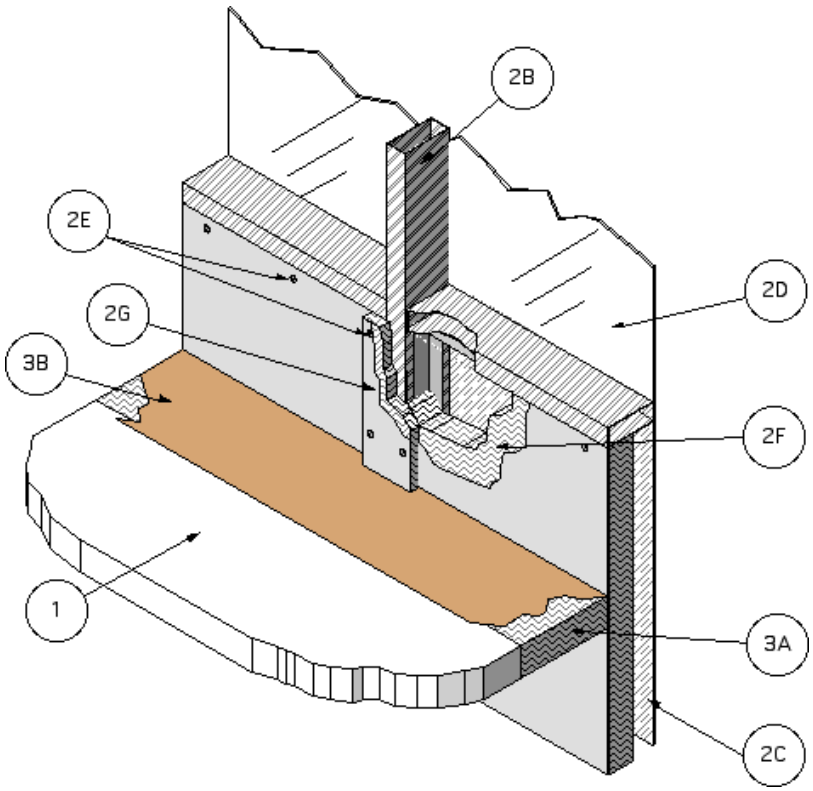
Specified Technologies, Inc.
Design No. STI/BPF 150-03
Perimeter Fire Barrier System
SpecSeal® AS Elastomeric Spray
ASM E2307, CAN/ULC-S115
Ratings: F-Rating – 2-1/2 Hour, T-Rating – 2-1/2 Hour
UL 2079 Air Leakage
L-Rating <1 SCFM/LF
Rated for ± 0% Movement



1. **CONCRETE FLOOR ASSEMBLY:** Lightweight or normal weight 4 in. thick (min.) reinforced concrete slab (100-150 pcf).

2. **CURTAIN WALL ASSEMBLY:** The curtain wall assembly shall incorporate the following construction features:

A. MOUNTING ATTACHMENT (Not shown) Attachment of the curtain wall framing to the structural framing is required at each floor. The mounting attachments to the floor slab shall be either to the top surface of the floor slab or the joint face of the floor slab, according to the curtainwall manufacturer's instructions. The distance between mounting attachments shall be a

min. 60 in. o.c. The mounting attachments shall be a min. 1/4 in. thick steel.

B. Aluminum Framing: Rectangular aluminum tubing mullions and transoms, sized according to the curtain wall system manufacturer's guidelines. Min. overall dimensions of framing required is 0.100 in. thick aluminum with a min. 6-1/2 in. height and a min. of 2-1/2 in. width of the extrusion. Mullions are to be spaced a min. 60 in. o.c. and transoms are to bespaced a min. 72 in. o.c. Transoms are to be located at a height of 33 in. above the top surface of the concrete floor assembly (as measured from the bottom of the transom).

