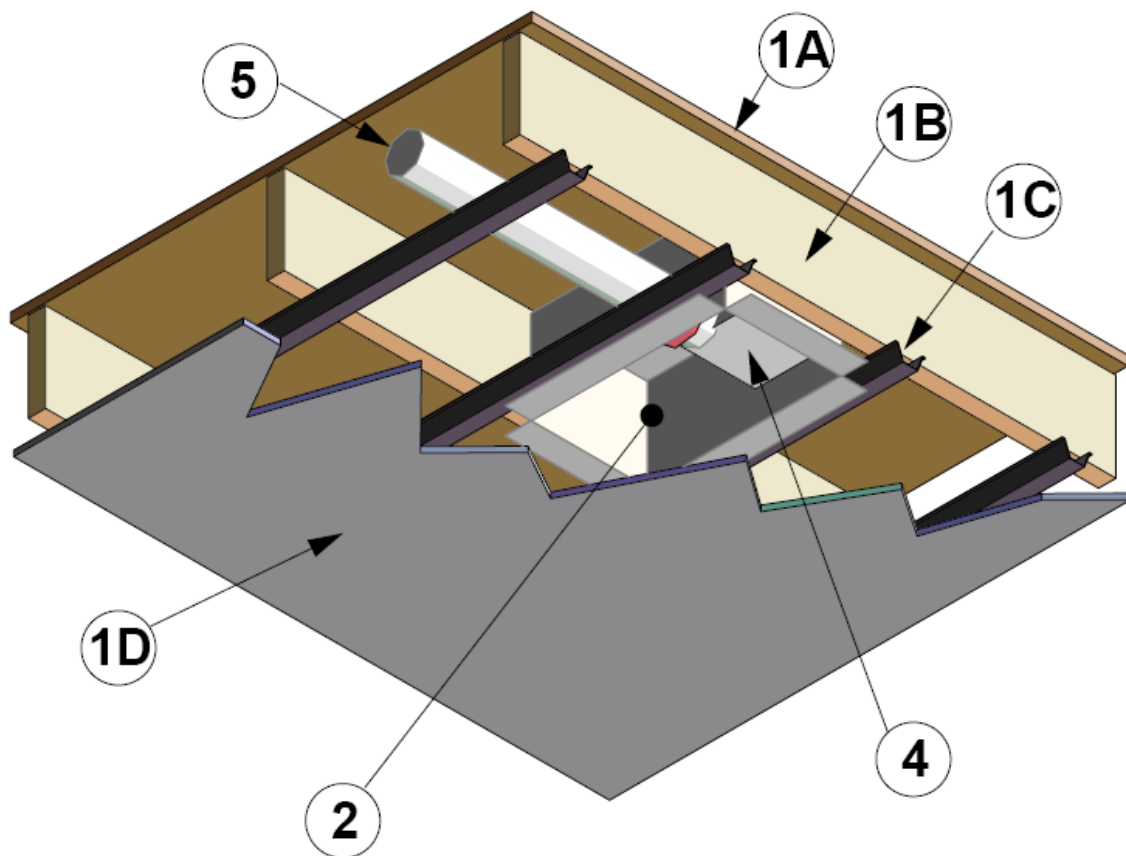

Fire Rated Product Specialties Corp
Design No. FRPS/FME 60-03
FRPS Fire Rated Enclosures:
FN-Z-12-20-9 and FN-Z-12-20-9-SEA FIRE RATED ENCLOSURES
FN-Z-12-20-9-EXH, FIRE RATED ENCLOSURE
FN-Z-14-14-3, FIRE RATED ENCLOSURE
ASTM E119 & CAN/ULC S101
Fire Resistance Rating: 1 Hour



1. FLOOR CEILING ASSEMBLY: Constructed in the manner as specified below:

- A. Plywood Subfloor: Nominal 23/32 in. thick interior grade plywood. Align long dimension of panels, or face grain of plywood, to be perpendicular to wood studs with joints staggered. Plywood is secured to top side of wood joist assembly (Item 1B) with 6d nails spaced max. 12 in. on center (oc).
- B. Wood Joists: Nominal 2 in. x 10 in. SYP lumber spaced a max. of 24 in. oc. Joists and resilient channels form a min.

