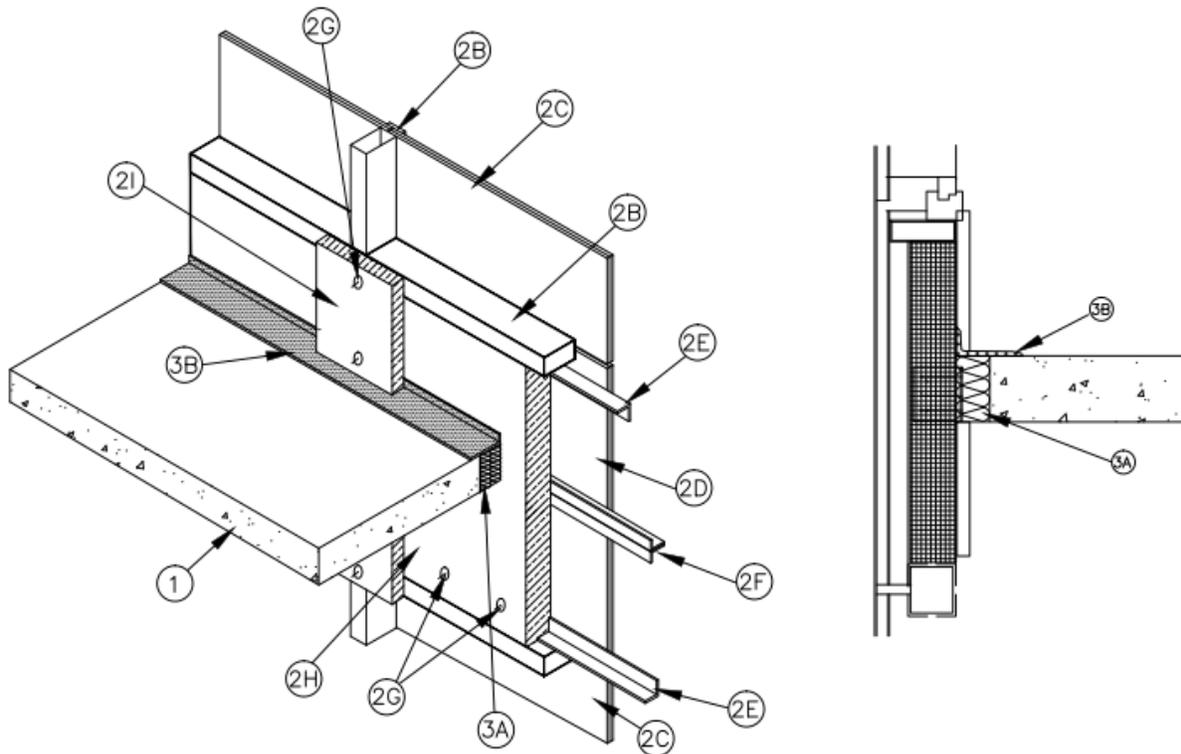


RectorSeal, LLC
Design No. RSC/BPF 180-01
Joint Spray or Caulk
Metacaulk 1200, Biostop 750+
ASTM E2307
T and F-Rating: 3 Hour
Cycling - Combined
±6.5% Horizontal Movement and ±5% Vertical Movement



1. SUPPORTING CONSTRUCTION: Concrete floor assembly made from either lightweight or normal weight concrete with a min. thickness of 4-1/2 in. at the joint face. Overall slab thickness may vary to accommodate various block-out depths (longitudinal recesses) formed in the concrete to house the architectural cover plate. The block-out width may also vary without restriction.

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 shall be according to the curtain wall manufacturer’s instructions to allow vertical and horizontal movement. When required, the mounting attachments to the floor slab shall be connected to the joint face of the floor slab, according to the curtain wall manufacturer’s instructions.



- B. ALUMINUM FRAMING – Rectangular aluminum tubing mullions and transoms, sized according to the curtain wall system manufacturer’s guidelines. Min. overall dimensions of the extruded framing sections are 0.100 in. thick aluminum with a min. 5-1/4 in. depth and a min. 2-1/2 in. width. Mullion and transom covers are added to the external side of the framing, giving the framing system a total depth of min. 6-3/4 in. Mullions are to be spaced a min. 56-1/2 in. on center (oc) and transoms are to be spaced min. 49 in. oc. For the spandrel region, the lower transom shall be placed a min. 21 in. below the concrete floor (as measured from the underside of the floor to the top side of the transom), and the upper transom shall be placed a min. 21 in. above the floor (as measured from the top surface of the floor to the underside of the transom) while maintaining a min. 46-1/2 in. spandrel panel height.
- C. VISION GLASS PANELS – Glass panels shall be sized and attached to curtain wall framing according to the curtain wall system manufacturer’s guidelines. Use a min. 1/4 in. thick, clear, heat-strengthened (HS) glass or tempered glass with a max. width and height less than the aluminum framing oc spacing, which allows the glass to be secured between the notched shoulder of the aluminum framing and pressure bar. Panels are secured with a thermal break (rubber extrusion), pressure bar (aluminum extrusion), screws, and a snap face (aluminum extrusion).
- D. SPANDREL PANELS – Either glass or aluminum spandrel panels may be applied to the spandrel exterior. If Glass Spandrel Panels: Glass panels shall be sized and

installed to curtain wall framing according to the curtain wall system manufacturer’s guidelines. Use a min. 1/4 in. thick, clear, heat-strengthened (HS) glass or tempered glass with a max. width and height is less than the aluminum framing oc spacing, which allows the glass to be secured between the notched shoulder of the aluminum framing and pressure bar. Panels are secured with a thermal break (rubber extrusion), pressure bar (aluminum extrusion), screws, and a snap face (aluminum extrusion). If Aluminum Spandrel Panels: Aluminum panels used in the spandrel shall be sized and attached to curtain wall framing according to the curtain wall system manufacturer’s guidelines. Use a min. 1/8 in. sheet aluminum panel.

