

SECTION 102219.16 - DEMOUNTABLE GLASS PARTITIONS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Demountable Glass Partitions with Swinging and Sliding Doors.

1.3 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.

1.4 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Shop Drawings: For demountable partitions.
 - 1. Include plans, elevations, sections, and attachment details at floors, columns, permanent partitions, and ceilings; and method of erection and disassembly.
 - 2. Include diagrams for power-, signal-, and control-wiring raceways; and details of access to raceways.
- C. Samples: For each exposed product and for each color and texture specified, in manufacturer's standard sizes.
- D. Samples for Initial Selection: For each type of exposed finish.
 - 1. Include Samples of hardware and accessories involving color or finish selection.
- E. Samples for Verification: For each type of the following products:
 - 1. Face-Panel Finish: Manufacturer's standard-size unit, but not less than 6 inches square.
 - 2. Linear Trim: 12-inch- long Samples.

3. Door Finish: Manufacturer's standard-size unit, but not less than 3 inches square.
4. Glazing: Manufacturer's standard-size unit, but not less than 3 inches square.
5. Hardware and Accessories: Whole units.

1.5 INFORMATIONAL SUBMITTALS

- A. Coordination Drawings: Reflected ceiling plans and other details, drawn to scale, on which the following items are shown and coordinated with each other, using input from the installers of the items involved:
 1. Suspended-ceiling components and dimensioned ceiling-grid layout.
 2. Locations of fixed door and window mullions.
 3. Overhead bracing, seismic restraints, and related structural members.
 4. Ductwork above ceiling.
- B. Qualification Data: For Installer.
- C. Product Certificates: For each type of demountable partition.
- D. Product Test Reports: For each type of demountable-partition assembly, for tests performed by manufacturer and witnessed by a qualified testing agency.

1.6 CLOSEOUT SUBMITTALS

- A. Maintenance Data: For demountable partitions to include in maintenance manuals.
 1. Finishes for exposed trim and accessories. Include precautions for cleaning materials and methods that could be detrimental to finishes and performance.
 2. Seals, hardware, and other operating components.

1.7 MAINTENANCE MATERIAL SUBMITTALS

- A. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
 1. Partition Components: Furnish a quantity of each type of full-size unit with installation tools and materials equal to one percent of the amount installed, but no fewer than 1 units.

1.8 QUALITY ASSURANCE

- A. **Installer Qualifications:** An entity that employs installers and supervisors who are trained and approved by manufacturer. The installer shall have had a minimum of 10 years successful experience in the installation of demountable partition system work comparable to that shown and specified, be certified in writing by the demountable partition manufacturer as qualified to install the manufacturer's partition systems.
- B. **Regulatory Requirements:** Provide demountable door and frame assemblies complying with the applicable provisions for accessibility and usability by the disabled and handicapped in compliance with ANSI A117.1.

1.9 FIELD CONDITIONS

- A. **Finished Spaces:** Do not deliver or install demountable partitions until finishes in spaces to receive them are complete, including suspended ceilings, floors, carpeting, and painting.
- B. **Field Measurements:** Verify demountable partition openings and storage arrangements by field measurements before fabrication and indicate measurements on Shop Drawings. Coordinate fabrication schedule with construction progress to avoid delaying the Work.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. **Surface-Burning Characteristics:** Comply with ASTM E 84 or UL 723; testing by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.
 - 1. **Flame-Spread Index:** 25 or less.
 - 2. **Smoke-Developed Index:** 450 or less.
- B. **Structural Performance:** Provide demountable partitions capable of withstanding the effects of gravity loads and the following loads and stresses within limits and under conditions indicated:
 - 1. **Load-Bearing Capacity:** Not less than 300-lb concentrated proof load when tested according to BIFMA X 5.6.
 - 2. **Transverse-Load Capacity:** Lateral deflection of not more than 1/120 of the overall span when tested under a uniformly distributed load of 5 lb/sq. ft. according to ASTM E 72.

- C. Deflection: Where interior glazing is installed adjacent to a walking surface, the differential deflection of two adjacent unsupported edges shall not be greater than the thickness of the panels when a force of 50 plf (730 N/m Pa) is applied horizontally to one panel at any point up to 42 inches above the walking surface.
- D. Opening Force: Provide demountable door assemblies that have been fabricated and tested to comply with opening force requirements in the current edition of the International Building Code, and ADA §404.2.9.
- E. Acoustical Performance: Where acoustical rating is indicated, provide demountable-partition assembly tested by a qualified testing agency for sound transmission loss performance according to ASTM E 90, calculated according to ASTM E 413, and rated for not less than the STC value indicated.

