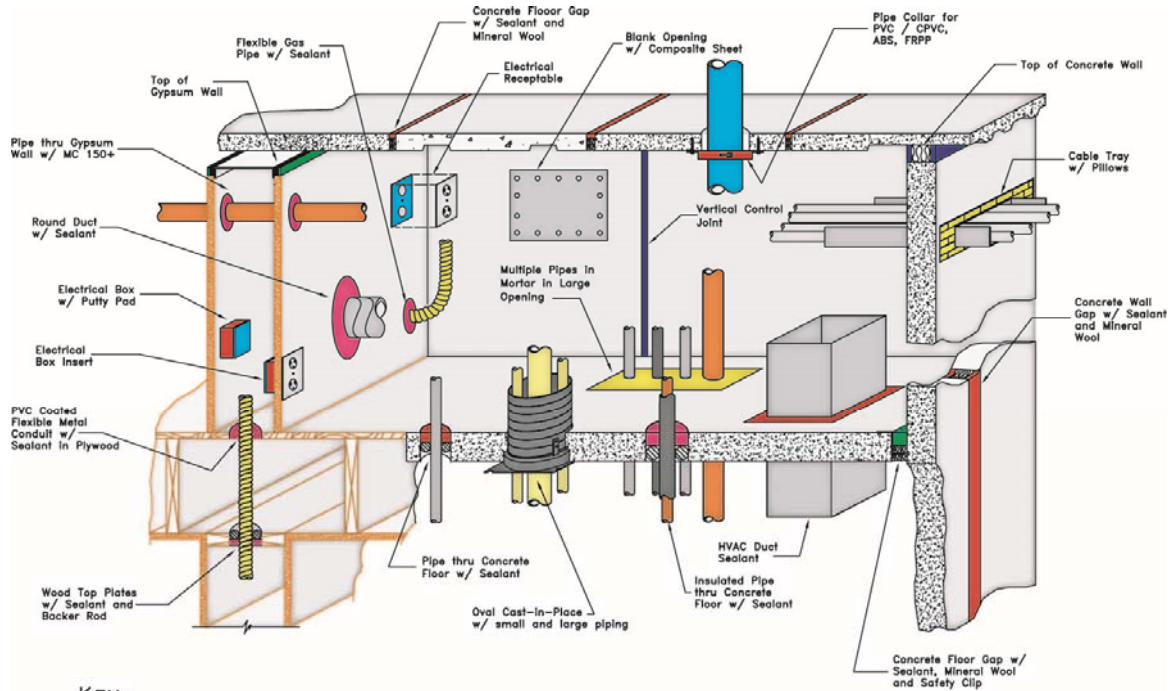


Pre-Cured Firestop Applications














Products that do not require caulk guns or sprayers for Firestopping penetrations and joint applications







KEY:

 Metacaulk* 1000	 Metacaulk* 835+	 Concrete	 Pillows	 Mineral Wool	 Putty Pad/Box
 Metacaulk* 1100	 Metacaulk* MC150+	 Gypsum Wallboard	 Mortar	 Plywood	 Backer Rod
 Metacaulk* 1200					

Rev. 03-20-07



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Intumescent With Pressure

Material expands when subjected to heat or flame exposure, increasing in volume and decreasing in density. with a quantifiable expanding pressure.

Chemical Material : Graphite
Reaction : Expansion
Temperature : 180° F / 82° C
Expansion Rate : 1:25

Best Uses for Canadian Construction

Pre-Cured Intumescent Product Uses:

- Excellent in hot and COLD weather
 - Great workability
 - Excellent Freeze Thaw
 - Pliable
- Great for Large Diameter non-metallic penetrations
- ULC[®] listed and tested designs

Basic Intumescent Chemical Principles

Pre-Cured Intumescent Product Applications:

- Box Guards
- Firestop Collars
- Wrap Strips
- Joint Strips
- Expansion Joint
 - Blocks
 - Mats
- Expandable foams
- Cast In Devices
- Pillows
- Sleeves
- Sheets

