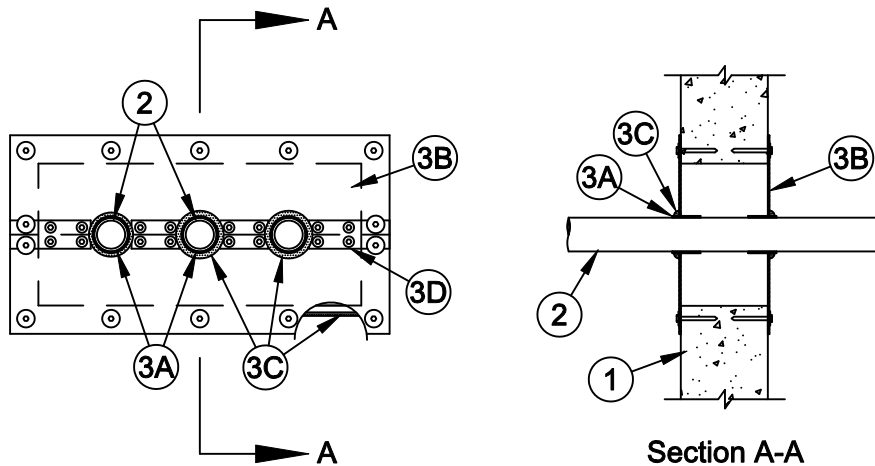


## System No. W-J-2193

F Rating - 2 Hr  
T Rating - 3/4 Hr



1. **Wall Assembly** - Min 6 in. (152 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m<sup>3</sup>) concrete. Wall may also be constructed of any UL Classified **Concrete Blocks\***. Max area of opening is 192 sq in. (0.12 m<sup>2</sup>) with max dimension of 24 in. (610 mm).

See **Concrete Blocks** (CAZT) category in the Fire Resistance Directory for names of manufacturers.

2. **Through Penetrants** - One or more nonmetallic pipes or conduits to be installed within the firestop system. A min separation of 3 in. (76 mm) shall be maintained between pipes or conduits. A min 1 in. (25 mm) clearance shall be maintained between the pipes or conduits and the periphery of the opening. Pipes or conduits to be rigidly supported on both sides of the wall assembly. The following types and sizes of nonmetallic pipes or conduits may be used:
  - A. **Polyvinyl Chloride (PVC) Pipe** - Nom 2 in. (51 mm) diam (or smaller) Schedule 40 cellular or solid core PVC pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.
  - B. **Chlorinated Polyvinyl Chloride (CPVC) Pipe** - Nom 2 in. (51 mm) diam (or smaller) SDR 13.5 CPVC pipe for use in closed (process or supply) piping systems.
  - C. **Rigid Nonmetallic Conduit+** - Nom 2 in. (51 mm) diam (or smaller) Schedule 40 PVC conduit installed in accordance with the National Electrical Code (NFPA No. 70).
  - D. **Acrylonitrile Butadiene Styrene (ABS) Pipe** - Nom 2 in. (51 mm) diam (or smaller) Schedule 40 cellular or solid core ABS pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.
  - E. **Flame Retardant Polypropylene (FRPP) Pipe** - Nom 2 in. (51 mm) diam (or smaller) Schedule 40 cellular or solid core ABS pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.
  - F. **Polypropylene (PP) Pipe** - Nom 1 in. (25 mm) diam (or smaller) Schedule 80 PP pipe for use in closed (process or supply) piping systems.



**Specified Technologies Inc. 210 Evans Way Somerville, NJ 08876**

Reproduced courtesy of Underwriters Laboratories, Inc.  
Created or Revised: January 2, 2009

(800)992-1180 • (908)526-8000 • FAX (908)231-8415 • E-Mail:techserv@stifirestop.com • Website:www.stifirestop.com



W-J-2193  
PAGE 1 OF 2

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

- A. **Fill, Void or Cavity Material\* - Wrap Strip** - Nom 1/8 in. (3.2 mm) or 3/16 in. (4.8 mm) thick intumescent material faced on both sides with a plastic film, supplied in 2 in. (51 mm) wide strips. Wrap strip tightly-wrapped around each pipe or conduit and secured in place with one layer of aluminum foil tape. Wrap strips to protrude approx 1/2 in. (13 mm) beyond surface of the intumescent sheet (Item 3B) on each side of the wall.

**SPECIFIED TECHNOLOGIES INC** - SpecSeal BLU Wrap Strip, SpecSeal BLU2 Wrap Strip

- B. **Fill, Void or Cavity Materials\* - Composite Sheet** - Foil-faced sheet with galv steel sheet backer. Sheets may be installed as one solid sheet, cut in two pieces (top and bottom) or split on one side of the penetrant(s). Openings in intumescent sheet to be max 3/8 in. (10 mm) larger than outside diameter of through penetrant(s). Sheets cut to lap min of 2 in. (51 mm) on the wall on all sides. Sheets to be installed on each side of wall with foil facing against wall surface and secured with min 3/16 in. (5 mm) diam by 1-1/4 in. (32 mm) long steel concrete screws in conjunction with min 1-1/4 in. (32 mm) diam steel fender washers. Spacing of fasteners not to exceed 6 in. (152 mm) OC.

**SPECIFIED TECHNOLOGIES INC** - SpecSeal CS Composite Sheet

- C. **Fill, Void or Cavity Materials\* - Putty or Sealant** - Putty or sealant applied into annular space between the wrap strip and the edge of the opening in composite sheet to the full depth of the composite sheet (Item 3B). Additional thin layer of putty or sealant to be applied over wrap strip material (Item 3A) on both sides of the wall. Nom 3/16 in. (5 mm) wide by 3/16 in. (5 mm) thick putty strips or 1/4 in. (6 mm) diam bead of sealant applied beneath composite sheet around entire perimeter of through opening on both sides of the wall.

**SPECIFIED TECHNOLOGIES INC** - SpecSeal Putty, SpecSeal Series SSS Sealant or SpecSeal LCI Sealant

- D. **Steel Cover Strip** - Min 2 in. (51 mm) wide strip of min 0.020 in. (0.51 mm) thick (26 gauge) galv steel centered over entire length of each butted seam or slit made in the composite sheet (Item 3B). Prior to installation of the steel strip, the seam or slit in the intumescent sheet shall be covered with a nom 1/8 by 1/2 in. (3.2 mm by 13 mm) ribbon of putty or a nom 1/4 in. (6 mm) diam bead of sealant (Item 3C). Steel cover strip secured to galv steel sheet backer of intumescent sheet with steel sheet metal screws or rivets spaced max 3 in. (76 mm) OC on each side of seam or slit.

\*Bearing the UL Classification Mark



**Specified Technologies Inc. 210 Evans Way Somerville, NJ 08876**

Reproduced courtesy of Underwriters Laboratories, Inc.  
Created or Revised: January 2, 2009

(800)992-1180 • (908)526-8000 • FAX (908)231-8415 • E-Mail:techserv@stifirestop.com • Website:www.stifirestop.com



W-J-2193  
PAGE 2 OF 2