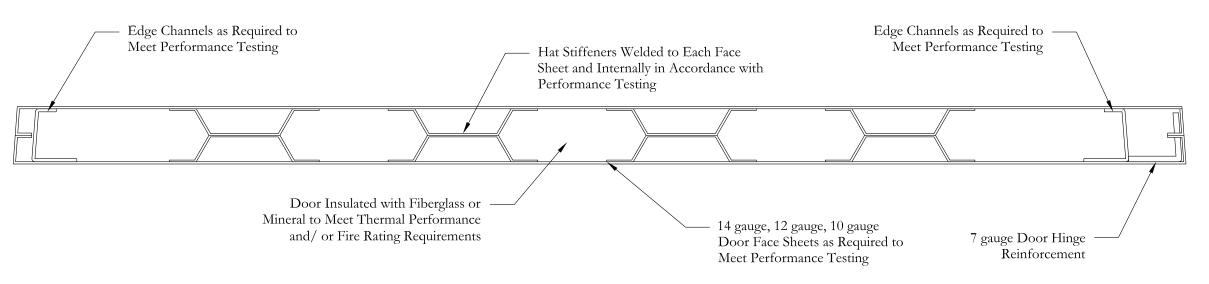
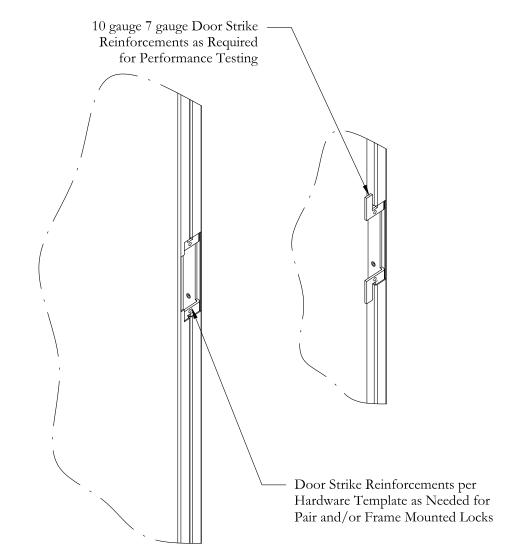
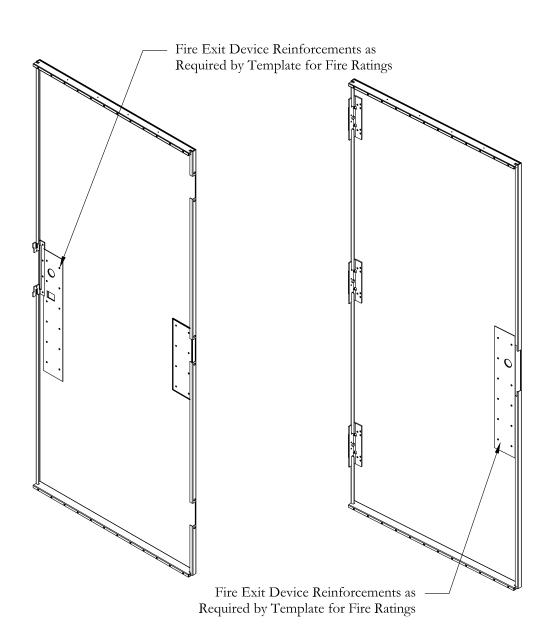
Habersham Metal Products Company - HMMA 862 Commercial Security Hollow Metal - Tech Data Sheet







COMMERCIAL SECURITY HOLLOW METAL DOORS

A. Materials

- 1. Manufacture doors of cold-rolled steel conforming to ASTM A 1008 / A 1008M CS Type B, or hot-rolled, pickled and oiled steel conforming to ASTM A 1011 / A 1011M CS Type B. Use steel that is free of scale, pitting, coil breaks, surface blemishes, buckles, waves, or other defects.
- 2. Interior doors: Fabricate face sheets from steel that is 0.067 in. (1.7 mm); 0.093 in. (2.3 mm)] minimum thickness. 3 Exterior Doors: Fabricate face sheets from steel that is [for Grades 1, 2, and 3; 0.067 in. (1.7 mm)] [for Grades 4, 5 and 6; 0.093 in. (2.3 mm)] minimum thickness and that has a zinc-coating applied by the hot-dip process conforming to ASTM A 653/A 653M Commercial Steel (CS), coating designation A60 (ZF180) or G60 (Z180).