- **Box Guards**

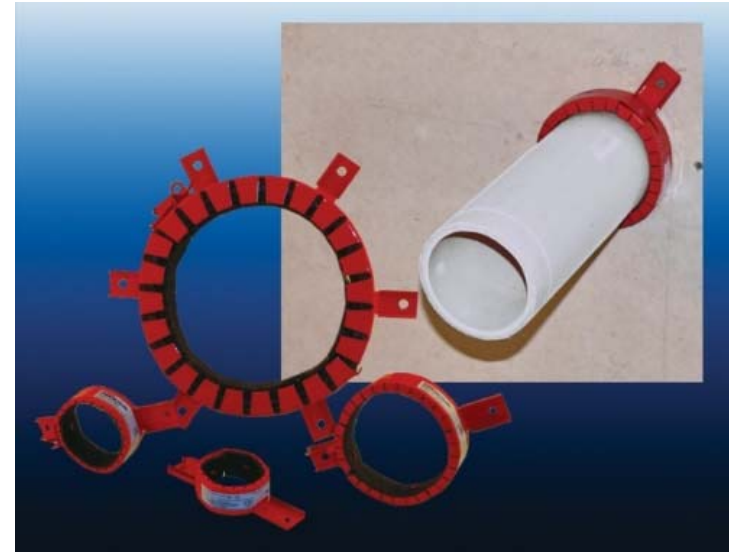
- Installs from face of wall
- STC Rated
- Able to install in a finished gyp wall construction



Box Guards can be installed inside the cavity of an electrical box. This allows it to be installed even in a finished gypsum wall.

Products :

- **Firestop Collars**
 - Used on 2" thru 6" pipes
 - Attaches with metal screws through tabs on the collar.
 - Mounts to the wall surface on both sides.

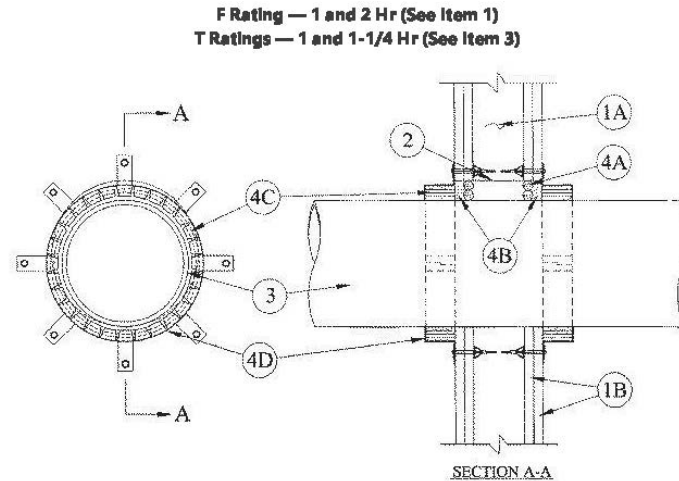


Pipe Collars are prefabricated for through-penetration firestop systems using PVC, CPVC, ABS, Poly Pro, PVC foam core and ABS foam core pipe. UL/C Classified for both open and closed pipe systems.

Products :

- **Universal Firestop Collars with Joint/Wrap Strips**

- Used on Large Diameter Non-Metallic pipes up to 350mm
- Attaches with metal screws through tabs on the collar.
- Mounts to the wall surface on both sides.



Pipe Collars are prefabricated for through-penetration firestop systems using PVC, CPVC, ABS, Poly Pro, PVC foam core and ABS foam core pipe. UL/C Classified for both open and closed pipe systems.



Products :

- **Wrap Strips**

- Tucks into penetration opening
- Works with large plastic pipe diameters
- 7mm thickness allows fewer wraps per pipe
- No negative reaction to plastic pipes or sealants

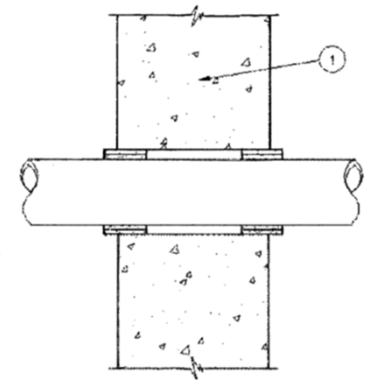


Wrap Strips are a flexible strip of highly intumescent firestop material used primarily for plastic and insulated pipe applications.

