STORAGE AND HANDLING

- A. Delivery:
 - 1. Deliver materials to site in undamaged condition, in original containers or packages, complete with accessories and instructions. Label packages with manufacturer's name and brand designations. Package materials covered by specific references bearing specification number, type, and class as applicable.
- B. Storage:

- 1. Store all materials in original protective packaging in a safe, dry, and clean location. Store panels at temperatures between 4 and 32 degrees C (40 and 90 degrees F) and between 20 and 70 percent humidity. Replace defective or damaged materials.

C. Handling:

- 1. Handle and protect materials in a manner to prevent damage during the entire construction period.

1.7 WARRANTY

- A. Construction Warranty: Comply with FAR clause 52.246-21, "Warranty of Construction".

SPEC WRITER NOTE: Make the referenced Applicable Publications agree with material requirements specified in PART 2. Update and specify only that which applies to the project.

1.8 APPLICABLE PUBLICATIONS

- A. The publications listed below form a part of this specification to the extent referenced. The publications are referenced in the text by the basic designation only.
- B. American Association of Textile Chemists and Colorists (AATCC):
134-11.....Electrostatic Propensity of Carpets
- C. Architectural Aluminum Manufacturers Association (AAMA):
2604-10.....High Performance Organic Coatings on Aluminum Extrusions and Panels.
- D. ASTM International (ASTM):
E84-20.....Surface Burning Characteristics of Building Materials
E648-19ae1.....Critical Radiant Flux of Floor-Covering Systems Using a Radiant Heat Energy Source
F150-06(2018).....Electrical Resistance of Conductive and Static Resilient Flooring
F1066-04(2018).....Vinyl Composition Floor Tile
F1700-20.....Solid Vinyl Floor Tile
- E. Code of Federal Regulation (CFR):
40 CFR 59.....Determination of Volatile Matter Content, Water Content, Density Volume Solids, and Weight Solids of Surface Coating
- F. National Association of Architectural Metal Manufacturers (NAAMM):
AMP 500 Series.....Metal Finishes Manual

- G. National Electrical Manufacturers Association (NEMA):
 LD-3.1-05.....Application, Fabrication, and Installation of
 High-Pressure Decorative Laminates
- H. Ceilings and Interior Systems Construction Association (CISCA):
 CISCA 2004.....Recommended Test Procedures for Access Floors
- I. National Fire Protection Association (NFPA):
 75-13.....Fire Protection of Information Technology
 Equipment
- J. Underwriters Laboratory (UL):
 94-06(R2014).....Tests for Flammability of Plastic Materials for
 Parts in Devices and Appliances

PART 2 - PRODUCTS

2.1 FLOOR COVERING

- A. // //Conductive // Vinyl Tile:
1. // Solid Vinyl Tile: ASTM F1700, Class 1 Type A (Smooth Surface),
 fabricated in one piece to cover panel face within plastic edging.
 Thickness: 3.17 mm (0.125 inch). //
 2. // Vinyl Composition Tile: ASTM F1066, Class 1 // solid-color tile
 // // through-pattern tile // // surface-pattern tile //, wearing
 Surface // Smooth // // Embossed. // Thickness: 3.17 mm
 (0.125 inch). //
 3. // Static-Conductive Floor Covering Surface-to-Ground Resistance:
 Not less than 25,000 ohms nor more than 1 mega ohm, as determined by
 testing identical products according to test method for conductive
 flooring specified in ASTM F150 but modified to place one (1)
 electrode on floor surface and to attach the other electrode to
 understructure.// //

SPEC WRITER NOTE: Grade HW-120, is approximately 3 mm (1/8 inch) thick, and is recommended on metal floor panels to reduce the possibility of cracking due to impact. On filled steel and concrete panels, Grade HW-62, 1.5 mm (1/16 inch) thick is sufficient due to absorptive quality of panel material. This option is recommended when there is frequent movement of equipment.

- B. // High Pressure Laminate:
- C. //Conductive // Plastic Laminate: NEMA LD3, High-Wear type, Grade
 // HW-62 // // HW-120 // fabricated in one (1) piece to cover each
 panel face within perimeter plastic edging or with integral trim

serving as edging. // Static decay of 5000 to 0 V in less than 0.5 seconds per FS 101C/4046 at 15 percent relative humidity //.

