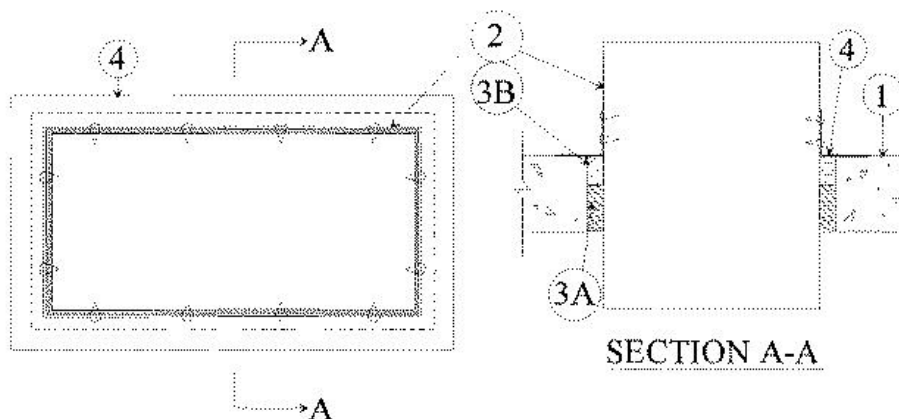


F Rating — 2 Hr
 T Rating — 0 Hr
 L Rating at Ambient — Less Than 1 CFM/sq ft
 L Rating at 400 F — 3 CFM/sq ft
 W Rating — Class 1 (See Item 2)



1. **Floor or Wall Assembly** — Min 4-1/2 in. thick reinforced lightweight or normal weight (100-150 pcf) concrete. Wall may also be constructed of any UL Classified **Concrete Blocks***. Max area of opening is 325 in. sq with max dimension of 25 in. See **Concrete Blocks (CAZT)** category in the Fire Resistance Directory for names of manufacturers.

2. **Steel Duct** — Nom 24 by 12 by No. 24 gauge (or heavier) galv steel duct. One steel duct to be positioned within the firestop system. The annular space shall be min 0 in. to max 1 in. **Water resistance of steel duct must be considered for W Rating in addition to water resistance of firestop system (Item 3).** Duct to be rigidly supported on both sides of floor or wall assembly.

3. **Firestop System** — The firestop system shall consist of the following:

A. **Packing Material** — Min 3.0 in. thickness of min 4.0 pcf mineral wool batt insulation firmly packed into opening as a permanent form. Packing material to be recessed from top surface of floor or from both surfaces of wall as required to accommodate the required thickness of fill material.

B. **Fill, Void or Cavity Material* — Caulk** — Min 3/4 in. thickness of fill material applied within the annulus, flush with top surface of floor or with both surfaces of wall. At the point contact location between duct and concrete, a min 1/4 in. diam bead of fill material shall be applied at the concrete/duct interface on the top surface of floor and on both surfaces of wall.
RECTORSEAL — [Metacaulk 835+](#)

4. **Steel Retaining Angle** — Nom 2 by 4 by No. 22 gauge (or heavier) steel angles attached to all four sides of the steel duct on the top surface of floor or both surfaces of wall. The angles shall be attached with No. 8 (or larger) steel sheet metal screws spaced max of 2 in. from each end and a max of 5 in. OC.

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

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