

CURRIES[®]

ASSA ABLOY



Hollow Metal Specifications

These specifications are provided to you as a guideline for CURRIES' hollow metal doors and frames.

Compiled in a basic C.S.I. (Construction Specification Institute) format for Section 8100, we hope you will modify and incorporate your specific job requirements to this guideline and include it in your master specification.

CURRIES Hollow Metal Specifications

Part I - General

- 1.01 This section covers commercial grade hollow metal doors and frames. Drawings and general provisions of contract, including General and Supplementary Conditions, and Division - 1 Specification Sections, apply to work of this section.
- 1.02 Commercial grade hollow metal products to be furnished to the general contractor for installation as site construction progress permits.
- 1.03 Lintels, sills, special fastening devices required for installation of hollow metal products are listed in their appropriate division and section as required for construction.
- 1.04 Hardware, glass/glazing, and miscellaneous items related to hollow metal functions are listed in their respective section of this specification.
- 1.05 References — Products supplied in this section must comply with standards established by:
- American National Standards Institute/Steel Door Institute (ANSI/A250.8)
“Recommended Specifications for Standard Steel Doors and Frames.”
 - National Fire Protection Association (N.F.P.A.) #80 Standard for Fire Doors and Fire Windows, Steel Door Institute (S.D.I.) all publication standards. Door Hardware Institute (D.H.I.) all publication standards. U.L. 10C, fire listed products.

American Society for Testing Materials (A.S.T.M.)	
A1008/A1008M	Standard Specification for Steel, Sheet, Cold-Rolled, Carbon, Structural, High-Strength Low-Alloy and High-Strength Low-Alloy with Improved Formability
A568/A568M	Standard Specification for Steel, Sheet, Carbon, and High-Strength, Low-Alloy, Hot-Rolled and Cold-Rolled, General Requirements for
A924/A924M	Standard Specification for General Requirements for Steel Sheet, Metallic-Coated by the Hot-Dip Process
A653/A653M	Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process

- 1.06 Shop Drawings: Submit for fabrication and installation of steel doors and frames. Include details of each frame type, elevations of door design types, conditions at openings, details of construction, location and installation requirements of finish hardware and reinforcements, and details of joints and connections. Show anchorage and accessory items required for installation. Submit manufacturer’s technical product data substantiating that products comply with requirements.
1. Provide schedule of doors and frames using same reference numbers for details and openings as those on contract drawings.
 2. Indicate coordination of glazing frames and stops with glass and glazing requirements.

CURRIES Hollow Metal Specifications

- 1.07 Fire-Rated Assemblies: Provide U.L., W.H.I., no longer label with F.M. label rated openings where indicated, with labeled doors having appropriate labeled frames of the type to accommodate hardware specified and meet local code requirements. Label Construction Certification shall be provided on door assemblies required to be fire-rated that exceed manufacturer's capabilities. Submit manufacturer's certification that each door and frame assembly has been constructed to conform to design, materials and construction equivalent to requirements for labeled assemblies or products or units tested in accordance with U.L. 10C standards. Temperature rise rated doors should be provided for stairwell enclosures which indicate "Temperature rise 30 minutes — 450 degrees F maximum or 250 degrees F maximum" as required by the local building code.
- 1.08 Delivery Storage and Handling: For welded frames, provide channel steel shipping spreader welded to the bottom of each jamb at door opening to prevent damage in transit and jobsite handling. Shipping spreader shall be removed and replaced with a "setting" spreader at bottom of frame at time of frame installation (see "Installation"). General contractor shall inspect hollow metal work upon delivery for damage. Minor damage may be repaired provided refinished items are equal in all respects to new work and acceptable to architect; otherwise, remove and replace damaged items as required.

Store doors and frames at building site under cover. Place units on minimum 4" high wood blocking. Avoid use of non-vented plastic or canvas shelters which could create a humidity chamber. If cardboard wrapper on doors becomes wet, remove carton immediately. Provide 1/4" spaces between stacked doors to promote air circulation.