2.2 DEMOUNTABLE GLASS PARTITIONS

- A. General: Progressive demountable-partition assembly and components that are the standard products of manufacturer.
 - 1. Basis-of-Design Product & Manufacturer: Falkbuilt
 - 2. Subject to compliance with requirements, provide product indicated on Drawings or comparable product by one of the following:
 - a. DIRTT Environmental Solutions: Demountable Partitions
 - b. Steelcase Inc.: VIA
 - c. Adotta Italia: Metafora
 - d. Clestra Hauserman: pleinAir 81 Demountable Partitions
 - e. Haworth: Enclose
 - f. Modular Architectural Interiors: ALUR Glass Wall System
 - g. Muraflex: MIMO
 - h. PK30 System, LLC: PK30 Demountable Partition System
 - i. Transwall: ONE
- B. Acoustical Rating: STC 40
- C. Glass Units for Demountable Partitions: Clear, fully tempered glass
 - 1. Glass Thickness: 1/2 inch.
- D. Glass Units for Demountable Glass Doors: Clear, fully tempered glass
 - 1. Glass Thickness: 1/2 inch.

- E. Framing & Trim: Continuous, factory-finished, snap-on type; adjustable for variations in floor level floor and ceiling levels.
 - 1. Trim Material: Manufacturer's Standard
 - 2. Panel Joints: Butt joints without trim
 - 3. Outside Corner Trim: Square.
 - 4. Base Profile: Projected.
 - 5. Ceiling Trim Profile: Projected.
 - 6. Exposed-Metal Trim Finish: Manufacturer's Standard, finish as selected by Architect from manufacturer's full range.

2.3 DEMOUNTABLE DOORS

- A. Swinging Glass Doors: Provide full bottom rails at all glass doors. All bottom rails less than 10 inches tall shall be tapered 60 degrees minimum from horizontal. Provide manufacturer's standard swinging door hardware, unless otherwise indicated.
- B. Sliding Glass Doors: As indicated on Drawings. Provide manufacturer's standard sliding door hardware.
- C. Hardware: As specified in Section 087100 "Door Hardware".
- D. Door Frames: Manufacturer's standard frames, factory mortised to receive hardware, finish as selected by Architect from manufacturer's full range.
- E. Glazing Frames: Manufacturer's standard frames for glazing thickness indicated; finish as selected by Architect from manufacturer's full range.
- F. Gasketing and Seals: Manufacturer's standard; provide gray color gasketing and seals where visible.

2.4 FABRICATION

- A. General: Fabricate demountable walls for installation with concealed fastening devices and pressure-fit members that will not damage ceiling or floor coverings. Fabricate systems for installation with continuous seals at floor, ceiling, and other locations where partitions abut fixed construction.
- B. Finish Facings: Factory apply finish-facing materials with appropriate backings, using mildew-resistant nonstaining adhesive as recommended by finish-material manufacturer's written instructions.

1. Apply facing to panel in one piece, seamless, and with no gaps or overlaps; free of air bubbles, wrinkles, blisters, or other defects.
 2. Tightly secure and conceal raw and selvage edges of facing for finished appearance.
- C. Wiring: Conceal conductors and cables in raceways. Bundle, lace, and train conductors to terminal points with no excess and without exceeding manufacturer's limitations on bending radii.
1. Electrical devices: Integral, concealed raceways and wiring for electrical power and communication devices shall comply with NFPA 70.

2.5 OTHER MATERIALS

- A. Adhesives: As recommended by demountable-partition manufacturer and with a VOC content of 70 g/L or less when calculated according to 40 CFR 59, Subpart D (EPA Method 24).

2.6 GENERAL FINISH REQUIREMENTS

- A. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.
- B. Appearance of Finished Work: Noticeable variations in same piece are not acceptable. Variations in appearance of adjoining components are acceptable if they are within the range of approved Samples and are assembled or installed to minimize contrast.

