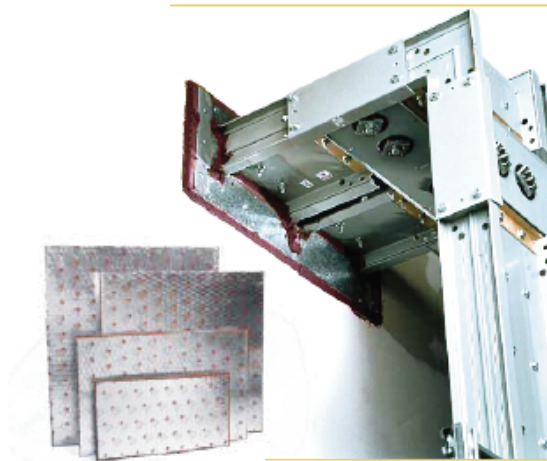


# 3M™ Fire Barrier CS-195+ Composite Sheet



## Product Description

3M™ Fire Barrier CS-195+ Composite Sheet is a one-part composite system comprised of four components. The heart of the system is an organic/ inorganic, fire-resistive elastomeric sheet. 3M™ Fire Barrier CS-195+ Composite Sheet is designed to seal larger penetrations through fire-rated walls and floors. The nominal 0.3 inch (7.62 mm) thick composite sheet provides up to a 4-hour fire rating. When exposed to temperatures in excess of 250°F (121°C), the fire-resistive sheet begins to volumetrically expand and swells 8-10 times its original size, forming a high strength, hard char that retards heat transmission. This expansion process is called "intumescence".

## Fire Resistance Rating

From 2 hours to 4 hours depending on the system and application for walls and floors penetration.



## Product Features and benefits:

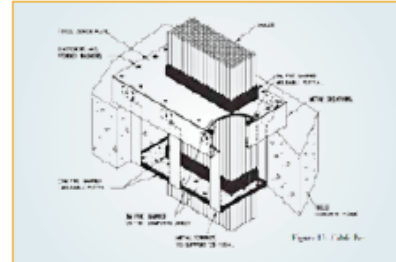
- **Intumescences (expands with heat) to form a hard char** that tightly seals penetrations against flame spread, smoke and toxic fumes.
- **Multiple applications:** It can be used for through penetration firestop, heat shield and firebreak protection.
- **Easy to install** using common trade tools, No mixing or damming required
- **Lightweight:** It is easy to handle, cut and form to desired shape.
- **Easy to fasten:** Bolt punch or drill through. Use self-tapping screws or anchor bolts.
- **Thermally conductive:** Allows unwanted heat build-up to escape.
- **UL Classified:** Tried and tested. Peace of mind for the customer.
- **Cost effective:** High performance versus installed cost.
- **Versatile and Re- enterable:** Can be cut to fit irregular shapes.



## Installation

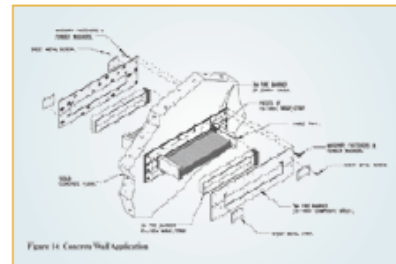
### Floor Installation (Typical)

- 1 **Cover Sheet:** The opening is covered with 3M™ Fire Barrier CS-195+ Composite Sheet cut to fit snugly around pipes and to overlap the opening by a minimum of 50.8 mm. The sheet's galvanized steel layer should face outward (exposed).
- 2 The 3M™ Fire Barrier CS-195+ Composite is secured with 6.35 mm x 38.1 mm steel masonry fasteners with steel washers spaced 152.4 mm O.C.
- 3 **Seal:** 3M™ Fire Barrier CP 25 WB+ Caulk and Moldable Putty+ is used to seal the CS-195+ Composite Sheet.



### Wall Installation:

- 1 The 3M™ Fire Barrier CS-195+ Composite must be placed on both sides of the wall and overlap the edge of the opening a minimum of 50.8 mm.
- 2 Wrap the required number of layers of FS-195+ Wrap/Strip around the insulated pipe, foil side out.
- 3 Cut the 3M™ Fire Barrier CS-195+ Composite to closely follow the contours of the FS-195+ Wrap/Strip around the insulated pipe. Do not allow an annular space greater than 6.35 mm to remain between the 3M™ Fire Barrier CS-195+ Composite and the FS-195+ Wrap/Strip.
- 4 Install the 3M™ Fire Barrier CS-195+ Composite with the foil side facing into the penetration opening. Apply a 6.35 mm minimum bead of CP 25 WB+ Caulk or Moldable Putty+ around the perimeter of the opening on the concrete before installing the 3M™ Fire Barrier CS-195+ Composite. To allow for fastening, there must be a 50.8 mm minimum overlap of the 3M™ Fire Barrier CS-195+ Composite onto the concrete on all sides of the opening.



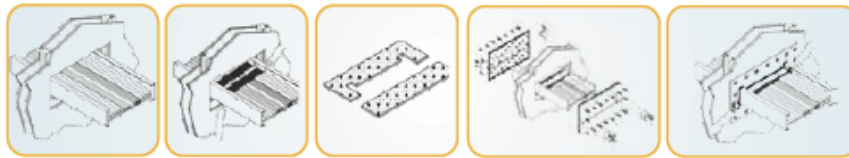
\* The above installation details is a typical one which changes as per site and as per the system passing. Always follow UL specification details for installation. The above details will just provide the overview of the installation.

## Coverage:

Size of the sheet	Size of the opening (Blank)	Number of sheets
711.2 mm x 1320.8 mm	1000mm x 1000mm	1.064 number
609.6 mm x 914.4 mm	1000mm x 1000mm	1.793 number

\* The coverage does not take into account the percentage of the hole filled with services. Also add 50mm all over the perimeter for fastening the CS 195+ with the substrate. The applicator should be responsible for the quantity measurement.

## Installation Methodology:



Blank opening

Apply Caulk / MPP

Cut CS 195+

Fasten Board

Seal with caulk / MPP