Products :

- **Joint Strips**

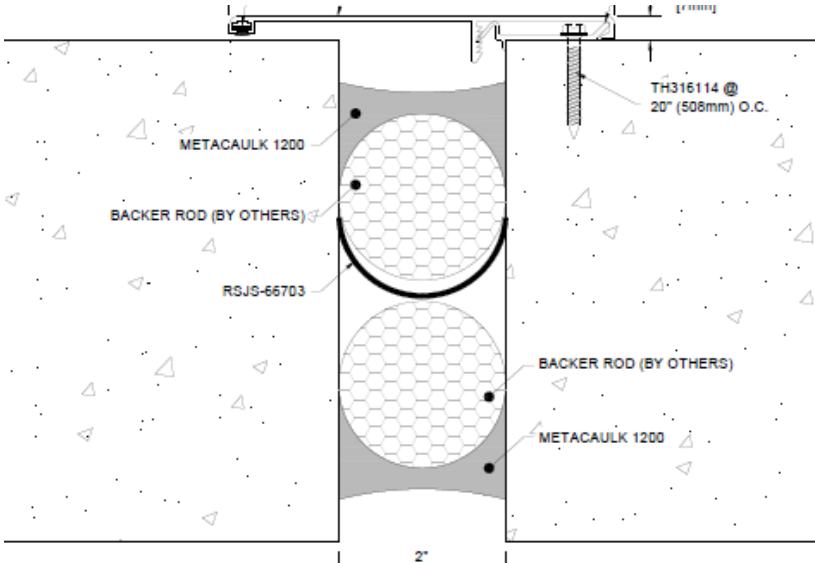
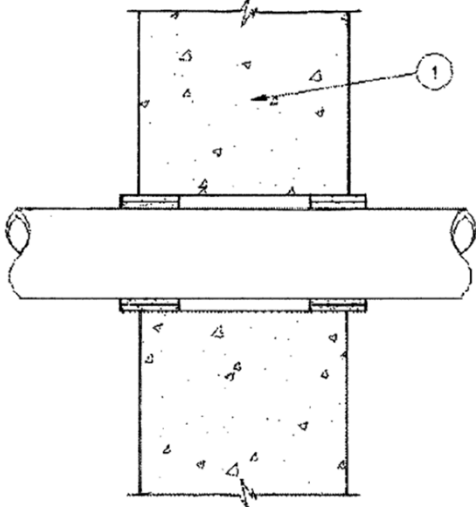
- Expansion joints up to 3" wide
- Typically Precast or CMU and Block construction
- Applications for vertical and horizontal
- Works on pipe penetrations as well



Joint Strips are a flexible, highly intumescent firestop material used in concrete and masonry control joints up to 2" wide. It forms a strong char that prevents the passage of flame, smoke and hot gases between control joints.

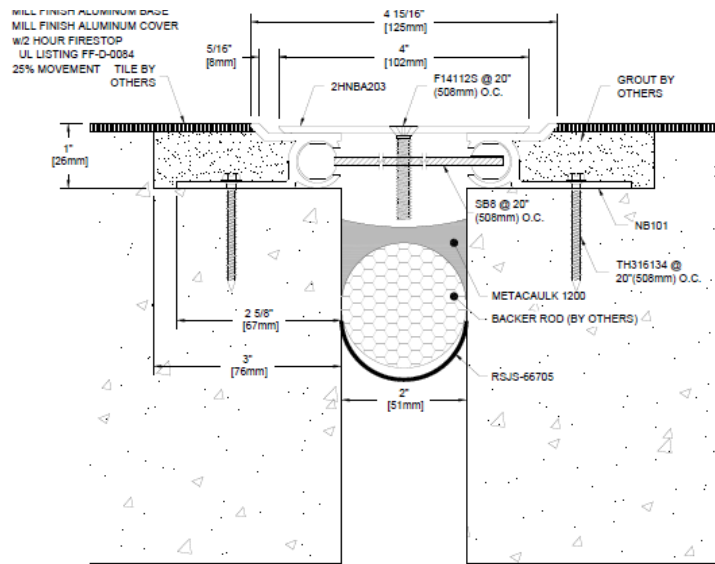
Products :

- **Joint Strip**
- **Expansion joints for walls installs with Backer Rod and common sealants**
- **Through penetrations for horizontal and vertical similar to Wrap Strips**

