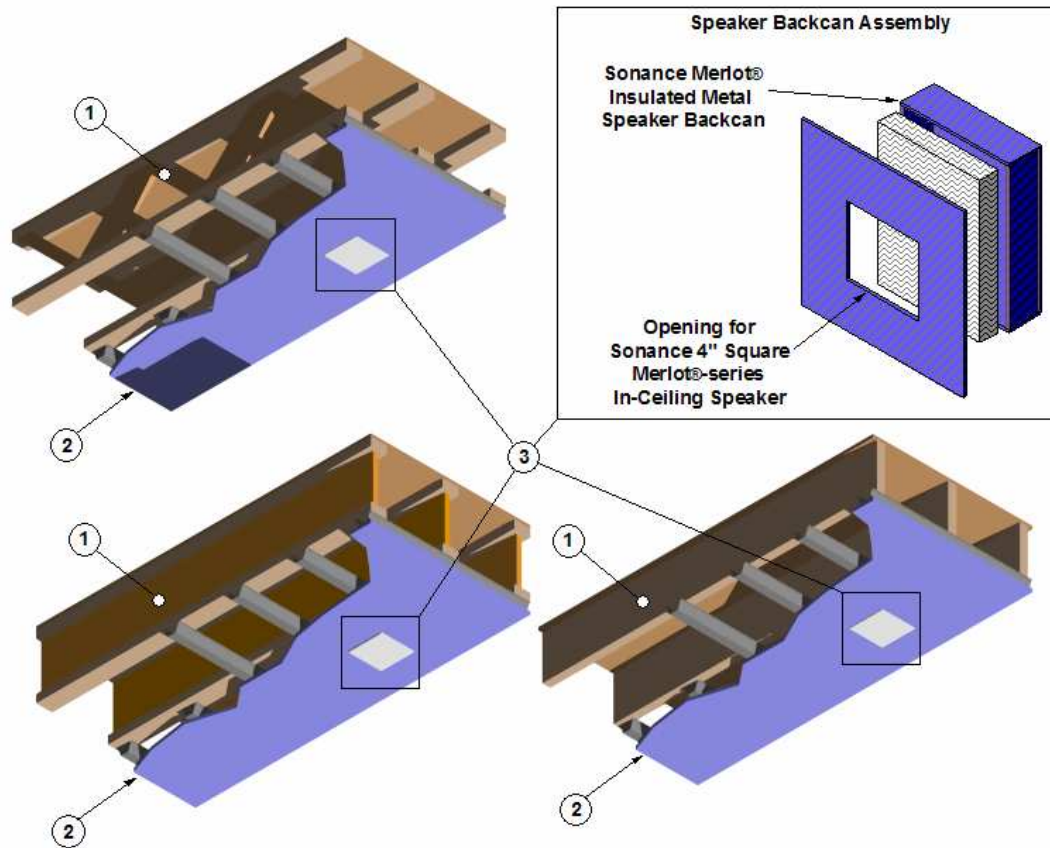

Design No. DII/PH 60-06
Penetration Fire Stops – ASTM E 814-06
T Rating – 1 hr.
F-Rating – 1 hr.



1. FLOOR/CEILING ASSEMBLY – Any one-hour fire-rated floor-ceiling assembly rated in accordance with ASTM E 119, UL 263, NFPA 251, CAN/ULC S 101 or complying with the following: Use nominal 2 x 10 SYP wood or steel, solid or open-web joists spaced 16 inches on center maximum. Subfloor/underlayment (Item 1): 19/32"-thick plywood with long edges T&G and 15/32" interior plywood underlayment with exterior glue subfloor perpendicular to joists with joints staggered from both adjacent subflooring and underlayment (or equivalent subfloor/underlayment) or 1" nominal wood sub and finished floor. Subfloor and underlayment fastened to joists in accordance with local building code.

NOTE: Cavity insulation is not required in this floor/ceiling assembly to achieve the 1-hr fire-resistance rating.

2. Gypsum Board Ceiling (Item 2): Cover underside of joists with one layer of minimum 5/8"-thick ASTM C 1396, Type X gypsum board (or equivalent). Apply gypsum board using minimum 6d, 1 7/8" long gypsum board nails spaced 6" on center maximum. Premixed joint compound applied to face layers of gypsum board in two coats to all exposed fastener heads and gypsum wallboard joints. A minimum 2 inch wide paper tape (or equivalent) is embedded in first layer of compound over joints in second layer of gypsum wallboard.

Penetration Firestop Systems

3. PENETRATING ITEM – In-ceiling insulated metal Speaker Backcan assembly (Item 3) consisting of a Sonance Merlot® (nominal 5⁵/₈" square opening) insulated metal Speaker Backcan (Part No. 92701), and a Sonance Merlot® 442MSQ 4" square footprint in-ceiling speaker (or equivalent speaker). Attach the Speaker Backcan to the horizontal ceiling joists at the desired location through the pre-drilled holes in the flange of the Speaker Backcan using a minimum of four (4) #8 x 1-1/4-inch long mechanical fasteners: one applied to each corner. Cut a hole in the gypsum board (item2) to match the opening in the Speaker Backcan. Apply the gypsum board (Item 2) over the Speaker Backcan so that the

hole is aligned with the Speaker Backcan opening. Install the Sonance Merlot® 442MSQ 4" square footprint in-ceiling speaker (or equivalent speaker).

NOTE: A speaker is not required in this assembly to achieve the 1-hr fire-resistance rating.

Reference the manufacturer's installation instructions for more details about the Sonance Merlot® insulated metal Speaker Backcan assembly and wiring.

Listed Manufacturer:

Sonance -- Merlot® (nominal 5⁵/₈" square opening) Insulated Metal Speaker Backcan