|  |
| --- |
| This guide specification was prepared utilizing 3-part format recommended by the Construction Specifications Institute (CSI), and generally incorporates recommendations from their SectionFormat™/Page Format™, and MasterFormat™, latest Editions, insofar as practicable.Carefully review and edit the text to meet the Project requirements and coordinate this Section with the remainder of the Specifications and the Drawings. Where bracketed text is indicated, e.g. [text], make appropriate selection and delete the remainder of text within additional brackets, highlighting, and bold face type, if any.Consult the manufacturer for assistance in editing this guide specification for specific Project applications where necessary.This Specification was current at the time of publication but is subject to change. Please confirm the accuracy of these specifications with the manufacturer prior to use. Shape  Description automatically generated with medium confidence |

 Section: 08 31 16

 ACCESS PANELS AND FRAMES

**PART 1 - GENERAL**

**1.01 SUMMARY**

A. Section Includes:

*SPECIFIER: Revise subparagraphs below to suit Project requirements.*

1. Access panels and frames for walls and ceilings.

2. Accessories.

B. Related Requirements:

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

*SPECIFIER: Delete Section 01 21 00 - Allowances if locations are clearly shown on the Drawings and sizes are either indicated alongside the locations or specified herein.*

2. Section 01 21 00 - Allowances: For cash or quantity allowances covering access panels and frames.

3. Section 01 33 00 - Submittal Procedures: For administrative and procedural requirements for processing of submittals during the construction phase.

4. Section 01 77 00 - Closeout Procedures: For administrative and procedural requirements for completion of the Work.

*SPECIFIER: Retain subparagraphs below to suit Project requirements; revise section numbers and titles per project requirements.*

4. Section 08 31 13 - Access Doors and Frames: For [**floor**] [**sidewalk**] doors and frames.

5. Section 09 24 00 - Portland Cement Plastering: For plaster infill.

6. Section 09 25 23 - Lime Based Plastering: For plaster infill.

7. Section 09 26 00 - Veneer Plastering: For plaster infill.

8. Section 09 29 00 - Gypsum Board: For gypsum wallboard infill.

9. Section 09 51 00 - Acoustical Ceilings: For acoustical panel/tile infill.

10. Section 09 91 00 - Painting: For field painting of access panels and frames.

11. Section 11 19 00 - Detention Equipment: For access panels and frames for detention facilities.

*SPECIFIER: Retain this Article if provision of access panels and frames are covered under an allowance.*

**1.02 ALLOWANCES**

*SPECIFIER: Retain products and work included in this Section that are covered by cash or quantity allowance. Do not include amounts. Insert descriptions of items in Part 2 or 3 to provide information affecting the cost of the Work that is not included under the allowance.*

A. Access panels and frames are part of an access panel and frame allowance.

**1.03 REFERENCES**

*SPECIFIER: Use care when indicating the edition date of the referenced standards; these standards are subject to regular review and updated accordingly; review list carefully for inclusion.*

A. Reference Standards:

1. ASTM International (ASTM):

a. ASTM A36/A36M-12, Standard Specification for Carbon Structural Steel

b. ASTM A153/A153M-09, Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware

c. ASTM A653/A653M-11, Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy Coated (Galvannealed) by the Hot-Dip Process

d. ASTM A666-10, Standard Specification for Annealed or Cold-Worked Austenitic Stainless Steel Sheet, Strip, Plate, and Flat Bar]

e. ASTM A879/A879M-12, Standard Specification for Steel Sheet, Zinc Coated by the Electrolytic Process for Applications Requiring Designation of the Coating Mass on Each Surface

f. ASTM A1008/A1008M-12a, Standard Specification for Steel, Sheet, Cold-Rolled, Carbon, Structural, High-Strength Low-Alloy, High-Strength Low-Alloy with Improved Formability, Solution Hardened, and Bake Hardenable

g. ASTM B209-10, Standard Specification for Aluminum and Aluminum-Alloy Sheet

and Plate

h. ASTM B221-12a, Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes

i. ASTM F2329-11, Standard Specification for Zinc Coating, Hot-Dip, Requirements for Application to Carbon and Alloy Steel Bolts, Screws, Washers, Nuts, and Special Threaded Fasteners

*SPECIFIER: Delete subparagraphs below if project is not located in California.*

2. California Health and Safety Code - [C**urrent**] Edition.

3. California State Fire Marshall (CSFM)

*SPECIFIER: Indicate date of current Edition in affect in the Project location if known, to avoid problems with interpretation.*

4. International Code Council (ICC):

a. International Building Code (IBC) - [C**urrent**] Edition.