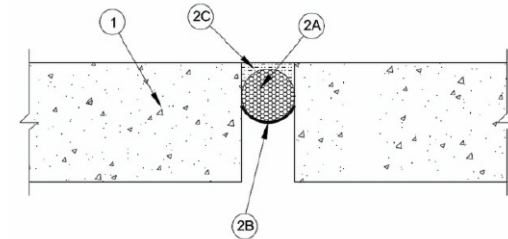


Products :

- Joint Strip for Floors
- Single Side installs to the bottom



ANSI/UL 1017	CANULC 9110
Assembly Rating — 2 Hr	F Rating — 2 Hr
Nominal Joint Width — 2 in.	FT Rating — 2 Hr
Class II or III Movement Capabilities — 25 % Compression or Extension	FH Rating — 2 Hr
	FTH Rating — 2 Hr
	Nominal Joint Width — 51 mm
	Class II or III Movement Capabilities — 25 % Compression or Extension



1. Floor Assembly — Min 6 in. (152 mm) thick reinforced lightweight or normal weight (100-150 pcf 1600-2400 kg/m³) structural concrete.

2. Joint System — Max width of joint (at time of installation of joint system) is 2 in. The joint system is designed to accommodate a max 25 percent compression or extension from it's installed width. The joint system shall consist of the following:

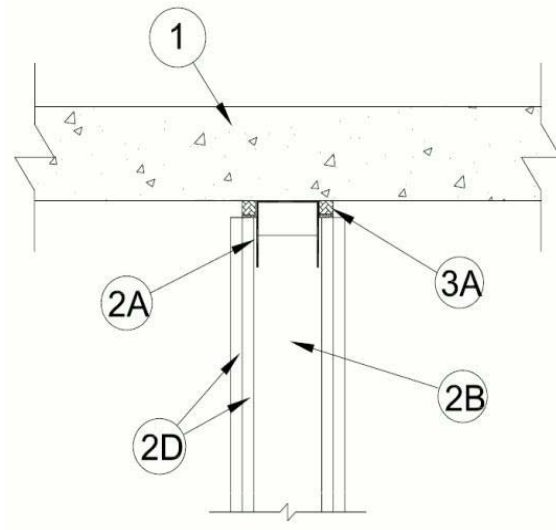
A. Fill, Void or Cavity Material¹ — Joint Strip — Nom 1/16 in. (1.6 mm) thick by 4 in. (102 mm) wide strip of intumescent material faced on one side with an elastomeric backing strip. Strip is formed into a "u-shape" along its length and friction fit into joint opening such that the base of the "u" is recessed approximately 1-8/16 in. (39 mm) from the top surface of floor.

RECTORSEAL — Metacaulk Joint Strip, Biostop Joint Strip or FlameSafe Joint Strip

Products :

- **Expandable Foam Strips**

- Head of Wall
- Bottom of Wall
- Wall to Wall
- Compression Fit between gypsum or block wall up to flat concrete decks.



Foam Strips are an Intumescent with Foam expansion and compression capabilities for joints requiring up to 100% movement.

Products :

• Cast In Devices

- Systems for plastic and metal pipes
- Allows for blank open penetration applications
- Devices can be W Rated
- Extensions allow for variable depths
- Devices can be connected side by side to create multiple penetrations.



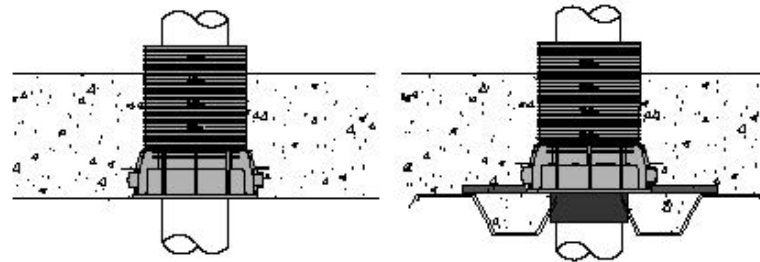
Cast In Devices are an all-in-one through penetration firestop devices that are installed before concrete pouring instead of post pour core drilling and firestopping.

Products :

- **Cast In Devices**

APPLICATION ♦ Single component Cast-In-Place device, approved for use with a multitude of penetrating items. Will prevent the spread of fire from through-penetration services in concrete floors ♦ Installs prior to concrete pour. ♦ Casts directly into the concrete to form an embedded intumescent service supply.