- D. // Carpet: Nylon filament, loop pile, minimum //0.81// // // kg per square meter // 24 // // // oz. per square yard, minimum density 4000, without cushion. Provide carpet with a flame propagation index of less than 4.0 or conform to ASTM E648 with minimum average critical radiant flux of 0.25 watts per square cm (1.6 watts per square inch). Static electricity propensity is to be less than 2.0 kV at 20 percent relative humidity and 21 degrees C (70 degrees F) when tested in accordance with AATCC 134. Provide vinyl edge trim to prevent unraveling. //

2.2 FLOOR PANELS

- A. Construct panels to be uniform in face dimensions, within a tolerance of plus or minus 0.38 mm (0.015 inches) of required size and be square within a tolerance of plus or minus 0.38 mm (0.015 inches), and flatness within a tolerance of plus or minus 0.5 mm (0.02 inches). Design individual floor panels to be easily placed and removed, without disturbing adjacent panels or understructure, by one (1) person using a tool furnished by the access floor manufacturer. Provide panels 610 by 610 mm (24 by 24 inches) // // by // // mm (// // by // // inches) in size.
- B. Filled Formed-Steel Panels: Contractor option of panel construction described below:
1. Particleboard core panels not less than 25 mm (1 inch) thick laminated to top and bottom face sheets of zinc-coated steel not less than 0.45 mm (0.0179 inches) thick. Enclose edges of core // with upturned, die formed edge of bottom sheet // // with perimeter channel welded to top and bottom sheets //. The completed panels will have a flame spread rating of 25 or less when tested in accordance with ASTM E84.
 2. Cementitious-filled panels fabricated with die-cut flat top sheet and die-formed and stiffened bottom pan formed from cold-rolled steel sheet joined together by resistance welding to form an enclosed assembly, with metal surfaces protected against corrosion by manufacturer's standard factory-applied finish.
 3. Lightweight concrete filled panels fabricated with flat top sheet and bottom pan formed from electrolytic-zinc-coated, cold-rolled steel sheet joined together permanently and structurally by hemming

and joined to concrete core by adhesive to form an enclosed assembly.

- C. // Aluminum Panels: Construct panel of one (1) piece die cast aluminum configured with a series of major and minor ribs. //
- D. // Concrete Panels: Provide panels that are a minimum of 25 mm (1 inch) thick, molded from lightweight // reinforced // high strength concrete. Panel is to be a one (1) piece unit with a flat solid surface on top. Panel corners are to be radiused and perimeter is to be formed to receive pedestal locking mechanism. //
- E. Provide perimeter of panels with continuous extruded // conductive // vinyl edge strips. Top edge of strip to be flush with panel floor finish. Mechanically lock edge strips and fasten in place with adhesive.

SPEC WRITER NOTE:

Insert values required for perforations.

- F. Perforated Panels: Flat, perforated top surface with // holes // // slots // of number, spacing, and size standard with manufacturer to produce a nominal open area of // // percent and with a downward airflow // with // // without // damper of // // L/s (// // cfm) at // // Pa (// //inch wg) static pressure.

2.3 CUT-OUTS

- A. Fabricate cut-outs in floor panels to accommodate cable penetrations and service outlets where shown on construction documents or specified. Provide reinforcement or additional support to make panels with cut-outs perform the same as solid uncut panels. Fit cut-outs with manufacturer's standard grommet. For cut-outs larger than maximum size grommet, trim edge of cut-outs with plastic trim, molding and/or gaskets having tapered top flange. Provide removable twist close covers for grommets.

SPEC WRITER NOTE: Retain below if under floor cavity is used for air distribution.

1. // Provide foam-rubber pads for sealing annular space formed in cutouts by cables and trim edge of cutout with molding having flange and ledge for capturing and supporting pads. //

2.4 ACCESSORIES

A. Provide manufacturer's standard registers, grilles and plenum dividers. Design registers and grilles exposed to foot traffic, or the weight of equipment, to support the same load as the floor panel.

B. Plastic Floor Grilles with Dampers: Standard load-bearing grilles molded from polycarbonate plastic to produce removable one (1) piece unit precisely fitted in factory prepared openings of standard field panels, with adjustable/removable damper blades and complying with requirements indicated below:

SPEC WRITER NOTE: Subparagraphs below are examples only. Revise to suit products selected. Types of diffusers and grilles required vary with ventilation system design and occupancy. Consult mechanical designer for type.