*SPECIFIER: Delete subparagraph below if no fire-rated access panels are specified.*

5. Intertek Testing Services/Warnock-Hersey International (ITS/WHI)

*SPECIFIER: Select applicable NFPA Standard in subparagraph below; delete subparagraph if no fire-rated access panels are specified.*

6. National Fire Protection Association (NFPA):

a. NFPA 80-2013, Standard for Fire Doors and Other Opening Protectives

b. NFPA 252-2012, Standard Methods of Fire Tests of Door Assemblies

c. NFPA 288-2012, Standard Methods of Fire Tests of Horizontal Fire Door Assemblies Installed in Horizontal Fire Resistance-Rated Assemblies

*SPECIFIER: Delete subparagraph below if no fire-rated access panels are specified.*

7. Underwriters Laboratories, Inc. (UL)

a. UL 10B-2008, Fire Tests of Door Assemblies

b. Classified Building Materials Index

**1.04 ACTION SUBMITTALS**

*SPECIFIER: Revise Section number in the paragraph below to match that used in the Project Manual.*

A. Submit in accordance with Section [**01 33 00**] [**other**]:

1. Product Data:

a. Materials description for access panels and frames including details showing mounting type, relationships to surrounding construction, panel and frame type, materials, and construction, and locking features.

b. Installation instructions for each product specified.

2. Shop Drawings:

a. Include details of each frame type, elevation of panel, anchorage and accessory items.

b. Schedule showing each type of access panel and frame, locations, sizes, latching or locking provisions, and other data pertinent to installation

c. Indicate installation procedures and accessories required for a complete installation.

*SPECIFIER: Delete subparagraph below for standard steel panels; retain for stainless steel or other optional upscale finishes.*

3. Samples: For each panel face material, at least 3 by 5 inches (75 by 125 mm) in size, in specified finish.

**1.05 QUALITY ASSURANCE**

A. Comply with standards referenced in Article 1.03 REFERENCES.

B. Provide access panels and frames produced by a single manufacturer.

*SPECIFIER: Retain paragraph below for fire-rated access panels and frames, if any.*

C. Wherever a fire-resistance classification is indicated, provide access assembly with panel, frame, hinge, and latch from manufacturer listed in Underwriters Laboratories, Inc.; "Classified Building Materials Index" for rating shown.

1. Provide UL Label on each fire-rated access panel.

**1.06 DELIVERY, STORAGE, AND HANDLING**

A. Deliver, store, and handle access panels and frames using means and methods that will prevent damage, deterioration, or loss.

1. Deliver units in manufacturer's original packaging, properly labeled for identification.

**PART 2 - PRODUCTS**

**2.01 ACCESS PANELS AND FRAMES MANUFACTURERS**

A. Acceptable Manufacturers:

 JL Industries – a Division of Activar Construction Products Group, Inc.

9702 Newton Av S

Bloomington, MN 55431

(800) 554-6077

www.activarcpg.com

sales@activarcpg.com

B. Substitutions: Manufacturers seeking approval of their products are required to comply with the Owner's Instructions to Bidders, generally contained in the Project Manual.

**2.02 PERFORMANCE REQUIREMENTS**

*SPECIFIER: Retain paragraph below for fire-rated access panels and frames, if any.*

A. Fire‑Rated Access Panels and Frames: Units complying with NFPA 80 that are identical to access panel and frame assemblies tested for fire‑test‑response characteristics according to the following test method, and that are listed and labeled by UL or another testing and inspecting agency acceptable to authorities having jurisdiction:

*SPECIFIER: Retain one or both subparagraphs below if retaining paragraph, A above. Verify test method recognized by authorities having jurisdiction and availability of complying products with manufacturers.*