2.7 METAL FINISHES, GENERAL

- A. General: Remove tool and die marks and stretch lines, or blend into finish. Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.
- B. Finish Application: Apply coatings to all exposed surfaces of demountable partition frame work.

2.8 ALUMINUM FINISHES

- A. Finish designations prefixed by AA comply with the system established by the Aluminum Association for designating aluminum finishes.
- B. Protective and Decorative, Finishes: Complying with the following:

1. Metal Preparation and Pretreatment: Remove die markings prior to finishing operations. Perform this work in addition to the finish specified. Scratches, abrasions, dents and similar defects are unacceptable.
2. Colors:
 - a. Painted Finish: Factory applied powder coat coating complying with AAMA 2603, AAMA 2604, and AA-DAF-45 in one custom color(s) as indicated on the drawings, and schedules and matching Architect's sample(s).
 - b. Clear Anodized Finish: Medium matte (non-directional) finished, clear natural anodized complying with AA-M10C22A21 finish.
 - c. Color Anodized Finish: Medium matte (non-directional) finished, black integral, impregnated, or electrolytically deposited, colored anodized finish complying with AA-M10C22A22, AA-M10C22A23, or AA-M10C22A24 matching Architect's sample.
 - 1) Post Anodizing Finish (Sealing): Anodized finishes shall be fully sealed by the manufacturer or processor according to procedures recommended by the licensor of the process.

2.9 STAINLESS-STEEL FINISHES

- A. General: Remove tool and die marks and stretch lines, or blend into finish.
- B. Polished Finishes: Grind and polish surfaces to produce uniform finish, free of cross scratches.
 1. Directional Finishes: Run grain of directional finishes vertical for vertical surfaces and parallel to long dimension for framing.
 2. Passivation: When polishing is completed, passivate and rinse surfaces. Remove embedded foreign matter and leave surfaces chemically clean.
 3. Directional Satin Finish: No. 4.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.
- B. Examine components before installation. Reject components that are wet, moisture damaged, mold damaged, broken, cracked, chipped, deformed, or unmatched.

- C. Examine roughing-in for electrical power to verify actual locations of power connections before partition installation.
- D. Do not commence installation of demountable partitions until floor substrate is within the following tolerances in all directions. If substrate is not within tolerance, level the substrate using a method and a product(s) specified in Section 035416 "Hydraulic-Cement Underlayment."
 - 1. Subfloor Surfaces to Receive Demountable Partitions: +/- 1/8 inch in 10 feet
- E. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

- A. Install demountable partitions after other finishing operations have been completed.
 - 1. Install partitions rigid, level, plumb, and aligned. Install seals at connections with floors, ceilings, fixed walls, and abutting surfaces to prevent light and sound transmission.
 - 2. Except for filler panels scribed to fixed walls or columns, do not modify manufacturer's standard components.
- B. Suspended-Ceiling System: Do not alter suspended-ceiling system.
- C. Doors and Frames: Install door-and-frame and glazing-and-glazing-frame assemblies securely anchored to partitions and with doors aligned and fitted. Install and adjust door hardware for proper operation.
- D. Electrical Devices: Connect integral, concealed wiring to serve electrical power and communication devices indicated on Drawings.
 - 1. Connect electrical service at junction-box locations according to Section 260519 "Low-Voltage Electrical Power Conductors and Cables."
 - 2. Connect data communication service at junction-box locations according to Section 271513 "Communications Copper Horizontal Cabling."

3.3 ERECTION TOLERANCES

- A. Install each demountable partition so surfaces vary not more than 1/8 inch from the plane formed by the faces of adjacent partitions.

3.4 ADJUSTING

- A. Inspect installation, correct misalignments, and tighten loose connections.
- B. Doors: Adjust doors to operate smoothly and easily, without binding or warping. Adjust hardware to function smoothly, and lubricate as recommended by manufacturer. Verify that latches and locks engage accurately and securely without forcing or binding.
- C. Check and readjust operating hardware. Verify that latches and locks engage accurately and securely without forcing or bind; lubricate as recommended by manufacturer.
- D. Clean soiled surfaces to remove dirt, fingerprints, adhesives and other foreign materials according to manufacturer's written instructions.
- E. Remove and replace defaced or damaged components.

3.5 DEMONSTRATION

- A. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, assemble, disassemble, and maintain demountable partitions.

END OF SECTION