

Section 08150
INTEGRATED FIRE DOOR AND HARDWARE SYSTEMS

PART 1 GENERAL

1.01 GENERAL NOTE

- A. The General Conditions, Supplementary General Conditions, and Division 1 - General Requirements are hereby made a part of this Section as fully as if repeated herein.

1.02 SUMMARY

- A. Integrated metal door opening assemblies with doors, operating hardware, accessories, and installation for a complete assembly.

RELATED SECTIONS

- B. Section 01 33 00, Submittal Procedures.
- C. Section 01 25 13, Product Substitution Procedures.
- D. Section 08 71 00, Door Hardware.

1.03 REFERENCES

- A. ANSI/BHMA A156.3 – Exit Devices, American National Standards Institute/ Building Hardware Manufacturers Association, 2001.
- B. NFPA 101 – Life Safety Code, National Fire Protection Association, 2003.
- C. NFPA 252 - Standard Methods of Fire Tests of Door Assemblies, National Fire Protection Association, 2003.
- D. UL 10C - Positive Pressure Fire Tests of Door Assemblies, Underwriters Laboratories Inc., 2001.
- E. UL 305 - Standard for Panic Hardware, Underwriters Laboratories Inc., 1997

1.04 SYSTEM DESCRIPTION

- A. Performance Requirements
 - 1. Integrated metal door opening assemblies: Exceed minimum performance standards.
 - a. Steel Doors: In accordance with ANSI/SDI A250.8, Grade 1, but not less than 5,000,000 cycles.
 - b. Exit Devices: In accordance with ANSI/BHMA A156.3, Grade 1, but not less than 5,000,000 cycles.
 - c. Closers: In accordance with ANSI/BHMA A156.4, Grade 1.
 - d. Mortise Locks/Latches: In accordance with ANSI/ BHMA A156.13, Grade 1, but not less than 5,000,000 cycles.
 - e. Full-height Hinges: In accordance with ANSI/ BHMA A156.26, Grade 1, but not less than 5,000,000 cycles.
 - f. Warnock Hersey Category D (Integrated Door/Frame Assemblies)
 - g. California State Fire Marshal Listed
 - h. Los Angeles City approval

1.05 SUBMITTALS

- A. Shop Drawings
 - 1. In accordance with Section 01 33 00.
 - 2. Indicate each door and frame condition; frame type, profile and installation detail;

items of finish hardware, finishes and electrical rough-in requirements.

- B. Samples
 - 1. In accordance with Section 01 33 00.

1.06 QUALITY ASSURANCE

- A. Qualifications
 - 1. Manufacturer: Firm with not less than 5 years successful experience in fabrication of integrated metal door opening assemblies with full-height latch/lock and full-height hinge.
 - 2. Supplier: Authorized distributor of manufacturer.
 - 3. Installer: Manufacturer certified, employed by supplier.
- B. Regulatory Requirements
 - 1. Temperature rise door assemblies shall meet requirements for 250 degree rating.

1.07 DELIVERY, STORAGE AND HANDLING

- A. Packaging: Polyvinyl wrapped, palette by floor, and clearly marked for each opening.
- B. Delivery: Deliver to site in original unopened containers and pallets bearing system manufacturers name, and brand.
- C. Store: Horizontally on level surface, not less than 2 inches off floor in a clean, dry well-ventilated area protected from sunlight, extreme heat, dryness and moisture.
- D. Receiving, off loading, and site distribution should be handled by an authorized Total Door Distributor unless otherwise stipulated by contract. If the G.C. or other entity handles all or any portion of the receiving, off loading, and site distribution, they are held responsible for any and all damages that may result from potential miss handling of the product.

1.08 WARRANTY

- A. Integrated metal door opening assembly: Manufacturer's standard 2 year warranty against defects in material and workmanship.
- B. Locksets, hanger rods, and panic exit devices: Manufacturer's lifetime limited warranty against defects in material and workmanship.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Integrated metal door systems
 - 1. Total Door. Door Systems, Inc. 714-222-3769 www.doorsysinc.com
- B. Hardware
 - 1. All Hardware by Total Door. See schedule below.

