

## Design No. W301

August 19, 2020

**Bearing Wall Rating — 3/4 Hr. (See Item 1)**

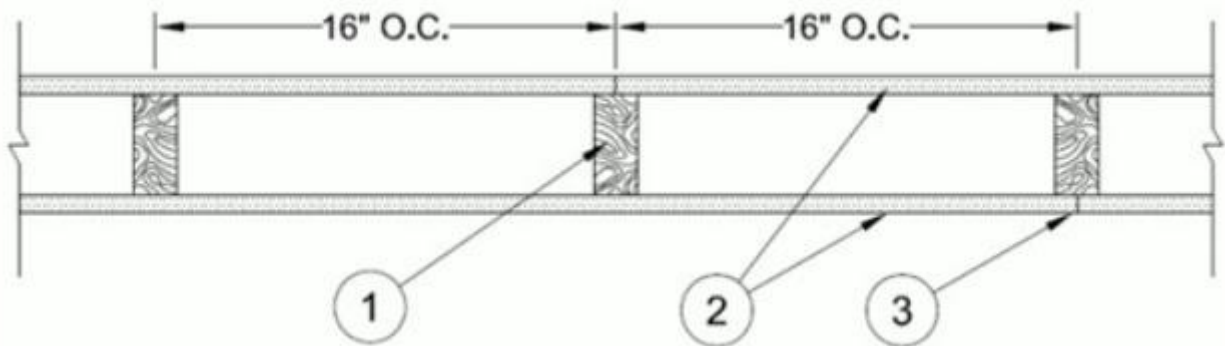
**Nonbearing Wall Rating - 3/4 Hr. (See Item 1)**

**Finish Rating — 19 min.**

**For Bearing Wall, Loaded Per 2012 NDS Supplement, ASD Method, Wall Braced at Mid-Height.**

**This design was evaluated using a load design method other than the Limit States Design Method (e.g., Working Stress Design Method). For jurisdictions employing the Limit States Design Method, such as Canada, a load restriction factor shall be used — See Guide [BXUV](#) or [BXUV7](#)**

**\* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.**



1. **Wood Studs** — Nom 2 by 4 in. spaced 16 in. OC max, effectively firestopped. For bearing walls, horizontal bracing at 5 ft OC max is required and constructed of same studs. For non-bearing walls, horizontal bracing is not required unless wall height exceeds 10 ft, then required at 10 ft OC max and constructed of same studs.

2. **Gypsum Board\*** — 1/2 in. thick with beveled, square or tapered edges, applied either horizontally or vertically. Horizontal joints need not be backed by framing. Horizontal edge joints and horizontal butt joints on opposite sides of studs need not be staggered. Secured to wood studs and plates with 1-3/8 in. long phosphate coated cupped drywall nails spaced 8 in. OC at the perimeter and in the field.

When Item 5, Furring Channels are used, gypsum panels applied vertically. Panels screw-attached to furring channels with 1 in. long, self-drilling, self-tapping Type S or S-12 steel screws spaced 8 in. OC, vertical joints located midway between studs.

**NATIONAL GYPSUM CO** — Type FS45

3. **Joint Tape and Compound** — Vinyl or casein, dry or premixed joint compound applied in two coats to joints and screw heads of outer layers. Paper tape, nom 2 in. wide, embedded in first layer of compound over all joints of outer layer panels. Paper tape and joint compound may be omitted when gypsum panels are supplied with a square edge.

4. **Batts and Blankets\*** — (Optional, not shown) — Glass fiber or mineral wool insulation. Placed to completely or partially fill the stud cavities. See Batts and Blankets (BKNV or BZJZ) Categories for names of Classified companies.

5. **Furring Channel** — (Optional, not shown) — Resilient channels, 25 MSG galv steel, spaced vertically max 16 in. OC, flange portion screw attached to one or both sides of studs with 1-1/4 in. long diamond shaped point, double lead Phillips head steel screws.

5A. **Steel Framing Members\*** — (Optional, Not Shown) — Used as an alternate method to attach resilient channels to wall studs. A resilient sound isolation accessory shall be used at each attachment point of the resilient channels and spaced max 24 in. O.C. Channel ends butted and centered under the structural members and attached with one accessory at each end. Additional accessories used to hold resilient channels that support the gypsum board end joints. The accessory envelops the mounting edge of the resilient channel. The accessory and resilient channel are fastened to the structural members with the screws supplied with the accessory and per the accessory manufacturer's installation instructions.

**PAC INTERNATIONAL L L C** — Type RC-1 Boost

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[Last Updated](#) on 2020-08-19