**Specified Technologies, Inc.**
**Design No. STI/BPF 120-29**
**Perimeter Fire Barrier System**
**SpecSeal® Window Wall Gasket, SpecSeal® SIL300 Silicone Sealant**
**ASTM E2307, CAN/ULC-S115**
**Rating: F-Rating – 2 hr., T-Rating – 1 hr.**

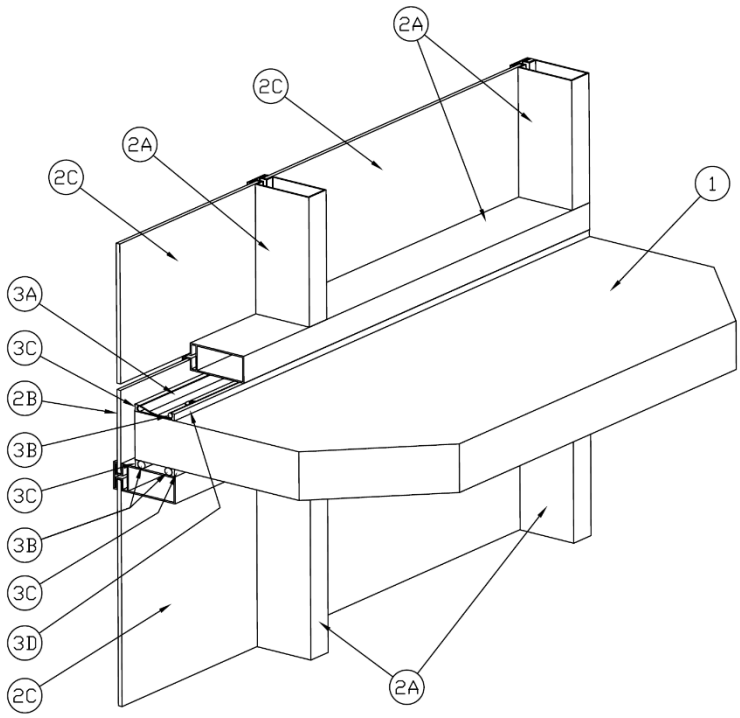


Figure 1 - Isometric

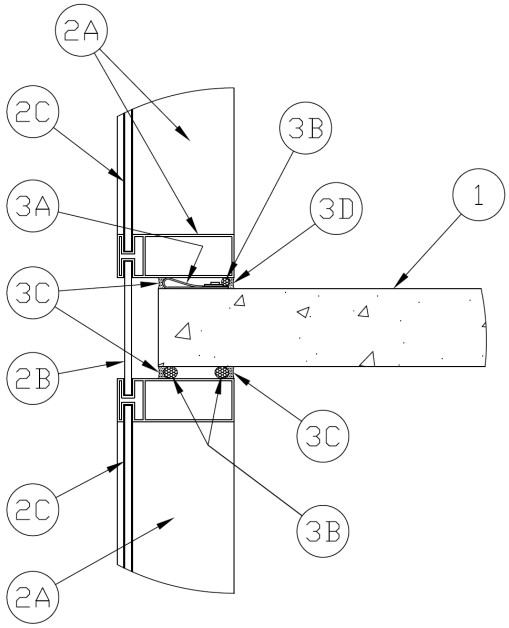


Figure 2 - Base Detail

1. **CONCRETE FLOOR ASSEMBLY:** Minimum 1-hr rated concrete floor assembly made from either lightweight or normal weight concrete with a density of 100-150 pcf, with a minimum thickness of 4-1/2 in. (114 mm) at the joint face. F-rating will be determined by the rating of the concrete floor assembly system up to a maximum 2-hr F-rating. For concrete floor assemblies with a rating of less than 2 hours, T-Rating shall be 0.

