

**SECTION 083100
ACCESS DOORS AND PANELS**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Wall-mounted access units.
- B. Wall-Mounted Units in Wet Areas.
- C. Ceiling-mounted access units.
- D. Wall- and ceiling-mounted access units.
- E. Floor-mounted access door and frame units, interior and exterior.

1.02 RELATED REQUIREMENTS

- A. Section 087100 - Door Hardware: Mortise cylinder and core hardware.
- B. Section 099113 - Exterior Painting: Field paint finish.
- C. Section 099123 - Interior Painting: Field paint finish.
- D. Section 233300 - Air Duct Accessories: Access doors in ductwork.

1.03 REFERENCE STANDARDS

- A. ADA Standards - 2010 ADA Standards for Accessible Design 2010.
- B. ASTM A36/A36M - Standard Specification for Carbon Structural Steel 2019.
- C. ASTM A240/A240M - Standard Specification for Chromium and Chromium-Nickel Stainless Steel Plate, Sheet, and Strip for Pressure Vessels and for General Applications 2022.
- D. ASTM A276/A276M - Standard Specification for Stainless Steel Bars and Shapes 2017.
- E. ASTM A500/A500M - Standard Specification for Cold-Formed Welded and Seamless Carbon Steel Structural Tubing in Rounds and Shapes 2021a.
- F. ASTM A513/A513M - Standard Specification for Electric-Resistance-Welded Carbon and Alloy Steel Mechanical Tubing 2020a.
- G. ASTM A1008/A1008M - Standard Specification for Steel, Sheet, Cold-Rolled, Carbon, Structural, High-Strength Low-Alloy, High-Strength Low-Alloy with Improved Formability, Required Hardness, Solution Hardened, and Bake Hardenable 2021a.
- H. ASTM A1011/A1011M - Standard Specification for Steel, Sheet and Strip, Hot-Rolled, Carbon, Structural, High-Strength Low-Alloy, High-Strength Low-Alloy with Improved Formability, and Ultra-High Strength 2018a.
- I. ASTM B26/B26M - Standard Specification for Aluminum-Alloy Sand Castings 2018, with Editorial Revision.
- J. ASTM B209/B209M - Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate 2021a.
- K. ASTM B211/B211M - Standard Specification for Aluminum and Aluminum-Alloy Rolled or Cold Finished Bar, Rod, and Wire 2019.
- L. FM (AG) - FM Approval Guide current edition.
- M. ITS (DIR) - Directory of Listed Products Current Edition.
- N. UL (FRD) - Fire Resistance Directory Current Edition.

1.04 SUBMITTALS

- A. See Section 013000 - Administrative Requirements for submittal procedures.
- B. Product Data: Provide sizes, types, finishes, hardware, scheduled locations, and details of adjoining work.
- C. Shop Drawings: Indicate exact position of each access door and/or panel unit.
- D. Manufacturer's Installation Instructions: Indicate installation requirements.

- E. Manufacturer's qualification statement.
- F. Installer's qualification statement.
- G. Project Record Documents: Record actual locations of each access unit.

1.05 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years documented experience.
- B. Installer Qualifications: Company specializing in performing work of the type specified and with at least three years documented experience.

