



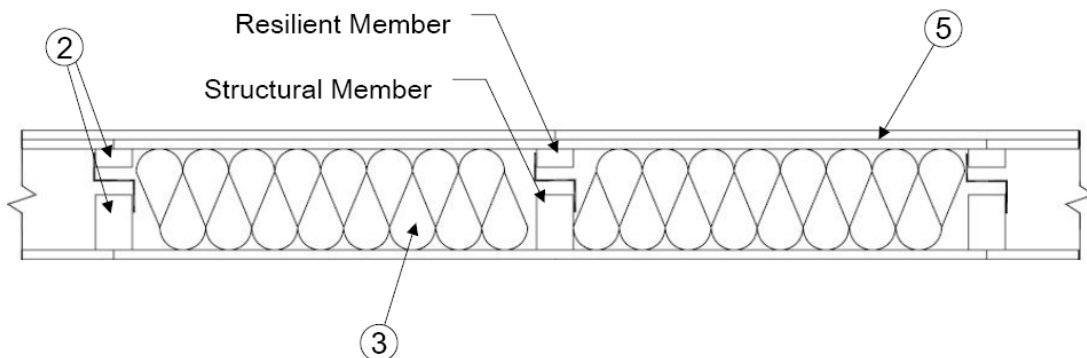
**Underwriters'
Laboratories of Canada®**

BXUVC.W511

Fire Resistance Ratings

Fire Resistance Ratings

Design No. W511
September 24, 2004
Assembly Rating - 1 h



Horizontal Sections Bearing Wall

1. **Floor and Ceiling Plates** — (not shown) - Two 38 by 89 mm, when using 38 by 89 mm studs (Item 2) or two 38 by 140 mm when using 38 by 140 mm studs (Item 2), placed at the top of the wall and one, respectively, placed at the bottom of the wall. Structure to be effectively fire stopped at top and bottom of wall.
2. **Structural Components** — (Guide No. 40 U18.20C)(CIZTC). Pre-fabricated engineered lumber structural and acoustical studs, designated QuietZone™ Acoustic Wall Framing, consisting of a structural member and resilient member attached together with clips. Minimum 38 by 89 mm or 38 by 140 mm studs spaced 406 mm OC or 610 mm OC.

OWENS CORNING

3. **Batts and Blankets** - — (Guide 40 U18.2)(BZJZC). Glass fiber insulation, designated QuietZone™ Acoustic Batt, minimum 89 mm thick for 38 by 89 mm construction and minimum 140 mm thick for 38 by 140 mm construction, secured to the studs, on either structural member or resilient member, with staples spaced 305 mm OC when faced batts are used. When unfaced batts are used, insulation is to be friction fit into the wall cavity. Minimum density of 7.2 kg/m³, 380 mm wide insulation to be used when studs (Item 2) are spaced 406 mm OC and 584 mm wide insulation to be used when studs (Item 2) are spaced 610 mm OC.

OWENS CORNING

4. **Caulking and Sealants** — (optional) (not shown) — Caulking is optional for fire resistance, but is required for acoustical performance. A bead of acoustical sealant applied along the top and bottom plates of the wall, on resilient member side, before gypsum wallboard (Item 5) attachment. Caulking is to fill 3.2 mm gap between top and bottom plates (Item 1) and resilient member on the resilient member side of the wall.

5. **Gypsum Wallboard** — (Guide No. 40 U18.23)(CKNXC). For resilient member, two layers of nominal 16 mm thick boards, installed vertically or horizontally. For structural member, one layer of nominal 16 mm thick boards, installed vertically or horizontally. Gypsum board joints to be staggered and vertical joints to be backed by studs (Item 2). Base layer attached to resilient member using minimum 32 mm long Type S bugle-head screws and minimum 47.6 mm for the face layer. Screws for base layer and face layer to be spaced maximum of 203 mm OC along the perimeter of the board and in the field. Face layer of gypsum board joints to be staggered from base layer. Screws located a maximum of 38 mm from side joints and 12.7 mm from end joints for the base and face layers of gypsum board installed horizontally. Screws located 12.7 mm from side joints and a maximum of 38 mm from end joints for the base and face layers of gypsum board installed vertically. No screws to be located along the top and bottom plates on the resilient member side of the wall for either, the base or face layers of gypsum board. Maximum screw lengths of 32 mm long and 51 mm long when screwing into the resilient member side of the studs for the 38 by 89 mm and 38 by 140 mm studs, respectively. Single layer attached to the structural member using minimum 32 mm long Type S bugle-head screws. Screws for the single layer to be spaced maximum of 203 mm OC along the

perimeter of the board and in the field. For single layer of gypsum board, screws located a maximum of 38 mm from side joints when gypsum board installed horizontally and maximum of 38 mm from end joints when gypsum board installed vertically.

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**G-P GYPSUM CORP, SUB OF
GEORGIA-PACIFIC CORP**

5A. Gypsum Wallboard — (Guide No. 40 U18.23)(CKNXC). As an alternate to Item 5, two layers of nominal 12.7 mm thick boards, installed vertically or horizontally. Gypsum board joints to be staggered and base layer vertical joints of gypsum board to be backed by studs (item 2). Base layer attached to either the resilient member or structural member (item 2) using minimum 32 mm long Type S bugle-head screws and minimum 47.6 mm long for the face layer. Screws for the base and face layer to be spaced a maximum of 203 mm along the perimeter of the board and in the field. Face layer of gypsum board joints to be staggered from base layer. Screws located a maximum of 38 mm from side joints and 12.7 mm from end joints for the base and face layers of gypsum board installed horizontally. Screws located 12.7 mm from side joints and a maximum of 38 mm from end joints for the base and face layers of gypsum board installed vertically. No screws to be located along the top and bottom plates on the resilient side of the wall for either, the base or face layers of gypsum board. Maximum screw lengths of 32 mm and 51 mm when screwing into the resilient member side of the studs for the 38 by 89 mm and 38 by 140 mm studs, respectively.

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6. Finishing System — (not shown) — Vinyl, dry or premixed joint compound, applied in two coats to joints and screw heads of face layer of gypsum wallboard; paper tape, 50 mm wide, embedded in first layer of compound over all joints. As an alternate, nominal 2.4 mm thick veneer plaster may be applied to the entire surface of the gypsum board.