2.02 MATERIALS

- A. Frames
 - 1. In accordance with ANSI/SDI A250.8, SDI 111A, and SDI 112.
 - 2. Construction: All welded type.
 - 3. Material: Steel, cold rolled, ASTM A1008, 16 gauge.
 - 4. Fire Resistance Rating: Where indicated in Contract Documents for doors.
 - 5. Spreader Bar: Removable, at sill.
- B. Frame Anchorage Devices
 - 1. To securely fasten to wall construction without distortion or stress.
 - 2. In accordance with fire resistance rating indicated in Contract Documents.
- C. Door Systems

1. In accordance with ANSI/SDI A250.8.
 - a. Stiles: Steel, galvanized, 16 gauge, MIG spot welded.
 - b. Top and Bottom Rails: 5-1/2 inch, kiln-dried lumber.
 - c. Cores: Solid polystyrene continuously bonded to faces.
 - d. Thickness: 1-3/4 inches.
 - e. Faces: Steel, stretcher leveled, without seams or spot welds, galvanized and bonderized, 20 gauge.

2.03 FINISHES

- A. Frames: Factory prime painted for field-applied finish.
- B. Hinge and Locking Channel
 1. Finish: 2 part infrared baked polyurethane paint.
 - a. Custom color selected by Architect.
- C. Door Faces, Interior
 1. Prime painted to receive field applied finish or
 2. 2 part infrared baked polyurethane paint, color selected by Architect or
 3. Vinyl veneer applied over steel faces, colors as selected by Architect or
 4. Wood Veneer Applied Over Steel Faces: Type as selected by Architect or
 5. High pressure Plastic Laminate (HPL) Applied over steel faces: Colors as selected by Architect.

2.04 FABRICATION

- A. Unless modified by Contract Documents, construct integrated metal door opening assemblies in accordance with manufacturer's published specifications and applicable Code requirements.
- B. Factory assemble with full-height hinges and latching/locking channels, locksets, exit devices, closers, lite kits, glazing, kickplates, stretcher plates, and armor plates.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Field Conditions
 1. Prior to commencing installation, examine parts of building structure, which are to receive door systems and component parts.
 2. Report, in writing, conditions which would prevent proper execution or endanger permanency of the work to the Architect.
- B. Field Dimensions
 1. Where possible, verify frame tolerances before fabrication of door systems.
 2. Notify Architect of variances with reviewed shop drawings.
- C. Coordinate door opening assembly details with adjacent work to assure proper attachments, clean junctions, etc.

3.02 INSTALLATION

- A. Install work in accordance with Contract Documents and reviewed shop drawings.
 1. Install door systems and hardware in accordance with manufacturer's recommendations.
 2. Deliver frames to be installed by others.
- B. Frames
 1. Set plumb and square in accordance with DHI standards.
 - a. Out-of-square at frame head: Not to exceed 1/16 inch.
 - b. Out-of-plumb for each frame jamb: Not to exceed 1/16 inch.
 - c. Out-of-alignment for each side in plan: Not to exceed 1/16 inch

2. Brace until adjacent wall is constructed.
 3. Securely anchor to adjacent wall.
 4. Furnish and install clips, fastenings, and anchorages and conceal unless otherwise noted.
- C. Door Systems
1. Hang to maintain manufacturer's installation tolerances.
 2. Adjust to freely swing without binding, sticking, or sagging, and to eliminate excessive clearances.
- D. Hardware: When installation is otherwise complete, adjust hardware for proper operation and function.

PART 4 SCHEDULE

A. Hardware

General

1. Full-height Hinge
 - a. Full-height, semi-concealed.
 - b. Acceptable products:
 - 1) Total Door: H-13.
2. Full-height Latching/Locking Channel
 - a. Full-height.
 - b. Acceptable products:
 - 1) Total Door: L-11.
3. Grip
 - a. Size: Nominal 2-3/4 by 5-3/4 inches.
 - b. Clearance: 1-1/32 inches.
 - c. Acceptable products:
 - 1) Total Door: M33.
4. Push
 - a. Size: Nominal 2-3/4 by 5-3/4 inches.
 - b. Flush, non-operating.
 - c. Engraved: Push.
 - d. Acceptable products:
 - 1) Total Door: M52
5. Lever
 - a. Acceptable Products:
 - 1) Total Door: #60
6. Exit Devices, Flush
 - a. Height: 4-3/8 inches.
 - b. Width: 2 sizes available depending on door width.
 - c. Projection: 5/8 inch closed and 1/8 inch open.
 - d. Acceptable products:
 - 1) Total Door: PF200.
7. Closures
 - a. Standard surface/pocket wall mount
 - b. Model DDCX-70A-BC
8. Magnetic Holders
 - a. Holding force: 20 pounds.
 - b. Voltage: 24v/120v.
 - c. Mounting: On wall.
 - d. Acceptable products:
 - 1) Total Door: CH-11