1. NFPA 252 or UL 10B for fire‑rated access panel assemblies installed vertically.

2. NFPA 288 for fire‑rated access panel assemblies installed horizontally.

*SPECIFIER: The Model number for these access panels is established by specifying the Series identifier, followed by the width and height, latch/lock type, and color code; e.g.* ***Model No. FD - 1222U-W****, meaning an FD Series fire-rated flush access panel, 12 inches (305 mm) wide by 12 inches (305 mm) high, with a standard universal turn ring and key lock, and an optional white finish.*

**2.03 FD SERIES - INTERIOR FIRE-RATED ACCESS PANELS AND FRAMES**

A. Style **FD**: Fire-rated and insulated flush access panel.

1. Model No. FD **- [Insert Dimensions**].

2. Frame and Trim: 16-gauge steel with 1-inch (25.40-mm) flange and welded-on masonry anchor.

3. Panel: Insulated 20-gauge steel with continuous hinge; 2-inch (50.80-mm) thickness.

4. Finish: White powder coat.

*SPECIFIER: Add "U" designation following the Model number in subparagraph 1 above for the standard latch type indicated below or; refer to subparagraph 8 below for optional lock features.*

5. Standard Latch/Lock: Universal turn ring and key.

6. General Use: [**Walls**] [**Ceilings**].

7. Fire-Rating:

*SPECIFIER: Select applicable subparagraph below for wall or ceiling location.*

a. Walls: 1-1/2-hour UL "B" label in a 2-hour fire barrier; maximum size 48 inches by 48 inches (1219.20 mm by 1219.20 mm).

b. Ceilings: Warnock Hersey listed for floor or ceiling installations with 3-hour noncombustible rating, or 1-hour combustible rating; maximum size 24 inches by 36 inches (609.60 mm by 914.40 mm).

8. Options:

*SPECIFIER: Select specific options listed below; indicate selection as a part of the Model number in subparagraph 1 above.*

a. Color: **[Gray] (G)**] [**Red (R)**] [**Black (BK)**] [**Flat Black (FB)**] [**Sand (S)**] [**AMS Beige (AB)**] [**SC Flat Beige (SB)] [Bronze (B)].**

b. Frame, Trim, and Panel Material: Galvannealed.

c. Lock Feature: [**Mortise Slam Lock Prep (U3**)] [**Mortise Slam Lock Installed (U4)**] **[Slam Latch with Knurled Knob (U2)].**

B. Style **FDP**: Fire-rated and insulated access panel in concealed frame with recessed plaster flange for installation in plaster surround.

1. Model No. FDP – **[Insert Dimensions].**

2. Frame: 16-gauge steel with 3/4-inch (19.05-mm) plaster bead.

3. Panel: Insulated 20-gauge steel with continuous hinge; 2-inch (50.80-mm) thickness.

4. Finish: White powder coat.

*SPECIFIER: Add "U" designation following the Model number in subparagraph 1 above for the standard latch type indicated below or; refer to subparagraph 8 below for optional lock features.*

5. Standard Latch/Lock: Universal turn ring and key.

6. General Use: [**Walls**] [**Ceilings**].

7. Fire-Rating:

*SPECIFIER: Select applicable subparagraph below for wall or ceiling location.*

a. Walls: 1-1/2-hour UL "B" label in a 2-hour fire barrier; maximum size 48 inches by 48 inches (1219.20 mm by 1219.20 mm).

b. Ceilings: Warnock Hersey listed for floor or ceiling installations with 3-hour noncombustible rating, or 1-hour combustible rating; maximum size 24 inches by 36 inches (609.60 mm by 914.40 mm).

8. Options:

*SPECIFIER: Select specific options listed below; indicate selection as a part of the Model number in subparagraph 1 above.*

a. Color: **[Gray] (G)**] [**Red (R)**] [**Black (BK)**] [**Flat Black (FB)**] [**Sand (S)**] [**AMS Beige (AB)**] [**SC Flat Beige (SB)] [Bronze (BR)].**

b. Frame and Panel Material: Galvannealed steel.

c. Lock Feature: [**Mortise Slam Lock prep (U3**)] [**Mortise Slam Lock installed (UM4)**], **[Slam Latch with Knurled Knob (U2)].**

d. Metal Lath: Additional 3-inch (76.20-mm) wide metal lath wing for plaster application to the edge of the panel.

