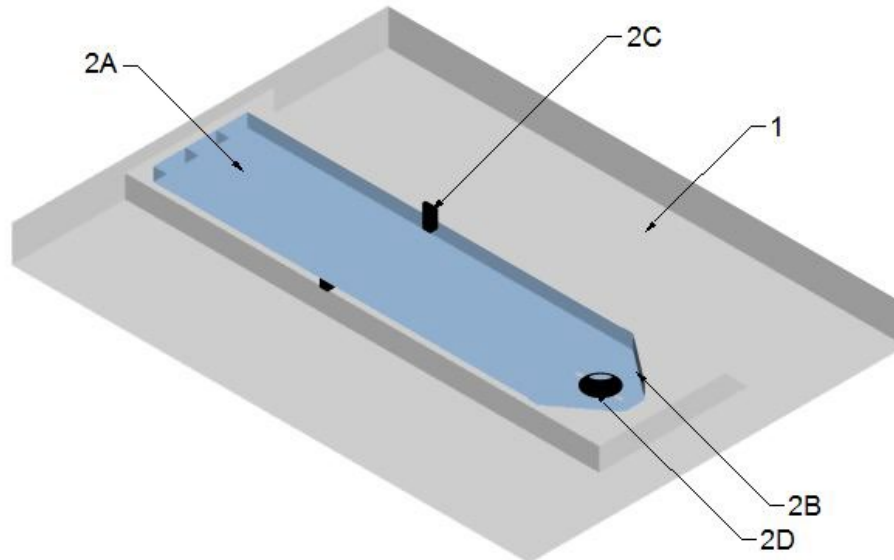


**560005 Alberta Ltd.**  
**Design No. 5AL/MD 240-01**  
**Air Ducts**  
**In-Slab Ventilation Duct System**  
**ASTM E814**  
**CAN/ULC S115**  
**Ratings:**

Assembly	F-Rating	T-Rating	H-Rating
4 in. Inlet Boot (No Intumescent pad – See Item 2D)	4 Hour	168 Minutes	0
6 in. Inlet Boot (with Intumescent pad – See Item 2D)	4 Hour	4 Hour	0
8 in. Inlet Boot (with Intumescent pad –See Item 2D)	4 Hour	168 Minutes	0



- 1. FLOOR CEILING ASSEMBLY:** Construct 8 in. thick, 4 hour fire-rated concrete floor assembly made from either lightweight or normal weight concrete with a nominal density of 100-150 pcf and 3000 psi compressive strength.
- 2. DUCT SYSTEM:** Install in-slab duct system embedded in the floor ceiling assembly (Item 1) containing the following elements:
  - A. REINFORCED SLAB DUCT** – Use nominal 12 in. wide x 36 in. long x 1-3/4 in. high, nominal 26 GA galvanized steel duct with reinforcement channel welded using a spiral wound lockseam.
  - B. INLET BOOT** – Attach nominal 26 GA, 1-7/8 in. high x 12-1/8 in. wide x 3-3/8 in. triangular shaped boot with nominal 4 in., 6 in., or 8 in. hole in the bottom side.



- C. PLASTIC DUCT SUPPORTS – Use nominal 4-3/4 in. tall HP8250 polystyrene support with dual sized 3-1/4 in. and 2-1/8 in. ledges to support reinforced duct slab, spaced max. 5 ft. on center (oc) the length of the duct.
- D. INTUMESCENT PAD (Not required for 4 in. diameter inlet) – Install nominal 6 in.

Microtherm Inc. (US) Intumex LXSK Sap 50239 2.0 mm thick intumescent pad, and secure pad tabs to underside of floor ceiling assembly (Item 1) using masonry screws, one per tab. For the 8 in. inlet boot, install the pad internally within the boot on the opposite side facing the 8 in. inlet. The pad must extend across the face of the boot adjacent to the in-slab duct opposite the 8 in. inlet.

*Consult the listing report on the Directory of Building Products (<https://bpdirectory.intertek.com>) for the edition of the standard(s) evaluated.*

*Compliance of the assembly described in this Design Listing with the referenced standard relies on verification that the assembly constructed in the field is consistent with that described herein. Intertek certified products may be verified by the approved Intertek label; other products must be verified by the Authority Having Jurisdiction as meeting the specifications stated herein.*