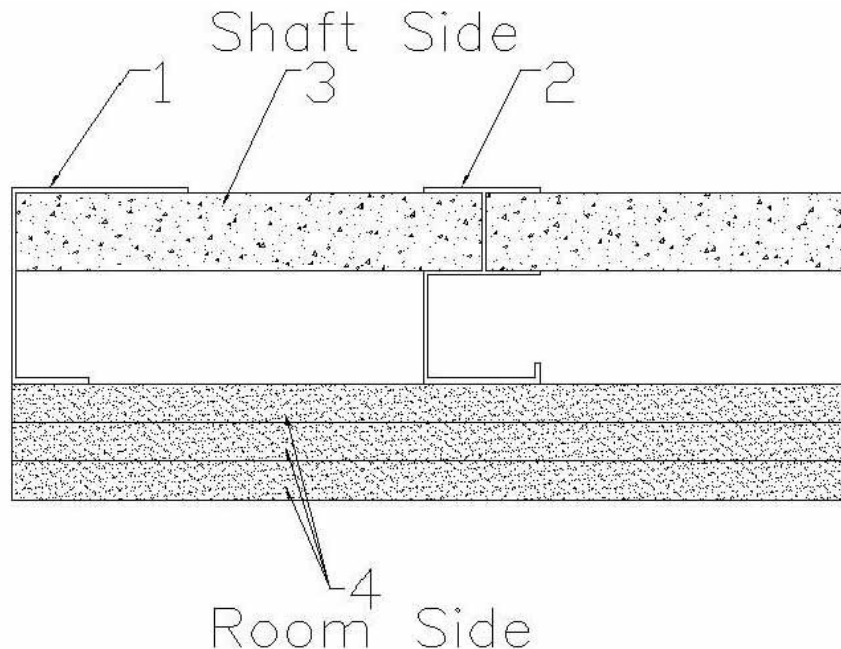

Georgia-Pacific Gypsum, LLC
Design No. GP/GBA 180-01
Non-Load Bearing Wall Assembly
ToughRock Fireguard® Shaftliner and DensGlass® Ultra Shaftliner
ASTM E119 (2008)
Rating: 3 Hour



CERTIFIED MANUFACTURER: Georgia-Pacific Gypsum, LLC.

CERTIFIED PRODUCT: 3 Hour, Non-Load Bearing Wall

Certified product is a wall assembly consisting of 5/8 in., Type X gypsum wallboard, steel studs, and a 1 in. gypsum shaftliner.

- 1. FLOOR AND CEILING RUNNERS (Not Shown):** 'J' shaped runner with unequal legs and 2-1/2 in. min. 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.

- 2. STEEL STUDS:** 'C-T', 'C-H', 'I' shaped studs, 1-1/2 in. wide x 2-1/2 in. deep, fabricated from 25 MSG galvanized steel. Cut to length 3/4 in. less than the openings height and spaced 24 in. oc, and between 1 in. thick gypsum shaftliner panels. Steel studs to be supplied by others.

- 3. GYPSUM SHAFTLINER:** 1 in. thick ToughRock Fireguard® Shaftliner or 1 in. DensGlass Ultra Shaftliner, Type X panels, supplied in nominal 24 in. widths. The panels are inserted against the long leg of the 'J' runners and into the 1 in. deep recess of the studs. The panels are attached to the vertical 'J' runners using either 1-5/8 in. Type S, self-drilling, self-tapping bugle head steel screws spaced 24 in. oc, or the tabs in the 'J' runner (12 in. oc) are bent at 90° angle.

4. **GYPSUM BOARD:** 5/8 in. thick, 4 ft. 0 in. wide GP Gypsum Corp. ToughRock® Fireguard C™ or DensArmor Plus® Fireguard C™ applied in three layers on the cavity side. The base layer is applied horizontally to the studs with 1 in. Type S, self-drilling, self-tapping bugle head steel screws, spaced 24 in. oc. The second layer is applied horizontally with the horizontal joints offset 24 in. from the studs. Vertical butt joints are staggered between succeeding courses. The second layer is secured with 1-5/8 in. Type S, self-drilling, self-tapping bugle head steel screws 16 in. oc to stud framing, and with 1-1/2 in.

Type G, #10 laminating screws 16 in. oc, and spaced 2 in. from any vertical butt joints. The face layer is applied vertically to the studs with 2-1/4 in. Type S, self-drilling, self-tapping bugle head steel screws 12 in. oc. Any horizontal butt joints in the face layer are staggered 24 in. between adjoining panels. At horizontal butt joints, 1-1/2 in. Type G, laminating screws are driven 12 in. oc at 2 in. from both sides of joint. The face layer joints are covered with paper tape and joint compound. Exposed screw heads are covered with joint compound.