12 in. deep cavity, from the underside of the subfloor (Item 1A) to the top side of the gypsum wallboard (Item 1D).

- C. Resilient Channels: Formed from nominal 26 GA galvanized steel, spaced 16 in. oc and applied perpendicular to the 2 in. x 10 in. SYP joists (Item 1B). Channels are secured to the trusses with 1-1/4 in. long steel coarse thread wood screws.
- D. Gypsum Wallboard: One layer of nominal 5/8 in. Type-C gypsum wallboard is secured to the underside of

the resilient channels (Item 1C) applied parallel with the wood joists (Item 1B) and perpendicular to resilient channels (Item 1C) in the long dimension of the gypsum wallboard. Secured with 1-1/4 in. long gypsum wallboard screws spaced max. 8 in. around the perimeter and max. 12 in. in the field. Apply vinyl or casein, dry or premixed joint compound to face layers of gypsum wallboard in two coats to all exposed fastener heads and gypsum wallboard joints. A min. 2 in. wide paper, plastic, or fiberglass tape is embedded in first layer of compound over joints in gypsum wallboard.

2. CERTIFIED MANUFACTURER: Fire Rated Product Specialties Corp

CERTIFIED PRODUCT: Formed Metal Fabrications

MODEL: FRPS Fire Rated Enclosures: FN-Z-12-20-9, FN-Z-12-20-9-SEA, FN-Z-12-20-9-EXH, and FN-Z-14-14-3

RECESSED EXHAUST FAN COVER: Constructed of nominal 22 GA galvanized steel. Position the box inverted and recessed into the floor/ceiling cavity. Secure the flanges of the box to the underside of the truss assembly (Item 1B) with No. 6, 1-1/4 in. long bugle head screws (min. of three screws per flange) spaced at predrilled locations on the flanges. The boxes may be installed in the floor/ceiling with the following provisions:

- Max. 1 recessed cover within 104 square foot area

3. INTUMESCENT MAT (Not shown): One layer of 3M Interam I-10 Mat, lining the interior surface area of the recessed exhaust fan cover. Attach mat material using the pre-punched tabs in accordance with manufacturer's instructions. If tabs are not available, attach mat using No. 10, 1/2 in. hex head self-drilling screws and fender washers per manufacturer's installation instructions.

4. RECESSED EXHAUST FAN: Bathroom exhaust fan/light combination fixture installed in accordance with manufacturer's instructions.

5. EXHAUST DUCT: Nominal 3 or 4 in. diameter metal exhaust pipe connected to recessed exhaust fan cover (Item 4) with a min. of four 1/4 in. x 2 in. long steel screws.

6. SLEEVE EXTENSION (Not shown): 3 or 4 in. diameter PVC pipe fitted concentrically with the exhaust duct (Item 5) and extending from the recessed exhaust fan cover (Item 2) to the recessed exhaust fan (Item 4). Nominal PVC pipe diameter must be the same as exhaust duct. When firestop device (Item 7) is installed external to the recessed exhaust fan cover, size PVC pipe such that it extends beyond the firestop device.

7. FIRESTOP DEVICE (Not shown): 3M Fire Barrier Ultra PPD 3.0 or 4.0 R-9269 Plastic Pipe Device, nominal 3 or 4 in. diameter, with three or four layers of intumescent mat material 1/8 in. thickness. Firestop device is fitted concentrically over sleeve extension (Item 6). Nominal PPD diameter must match that of the sleeve extension (Item 6) and exhaust duct (Item 5). Attach device inside the recessed exhaust fan cover in accordance with manufacturer's instructions. When installed outside of the recessed exhaust fan cover (Item 2), ensure that the sleeve extension (Item 6) extends beyond the firestop device.

8. FIRESTOP SEAL (Not shown): Apply a bead of 3M Fire Barrier CP-25WB+ sealant (Listed with Intertek) around annular space at the penetration through the floor/ceiling assembly.