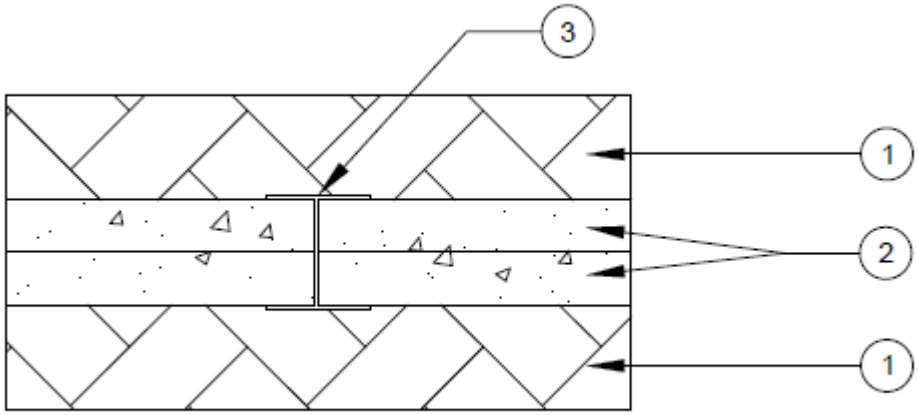
Georgia-Pacific Gypsum, LLC
Design No. GP/GBA 180-02
Non-Load Bearing Wall Assemby
ToughRock® Shaftliner and DensGlass® Shaftliner
ASTM E119 (2015)
Rating: 3 Hour



1. **MINERAL FIBER:** Min. 2 in. thick mineral fiber, min. 3.0 pcf, applied on the outsides of the two shaftliner panels (Item 2).

2. **CERTIFIED MANUFACTURER:** Georgia-Pacific Gypsum, LLC

   CERTIFIED PRODUCT: 3 Hour, Non-Load Bearing Wall

   CERTIFIED MODEL: ToughRock® Shaftliner or DensGlass® Shaftliner

   SHAFTLINER: Two layers of 1 x 24 in. ToughRock® or DensGlass® Shaftliner panels are inserted in between the two mineral fiber layers (Item 1). The panels are inserted against the long leg of the 'J' or 'C' runners and into the 1 in. deep recess of the studs. The panels are attached to the vertical 'J' or 'C' runners using either 1-5/8 in. Type S, self-drilling, self-tapping bugle head steel screws spaced 24 in. on center (oc), or the tabs in the 'J' or 'C' runner (12 in. oc) are bent at a 90° angle.

3. **STEEL STUDS:** 'I' or 'H' shaped studs, 1-1/2 in. wide x 2 in. deep, fabricated from 25 MSG galvanized steel. Cut to length 3/4 in. less than the opening's height, and spaced 24 in. oc, and between 1 in. thick gypsum shaftliner panels. Steel studs to be supplied by others.

4. **FLOOR AND CEILING RUNNERS** (Not Shown)**:** 'J' or 'C' shaped runner with unequal legs and min. 1-1/2 in. wide x 2 in. depth, fabricated from 25 MSG galvanized steel. Position runners with short leg towards the finished side of the wall. Runners attached to structural members with steel fasteners located not greater than 24 in. oc. Floor and ceiling runners to be supplied by others.

5. **STAPLES** (Not Shown)**:** The mineral fiber is stapled to the shaftliner panels.