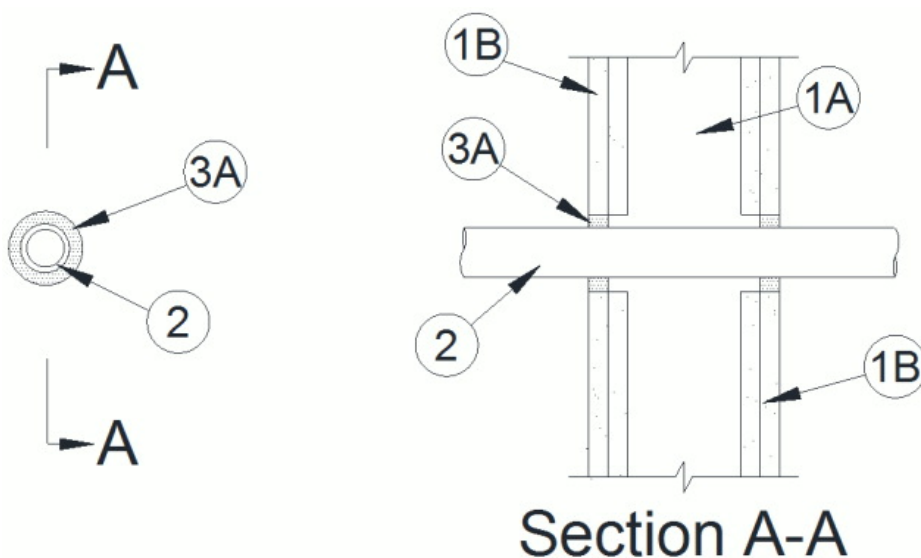


F Ratings — 1 and 2 Hr (See Item 1)

FT Rating — 0 Hr

FH Rating — 0 Hr

FTH Rating — 0 Hr



System tested with a pressure differential of 50 Pa between the exposed and the unexposed surfaces with the higher pressure on the exposed side.

1. Wall Assembly — The 1 or 2 hr fire-rated gypsum board/stud wall assembly shall be constructed of the materials and in the manner specified in the individual U300, U400, V400 or W400 Series Wall and Partition Design in the UL Fire Resistance Directory and shall include the following construction features:

A. Studs — Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of min 51 by 102 mm (2 by 4 in.) lumber spaced 406 mm (16 in.) OC. Steel studs to be min 89 mm (3-1/2 in.) wide and spaced max 610 mm (24 in.) OC.

B. Polypropylene (PP-RCT) Pipe — Nom 2 in. diam (63 mm) OD (or smaller) SDR 11 and SDR 7.4 Niron Clima Pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.

C. Gypsum Board* — Min 16 mm (5/8 in.) with square or tapered edges. Thickness, type, number of layers and fasteners as specified in the individual Wall and Partition Design. Diam of opening shall be nom 39 mm (1-1/2 in.) larger than OD of through penetrant. Max diam of opening is 102 mm (4 in.).

D. Polypropylene (PP-RCT) Pipe — Nom 2 in. diam (63 mm) OD (or smaller) SDR 11 and SDR 7.4 Niron Cool Pro or Niron Clima Pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.

The hourly F Rating of the firestop system is equal to the hourly fire rating of the wall assembly in which it is installed.

2. Through Penetrants — One nonmetallic pipe to be installed within the firestop system. The annular space between the pipe and periphery of opening shall be min 13 mm (1/2 in.) to max 25 mm (1 in.) Pipe to be rigidly supported on both sides of the wall assembly. The following types and sizes of nonmetallic pipes may be used:

A. Polypropylene (PP-R) Pipe — Nom 2 in. diam - 63 mm OD (or smaller) SDR 11 and SDR 7.4 MF Aquatherm Blue Pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.

B. Polypropylene (PP-R) Pipe — Nom 2 in. diam - 63 mm OD (or smaller) SDR 11 and SDR 7.4 MF Aquatherm Green Pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.

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

A. Fill, Void or Cavity Material* — Sealant — Min 16 mm (5/8 in.) thickness of fill material applied within the annulus, flush with both surfaces of wall.

RECTORSEAL — [Metacaulk 1000](#), Biostop 500+, FlameSafe 1900

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