

SECTION 08 11 13 - HOLLOW METAL DOORS AND FRAMES

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes:

1. **KROGER NATIONAL ACCOUNT AGREEMENT:** Contractor purchased - Contractor installed.
 - a. The following items are to be provided by the Contractor and purchased under a national account agreement with the Kroger Co.:
 - 1) **Material:**
 - a) Hollow-metal steel doors and frames.
2. Installation of hollow-metal steel doors and frames by Contractor.

1.2 SUBMITTALS

- A. Product Data: Including construction details, material descriptions, core descriptions, label compliance, and finishes for each type of steel door and frame specified.
- B. Shop Drawings: Showing a schedule of standard steel doors and frames using same reference numbers for details and openings as those on Drawings.

PART 2 - PRODUCTS

2.1 SUPPLIER

- A. Supplier: Cook & Boardman, a division of The Cook & Boardman Group, LLC.
 1. Kroger Account Representative; (615) 964-6000, kroger@cookandboardman.com. Specify store number and address when ordering.
 2. No substitutions allowed.

2.2 REGULATORY REQUIREMENTS

- A. Fire-Rated Assemblies (When Required): Complying with NFPA 80 and listed and labeled by a qualified testing agency acceptable to authorities having jurisdiction for fire-protection ratings indicated, based on testing at positive pressure according to NFPA 252 or UL 10C.

2.3 INTERIOR DOORS AND FRAMES

A. Heavy-Duty Doors and Frames: SDI A250.8, Level 2.

1. Physical Performance: Level B according to SDI A250.4.
2. Doors:
 - a. Type: As indicated in the Door and Frame Schedule.
 - b. Thickness: 1-3/4 inches (44.5 mm).
 - c. Face: Uncoated, cold-rolled steel sheet, minimum thickness of 0.042 inch (1.0 mm) (18 gage).
 - d. Edge Construction: Model 1, Full Flush.
 - e. Core: Kraft-paper honeycomb.
3. Frames:
 - a. Materials: Uncoated, steel sheet, minimum thickness of 0.053 inch (1.3 mm) (16 gage).
 - 1) Provide 0.067 inch (1.7 mm) (14 gage) metallic-coated steel sheet, minimum A60 (ZF180) coating, frames for traffic doors, compactor doors and other areas as indicated.
 - b. Construction: Full profile welded.
 - 1) For remodels, knocked down frames may be provide upon written approval of Owner.
4. Exposed Finish: Factory primed with manufacturer's standard, fast-curing, lead- and chromate-free primer complying with ANSI A250.10 acceptance criteria for field-painted finish.

2.4 EXTERIOR HOLLOW-METAL DOORS AND FRAMES

A. Extra-Heavy-Duty Doors and Frames: SDI A250.8, Level 3.

1. Physical Performance: Level A according to SDI A250.4.
2. Doors:
 - a. Type: As indicated in the Door and Frame Schedule.
 - b. Thickness: 1-3/4 inches (44.5 mm).
 - c. Face: Metallic-coated steel sheet, minimum thickness of 0.053 inch (1.3 mm) (16 gage), with minimum A60 (ZF180) coating.
 - d. Edge Construction: Model 1, Full Flush.
 - e. Core: Manufacturer's standard polystyrene or polyurethane insulation material to meet specified thermal-resistance value.
3. Thermal-Rated Doors: Provide doors fabricated with thermal-resistance value (R-value) of not less than 2.1 deg F x h x sq. ft./Btu (0.370 K x sq. m/W) when tested according to ASTM C 1363.

4. Frames:

- a. Materials: Metallic-coated steel sheet, minimum thickness of 0.053 inch (1.3 mm) (16 gage), with minimum A60 (ZF180) coating.
- b. Construction: Full profile welded.
- c. Exposed Finish: Factory primed with manufacturer's standard, fast-curing, lead- and chromate-free primer complying with ANSI A250.10 acceptance criteria for field-painted finish.

2.5 MISCELLANEOUS MATERIALS

- A. Supports and Anchors: Fabricated from electrolytic zinc-coated or metallic-coated steel sheet.
- B. Jamb Anchors: Masonry, stud-wall, compression, or postinstalled expansion type; not less than 18 gage, 0.052 inch (1.321 mm) thick.
 1. Masonry wall anchors: Crimped tees at least 2-1/2 inches (63.5 mm) by 10 inches (254 mm).
 2. Provide UL listed anchors for labeled frames.
- C. Floor Anchors: Single-unit clip angles, formed from same material as frames, not less than 16 gage, 0.064 inch (1.626 mm) thick.
 1. Provide adjustable floor anchors at bottom of mullions.
- D. Tension Plates: Provide 18 gage, 0.052 inch (1.321 mm), 2-inch (50.8 mm) by buck width, with tube spacers welded to bucks at approximately 2 feet (609.6 mm) o.c. for anchorage of jambs against steel or concrete columns, or at other locations where masonry anchors cannot be used. Frames shall be drilled and countersunk for 1/4 inch (6.35 mm) flat head bolts.
- E. Plaster Guards: Formed from same material as frames, not less than 26 gage, 0.022-inch (0.559-mm) thick.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Remove welded-in shipping spreaders installed at factory.
- B. Install standard steel doors and frames plumb, rigid, properly aligned, and securely fastened in place; comply with Drawings and manufacturer's written instructions.
- C. Standard Steel Frames: Install standard steel frames for doors and other openings, of size and profile indicated. Comply with SDI 105.
 1. Set frames accurately in position; plumbed, aligned, and braced securely until permanent anchors are set. After wall construction is complete, remove temporary braces, leaving surfaces smooth and undamaged.

- a. At fire-protection-rated openings, install frames according to NFPA 80.
 - b. Apply bituminous coating to backs of frames that are filled with mortar or grout containing antifreezing agents.
2. Masonry Walls: Coordinate installation of frames to allow for solidly filling space between frames and masonry with mortar as specified in Division 4 Section "Common Work Results for Masonry."
 - a. Masonry anchors: Spaced 1-foot (304.8-mm) (maximum) from bottom of frame, 1-foot (304.8-mm) (maximum) from top of frame, and maximum of 2 feet (609.6-mm) intermittent spacing, a minimum of two anchors per jamb.
- D. Standard Steel Doors: Fit hollow-metal doors accurately in frames. Shim as necessary.
 1. Door to Frame Clearances: 3/32-inch (2.38 mm) at jambs, 1/8-inch (3.175 mm) at head, and 5/8-inch (15.875 mm) at bottom.
 2. Fire-Rated Doors: Install doors with clearances according to NFPA 80.
- E. Final Adjustments: Check and readjust operating hardware items immediately before final inspection. Leave work in complete and proper operating condition. Remove and replace defective work, including standard steel doors or frames that are warped, bowed, or otherwise unacceptable.
 1. Interior doors shall require no more than 5 ft.lbs. of force to pull or push open.
- F. Prime-Coat Touchup: Immediately after erection, sand smooth rusted or damaged areas of prime coat and apply touchup of compatible air-drying primer.

END OF SECTION 08 11 13