1. Air-Distribution Characteristics: Refer to mechanical construction documents.
2. Structural Performance: Capable of supporting a 4448 N (1000 pound force) concentrated load.
3. Flammability Characteristics: Classified 94V 0 per UL 94.

SPEC WRITER NOTE: Delete paragraph below if not required.

C. // Cavity Dividers: Provide manufacturer's standard metal dividers located where indicated on construction documents to divide under floor cavities. //

SPEC WRITER NOTE: Revise paragraph below if special finish or specific type of metal is required.

D. Vertical Closures (Fascia): Where under floor cavity is not enclosed by abutting walls or other construction, provide manufacturer's standard metal closure plates with factory applied finish.

SPEC WRITER NOTE: For computer rooms to comply with NFPA 75, item below must be located and well marked within computer room.

E. Panel Lifting Device: Manufacturer's standard portable lifting device of type required for lifting panels with floor covering provided. Provide four (4) // // lifting devices of each type required.

SPEC WRITER NOTE: Pedestals are generally used for perimeter support. If special extrusion or other means are required,

show details on drawings and revise below accordingly.

F. Perimeter Support: Where indicated on construction documents, provide manufacturer's standard method for supporting panel edge and form transition between access flooring and adjoining floor covering at same level as access flooring.

G. Floor Cleaner: Type recommended by the floor covering manufacturer.

2.5 PEDESTALS

- A. Provide manufacturer's standard pedestal assembly including base, column with provisions for adjustment, locking device, head and pad.
1. Base: Provide pedestal base with not less than 101 by 101 mm (4 by 4 inches) of bearing area.
 2. Column: Hollow shaft of appropriate length fitted with threaded rod and leveling nut.
 3. Provide vibration proof mechanism for making and holding fine adjustments in heights for leveling purposes over a range of not less than 50 mm (2 inches). Include means of locking mechanism at a selected height.
 4. Heads: Provide heads designed // to accommodate snap-on stringers // // to accommodate bolted stringers // // to hold panels in place in a freestanding stringer-less understructure//.
 5. Pads: Provide sound dampening pad for each pedestal head.
 6. Fabricate units of sufficient height to provide required under floor clearance indicated in construction documents.

2.6 PEDESTAL BASE ADHESIVE:

- A. Type recommended by manufacturer.
1. // Adhesive to have a VOC content of // 70 // // // g/L or less when calculated according to 40 CFR 59, (EPA Method 24).//

2.7 // STRINGERS:

- A. Form stringers from extruded aluminum or zinc coated steel in 610 mm (2 foot) lengths. Attach stringers to pedestals with // non-bolted interlocking connections // // threaded fasteners accessible from above //. Stringer system to form a grid pattern with members under edges of floor panels and with pedestals under adjacent panel corners. //

2.8 // // RAMPS // // AND // // STEPS //:

- A. Bolt, // ramps, // // and // // steps // to framing. Form step nosing, threshold strip, and floor bevel strip from extruded or cast aluminum,

with non-slip traffic surface. Close exposed sides of // ramp //
 // and // // steps // with not thinner than 18 gauge aluminum,
 reinforced on the back to prevent warp. Install ramp shoes to meet main
 and raised access floor.

- B. Ramps: Manufacturer's standard ramp construction of width and slope indicated, but not steeper than 1:12, with manufacturer's standard non-slip floor finish, and of same materials, performance, and construction requirements as access flooring.
- C. Steps: Provide steps of size and arrangement indicated on construction documents with manufacturer's standard non-slip floor finish and nosings. //

SPEC WRITER NOTE: This article is for railings, posts, and other exposed metal parts. If more than one finish is used on project, precede finish paragraph with "Finish for (list items):"

2.9 // RAILING AND POSTS:

- A. Construct rails and posts from 32 mm (1-1/4 inch) round extruded aluminum tube shapes. Weld all joints and finish to texture of tubing. Flanges may be welded, or bolted to rails and supports.
- B. Railings: Standard extruded aluminum railings, at ramps and open sided perimeter of access flooring where indicated on construction documents. Include handrail, intermediate rails, posts, brackets, end caps, wall returns, wall and floor flanges, plates, and anchorage where required. Provide railings that comply with structural performance requirements mandated by code.

SPEC WRITER NOTE: Coordinate with Section 09 06 00, SCHEDULE FOR FINISHES and drawings. Clearly identify locations of different colors or finish of the same item.