Part II - Products

- 2.01 Manufacturers: CURRIES Company or manufacturers submitting compliance test data information certifying products as equal to CURRIES' performance standards.
- 2.02 Steel Requirements: All doors and frames to be manufactured of commercial quality, stretcher leveled flatness, cold rolled steel per ASTM A1008 and A568 general requirements or galvanized steel sheet shall be as per ASTM A924 or A653 hot dip galvanized to A60 minimum coating weight standard. Internal reinforcing may be manufactured of hot rolled pickled and oiled steel per ASTM A1011.
- 2.03 Steel Frames: Comply with ANSI/A250.8. Provide metal frames for doors, transoms, sidelights, borrowed lights, and other openings, of types and styles as shown in drawings and schedules. Conceal fastenings, unless otherwise indicated. Mechanical interlock joint (knock-down K.D.) is acceptable on masonry frame corners with a fine hairline seam on frame corner face, or when face of frame is welded and ground smooth. Drywall frames with mechanical interlock (Knock-down K.D.) are acceptable with a fine hairline seam on frame corner face. Frame types, anchor requirements, and locations shall be detailed on plans.
- Interior frames minimum _____ gauge.
- Exterior frames galvanized (A60) and minimum _____ gauge unless noted. Grout solid all frames in masonry or concrete walls. Provide steel plaster guards or mortar boxes, welded to frame, at back of hardware cutouts where installed in concrete, masonry or plaster openings. Protect inside throat of each frame in grout filled wall conditions or where antifreeze additives are used in fill, with a waterproof undercoating type material minimum 1/8" thick, field applied by installer. All frames shall be bonderized and finished as standard with one coat of baked-on prime paint.

CURRIES Hollow Metal Specifications

2.03 Steel Doors: Comply with ANSI/A250.8/SDI 100. Provide metal doors in 20, 18, 16, or 14 gauge steel as specified on plans in accordance with performance levels defined in ANSI/A250.8/SDI 100 and ANSI A250.4 Test Procedure and Acceptance Criteria for Physical Endurance. Door size cycle tested to be 4070 to minimum Level A performance for 18 gauge or 16 gauge door. Door core material shall be a polystyrene slab (min. 6.0 R Factor/Inch), permanently bonded to the inside of each face sheet, providing rigidity, insulating, and sound deadening properties to the door. Door lock edge reinforcing shall be one-piece, full height, 14 gauge channel. Door hinge edge reinforcing shall be one-piece full height, 14 gauge channel, formed and tapped for hinges. Both hinge and lock channels to be welded to each face sheet of the door. Top and bottom of doors shall be closed with a minimum 16 gauge steel channel, welded to the face sheets. Door edges (hinge and lock) may have an exposed seam, in the center, or shall be welded, filled and ground smooth the full height of the door (seamless) or continuous wire welded seam full height, filled and ground smooth (seamless). Doors shall have a beveled (1/8" in 2") lock edge and square hinge edge. All doors shall be bonderized and finished as standard with one coat of baked-on prime paint.

Hardware reinforcing: Reinforce, drill and tap doors and frames to receive mortised hinges, locks, latches, flush bolts, and concealed door closers as required. Preparations shall be in accordance with ANSI A115. Provide minimum gauge hardware reinforcing for mortise or surface applied hardware as follows:

Hinges	—10 ga. or equivalent number of threads on doors. —7 gauge on frames.
Locks	—12 gauge or equivalent number of threads.
Surface Closers	—14 gauge
Hold Open Arms	—12 gauge
Panic Devices	—12 gauge
Floor Check Hinges & Pivots	—7 gauge

Field drilling and/or tapping for surface applied hardware is installation contractor's responsibility. Some anchor hinge and pivot type hardware must be drilled and tapped in the field by installer. Use S.D.I. publication #107 "Hardware on Steel Doors (Reinforcement Application)" as a guide for proper type of reinforcement and installation.

2.04 Fabrication: As detailed on plans, fabricated "welded" frame units to be delivered to jobsite as single units. Transoms, side lights, and window walls which are "oversize" for transportation and installation shall be furnished with field splices to be assembled in the field by the general contractor.

Part III - Execution

3.01 Erection Installation: Install hollow metal units in accordance with manufacturer's instructions and final shop drawings. Fit doors to frames and floors with proper clearances and to achieve the maximum operational effectiveness and appearance of each unit. S.D.I. 122 "Installation and Troubleshooting Guide for Standard Steel Doors and Frames" or "The Installation of Commercial Steel Doors and Steel Frames, Insulated Steel Doors in Wood Frames, and Builders Hardware" as published by the D.H.I. are recommended guidelines.

CURRIES

ASSA ABLOY

CURRIES • 1502 12th Street NW • Mason City • IA 50401
Phone: 641-423-1334 • Fax: 641-424-8305
Website: www.curries.com

ASSA ABLOY, the global leader
in door opening solutions