C. Glass Spandrel Panels: Glass spandrel panels shall be installed to curtain wall framing according to the curtain wall system manufacturer's guidelines. Use a min. 1/4 in. thick, clear tempered glass with a max. width of 59 in. and height of 71 in. Panels are secured with a thermal break (rubber extrusion), pressure bar (aluminum extrusion), 1/4-20 x 5/8 in. long screws, and a snap face (aluminum extrusion). The spandrel panels shall be insulated according to 2F.

D. Glass Vision Panels: Glass vision panels shall be at least 35-1/2 in. above the top surface of the floor assembly and installed to curtain wall framing according to the curtain wall system manufacturer's guidelines. Same min. requirements as in 2C.

E. Impaling Pins: When pins are used instead of screws, they shall be located in the same manner as the screws in 2F, sized and installed according to the curtain wall system manufacturer's guidelines, or be a min. 4-1/2 in. long, 12 GA steel pin attached to a nom. 2 in. by 2 in. galvanized sheet steel plate, a nom. 2 by 2 by 2 in. long angle, or directly attached to steel panel using a stud gun. Pins shall be spaced a max. of 12 in. o.c. and installed around the periphery (min.) so that the interior face of the curtain wall insulation is flush with the interior face of the framing.

F. **CERTIFIED PRODUCT:** Thermafiber® Firespan® 90

Curtain Wall Insulation: All spandrel panels shall be insulated with a min. 2 in. thick, 8 pcf, mineral wool batt insulation faced on one side with aluminum foil scrim (vapor retarder) which is exposed to the room interior. They are fitted tightly between vertical framing members, secured with screws placed a max. 8 in. o.c. attached to a min. 16 GA angle around the entire perimeter of each batt. The vertical 16 GA angles are attached to the mullions with screws. The horizontal angles are placed back to back to form a "T". The interior face of the batts is flush with the interior face of the curtain wall framing. A min. 3-1/4 in. air space is created between the glass and the insulation. The 36 in. wide batts shall be installed without vertical seams, spanning the full length between the vertical curtain wall framing members. Batt insulation shall fill the steel stud cavity. Horizontal seams in the insulation are to be at least 6 in. from the top surface of the perimeter joint treatment.

G. **CERTIFIED PRODUCT:** Thermafiber® Firespan® 90

Framing Covers: Strips made of 1 in. thick by 4 in. wide, 8 pcf, mineral wool batt insulation faced on one side with aluminum

foil scrim (vapor retarder) which is exposed to the room interior. Framing covers are centered over each vertical framing member and secured to the member with impaling pins and clips spaced at least 12 in. o.c. Framing covers do not pass through the perimeter joint treatment. They are butted to the top and bottom surfaces of the perimeter joint treatment.

3. **PERIMETER JOINT PROTECTION:** The perimeter joint (linear opening) shall not exceed an 8 in. nom. joint width (joint width at installation) and the perimeter joint treatment shall incorporate the following construction features:

   A. **CERTIFIED PRODUCT:** Thermafiber® Firespan® 90

   PACKING MATERIAL – Use a min. 4 in. thick, 8 pcf density, mineral wool batt insulation. The total width of mineral wool batt insulation shall be 1.25 times the nom. joint width. Compress the batt insulation into the perimeter joint such that the top surface of the batt insulation is flush with the top surface of the concrete floor slab. Splices (butt joints) in the lengths of mineral wool batt insulation are to be tightly compressed together.

   B. **CERTIFIED PRODUCT:** Specified Technologies, Inc. SpecSeal® AS Elastomeric Spray)Cat No. AS205 and AS205R)

   FILL, VOID, OR CAVITY MATERIAL – Liquid is to be spray applied to cover the exposed surface of the mineral wool installed in the perimeter joint. Apply a min. wet film thickness of 1/8 in. and overlap the material a min. 1/2 in. onto the adjacent curtain wall assembly and concrete floor slab assembly. The spraying process must be applied continuously with no stopping or restarting the application of the material.

   C. Support Clips: (Not Shown) Support clips are optional. Standard Z-shaped clips are 20 GA galvanized steel with the following dimensions: 1 in. wide by 3 in. high with a 2 in. upper leg and 3 in. lower leg.

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.