2. **WINDOW WALL ASSEMBLY:** The window wall assembly shall incorporate the following construction features:

   A. ALUMINUM FRAMING: Size rectangular aluminum tubing mullions and transoms, according to the window wall system manufacturer's guidelines. The one or two-piece framing members shall have minimum overall dimensions of 2-1/2 in. (64 mm) wide by 6 in. (152 mm) deep and shall be formed from min. 0.100 in. (2.5

mm) thick aluminum. Mullion and Transom covers are added to the external side of the framing, giving the framing system a total depth of nominal 6-3/4 in. (171 mm). Mullions spaced minimum 60 in. (1.52 m) on center (oc) and positioned above and below the floor so that the exterior of the framing extends a maximum 2-3/4 in. past the edge of the floor assembly. The framing is to be installed with a construction gap above the floor of maximum 5/8 in. (16 mm), and below the floor of maximum 11/16 in. (18 mm). Anchor the aluminum framing to the concrete floor assembly (Item 1) according to the window wall manufacturer's instructions.

B. EXTERIOR SPANDREL CLADDING: (Optional) Install glazing or an exterior cladding system that complies with applicable building code and regulatory requirements. Install in accordance with the exterior curtain wall assembly manufacturer's instructions and the design specifications. Glazing panels or other specified cladding may be secured in position with aluminum pressure plates in conjunction with glazing gaskets and steel screws or with structural silicone installed in accordance with the manufacturer's instructions.

C. VISION PANELS: Nominal 1/4 in. (6 mm) thick transparent heat-strengthened glass or nominal 1 in. (25 mm) thick insulated glass units with two layers of nominal 1/4 in. (6 mm) thick transparent heat-strengthened glass separated by a 1/2 in. (13 mm) air space. Each panel secured in position with aluminum pressure plates in conjunction with glazing gaskets and steel screws or with silicone structural glazing.

**3. CONSTRUCTION GAP SEAL:** Maximum separation between top of concrete floor assembly (Item 1) and underside of the transom is 5/8 in. (16 mm). Maximum separation between the underside of the concrete floor assembly (Item 1) and the transom is 11/16 in. (18 mm). The seal system shall incorporate the following construction features:

A. **CERTIFIED MANUFACTURER:** Specified Technologies, Inc.

**CERTIFIED PRODUCT:** Intumescent Wrap Strip

**CERTIFIED MODEL:** SpecSeal® Window Wall Gasket

INTUMESCENT GASKET: Nominal 1/8 in. (3 mm) thick and 8 in. (203 mm) wide intumescent gasket is positioned so that the gasket is doubled over and the leading edge of the folded gasket does not extend past the edge of the slab. The folded intumescent gasket is secured to the concrete floor assembly (Item 1) with nominal 1-1/4 in. (32 mm), 1/4 in. (6 mm) diameter concrete screws and fender washer spaced 12 in. (305 mm) oc. Alternatively, the intumescent gasket can be applied to the underside of the transom above the concrete floor assembly (Item 1), in the same folded configuration, with self-tapping screws and fender washers on 12 in. centers. Install with seams from adjacent sections of gasket tightly butted.

B. CLOSED-CELL BACKER ROD: Install appropriately sized closed cell backer rod into the gap space on the interior side of the wall (required), and exterior side of the wall (optional), both above and below the

concrete floor assembly (Item 1). Recess the backer rod to receive weather seal sealant (Item 3C) when used, and Interior Fire Seal (Item 3D).

C. EXTERIOR WEATHER SEAL: (Optional, for weather resistant purposes) – Install exterior grade silicone sealant as required by design to resist weather intrusion. Install sealant over closed cell backer rod (Item 3B) above and/or below the concrete floor assembly (Item 1) so that the sealant is flush with the front edge of the concrete floor assembly (Item 1). Tool the sealant with a concave surface facing the exterior.

D. **CERTIFIED MANUFACTURER:** Specified Technologies, Inc.

**CERTIFIED PRODUCT:** Sealant

**CERTIFIED MODEL:** SpecSeal® SIL300 Silicone Sealant

INTERIOR FIRE SEAL: Install silicone sealant over the closed cell backer rod (Item 3B) to a minimum 1/2 in. depth, so that the sealant is flush with the interior of the wall framing. Install the sealant between the intumescent gasket (Item 3A) and the transom above the concrete floor assembly (Item 1). Tool the sealant with a concave surface facing the interior.

*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.*