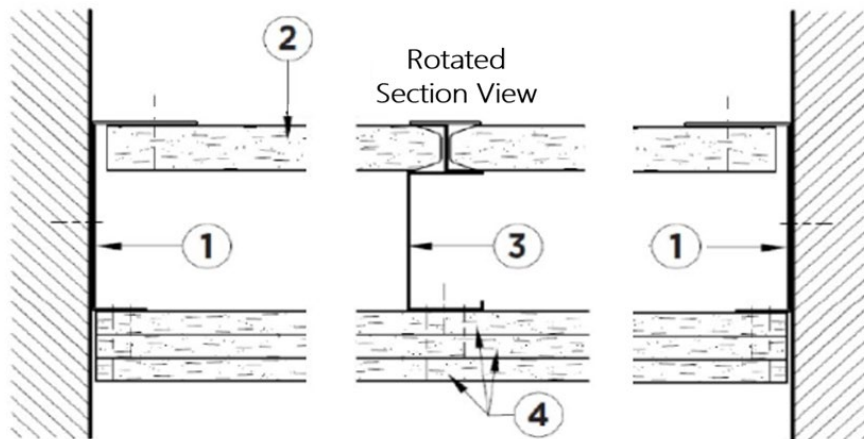




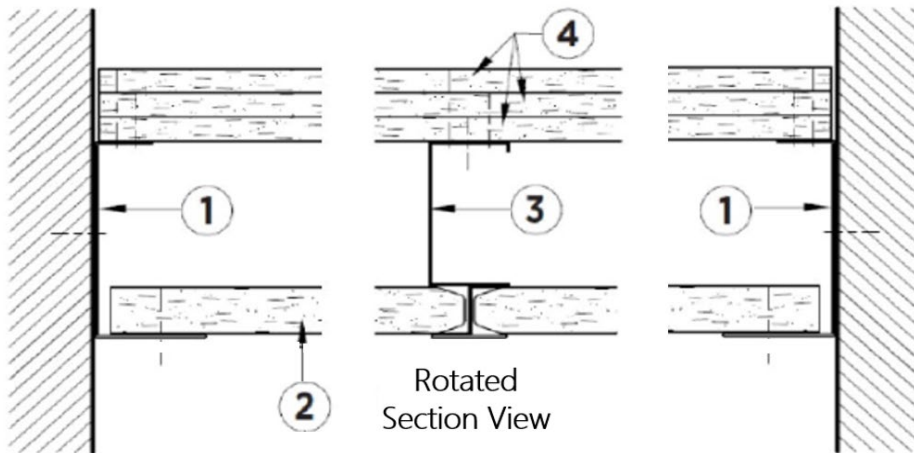
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**USG Corporation**  
**Design No. USG/GBSWA 120-01**  
**Horizontal Shaftwall**  
**USG/CGC Shaftwall System**  
**CAN/ULC-S101, ASTM E119**  
**Rating: 2-Hour Unrestrained, Non-Loadbearing**

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OR





**1. J-RUNNER: CGC/USG J-runners**

Min. 64 mm (2-1/2 in.) deep, 24 GA J-runners attached to the perimeter or boundary wall with appropriate fasteners spaced max. 24 in. on center (oc). Connection of the C-H stud to the J-runner, and connection of the J-runner to the structure, shall be capable of carrying the weight of the assembly and shall be verified by a registered design professional. The supporting structure shall have a fire-resistance rating as required for the building construction.

**2. GYPSUM LINER PANEL: Sheetrock® Brand Liner Panels (UL Type SLX)**

Friction-fitted in the H-section of C-H studs and screw attached to the 51 mm (2 in.) leg of the J-runner with 41 mm (1-5/8 in.) Type S screws, spaced 305 mm (12 in.) oc or with an approved alternative securement method.

**3. C-H STUD: CGC/USG C-H Stud**

Install the C-H studs perpendicular to the J-runners, spaced 610 mm (24 in.) oc, with two #8 - 12.7 mm (1/2 in.) long Type S-12 screws, one on each end. A 64 mm (2-1/2 in.) wide, 30 GA flat steel strap is attached perpendicular, and at the mid-span to the H-section of the C-H stud on the shaft side with 12.7 mm (1/2 in.) long Type S-12 screws, one at each C-H stud and one screw to the 51 mm (2 in.) long leg of J-runner at each end.

Max. Spans for 2-Hour Horizontal Membrane	
Three Layers of 12.7 mm (1/2 in.) Gypsum Panels	Max. Span
212CH-18	1532 mm (5 ft. – 4 in.)
212CH-34	1841 mm (6 ft. – 6 in.)
400CH-18	2140 mm (7 ft. – 3 in.)
400CH-34	2752 mm (9 ft. – 4 in.)
600CH-34	3965 mm (13 ft. – 1 in.)

**4. GYPSUM PANELS: CGC/USG Sheetrock® Brand Firecode® C Panels (UL Type C)**

Install three layers of 12.7 mm (1/2 in.) gypsum panels, UL Type C, to the C-section side of the assembly. The base layer is attached parallel to the C-H studs with 25 mm (1 in.) long Type S screws spaced 610 mm (24 in.) oc. The second layer is attached parallel to the C-H studs with 41 mm (1-5/8 in.) long Type S screws spaced 305 mm (12 in.) oc, with all the joints staggered 610 mm (24 in.) oc from the base layer. The face layer is applied perpendicular to the C-H studs and attached with 50 mm (2 in.) long Type S screws spaced 305 mm (12 in.) oc, starting 25 mm (1 in.) and 150 mm (6 in.) from the edge, with the butt joints located mid-span between the C-H studs, and attached with 57 mm (1-1/2 in.) long Type G screws spaced 178 mm (8 in.) oc and spaced 76 mm (3 in.) on each side of butt joint. Butt joints in the face layer shall be staggered a min. of 610 mm (24 in.). See Item 4 in Figure 2.

For more details on construction methods, including fasteners, the CGC/USG installation instructions shall be followed.



*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.*