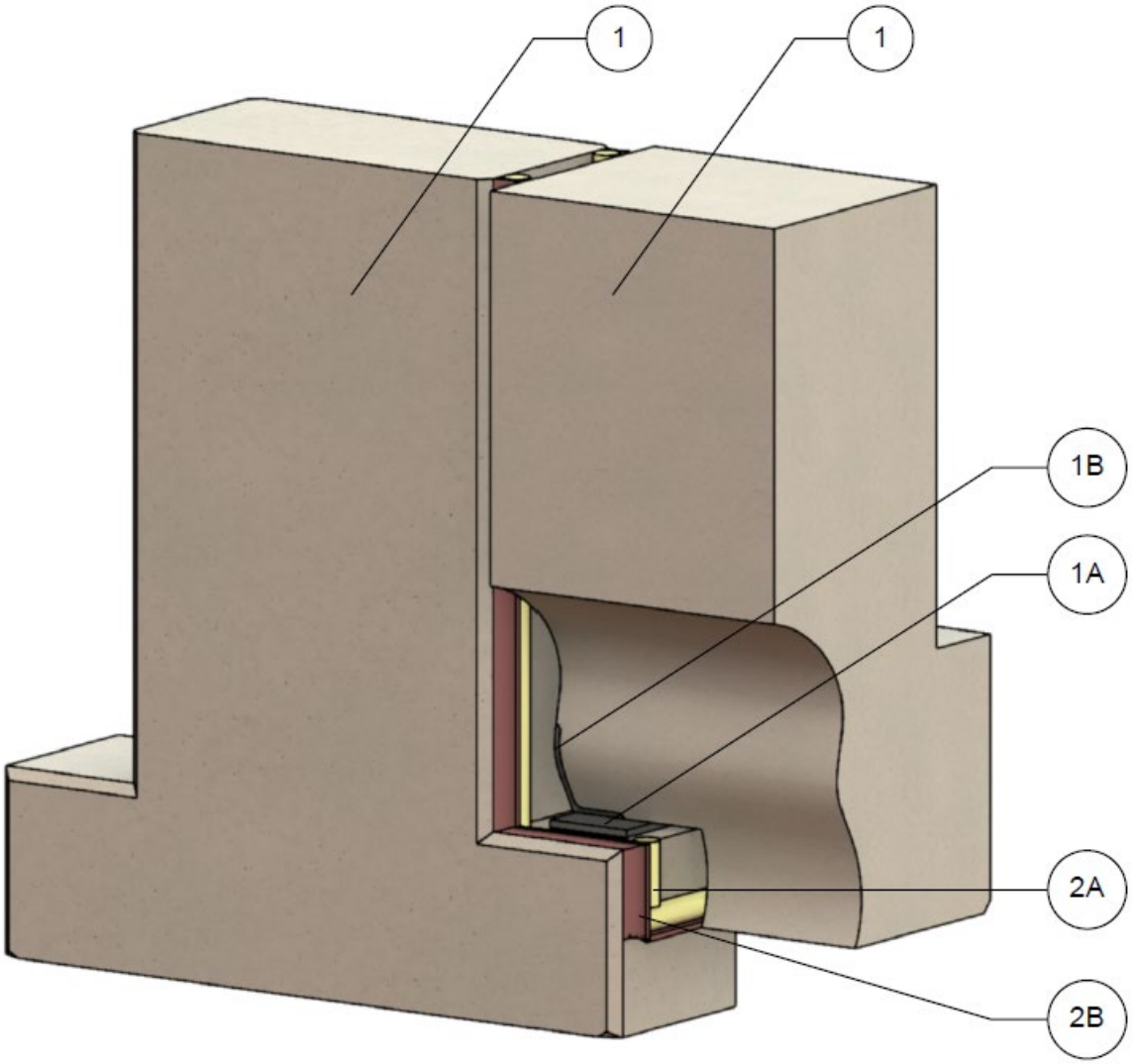
Firewise Consultants LLC
Design No. FWC/JF 60-01
Joint System
Concrete Column and Corbel Joint Assembly
ASTM E1966
Rating: 1 hour
UL 2079 (Air Leakage Only)
L-Rating: < 1 SCFM/LF
Nominal Joint Width: 1-3/4-in.



1. **CONCRETE ASSEMBLY:** Minimum 1-hour rated concrete assembly made from either lightweight of normal weight concrete with a density of 100-150 pcf, with a min. thickness of 13 in. at the joint face. The concrete assembly may consist of a wall, column, and/or beam assembly combination. The edges of the concrete assembly may have up to a maximum 3/4-in. chamfer.

   A. BEARING PAD (Optional) – A fiber-reinforced rubber mastic bearing pad may be used on the lower concrete assembly of a horizontal joint section. The bearing pad must maintain a distance from the edge that allows for a full depth of the joint system (Item 2), or at least 1/2-in. from the edge of the concrete assembly. The maximum horizontal joint width with a bearing pad is 1/2-in.

   B. STEEL ANGLE (Optional) – At locations of wall-to-beam interfaces, the beam section may be cast with a maximum 5-in x 6-in. steel angle with running perpendicular to the joint assembly.

2. **JOINT SYSTEM:** The joint width shall not exceed a nominal 1-3/4-in. joint width (joint width at time of installation). Joint system can be installed horizontally or vertically to accommodate for wall/column-to-beam and wall/column-to-wall/column configurations. The joint system shall consist of the following construction features:

   A. PACKING MATERIAL – Install open cell polyurethane foam backer rod used as a form for application of fill, void, cavity material (Item 2B). Packing material to be compressed into the joint width a minimum of 12.5%. Packing material to be recessed from both surfaces of the wall as required to accommodate the required thickness of fill, void, or cavity material. When a bearing pad (Item 1A) is used, the backer rod may stop and start on either side of the pad, and the bearing pad serves as the backing for the fill material. The maximum horizontal joint width with a bearing pad is 1/2-in.

      i. When chamfered edge of the concrete assembly (Item 1) is present, recess packing material as required to accommodate the required thickness of fill, void, or cavity material (Item 2B) such that the fill, void, or cavity material is flush with the interior edge of the chamfer.
      ii. When the joint width is less than 1 in., the packing material is optional.

   B. FILL, VOID, OR CAVITY MATERIAL

      Use Rectorseal, LLC, Metacaulk 150+ Sealant certified in accordance ASTM E1966. Apply min 1/2-in. thickness of sealant within the joint and over the packing material (Item 2A), flush with both surfaces of wall.

      i. When the chamfered edge of the concrete assembly (Item 1) is present, apply min. 1/2-in. thickness of fill material, flush with the interior edge of the chamfer.

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.