

JIANGSU JINPENG FIREPROOF BOARD CO., LTD.

Design No. JMM/MOBP 120-01

Loadbearing Steel Stud Wall Assembly

MagMatrix MgO Fire Rated Structural Panel - Perseverance Model

ASTM E119-20

Rating: 2 Hour

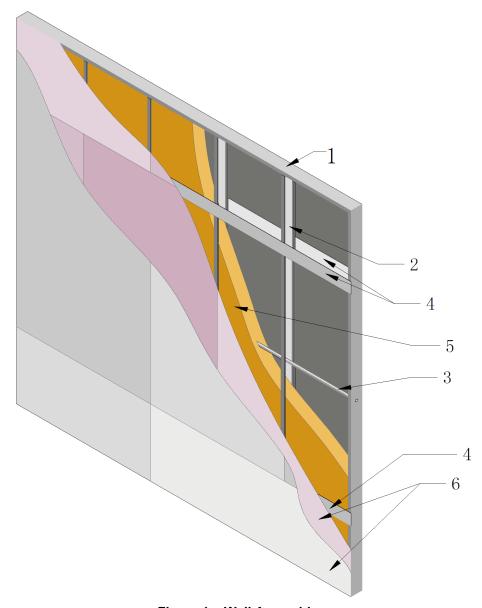


Figure 1 - Wall Assembly

Version: 9 June 2021 SFT-BC-OP-19i



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- 1. TRACK: Use 3-1/2 in. wide x 1-1/2 in. legs, 20 GA steel as top and bottom track. Studs attached to the top and bottom track with 1/2 in. long self-tapping pan-head screws.
- **2. STUDS:** Use 3-1/2 in. wide x 1-5/8 in. flange, 20 GA, steel studs spaced 24 in. on center (oc).
- 3. LATERAL SUPPORT: 16 GA, steel bracing channel, placed in the center cutout of the studs across the 10 ft. width of the assembly. Steel clip angles are fastened to the studs below the channel and then attached to the channel using 1/2 in. No. 8 self-drilling screws.
- **4. PANEL JOINT BACKING:** 4 in. wide x 10 ft. long, 20 GA steel backing plate is installed 24 in. oc from the top and bottom of the frame on both sides. The backing plate is attached to the studs with 1/2 in. long self-tapping pan-head screws.

- 5. INSULATION: 3 in. thick x 24 in. wide x 48 in. long, 4 pcf Rockwool™ Cavityrock® is friction-fit within the stud cavities. The ends of the batts are staggered to avoid continuous joints.
- **6. SHEATHING:** MagMatrix MgO Fire Rated Structural Panel Perseverance Model

Two layers of 12mm x 1220mm (4 ft.) wide x 2440mm (8 ft.) long MagMatrix MgO Fire Rated Structural Panel - Perseverance Model are installed vertically onto both sides of the frame. The base layer of board is attached to the framing with 1-1/8 in. long Type S-12 self-drilling bugle-head screws at 12 in. oc at the perimeter and field. The face layer of board is attached to the framing with 1-5/8 in. long Type S-12 screws at 12 in. oc, staggered 6 in. from the base layer fasteners. Edge screws at the vertical joints are located 1/2 in. from the board edge, perimeter screws are located 3/4 in. from the outside edges, and screws along the horizontal joints are located 1 in. from the board ends.

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Consult the listing report on the Directory of Building Products (https://bpdirectory.intertek.com) for the edition of the standard(s) evaluated.

Compliance of the assembly described in this Design Listing with the referenced standard relies on verification that the assembly constructed in the field is consistent with that described herein. Intertek certified products may be verified by the approved Intertek label; other products must be verified by the Authority Having Jurisdiction as meeting the specifications stated herein.