

## System No. CW-D-2021

F Rating - 2 Hr

T Rating - 1/4 Hr

Integrity Rating - 2 Hr

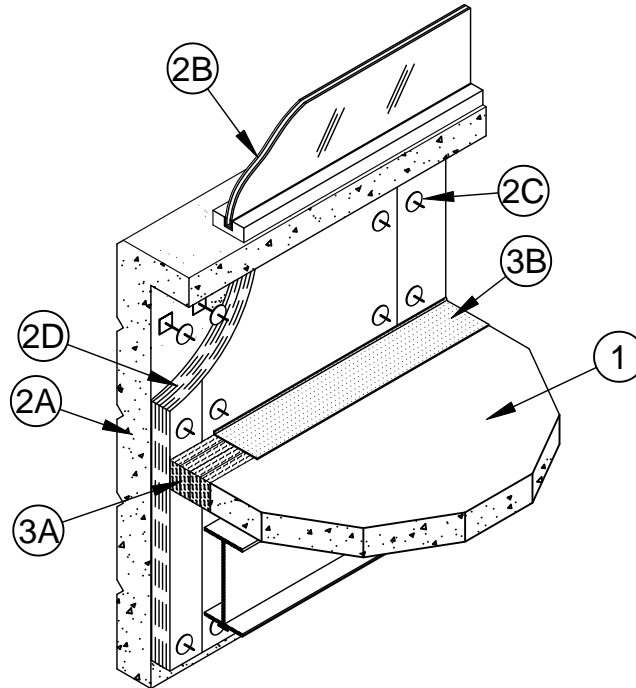
Insulation Rating - 1/4 Hr

Linear Opening Width - 8 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 Movement Capabilities - 5% Vertical Shear (See Item 3)



1. **Floor Assembly** - Min 4-1/2 in. thick steel-reinforced lightweight or normal weight (100-150 pcf) structural concrete. Floor assembly to be supported at perimeter edges by spandrel beams having a Restrained or Unrestrained Beam Rating of 2 hr. Edge of concrete floor to be max 8 in. from interior surface of spandrel panel (Item 2A).
2. **Curtain Wall Assembly** - The curtain wall assembly shall incorporate the following construction features:
  - A. **Spandrel Panels** - Min 72 in. high by min 4 in. thick steel-reinforced lightweight or normal weight (100-150 pcf) structural concrete spandrel panels. Wall may also consist of min 4 in. thick steel-reinforced lightweight or normal weight concrete tilt-up panels with a min 72 in. vertical separation between window openings. Panels provided with steel dead load anchors welded to steel reinforcing bars embedded in the concrete for attachment to the steel columns and spandrel beams. Panels also provided with steel lateral anchors or braces. The dead load anchors, which are located in the linear gap between the concrete floor slab and the spandrel panel or tilt-up panel, are to be spaced max 72 in. OC. The top of the dead load anchor is to be recessed min 1/2 in. from top surface of floor.
  - B. **Framed Window** - Metal framed window with nom 1 in. thick (double pane) transparent heat-strengthened glass panels. Sill of window to be min 34 in. above top of floor.
  - C. **Impaling Pins** - No. 12 gauge steel pins, min 1/2 in. longer than thickness of insulation boards (Item 2D), swaged to nom 2 by 2 in. galv steel base plate. Steel base plates secured to concrete spandrel panel with steel concrete screws or powder-driven steel fasteners. Impaling pins to be spaced 3 in. from edges of insulation boards (Item 2D) on each side of seams and spaced max 24 in. OC both vertically and horizontally. A min of two horizontal arrays of impaling pins are required to be located on spandrel panel above top surface of floor.
  - D. **Curtain Wall Insulation\*** - Min 2 in. thick mineral wool board insulation, faced on one side with aluminum foil/scrims vapor retarder, supplied in min 24 by 48 in. boards. Insulation boards installed vertically with tightly-butted seams to cover interior surface of concrete spandrel panel. Horizontal seams of insulation boards (if necessary) to be located min 24 in. above and min 6 in. below planes of floor. Insulation boards secured to spandrel panel with impaling pins in conjunction with min 1-1/2 in. diameter galv steel clinch shields. Butted seams to be covered with aluminum foil tape.

IIG MINWOOL L L C - CW-8



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3. **Safing System Max separation between edge of floor assembly and curtain wall insulation is 6 in. The safing system is designed to accommodate vertical shear movement between dead load anchors up to a max of 5 percent of its installed width between the edge of the floor assembly and the curtain wall insulation.** - The safing system shall incorporate the following construction features:

A. **Forming Material\*** - Nom 4 pcf density mineral wool batt safing material to be cut into min 4-1/2 in. wide pieces and stacked to a thickness which is at least 25 percent greater than the width of the linear gap between the curtain wall insulation (Item 2D) and the edge of the concrete floor slab. The stacked safing material is compressed and inserted cut-edge-first into the linear gap such that its top surface is flush with the top surface of the floor assembly. A max of one tightly butted seam is permitted between spandrel panel attachment plates or tubes. An additional min 1/2 in. thick piece of mineral wool batt safing material is to be installed to cover top surface of each dead load anchor.

**IIG MINWOOLL L C** - MinWool-1200 Safing

B. **Fill, Void or Cavity Material\*** - Min 1/8 in. wet thickness (1/16 in. dry) of fill material spray-applied over top of forming material and lapping min 1/2 in. onto the top surface of the concrete floor and onto the curtain wall insulation.

**SPECIFIED TECHNOLOGIES INC** - SpecSeal AS200 Elastomeric Spray or SpecSeal Fast Tack Spray

\*Bearing the UL Classification Mark



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