C. Style **FDS**: Fire-rated and insulated flush access panel.

1. Model No. FDS – **[Insert Dimensions].**

2. Frame and Trim: 16-gauge, Type 304 stainless steel with 1-inch (25.40-mm) flange and welded-on masonry anchor.

3. Panel: Insulated, 20-gauge, Type 304 stainless steel with continuous hinge; 2-inch

(50.80-mm) thickness.

4. Finish: Factory-applied ground and polished #4 directional satin finish.

*SPECIFIER: Add "U" designation following the Model number in subparagraph 1 above for the standard latch type indicated below or; refer to subparagraph 8 below for optional lock features.*

5. Standard Latch/Lock: Universal turn ring and key.

6. General Use: [**Walls**] [**Ceilings**].

7. Fire-Rating:

*SPECIFIER: Select applicable subparagraph below for wall or ceiling location.*

a. Walls: 1-1/2-hour UL "B" label in a 2-hour fire barrier; maximum size 48 inches by 48 inches (1219.20 mm by 1219.20 mm).

b. Ceilings: Warnock Hersey listed for floor or ceiling installations with 3-hour noncombustible rating, or 1-hour combustible rating; maximum size 24 inches by 36 inches (609.60 mm by 914.40 mm).

8. Options:

*SPECIFIER: Select specific options listed below; indicate selection as a part of the Model number in subparagraph 1 above.*

a. Lock Feature: [**Mortise Slam Lock prep (U3**)] [**Mortise Slam Lock installed (U4)**], **[Slam Latch with Knurled Knob (U2)].**

D. Style **FDW**: Fire-rated and insulated access panel in concealed frame with drywall bead for installation in drywall surround.

1. Model No. FDW – **[Insert Dimensions].**

2. Frame: 16-gauge steel with 1-inch (25.40-mm) drywall bead which can be taped and mudded for a smooth appearance.

3. Panel: Insulated 20-gauge steel with continuous hinge; 2-inch (50.80-mm) thickness.

4. Finish: White powder coat.

*SPECIFIER: Add "U" designation following the Model number in subparagraph 1 above for the standard latch type indicated below or; refer to subparagraph 8 below for optional lock features.*

5. Standard Latch/Lock: Universal turn ring and key.

6. General Use: [**Walls**] [**Ceilings**].

7. Fire-Rating:

*SPECIFIER: Select applicable subparagraph below for wall or ceiling location.*

a. Walls: 1-1/2-hour UL "B" label in a 2-hour fire barrier; maximum size 48 inches by 48 inches (1219.20 mm by 1219.20 mm).

b. Ceilings: Warnock Hersey listed for floor or ceiling installations with 3-hour noncombustible rating, or 1-hour combustible rating; maximum size 24 inches by 36 inches (609.60 mm by 914.40 mm).

8. Options:

*SPECIFIER: Select specific options listed below; indicate selection as a part of the Model number in subparagraph 1 above.*

a. Color: **[Gray] (G)**] [**Red (R)**] [**Black (BK)**] [**Flat Black (FB)**] [**Sand (S)**] [**AMS Beige (AB)**] [**SC Flat Beige (SB)] [Bronze (B)].**

b. Frame and Panel Material: Galvannealed steel.

c. Lock Feature: [**Mortise Slam Lock Prep (U3**)] [**Mortise Slam Lock Installed (U4)**], **[Slam Latch with Knurled Knob (U2)].**

E. Style **FD Heavy Gauge**: Fire-rated and insulated flush access panel, heavy gauge.

1. Model No. FD - [**insert remainder of model number from manufacturer's chart**].

2. Frame and Trim: 14-gauge steel with 1-inch (25.40-mm) flange and welded-on masonry anchor.

3. Panel: Insulated 14-gauge steel with continuous hinge; 2-inch (50.80-mm) thickness.

4. Finish: White powder coat.

*SPECIFIER: Add "U" designation following the Model number in subparagraph 1 above for the standard latch type indicated below or; refer to subparagraph 8 below for optional lock features.*

5. Standard Latch/Lock: Universal turn ring and key lock.

6. General Use: [**Walls**] [**Ceilings**].

7. Fire-Rating:

*SPECIFIER: Select applicable subparagraph below for wall or ceiling location.*

a. Walls: 1-1/2-hour UL "B" label in a 2-hour fire barrier; maximum size 48 inches by 48 inches (1219.20 mm by 1219.20 mm).

