System No. CW-S-1016  
August 10, 2005
Integrity Rating — 2 Hr  
Insulation Rating — 1/4 Hr  
Linear Opening Width — 2-1/2 In. Max  
(UL)

1. **Floor Assembly** — Min 4-1/2 in. thick reinforced lightweight or normal weight (100-150 pcf) structural concrete. Perimeter of floor assembly to be provided with min 3 by 3 by 1/4 in. thick cast-in-place structural steel angle for weld-attachment of mounting angles (Item 2A).

2. **Curtain Wall Assembly** — The curtain wall assembly shall incorporate the following construction features:

   A. **Mounting Angles** — (Not Shown) - Min 3 in. long angles with one nom 4 in. leg for attachment to edge of floor assembly and with one leg approx 2-1/2 to 3 in. longer than distance to interior face of steel studs. Angles to be formed of min 1/8 in. thick steel. Angles welded to cast-in-place structural steel angle at edge of floor assembly (Item 1) on one side of each steel stud (Item 2B) at each floor level. Top edge of each mounting angle to be recessed 1 to 1-1/2 in. below top surface of floor.

   B. **Steel Studs** — C-shaped studs formed from min 0.034 in. thick (20 ga) galv steel. The steel studs shall be 3-1/2 in. to 6 in. wide by 1-1/4 in. deep with 5/16 in. wide stiffening flanges and shall be assembled using runner channels formed from min 0.034 in. thick galv steel. Studs spaced max 24 in. OC and welded, bolted or screwed to mounting angles (Item 2A) at each floor level. When cementitious backer units (Item 2E) are used for exterior sheathing, max stud spacing is 16 in. OC. Interior face of studs to be max 2-1/2 in. from edge of floor assembly.

   C. **Steel Struts** — Short lengths of steel stud (Item 2B) used to brace each steel stud against lateral movement. One end of strut bolted, screwed or welded to steel stud beneath plane of floor assembly. Opposite end of strut anchored to underside of floor.

   D. **Gypsum Board** — One layer of nom 5/8 in. thick, 48 in. wide gypsum sheathing installed to cover entire exterior surface of wall. Sheathing applied with joints centered over studs and secured to steel studs with min 1 in. long bugle head steel screws spaced max 8 in. OC along the edges and max 12 in. OC in the field of each sheet.

See Gypsum Board (CKNX) category for names of Classified Companies and product types.
E. Cementitious Backer Units* — As an alternate to the gypsum sheathing (Item 2D), nom 1/2 in. or 5/8 in. thick square-edge boards attached to studs with 1-1/4 in. long corrosion resistant self-tapping wafer-head steel screws spaced 6 in OC. Joints covered with glass fiber mesh tape.

   UNITED STATES GYPSUM CO — Durock Exterior Cement Board, Durock Cement Board or Durock WMB

F. Curtain Wall Insulation* — Min 3 in. thick mineral wool batt insulation, unfaced or faced on one side with aluminum foil/scrim vapor retarder, supplied in nom 16 in. or 24 in. wide batts to accommodate spacing of steel studs. Insulation batts installed to completely fill all stud cavities of curtain wall above the top of the fill material (Item 3C) and below the forming material (Item 3B). Insulation batts to be friction-fitted between studs with adjoining lengths of batt tightly butted.

   THERMAFIBER INC — FIRESPAN Insulation

G. Gypsum Board* — One layer of nom 5/8 in. thick, 48 in. wide gypsum board applied with joints centered over studs. Gypsum board secured to steel studs on interior surface of curtain wall with min 1 in. long bugle head steel screws spaced max 8 in. OC along the edges and max 12 in. OC in the field of each sheet. Gypsum board installed to cover interior surface of wall above the top of the fill material (Item 3C) and below the forming material (Item 3B).

See Gypsum Board (CKNX) category for names of Classified Companies and product types.

H. Framed Window — Metal-framed window with nom 1/4 in. thick heat-strengthened glass. Sill of window to be min 34 in. above top of floor slab. Top of window to be min 33 in. below bottom of floor slab.

I. Siding, Brick or Stucco — (Not Shown)—Aluminum siding, steel siding, brick veneer or stucco installed over gypsum sheathing or cementitious backer units and meeting the requirements of local code agencies. Brick veneer wall attached to studs with corrugated metal wall ties attached to each stud with steel screws.

3. Safing System — The safing system shall incorporate the following construction features:

   A. Forming Material* — Nom 4 pcf density mineral wool batt insulation. Batt sections to be cut to a min 4 in. width. and stacked to a thickness which is 25 percent greater than the width of linear gap between the gypsum sheathing and the edge of the concrete floor to attain a min 20 percent compression in the thickness direction. The forming material is compressed and inserted cut-edge-first into linear gap between edge of floor slab and sheathing material such that its top surface is flush with the top surface of the floor assembly. Length of batt to be equal to on-center spacing of steel studs such that it is friction-fitted between studs and mounting angles without seams. Additional pieces of mineral wool batt to be stuffed inside the channel of each steel stud throughout the thickness of the forming material.

   THERMAFIBER INC — SAF

   B. Fill, Void or Cavity Material* — Min 1/8 in. wet thickness (min 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 floor and onto the gypsum sheathing and steel studs.

   TREMCO INC — TREMstop Acrylic SP

*Bearing the UL Classification Mark