2.10 FINISHES:

- A. General: Apply finishes in factory after products are fabricated. Protect finishes on exposed surfaces with protective covering before shipment.
- B. Aluminum Finishes:
 - 1. In accordance with NAAMM AMP 500 series:
 - a. // Clear anodized finish: AA-C22A41 Chemically etched medium matte, clear anodic coating, Class I Architectural, 0.018 mm (0.7-mil) thick. //

- b. // Color anodized finish: // AA-C22A42 Chemically etched medium matte, integrally colored anodic coating, Class I Architectural, 0.018 mm (0.7-mil) thick // // AA-C22A44 Chemically etched medium matte, electrolytically deposited metallic compound, Class I Architectural, 0.018 mm (0.7-mil) thick finish //. Dyes will not be accepted. //
 - c. // Mill Finish. //
 - d. // Fluorocarbon Finish: AAMA 2604, high performance organic coating. //
2. Factory-Primed Concealed Surface: Protect concealed aluminum surfaces that will be in contact with plaster, concrete or masonry surfaces when installed by applying a shop coat of zinc-molybdate primer to contact surfaces. Provide minimum dry film thickness of 0.05 mm (2.0 mils).
3. Steel // Grate // Panels:
- a. Conductive epoxy paint.
 - b. // Baked Enamel. //
- C. Pre-cast Concrete Panels:
- 1. Exposed face is to be ground smooth and polished.

SPEC WRITER NOTES:

- 1. Concrete floors used as air plenum surfaces beneath raised floors are required to be sealed with approved water-based acrylic sealing compound.
- 2. Sealer is optional and at designer discretion at other non-plenum areas.
- 3. Sealer should be compatible with pedestal adhesive, if pedestals are anchored with adhesive.
- 4. If a non-compatible sealer is applied before pedestals are anchored, specify removal of sealer at pedestal locations before adhesive is applied.
- 5. If an existing subfloor has been painted or otherwise sealed with non-compatible sealer or paint, specify removal of coating before applying adhesive.

PART 3 - EXECUTION**3.1 PREPARATION**

- A. Install floor sealer, required for dust or vapor control, prior to installation of pedestals, only if the pedestal adhesive will not damage the coating. If the coating and adhesive are not compatible, apply the coating after the pedestals have been installed and the

adhesive has cured. // Concrete sealer are to be provided if an under floor mechanical air plenum is being used. //

- B. Prior to installation, subfloor is to be dry and free of any surface irregularities that will adversely affect access flooring system appearance or performance.
- C. Clear the area in which the floor system is to be installed of debris. Clean floor surfaces and remove dust before the work is started.

3.2 INSTALLATION

- A. Layout floor panel installation to keep the number of cut panels at the floor perimeter to a minimum and to sizes not less than 1/2 half width to the greatest extent possible. Scribe panel assemblies at perimeter and around column to provide a close fit with no voids greater than 6 mm (1/4 inch) where panels abut vertical surface.
- B. Secure bases of pedestals to the structural sub-base with // an adhesive // // mechanical fasteners // in full and firm contact with the subbase. Set pedestals plumb, and in true alignment.
- C. // Where pedestal stringer system is used, join the stringers and other framing members with threaded fasteners for positive connection to the pedestals to preclude lateral movement. Uniformly space stringers in parallel lines, and place at the indicated elevation. //
- D. Provide auxiliary framing around columns and other permanent construction, at sides of ramps, at free ends of floor, and beneath floor panels that are substantially cut to accommodate utility systems.
- E. Construct floor panels to lie flat without warp or twist and bear uniformly on supports without rocking, and without edges projecting above the floor plane. Panels to interlock with supports in a manner that will preclude lateral movement.
- F. Provide free ends of floor with positive anchorage and rigid support where floor system does not abut wall or other construction.
- G. Cover exposed ends of floor system with aluminum closures. Closures to consist of complete trim and fascia assemblies.

3.3 REPAIR OR WELDED GALVANIZED SURFACES:

- A. Use galvanized repair compound where galvanized surfaces are scheduled to receive field or shop coatings, and apply in accordance with manufacturers printed instructions.

3.4 CLEANING

- A. Remove debris accumulated during installation from beneath the raised floor system. Immediately after completion of the floor installation,

apply floor cleaner in accordance with the floor covering manufacturer's instruction. Do not allow any cleaner to remain between individual panels.

3.5 PROTECTION

- A. Cover cleaned floors with clean building paper before construction traffic is permitted. Remove protective covering at completion of Work.

- - - E N D - - -