

## **DIVISION 8 - DOORS AND WINDOWS**

### SECTION 08100 - METAL DOORS AND FRAMES

#### 08100.0100 GENERAL

1. The work under this section is subject to all applicable provisions of the "Bidding Requirements", the "Conditions of the Contract", "Contract Forms" and Division 1 - "General Requirements", which form a part hereof whether attached hereto or not.

#### 08100.0200 WORK INCLUDED

1. Include all labor, materials and appliances and perform all operations in connection with the installation of all related work, complete, in strict accordance with the contract drawings, and as specified herein or reasonably implied.
2. Provide and install all hollow metal doors and steel door frames, as manufactured by Curries or equal as noted on schedule.
3. All material, labor and equipment necessary to furnish and deliver to the job site material as specified in this section.

#### 08100.0300 RELATED WORK SPECIFIED ELSEWHERE

1. Metal doors and frames; wood doors and frames; structural steel frames; finish hardware; automatic door closers; glass and glazing; caulking and weatherstripping; field painting.

#### 08100.0400 QUALIFICATIONS

1. Hollow metal doors and steel door frames, including appropriate anchorage, shall be fabricated from prime materials in accordance with manufacturer's normal standards and accepted industry practice. Assembly and installation, including field modifications and custom fabrication, shall be done by a hollow metal contractor.

#### 08100.0500 SHOP DRAWINGS

1. All doors, frames and hollow metal work shall be fabricated as shown on the shop drawings, submitted to and approved by the architect before fabrication.

08100.0600 DELIVERY AND STORAGE OF MATERIALS

1. Doors and frames shall be delivered to the contractor at the job site. They shall be handled so as to avoid damage and stored upright in a protected area on wood skids, covered with tarpaulins or plastic, vented to avoid condensation and entrapped moisture, until ready for installation. Damaged or deteriorated materials shall be removed from the premises.

08100.0700 PRODUCTS

1. Materials

- a. Doors - Hollow metal, full flush seamless Type D steel construction, Series 400 and UL400, 1-3/4" thick, completely filled with small cell phenolic resin-impregnated kraft honeycomb core bonded to 16 ga. skin sheets with heat and pressure-activated adhesive, 14 ga. channel perimeter reinforcement spot-welded to skin sheets top and bottom, skin sheets continuous lock-seamed along vertical edges. Top of exterior swing-out doors filled flush with additional channel to prevent moisture accumulation. Lock edge bevel 1/8" to 2". Provide R-7 polystyrene for all exterior doors as noted on our schedule.
- b. Hinge and lock reinforcements integral with vertical perimeter channel, additional reinforcing box for lock specified, internal reinforcing for overhead-surface mounted closers, and for surface-mounted hardware as required, for field drilling and tapping by contractor. Hinge mortise drilled and tapped, 3 full threads minimum, for standard weight 4 1/2" x 4 1/2" hinges.
- c. Doors to be cleaned, phosphatized and primed with oven-baked enamel of neutral color, ready for finish painting (by GC), and shipped in individual cartons. Cartons to be protected from moisture during shipping and handling.
- d. Door Accessories:

Kick plates – Plate size to equal door size less 2" x 12" high. Finish shall match door hardware and to be installed on both sides of door.

Glazing beads - 18 ga. steel, profile with max. 1/16" projection from door face, neatly coped and mitered at corners, (exterior sided nonremovable, interior side screw-attached) provided with all glassed styles.

- e. F-Line Frames - Prime, cold-rolled steel, assembled, arc-welded, ground and finished smooth, mortised, reinforced, drilled and tapped for standard weight, full mortise template hinges and template strike, mortar guards at all hardware preparations. Provide 1 welded-in floor anchor and 3 lock-in anchors each jamb for field insertion, 24" o.c. max., and furnish with rubber mutes, 3 for single

doors, 2 for pairs.

Frames to be cleaned, phosphatized and primed with oven-baked enamel or neutral color, ready for finish painting.

Series F416 frames, 16 ga., for 1 3/4" doors, hinge reinforcements 7 ga., strike reinforcement 14 ga. prepared for 1 1/2 pr. 4 1/2" x 4 1/2" hinges and ANSI 115.1 4 7/8" strike and UL-F416 labeled frames as required on above schedules.

Prepare frame for silencers, provide three (3) single rubber silencers for single doors on strike side, and two (2) single silencers on frame head at double doors without mullions.

- f. Labels - Nonremovable labels, of the hourly rating shown on door schedule, shall be permanently affixed to fire-rated doors and frames showing compliance with Underwriters Laboratories requirement (B-Label typical unless otherwise noted).
- g. Provide all door frames with special cut at latch for electrical devices. (verify make & model prior to order). All door frames that do not receive an electric strike at the time of project completion shall receive a fire rated finish cover plate at frame latch.

#### 08100.0800 EXECUTION

1. Doors - Hang doors level and plumb, shimming as necessary at hardware mortises to provide proper clearances and smooth operation with no binding.
2. F-Line Frames - Set plumb and square, securely anchor to floor construction and brace for erection of surrounding walls. Apply 1 coat of bituminous paint to frame surfaces that will be concealed in masonry walls.
3. Labeled Frames - Install labeled frames in accordance with NFPA Publications No. 80 and No. 101, and all applicable codes.

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