RECOMMENDED FOR ♦ Combustible plastic/metal pipe, power & telephone cable floor penetrations in multi-floor construction. ♦ Installs using both temporary wood or metal forms.



CID Alignment connectors allow tight placement of multiple penetrations.

Products :

- **Firestop Pillows**

- Easily compressible
- Removable
- Multiple thicknesses
- Clean and safe to use
- Excellent for filling large openings and odd shapes

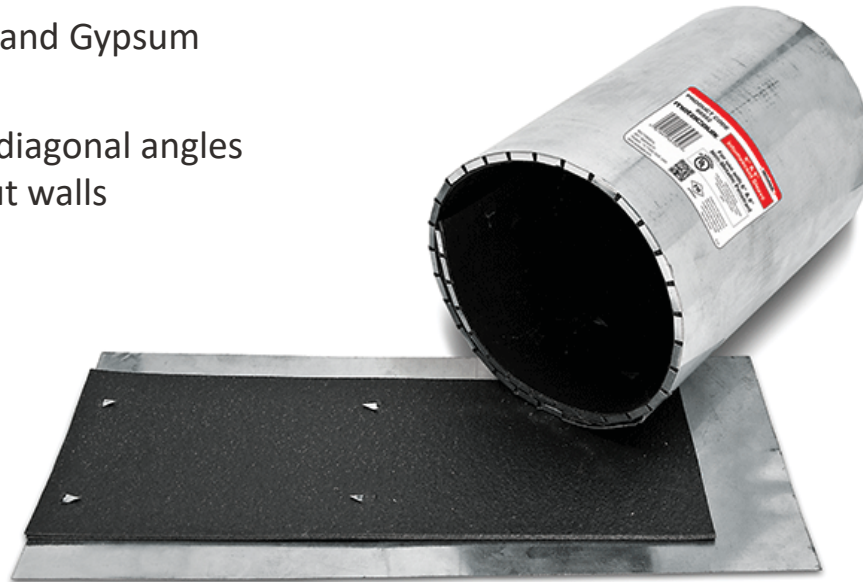


Metacaulk® Pillows fill large openings with removable firestop materials for retrofitting of penetrations

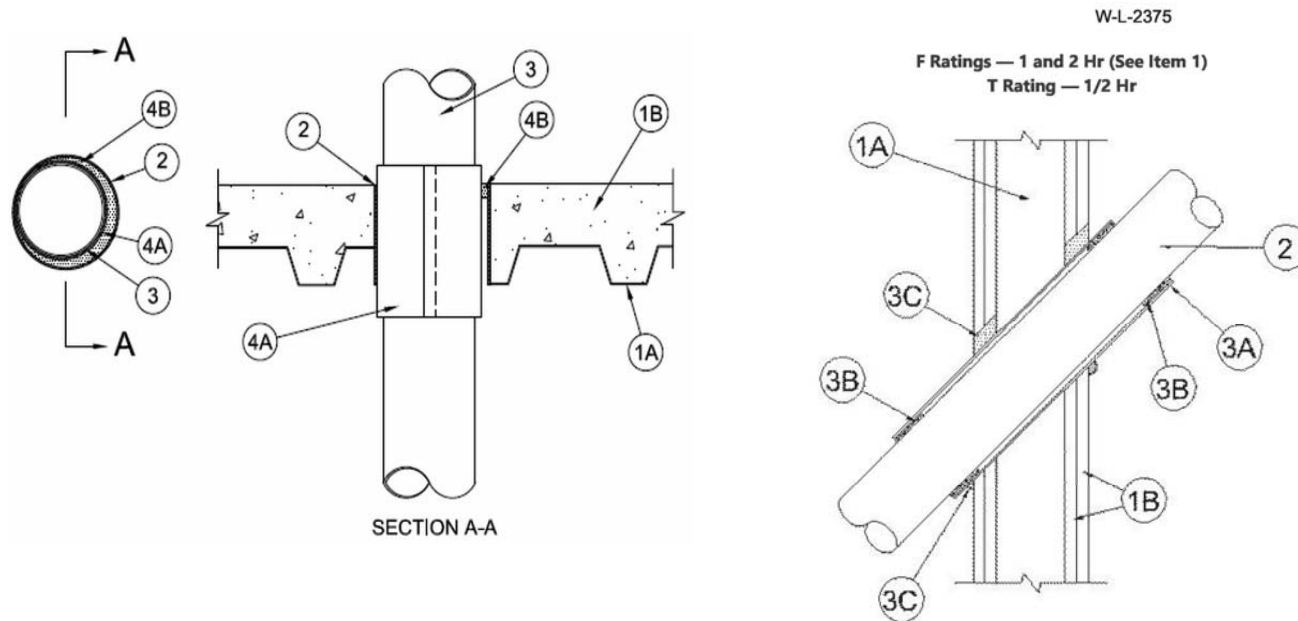
Product Features and Benefits

Products :