PART 2 PRODUCTS

2.01 ACCESS DOORS AND PANELS ASSEMBLIES

- A. Wall-Mounted Units with Return Air Grille:
 - 1. Location: As indicated on drawings.
 - 2. Panel Material: Aluminum extrusions with gypsum board inlay.
 - 3. Size: 12 by 12 inches (305 by 305 mm).
 - 4. Door/Panel: Hinged, standard duty, with tool-operated spring or cam lock and no handle.
 - 5. Wall Mounting Criteria: Provide surface-mounted face frame and door surface flush with frame surface.
 - 6. Gypsum Board Mounting Criteria: Provide drywall bead frame with door surface flush with wall surface.
 - 7. Plaster Mounting Criteria: Provide drywall bead frame with door surface flush with wall surface.
 - 8. Masonry Mounting Criteria: Provide surface-mounted frame with door surface flush with frame surface.
- B. Wall-Mounted Units in Wet Areas:
 - 1. Location: As indicated on drawings.
 - 2. Panel Material: Steel, hot-dipped zinc, or zinc-aluminum-alloy coated.
 - 3. Size: 12 by 12 inches (305 by 305 mm).
 - 4. Door/Panel: Hinged, standard duty, with tool-operated spring or cam lock and no handle.
 - 5. Wall Mounting Criteria: Provide surface-mounted face frame and door surface flush with frame surface.
 - 6. Gypsum Board Mounting Criteria: Provide drywall bead frame with door surface flush with wall surface.
 - 7. Plaster Mounting Criteria: Provide drywall bead frame with door surface flush with wall surface.
 - 8. Masonry Mounting Criteria: Provide surface-mounted frame with door surface flush with frame surface.
- C. Fire-Rated Wall-Mounted Units:
 - 1. Location: As indicated on drawings.
 - 2. Wall Fire-Rating: As indicated on drawings.
 - 3. Panel Material: Steel.
 - 4. Size: 12 by 12 inches (305 by 305 mm).
 - 5. Door/Panel: Insulated double-surface panel, with tool-operated spring or cam lock and no handle.
- D. Ceiling-Mounted Units with Return Air Grille:
 - 1. Location: As indicated on drawings.
 - 2. Panel Material: Aluminum extrusion with gypsum board inlay.
 - 3. Size - Lay-In Grid Ceilings: To match module of ceiling grid.
 - 4. Size - Other Ceilings: 12 by 12 inches (305 by 305 mm).
 - 5. Door/Panel: Hinged, standard duty, with tool-operated spring or cam lock and no handle.
- E. Fire-Rated Ceiling-Mounted Units:
 - 1. Location: As indicated on drawings.

2. Ceiling Fire-Rating: As indicated on drawings.
 3. Panel Material: Steel.
 4. Size: 12 by 12 inches (305 by 305 mm).
 5. Door/Panel: Hinged, standard duty, with tool-operated spring or cam lock and no handle.
- F. Wall-Mounted Security Units:
1. Location: As indicated on drawings.
 2. Panel Material: Steel.
 3. Size: 12 by 12 inches (305 by 305 mm).
 4. Door/Panel and Frame: Heavy duty.
 5. Security type lock as indicated.
- G. Removable Access Units:
1. Location: As indicated on drawings.
 2. Panel Material: Steel.
 3. Size: 12 by 12 inches (305 by 305 mm).
 4. Tool-operated catches.

2.02 WALL- AND CEILING-MOUNTED ACCESS UNITS

- A. Manufacturer:
1. Best Access Doors: www.bestaccessdoors.com/#sle.
 - a. Universal Access Panel Drywall: Best Access Doors; Series BA-UAP.
 - b. InvisaHatch Drywall Inlay with Fully Detachable Hatch: Best Access Doors; Series BA-IVH.
 - c. InvisaHatch Drywall Inlay Access Panel for Tiling: Best Access Doors; Series BA-IVT.
 - d. InvisaHatch Drywall Inlay with Fully Detachable Hatch with Mud-In Flange: Best Access Doors; Series BA-IVHDF.
 - e. Concealed Touch Latch Aesthetic Access Door with Mud-In Flange for Drywall: Best Access Doors; Series BA-TLDF.
 - f. Fire-Rated Insulated Access Panel for Drywall: Best Access Doors; Series BA-FRI.
 - g. Fire-Rated Insulated Access Panel in Stainless Steel for Drywall: Best Access Doors; Series BA-FRI-SS.
 - h. Fire-Rated Insulated Access Panel with Mud-In Flange: Best Access Doors; Series BA-FRI-DF.
- B. Wall- and Ceiling-Mounted Units: Factory-fabricated door and frame, fully assembled units with corner joints welded, filled and ground flush; square and without rack or warp; coordinate requirements with type of installation assembly being used for each unit.
1. Material: Steel.
 2. Style: As indicated on drawings.
 3. Style: Exposed frame with door surface flush with frame surface.
 - a. Gypsum Board Mounting Criteria: Use drywall bead type frame.
 - b. Plaster Mounting Criteria: Use plaster bead type frame.
 4. Door Style: Single thickness with rolled or turned in edges.
 5. Frames: 16-gauge, 0.0598-inch (1.52 mm) minimum thickness.
 6. Heavy-Duty Frames: 14-gauge, 0.0747-inch (1.89 mm) minimum thickness.
 7. Single Steel Sheet Door Panels: 16-gauge, 0.0625-inch (1.6 mm) minimum thickness.
 8. Heavy-Duty Single Steel Sheet Door Panels: 14-gauge, 0.0747-inch (1.89 mm) minimum thickness.
 9. Double-Skinned Hollow Steel Sheet Door Panels: 16-gauge, 0.059-inch (1.52 mm) minimum thickness, on both sides and along each edge.
 10. Door Panels to Receive Wall/Ceiling Finish: Surface recessed 5/8 inch (15.9 mm) back from wall face.
 11. Insulation: Non-combustible mineral wool or glass fiber.
 12. Units in Fire-Rated Assemblies: Fire rating as required by applicable code for fire-rated assembly that access doors are being installed.