B. Construction:

- 1. Manufacture doors of the types, sizes and construction in accordance with the contract documents. At the manufacturer's option, fabricate doors using alternate materials and methods of construction, which are permitted provided they meet the aforementioned performance criteria.
- 2. Join door face sheets at their vertical edges by a continuous weld extending the full height of the door.3. Fabricate doors such that they are neat in appearance and free from warpage or buckle. Form edge bends
- such that they are true and straight and of minimum radius for the thickness of metal used.

 4. Stiffen doors using continuous vertically formed steel sections. Incorporate any optional additional core materials
- in accordance with the manufacturer's proprietary standard, engineered and tested in accordance with the level of protection as specified by the Architect.
- 5. Reinforce the vertical edges continuously using steel, not less than the thickness of the face sheets extending the full length of the door. Close the top and bottom edges with a continuous channel, not less than the thickness of the face sheets and spot welded to face sheets a maximum of 4 in. (101 mm) o.c. Continuously weld the closing end channel to the vertical edge reinforcing at all four corners producing a fully welded perimeter reinforcing.
- 6. Fit the top end channel with an additional flush closing channel of not less than 0.053 in. (1.3 mm) thickness. Weld the flush closing channel in place at the corners and at the center
- 7. Mortise, reinforce, drill and tap doors at the factory for templated mortise hardware only, in accordance with the final approved hardware schedule and templates provided by the hardware supplier. Where surface mounted hardware, reinforce doors for drilling and tapping that is required to be done by others in the field.

COMMERCIAL SECURITY HOLLOW METAL FRAMES

A. Materials

- 1. Manufacture frames of cold rolled-steel conforming to ASTM A 1008 / A 1008M CS Type B or hot-rolled, pickled and oiled steel conforming to ASTM A 1011 / A 1011M CS Type B. Use steel that is free of scale, pitting, coil breaks or other surface defects.
- 2. Interior frames: Fabricate frame sections from steel that is 0.093 in. (2.3 mm)] minimum thickness.
- 3. Exterior Frames: Fabricate frame sections from steel that has a zinc- coating applied by the hot-dip process conforming to ASTM A 653/A 653M Commercial Steel (CS), coating designation A60 (ZF180) or G60 (Z180).

B. Construction

- 1. Manufacture frames such that they have integral stops and are welded units of the sizes and types shown on approved submittal drawings. Construct frames in accordance with these specifications, and such that they meet performance criteria specified.
- 2. Fabricate frames such that all finished work is neat in appearance, square, and free of defects, warps and buckles. Form pressed steel members such that they are straight and of uniform profile throughout their lengths. Fabricate jamb, header and sill profiles in accordance with the frame schedule and as shown on the approved submittal drawings.
- 4. Fabricate corner joints such that all of their contact edges are closed tight with faces mitered and stops either butted or mitered. Continuous weld faces and soffits and finish the faces smooth. The use of gussets or splice plates as a substitute for welding is not acceptable. Continuously weld all other face joints and finish them smooth.
- 6. Minimum height of stops in door openings are required to be 0.625 in. (15.8 mm). Height of stops on security glazing or panel openings are required to be as shown on approved submittal drawings.
- 7. When shipping limitations so dictate, or when advised by the contractor responsible for coordination or installation, fabricate frames for large openings in sections designated for assembly in the field by others. Install alignment plates or angles at each joint. Fabricate such components the same material thickness as the frame. Fabricate field joints, which are to be field welded by others, in accordance with approved submittal drawings.
- 8. Fabricate frames for multiple openings using mullion members which, after fabrication, are closed tubular shapes conforming to profiles shown on approved submittal drawings, and that have no visible seams or joints.
- 9. Hardware Reinforcements and Preparation:

