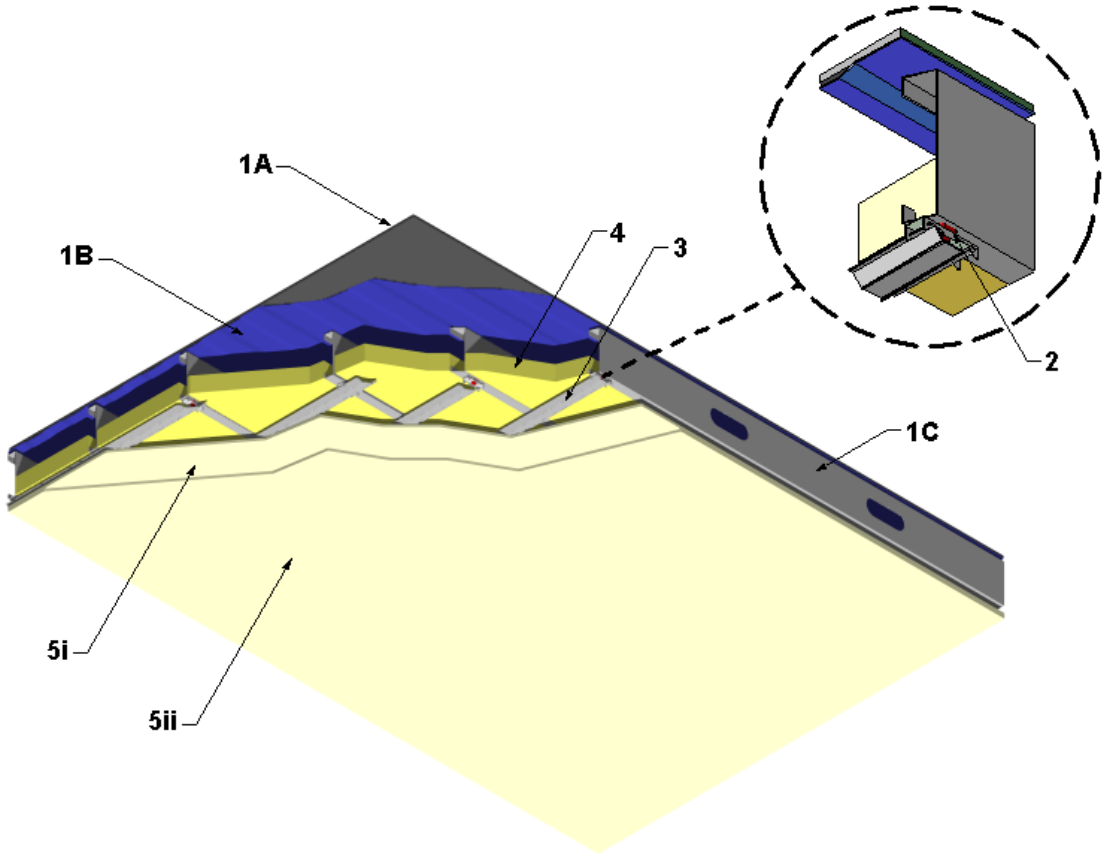
Studco Building Systems
Design Number SBS/MSVCC 90-01
Loadbearing Floor Ceiling Assembly
RESILMOUNT A237R WALL AND CEILING CLIP AND A237 WALL AND CEILING CLIP
ASTM E 119
Rating: 1-1/2 Hour Restrained, 1-1/2 Hour Unrestrained
Superimposed Load: 100% Design Load



1. **FLOOR-CEILING ASSEMBLY:** Construct 1-1/2 hour rated gypsum floor-ceiling assembly using the following elements:

   A. TOPPING: Install nominal 9/16 in. thick lightweight gypsum concrete topping (compressive strength 3500 – 4500 psi) applied to top of steel decking (Item 1B). Before applying the gypsum concrete topping, install floor underlayment primer (vinyl acetate adhesive) to cover the steel deck decking (Item 1B).

   B. STEEL DECKING: Install nominal 9/16 in. deep 22 MSG galvanized corrugated fluted steel deck, overlapped one corrugation at each side and attached to each steel joist (Item 1C) using 5/8 in. long No. 10-16 TEK screws at each side of the joint. Install screws spaced max. 12 in. on center (oc) down the length of the steel joist (Item 1C).

C. STEEL JOISTS: Install nominal 10 in. deep 16 gauge steel joists spaced max. 24 in. oc. Secure joists to 10 in. deep 16 gauge rim joist (not shown) using 6 in. angled tab. Secure joist to tab using three 3/4 in. No. 10 - 16 TEK screws. Secure a nominal 2 in. x 2 in. steel angle to top of the rim joist (Not Shown).

D. JOIST BRIDGING (Not Shown): Install 22 in. long x 2-1/3 in. wide (2 in. flange) 18 gauge structural blocking at the mid-span of the floor-ceiling assembly perpendicular to the steel joist (Item 1C). Install a continuous staggered row of blocking the full length of the floor-ceiling assembly.

2. **CERTIFIED COMPANY:**
Studco Building Systems

CERTIFIED PRODUCT: Sound and Vibration Control Equipment

MODEL: Resilmount A237R Wall and Ceiling Clip or A237 Wall and Ceiling Clip

Install clips with a max. spacing of 24 in. oc perpendicular to the furring (Item 3). Install clips a max. spacing of 48 in. oc parallel to the furring channels (Item 3). Secure clips to the underside of the steel joists (Item 1C) using a No. 8 x 1-5/8 in. zinc coated self-drilling screw through a 1 in. steel washer with 1/4 in. center hole. At all horizontal (short dimension) butt joints of the gypsum boards (Item 5), install clips a min. 3 in. on either side of the butt joints.

3. **FURRING:** Install 2-1/2 in. wide x 1 in. deep (1/2 in. leg) "hat shaped" channels perpendicular to steel joists (Item 1C). Secure "hat shaped" channels to Resilmount A237R Wall and Ceiling Clip or A237 Wall and Ceiling Clip (Item 2).

4. **INSULATION:** Install nominal 3-5/8 in. thick unfaced fiberglass insulation with a min. R Value of 13 when tested in accordance with ASTM C 518. Install insulation to fill the plenum cavity and draped over the furring (Item 3).

5. **GYPSUM BOARD:** Install two layers of 5/8 in. Type X gypsum board as described below. After gypsum board is attached as described below, apply vinyl or casein, dry or premixed joint compound to face layers of gypsum board in two coats to all exposed screw heads and gypsum board butt joints. Embed a min. 2 in. wide paper, plastic, or fiberglass tape in first layer of compound over butt joints of the gypsum board. Install gypsum board with the following specifications:

   i. BASE LAYER: Install base layer perpendicular to furring (Item 3) using No. 6 x 1-1/4 in. self- tapping zinc coated self-drilling screws, fastened to the furring channel (Item 3) spaced 8 in. oc on the perimeter and in the field.

   ii. FACE LAYER: Install face layer perpendicular to base layer using No. 6 x 1-7/8 in. zinc coated self-drilling screws spaced 8 in. oc in the perimeter and field.