- a. Provide products listed by ITS (DIR) or UL (FRD) as suitable for purpose indicated.
 - b. Provide certificate of compliance from authorities having jurisdiction indicating approval of fire rated doors.
- 13. Steel Finish: Primed.
- 14. Stainless Steel Finish: No.4 brushed finish.
- 15. Aluminum Finish: Natural brushed.
- 16. Primed and Factory Finish: Polyester powder coat; color _____.
- 17. Door/Panel Size: As indicated on the drawings.
- 18. Hardware:
 - a. Hardware for Fire-Rated Units: As required for listing.
 - b. Hinges for Non-Fire-Rated Units: Concealed, constant force closure spring type.
 - c. Handle: Fixed.
 - d. Latch/Lock: Screw driver slot for quarter turn cam latch.
 - e. Latch/Lock: Tamperproof tool-operated cam latch.
 - f. Latch/Lock: Cylinder lock-operated cam latch, two keys for each unit.
 - g. Number of Locks/Latches Required: As recommended by manufacturer for size of unit.
 - h. Inside Latch Release: Mechanism that allows door/panel to be opened from inside.
 - i. Gasketing: Extruded neoprene, around perimeter of door panel.

2.03 WALL-MOUNTED ACCESS UNITS WITH RETURN AIR GRILLES

2.04 FLOOR-MOUNTED ACCESS UNITS

- A. Manufacturer:
 - 1. Best Access Doors; Series BA-RFD - Removable Diamond Plated Floor Hatch Access Door: www.bestaccessdoors.com/#sle.
- B. Floor-Mounted Access Units: Factory fabricated, fully assembled units with corner joints welded, filled, and ground flush; square and without rack or warp; coordinate requirements with type of installation assembly being used for each unit.
 - 1. Size: As indicated on drawings.
 - 2. Units in Fire Rated Assemblies: Fire rating as required by applicable code for the fire rated assembly that access doors are being installed.
 - a. Provide products listed by ITS (DIR) or UL (FRD) as suitable for the purpose indicated.
 - b. Provide certificate of compliance from authority having jurisdiction indicating approval of fire rated doors.
 - 3. Hardware: Steel, hot-dipped galvanized.
 - a. Hardware for Fire-Rated Units: As required for listing.
 - b. Hinges: Removable pin.
 - c. Lock: Screw driver slot for quarter turn cam lock.
 - d. Lock: Cylinder lock with latch, two keys for each unit.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that rough openings are correctly sized and located.
- B. Begin installation only after substrates have been properly prepared, and if the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

3.02 PREPARATION

- A. Clean surfaces thoroughly prior to proceeding with this work.
- B. Prepare surfaces using methods recommended by manufacturer for applicable substrates in accordance with project conditions.

3.03 INSTALLATION

- A. Install units in accordance with manufacturer's instructions.

- B. Install frames plumb and level in openings, and secure units rigidly in place.
- C. Position units to provide convenient access to concealed equipment when necessary.

END OF SECTION