Consult the hollow metal manufacturer for specific hardware sets needed at each level of security. Mortise, reinforce, drill and tap frames at the factory for all templated mortised hardware only, in accordance with the final approved hardware schedule and templates provided by the hardware supplier. Where surface mounted hardware, anchor hinges, thrust pivots, pivot reinforced hinges, or non-templated hardware apply, reinforce frames for drilling and tapping that is required to be done by others in the field.

BULLET PENETRATION

When specified by the contract documents, test door assemblies for bullet penetration resistance in accordance with Level 1- 3 UL-752 (UL listing file BP4470), or SD-STD-01.01, Rev. G.

IMPACT TESTIN

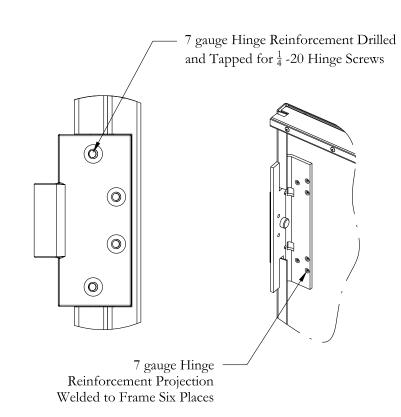
Impact testing under this section is performed using the methods and testing equipment described in ASTM F 1450 for hard body impacting and ASTM F 1592 for all vision system impact testing. Hardware must be of equal rating. **FORCED ENTRY ATTACK TEST**

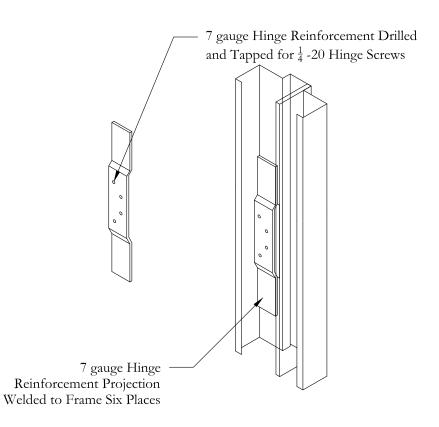
Door and frame and/or window assemblies tested in accordance with SD-STD-01.01, Revision G, Certification Standard for Forced Entry and Ballistic Resistance of Structural Systems. Use Table 1 for pass/fail criteria

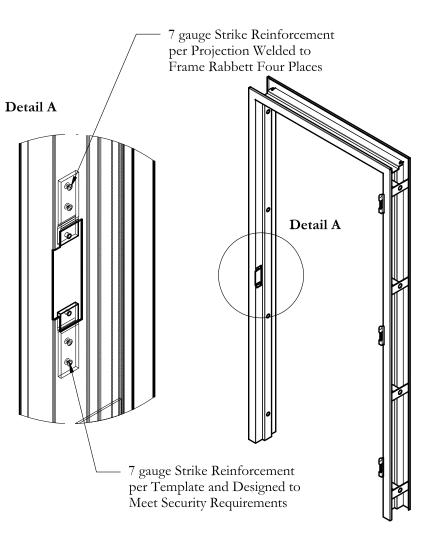
Blast resistance to 6 psi static. 50 psi short duration less than 100 psi.msec impulse.

FIRE RATINGS

Fire ratings up to 3 Hour in accordance with UL9, UL 10c, NFPA 80. (UL listing Files R3904 R4446 R15281)









HMP ELEVATION

Tech Data Sheet Number 1.1 Commercial Security

JOB

DATE

HMMA 862

DRAWING NAME

