SECTION 08 11 19 (08 12 19 and 08 13 19)
STAINLESS STEEL DOORS and FRAMES (R2)

PART 1 GENERAL

1.1 SECTION INCLUDES **(Delete items not applicable to project)**

Stainless Steel Doors, Frames and Borrowed Lights.

1.2 RELATED SECTIONS

03 30 00 Cast-in-place Concrete.
03 40 00 Precast Concrete.
03 60 00 Grouting.
04 00 00 Masonry (including 04 05 16 and 04 00 20).
08 71 00 Door Hardware.
09 00 00 Finishes.
09 20 00 Plaster and Gypsum Board.
08 10 00 Doors and Frames.

1.3 REFERENCES **(Delete items not applicable to project)**

ASTM A 568/A 568M Standard Specification for Steel, Sheet, Carbon, Structural, and High-Strength, Low-Alloy, Hot-Rolled and Cold-Rolled.
ASTM A 653/A 653M Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.
ASTM A 666/666M Specification for Annealed or Cold-Worked Austentic Stainless Steel Sheet, Strip, Plate, and Bar.
ASTM A 924/A 924M Standard Specification for General Requirements for Sheet Steel, Metallic-Coated by the Hot-Dip Process.
ANSI/SDI A250.11 Recommended Erection Instructions for Steel Frames.
HMMA 820-TN01 Grouting Hollow Metal Frames.
HMMA 840 Guide Specifications for Installation and Storage of Hollow Metal Doors and Frames.
HMMA 841 Tolerances and Clearances for Commercial Hollow Metal Doors and Frames.
HMMA 866 Guide Specifications for Stainless Steel Hollow Metal Doors and Frames.
ANSI/NFPA 80 Standard for Fire Doors and Windows
ANSI/NFPA 252 Standard Methods of Fire Tests of Door Assemblies
ANSI/NFPA 257 Standard on Fire Test for Window and Glass Block Assemblies
ANSI/UL 9 Fire Tests of Window Assemblies
ANSI/UL 10B, Fire Tests of Door Assemblies
ANSI/UL 10C Positive Pressure Fire Tests of Door Assemblies

1.4 TESTING REQUIREMENTS

Where noted on the door schedule, doors, frames, and fire windows shall have been tested or otherwise evaluated by Underwriters Laboratories, Inc for the fire protection rating noted.
Material shall be under a factory Follow-Up services Program of Underwriters Laboratories, Inc.

1.5 SUBMITTALS

Unless mutually agreed due to small quantity, submit shop drawings showing profiles, product components, anchors, and accessories. Details deemed to be proprietary by the manufacturer may be identified as such.
Submit installation instructions and installation tolerances if other than as specified in ANSI/SDI A250.11 or HMMA 840.
Submit jobsite storage and protection requirements if other than as specified herein or in ANSI/SDI A250.8, HMMA 861, or HMMA 866.

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PO Box 635, Birmingham, AL 35201
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Specifier: select one of the following two sentences or delete both:

Where requested prior to fabrication, submit three (3) samples of structural adhesive bonded to stainless steel plates no less than 6" X 6".

Where requested prior to fabrication, submit three (3) samples of structural adhesive bonded to stainless steel plates no less than 6" X 6" exhibiting "nugget pull" similar to equivalent spotweld.

1.6 QUALITY ASSURANCE

Installer shall have documented experience in installation of stainless steel door assemblies.

Fabricate products to tolerances in compliance with HMMA-841.

1.7 DELIVERY, STORAGE, AND HANDLING

Store and handle products in accordance with ANSI A250.8, HMMA 861, HMMA 866, or HMMA 840-TN01 in manufacturer's original, unopened, undamaged containers.

Leave manufacturer's protective covering intact until such time as construction is sufficiently complete to avoid damage to door or frame surfaces.

Protect materials from adverse temperature and humidity conditions.

Store doors and frames upright on wood planking, protected at corners to prevent damage.

Store accessories such as hinges, gaskets, and thresholds in a secure area protected from adverse temperature and humidity conditions.

Do not store in non-vented plastic or canvas shelters.

1.8 COORDINATION

Coordinate work with other directly affected trades, wall construction, and hardware installation.

Coordinate hardware locations with Sections 08 11 13 and 08 12 13.

Coordinate placing of material orders and fabrication schedules with construction progress.

1.9 WARRANTY

Submit written copy of manufacturer's standard warranty documents.

PART 2 PRODUCTS

2.1 MANUFACTURER

Doors and frames shall be manufactured by:

MEGAMET INDUSTRIES, INC.

P.O. BOX 635 (3228 6th. Avenue North)

BIRMINGHAM, AL 35201

WEBSITE: www.megametusa.com

PHONE: (205) 322-7700 TOLL FREE: (888) 322-7750

FAX: (205) 322-4600

Substitutions: Not permitted.

2.2 STAINLESS STEEL DOORS **(Delete if not applicable to project)**

Provide 1 3/4" nominal thickness stainless steel doors as listed in the door schedule and indicated on the Drawings in accordance with this specification. Opening sizes, configurations and types shall be as indicated on the Drawings and/or door schedule.

Steel for door faces shall comply with ASTM A 666 **specifier select** (type 304) (type 316).

