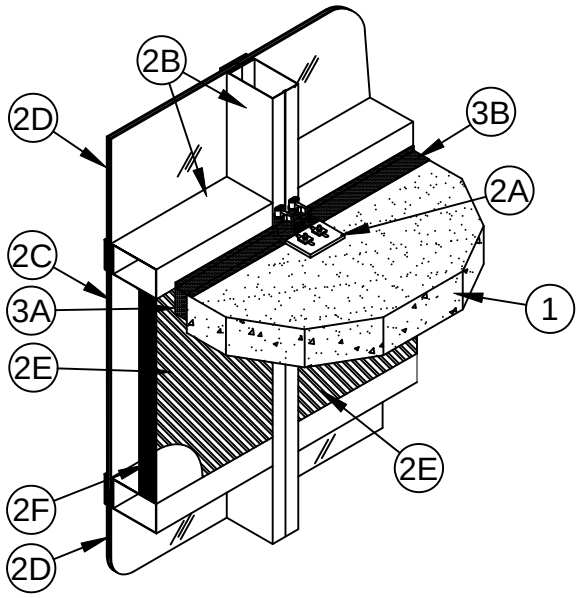
System No. CW-D-1044

F Rating - 2 Hr
T Rating - 3/4 Hr
Linear Opening Width - 4 In. Max
L Rating At Ambient - Less Than 1 CFM/Lin Ft
L Rating At 400°F - Less Than 1 CFM/Lin Ft
Class II or III Movement Capability - +/-5% Vertical Shear (See Item 3)



1. **Floor Assembly -** Min 6 in. (152 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m3) structural concrete.
2. **Curtain Wall Assembly -** The factory-assembled curtain wall assembly shall incorporate the following construction features:
   A. **Mullion Mounting Brackets -** Min 8 in. (203 mm) wide by 3/4 in. (19 mm) thick extruded aluminum mounting brackets with one nom 2 in. (51 mm) high leg for support and attachment of mullion and with one leg at least 6 in. (152 mm) longer than the width of linear opening between floor assembly and mullion. Mounting bracket attached to top of floor, or into max 2 in. (51 mm) by 14 in. (356 mm) by 2 in. (51 mm) deep slot, with two min 1/2 in. (13 mm) steel masonry anchors in conjunction with washer plates supplied with mounting bracket.
   B. **Framing -** The one or two-piece rectangular tubing mullions (vertical members) and transoms (horizontal members) shall be min 3 in. (76 mm) wide by 6 in. (152 mm) deep and shall be formed from min 0.100 in. (2.5 mm) thick aluminum. Mullions spaced max 60 in. (1.52 m) OC and secured to mullion mounting anchors (Item 2A) at each floor level in conjunction with extruded aluminum clips bolted to the sides of the mullions and designed to engage the vertical leg of the mullion mounting bracket in conjunction with an extruded aluminum hook/leveling connector. Transoms to be spaced min 20-1/2 in. (52.1 cm) OC. The underside of the vision glass sill shall be nominally flush with top surface of floor.
   C. **Spandrel Panels -** The spandrel panels shall consist of one of the following types:
      1. Glass Panels - Min 1/4 in. (6 mm) thick transparent or opaque heat-strengthened glass or min 1 in. (25 mm) thick insulated glass units with two layers of nom 1/4 in. (6 mm) thick heat-strengthened glass separated by a min 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, installed in accordance with the manufacturer's installation instructions.
      2. Aluminum Panels - Min 1/8 in. (3 mm) thick aluminum panels with nom 1/4 in. (6 mm) thick edges. Each panel secured in position with aluminum pressure plates in conjunction with gaskets and steel screws or with silicone structural glazing, installed in accordance with the manufacturer's installation instructions.
      3. Stone Panels - Nom 1-3/16 in. (30 mm) thick polished granite spandrel panels with 1 in. (25 mm) thick gauged edges. Each panel secured in position with aluminum pressure plates in conjunction with gaskets and steel screws.
      4. Aluminum Composite Panels - Min 1/8 in. (3 mm) thick aluminum composite comprised of min 0.02 in. (0.5 mm) aluminum skin with LDPE or mineral-filled Fire Resistant core . Each panel secured in position with steel furring channels in conjunction with gaskets and steel screws.

D. **Vision Panels -** Min 1/4 in. (6 mm) thick transparent heat-strengthened glass or min 1 in. (25 mm) thick insulated glass units with two layers of nom 1/4 in. (6 mm) thick transparent heat-strengthened glass separated by a min 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 structural silicone glazing, installed in accordance with the manufacturer's installation instructions.

E. **Steel Backpan -** Min 22 gauge (min 0.031 in. or 0.79 mm thick) galv steel panels installed between mullions and transoms within spandrel panel area. Steel backpan provided with min 3 in. (75 mm) wide flange around all four sides. Steel backpan installed flush with interior face of framing and screw-attached to mullions and transom along all sides with min No. 10 by 1/2 in. (13 mm) long self-drilling, self-tapping steel screws spaced max 8 in. (203 mm) OC.

F. **Curtain Wall Insulation* -** Min 3 in. (76 mm) thick unfaced mineral wool batt insulation installed as a continuous piece, or with vertical seams. Insulation panels tightly fitted between the flanges of the backpan and secured to steel backpan with No. 12 gauge steel weld pins with steel clinch shields or with No. 12 gauge galv steel weld pin of sufficient length to accommodate the batt insulation thickness with nom 1-3/16 in. (30 mm) diam galv steel cup head spaced max 12 in. (305 mm) OC. When installed with vertical seams each individual section of insulation shall be secured to the backpan with min of two No. 12 gauge steel weld pins with steel clinch shields or with cup head weld pins.

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G. **Aluminum Sandwich Panel -** (Optional, not shown) - Min 1/8 in. (3 mm) solid aluminum panel or aluminum composite panel installed on exterior surface of curtain wall insulation (Item 2F).

3. **Safing System -** Max separation between edge of floor assembly and face of framing member at time of installation is 4 in. (102 mm). The safing system is designed to accommodate vertical shear up to 5 percent of its installed width. The safing system shall incorporate the following construction features:

A. **Forming Material* -** Nom 4 pcf (64 kg/m3) density mineral wool batt insulation. Batt sections cut to a width of 4 in. (102 mm) and stacked to a thickness which is min 33 percent greater than the width of the linear gap between the curtain wall insulation and the edge of the concrete floor slab. The forming material is compressed min 25 percent and inserted cut-edge-first into the linear gap such that it is flush with the top surface of the floor assembly. Adjoining lengths of forming material to be tightly butted with butted seams spaced min 18 in. (460 mm) OC. Forming material to be continuous beneath mullion mounting brackets (Item 2A). Insulation depth is to be increased to a min of 6 in. (152 mm) on each side of anchor system, as needed, to maintain min 2 in. (51 mm) insulation block below lowest point of anchor system that lies within perimeter joint. The mullion fist anchor (vertical anchor component secured to the wall) may extend up to 2 in below the forming material.

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B. **Fill, Void or Cavity Material* -** Min 1/8 in. (3 mm) wet thickness (1/16 in. or 1.5 mm dry thickness) of fill material spray-applied over top of forming material and lapping min 1/2 in. (13 mm) onto the top surface of the floor and onto the steel backpan or mullion. When SpecSeal Fast Tack Spray is used, wet and dry thickness of spray is min 5/64 in. (2 mm).

SPECIFIED TECHNOLOGIES INC - SpecSeal AS200 Elastomeric Spray, SpecSeal Safing Spray or SpecSeal Fast Tack Spray

*** Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.**