8. Style FD Heavy Gauge Options:

*SPECIFIER: Select specific options listed below; indicate selection as a part of the Model number in subparagraph 1 above.*

a. Color: **[Gray] (G)**] [**Red (R)**] [**Black (BK)**] [**Flat Black (FB)**] [**Sand (S)**] [**AMS Beige (AB)**] [**SC Flat Beige (SB)] [Bronze (B)].**

b. Frame, Trim, and Panel Material: Galvanized steel.

c. Lock Feature: [**Mortise Slam Lock prep (U3**)] [**Mortise Slam Lock installed (U4)**] **[Slam Latch with Knurled Knob (U2)].**

**2.10 MATERIALS**

A. Steel Plates, Shapes, and Bars: ASTM A36/A36M.

B. Steel Sheet: Uncoated or electrolytic zinc coated, ASTM A879/A879M, with cold‑rolled steel sheet substrate complying with ASTM A1008/A1008M, Commercial Steel (CS), exposed.

C. Metallic‑Coated Steel Sheet: ASTM A653/A653M, Commercial Steel (CS), Type B; with minimum G60 (Z180) or A60 (ZF180) metallic coating.

*SPECIFIER: Select Type 304 stainless steel for normal environments or select Type 316 for better corrosion resistance in coastal environments; revise to Type 304L or 316L if welding is involved.*

D. Stainless‑Steel Sheet, Strip, Plate, and Flat Bars: ASTM A 666, [**Type 304**] [**Type 316**]. Remove tool and die marks and stretch lines or blend into finish.

E. Frame Anchors: Same type as panel face.

F. Inserts, Bolts, and Anchor Fasteners: Hot‑dip galvanized steel according to ASTM A153/A153M or ASTM F2329.

G. Furnish inserts and anchoring devices which must be built into other work for installation of access panels.

**2.11 FABRICATION**

A. General: Furnish each access panel assembly manufactured as an integral unit, complete and ready for installation.

B. Metal Surfaces: For metal surfaces exposed to view in the completed Work, provide materials with smooth, flat surfaces without blemishes. Do not use materials with exposed pitting, seam marks, roller marks, rolled trade names, or roughness.

C. Panels and Frames: Grind exposed welds smooth and flush with adjacent surfaces. Furnish attachment devices and fasteners of type required to secure access panel frames to types of supports indicated.

*SPECIFIER: Retain applicable subparagraphs below.*

1. For concealed flanges with drywall bead, provide edge trim for gypsum board securely attached to perimeter of frames.

2. For concealed flanges with plaster bead for full‑bed plaster applications, provide zinc‑coated expanded metal lath and exposed casing bead welded to perimeter of frames.

3. Provide mounting holes in frames for attachment of units to metal or wood framing.

4. Provide mounting holes in frame for attachment of masonry anchors.

D. Recessed Access Panels: Form face of panel to provide recess for application of applied finish. Reinforce panel as required to prevent buckling.

*SPECIFIER: Retain subparagraph below for recessed access panels with plaster infill.*

E. Latching Mechanisms: Furnish number required to hold panels in flush, smooth plane when closed.

1. For cylinder locks, furnish 2 keys per lock and key all locks alike.

**PART 3 - EXECUTION**

**3.01 EXAMINATION**

A. Examine substrates for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.

1. Notify the Contractor in writing of conditions detrimental to proper and timely completion of the installation.

2. Proceed with installation only after unsatisfactory conditions have been corrected.

**3.02 INSTALLATION**

A. General: Comply with manufacturer's written instructions for installing access panels and frames.

B. Install panels flush with adjacent finish surfaces or recessed to receive finish material.

**3.03 ADJUSTING AND CLEANING**

A. Adjust access panels to operate easily without binding. Verify that integral locking/latching devices operate properly.

B. Remove panels and frames that are warped, bowed, or otherwise damaged, and replace with new components.

C. On completion of access panel installation, clean interior and exterior surfaces as recommended by manufacturer.