- **Sleeves**
 - Works in concrete floors
 - Can be installed in fluted decks without building out flutes
 - Also works in CMU and Gypsum walls
 - Can be installed at diagonal angles without building out walls



Product Features and Benefits



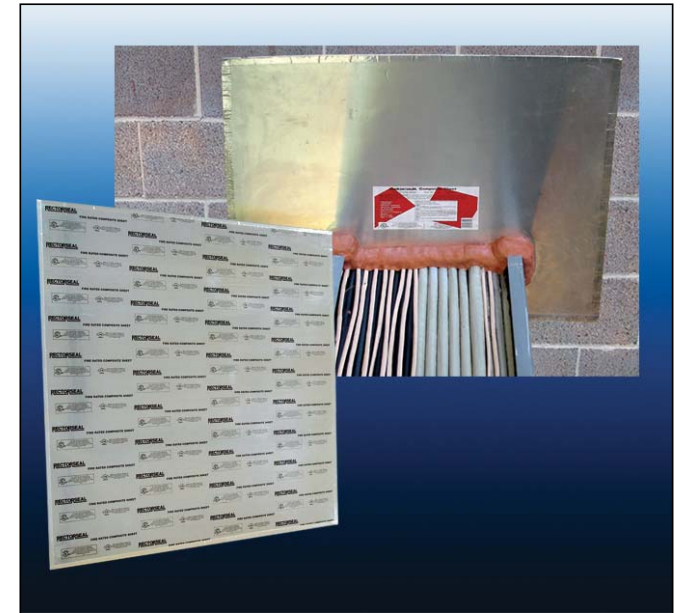
Sleeves allow Top Mount installation of vertical through penetration concrete floors and walls, even at odd angles.

Products:

- **Sheets**

- 1meter X 1meter covers large openings
- Can be combined with other sheets to accommodate very large openings
- Easy to notch for fitting with complex penetrations like cable trays.

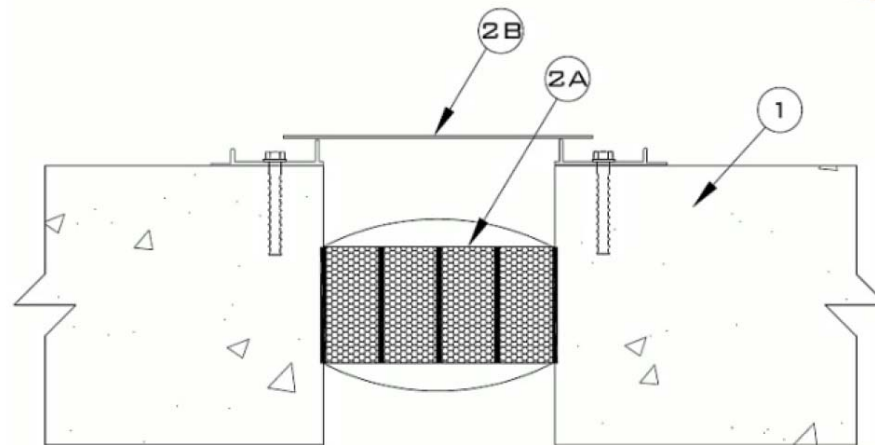
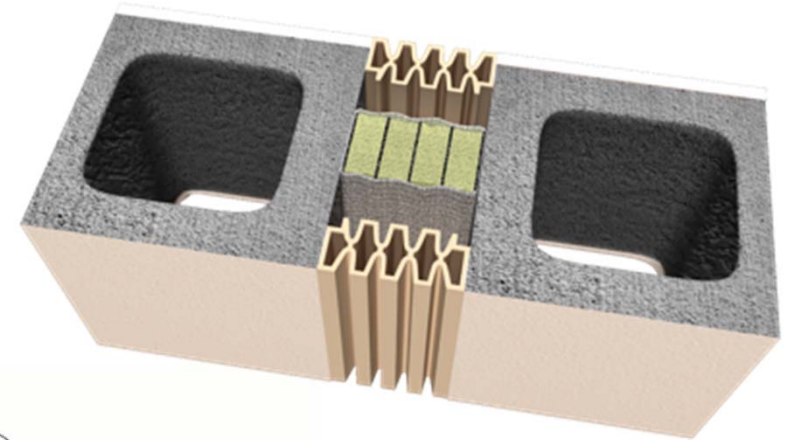
Sheets fill and cover large openings for cable trays and multiple penetrations.