- E. INSULATION RETAINER ANGLE – Secure a min. 2 in. × 1-1/2 in. 18 GA galvanized steel angle to the underside of the top spandrel transom extending the full length of the transom between each vertical framing member, and to each vertical framing member extending the full length of the mullions between each horizontal framing member. Position so that the curtain wall insulation, when placed flush against the back surface of the angles, is flush with the internal surface of the vertical framing members. Secure angles to the transom and mullions with min. 1 in. No. 10 self-tapping sheet metal screws spaced a max. 12-1/2 in. oc. Add an additional angle to the topside of the bottom spandrel transom but do not secure it to the transom. Instead, this angle is secured only to its adjacent angles by using a min. 1 in. No. 10 self-tapping sheet metal screw in each corner of the retainer angle frame.



- F. **INSULATION REINFORCEMENT ANGLE** – Two min. 2 in. × 1-1/2 in. 16 GA galvanized steel angles positioned to form a "T" bar such that the 1-1/2 in. legs are secured together and the two 2 in. legs make a flat 4 in. surface. Position the T-bar horizontally so that the 4 in. leg forms a flat surface that supports the backside of the curtain wall insulation. The T-bar should be positioned vertically such that the top edge of the 4 in. leg is recessed max. 1/4 in. from the top surface of the concrete deck. The T-bar shall be fastened on one side of each spandrel area with two min. 1 in. No. 10 self-tapping sheet metal screws securing the T-bar to a vertical retainer angle. On the opposite side of the spandrel area, the 1-1/2 in. leg of the T-bar slides into a min. 1 in. horizontal notch made in the vertical retainer angle. The T-bar shall be cut 1 in. shorter than the width between vertical framing members.
- G. **INSULATION RETAINING SCREWS** – In the field of the curtain wall insulation, between framing covers, attach curtain wall insulation to the insulation retainer angles with min. 3 in. long No. 8 bugle-head self-tapping screws fitted with min. 1-1/2 in. diameter steel clinch shields or self-locking washer clips. These are spaced a max. 12-3/4 in. oc and max. 4 in. from each vertical framing member. The insulation is attached to the top horizontal retainer angle and both vertical retainer angles. Where the framing covers overlap onto the curtain wall insulation they are secured through the curtain wall insulation and to the insulation retainer angle with min. 5 in. long No. 10 bugle-head self-tapping screws and min. 1-1/2 in. diameter steel clinch shields or self-locking washer clips.
- H. **CURTAIN WALL INSULATION** – A nominal 2 in. thick, 8pcf density, mineral wool batt insulation, faced on one side with aluminum foil scrim (vapor barrier) which faces the room interior, is installed to fill all cavities of the spandrel region between the framing. The batt is fitted tightly to the framing and is secured to the insulation retainer angles with retaining screws and min. 1-1/2 in. diameter steel clinch shields or self-locking washer clips. A min. 3 in. air space is created between the insulation and panel. All meeting edges of insulation are sealed with nominal 4 in. wide pressure sensitive aluminum foil faced tape centered over the junction so that approximately 2 in. of tape covers each edge of the adjacent insulation.
- I. **FRAMING COVERS** – Strips made of nominal 2 in. thick × 8 in. wide, 8pcf, mineral wool batt insulation, faced on one side with aluminum foil scrim (vapor barrier) which faces the room interior, are centered over each vertical framing member and secured to the insulation retainer angles with insulation retaining screws spaced 1 in. from both edges of the framing cover. 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 nominal 8 in. joint width (at time of installation) and the perimeter joint treatment incorporates the following construction features:
- A. **CERTIFIED MANUFACTURER:** Only Intertek Certified Manufacturer

CERTIFIED PRODUCT: Mineral Wool



CERTIFIED MODEL: Only Intertek certified manufacturer's products meeting the min. requirements below:

PACKING MATERIAL – Use a min. 4-1/2 in. thick, 4pcf density, mineral wool batt insulation installed with the fibers running parallel to the slab edge and curtain wall. The packing material shall be compressed min. 33% in the nominal joint width 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 with min. compression of 0.25 in. per piece.

B. **CERTIFIED MANUFACTURER:** RectorSeal, LLC

CERTIFIED PRODUCT: Joint Sealant, Caulk

CERTIFIED MODEL: Metacaulk 1200, Biostop 750+

FILL, VOID, OR CAVITY MATERIAL – To be applied (sprayed, brushed, or troweled) to cover the exposed top surface of the mineral wool installed in the perimeter joint at a wet thickness of nominal 1/8 in. and overlapping the material a nominal 1/2 in. onto all adjacent surrounding surfaces.

* Before testing, the test specimen was cycled 500 times at 30 cpm according to ASTM E1399