Finish shall be **specifier select** (# 4 grained) (# 2B mill finish).

Specifier: select or delete: Grain for # 4 finish shall run vertically.

Door faces shall be fabricated from **specifier select** (18), (16), (14), (12), (10) gage material.

Internal reinforcing members shall be fabricated from **specifier select** (hot-rolled or cold-rolled steel), (stainless steel type 304), (stainless steel type 316).

Fabricate faces and edges as seamless doors from two sheets of steel with no visible seams on either face or vertical edges; continuously weld door edges. Where finish is # 4, refinish edge welds to match grain.

All doors shall be handed with either square or bevel edges (at manufacturer's option).
Vertical edges shall be reinforced with continuous channels at hinge and lock edges. Channel shall be formed from one member; spliced channels are not permitted.
Hardware reinforcing shall be securely welded to edge channels.
Where welds would be exposed thus compromising the finish, a proprietary structural epoxy adhesive may be used (at manufacturer's option). Such connections shall demonstrate equality with a spotweld of similar size.
Door internal construction shall be **specifier select** (expanded polystyrene of 1.0 pcf nominal density) (impregnated honeycomb of no greater than 1.25" cell size) (polyurethane slab of no less than 1.0 pcf nominal density) (vertical steel stiffeners of no less than 22 gage). Fire protection rated doors shall be honeycomb core to comply with testing.
Hardware Preparation: Mortise, reinforce, drill, and tap to receive templated mortise hardware; reinforce for specified surface hardware in accordance with HMMA 861 and HMMA 866.

2.3 STAINLESS STEEL FRAMES **(Delete if not applicable to project)**

Provide stainless steel frames for doors or borrowed lights as listed in the door schedule and indicated on the Drawings in accordance with this specification. Opening sizes, profiles, anchors, and types shall be as indicated on the Drawings.
Frames shall be MegaMet series **specifier select** (M), (CM), (C).
Steel for frames shall comply with ASTM A 666 **specifier select** (type 304) (type 316).
Finish shall be **specifier select** (# 4 grained) (# 2B mill finish).
Specifier: select or delete: Grain for # 4 finish shall run **specifier select** (vertically on all faces), (vertically at jamb faces and horizontally on head/sill faces).
Frames shall be fabricated from **specifier select** (18), (16), (14), (12) gage material.
Fabricate frames with tightly fitting mitered corners and butted stops. Tabs and slots at headers and jambs may be incorporated for factory alignment of assembly.
Frame corners shall be **specifier select** (knocked-down for field assembly), (welded continuously at faces), (slip-on drywall).
At welded frames where finish is #4, refinish miter welds to match grain.
Internal reinforcing members and anchors shall be fabricated from **specifier select** (hot-rolled or cold-rolled steel), (stainless steel type 304), (stainless steel type 316).
Hardware reinforcing shall be securely welded to frames.
Where welds would be exposed thus compromising the finish, a proprietary structural epoxy adhesive may be used (at manufacturer's option). Such connections shall demonstrate equality with a spotweld of similar size.
Hardware Preparation: Mortise, reinforce, drill, and tap to receive templated mortise hardware; reinforce for specified surface hardware in accordance with HMMA 861, HMMA 866, and definitions in ANSI/SDI A250.6.
Provide frames with one floor anchor per jamb.
Provide series M and CM frames with wall anchors; not less than three up to an opening height of 90 inches and one additional anchor for every 24" or portion thereof above 90".
Frames installed in new masonry shall have T-strap anchors or wire anchors;
Frames installed in stud partitions shall have steel anchors of suitable design securely fastened to jambs with corresponding locations on strike jamb.
Frames installed with anchor bolts shall have frame soffits dimpled or countersunk for 3/8 inch diameter bolts. Anchor bolts are provided by the installer as rough hardware to suit the substrate.
Specifier: select or delete: Provide series C frames with proprietary anchors consistent with slip-on frame design.

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2.3 OPERATING CLEARANCES

Doors shall be undersized from frame opening sizes at head, jamb, and threshold in accordance with HMMA-866.

2.4 HARDWARE LOCATIONS

Unless otherwise specified, hinges and locks shall be located in accordance with HMMA-866.

PART 3 EXECUTION

3.1 EXAMINATION

Before beginning installation, verify that existing or planned substrate conditions are acceptable for installation.

Select fasteners of adequate type, number, and quality to perform intended functions.

3.2 INSTALLATION

Install frames plumb, straight, and true, rigidly secured in place and properly braced; comply with ANSI/SDI A250.11 and HMMA-866.

Grout fill frames in new masonry in accordance with ANSI/SDI A250.8, ANSI/SDI A250.11, and HMMA820-TN01. Frames installed in drywall partitions shall not be grouted.

Secure any bolted connections to adjacent construction using bolts suitable for the substrate.

Install accessories, doors, and hardware in accordance with manufacturers' templates and instructions.

3.3 PROTECTION

Protect installed products and finished surfaces from damage during construction.

Remove protective wrappings only after construction is sufficiently completed so that doors and frames will not be scratched or damaged.

3.4 FINAL ADJUSTMENTS

After construction work has been completed in the area, adjust hardware and closers prior to turn-over to Owner.

END OF SECTION

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