Products:

- **Expansion Joint Blocks**

- 15-100mm joints to 150mm Max Openings
- Horizontal and Vertical Designs
- Concrete, CMU, Gypsum applications
- 2, 3, 4 hour ratings.



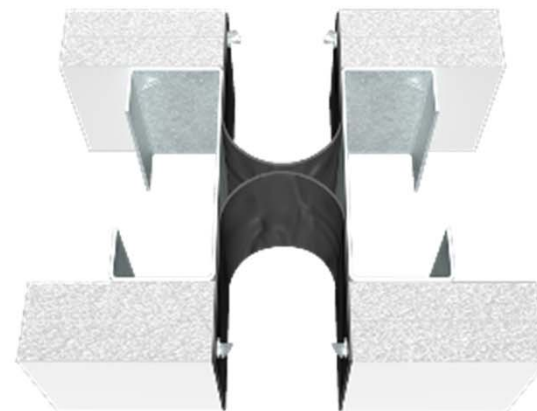
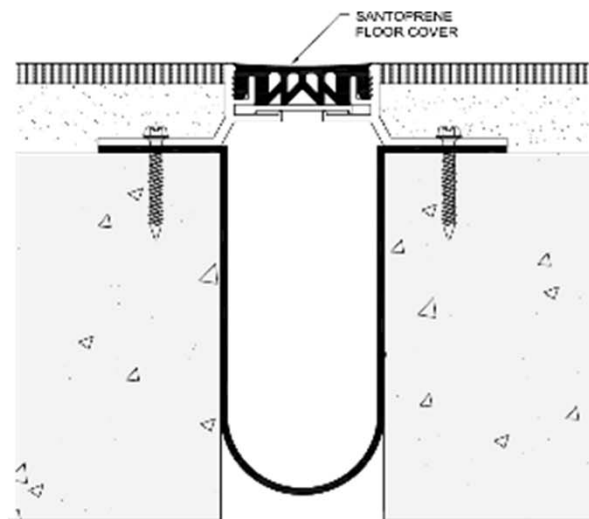
Sheets fill and cover large openings for cable trays and multiple penetrations.

Products:

- **Expansion Joints**

- 15-100mm joints to 150mm Max Openings
- Horizontal and Vertical Designs
- Concrete, CMY, Gypsum applications
- 2 hour ratings only.

Sheets fill and cover large openings for cable trays and multiple penetrations.



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Benefits of Precured Intumescent systems

Pre-Cured Intumescent Firestop

- No Mess
- Reusable
- No waste
- Installs with simple tools - Tape Measure and Utility Knife
- “Go to” product for complex jobsite conditions
- Handles really large plastic pipes



Pre-Cured Intumescent Firestop

- Many UL/C Listings
- Works well with all types of plastic and metal materials
- Non-Corrosive properties work well with construction materials
- Extended shelf life
- Minimal to No restrictions on storage temperatures
- Minimal to No restrictions on installation temperatures

Limitations and Challenges of Precured Intumescent systems

Pre-Cured Intumescent Firestop

- Gaps and openings require sealants or sprays in order to achieve an airtight system
- Irregular shapes are more difficult to conform to
- May need tape, wire or other fastening methods in some cases.
- The correct width or thickness must be chosen for the particular applications

Pre-Cured Intumescent Firestop

- Some limitations for building materials that must be coordinated for applications. Like CMU vs Gypsum walls for Joint Strips.
- Highly intumescent reactions creates outward force on surrounding construction.
- Some particular shapes must be coordinated with applications like Box Guards and Cover Guards or Collar Sizes and Sleeve Sizes.

Questions

