

3M[™] Fire Barrier FS-195+ Wrap/Strip

Product Description

3M Fire Barrier is one-part, organic/inorganic, fire resistive elastomeric sheet with aluminum foil on one side. It is available in convenient strips which are quickly and easily installed. FS-195+ is designed to firestop penetrations in fire-rated walls and floor-ceiling assemblies.

The unique, intumescent property of this material (expands when heated) means that as penetrating items such as cable insulation is consumed by fire, FS-195+ Wrap/ Strip expands to maintain a tight seal preventing the spread of fire, deadly smoke and other by-products of combustion.

3M Fire Barrier Systems including FS-195+ achieve Fire Resistance Ratings of up to 4 hours.



Product Features

- Intumescent: Expands when heated to seal around items consumed by fire
- Smoke seal: Retards spread of toxic by-products of combustion
- · Proven stability and performance for the life of a building
- Improved flexibility: Easy, cost effective installation
- Low flame spread and smoke development
- Versatile: can be cut to fit irregular shapes
- · Re-enterable: No special tools required
- · Non-flame supporting
- Low odour
- Red-brown colour: Consistent, enforceable
- Tested in accordance with AS1530.4, EN1366 and ASTM E814 (UL Listed).

Physical Properties





Properties	
Strip Size	6.35 mm x 50.8 mm 609.6 mm (1/4" x 2" x 24")
Detail: Wrap/Strip thickness	5.55 mm - 8.15 mm (0.22" - 0.32")
Aluminium foil thickness	$0.05 \text{ mm} \pm 0.0125 \text{ mm} (0.002" \pm 0.0005")$

Physical & Electrical Properties	Results
Thermal Conductivity: FS195+ sheet as supplied	2.392 BTU/hr/ft²/°F• in. @ 110°F 2.406 BTU/hr/ft²/°F• in. @ 165°F
Intumescent Activation:	
Expansion sequence begins	150°C (300°F)
Significant expansion	175°C (350°F)
Multi-directional free expansion	5 to 15 times (8 times average)
Weight loss (TGA)	20% @ 350°C (662°F) 31% @ 500°C (932°F)
Hardness	70 to 90 Shore A
Tensile Strength (PSI)/Elongation (%)	104 PSI/514% (ASTM D-412)
Colour	Red - Brown / Black Char

Weatherability					After Exposure	
Test Condition	Temperature	Humidity	Time	Elastic Properties		Normal Expansion
Oven	90°C (194°F)	_	90 days	Very Good	t	6

Fire Performance Tests	Results
Flame Spread Index (ASTM E 84)	5
Smoke Development Index (ASTM E 84)	50
Oxygen Index (ASTM D 2863)	50

Availability

3M[™] Fire Barrier FS-195+ Wrap/Strip is available from Authorized 3M Fire Protection Products Distributors.

3M Order Code	Packing	Unit/Case
98040022224	50.8 mm x 609.6 mm (2" x 24")	10

Maintenance

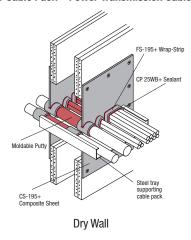
3M Fire Barrier FS-195+ Wrap/Strip remains stable for an indefinite period of time under normal storage conditions.

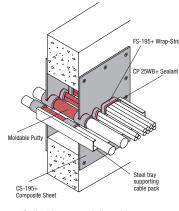


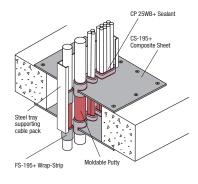
Applications

3M Fire Barrier FS-195+ Wrap/Strip is used as a component in several 3M Fire Barrier Systems. For more details on the systems illustrated below please refer to the 3M Fire Barrier CS-195+ Composite Sheet Product Data Sheet.

D1 Cable Pack - Power Transmission Cables.



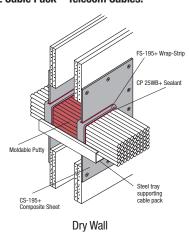


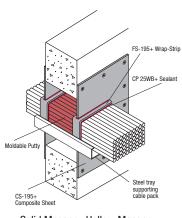


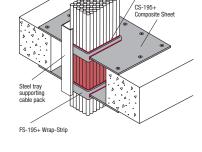
Solid Masonry, Hollow Masonry or Concrete Wall

Concrete Floor

D2 Cable Pack - Telecom Cables.



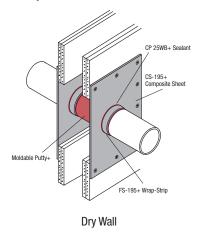


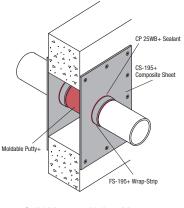


Solid Masonry, Hollow Masonry or Concrete Wall

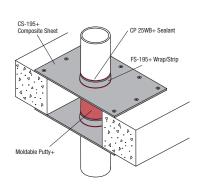
Concrete Floor

Metal Pipes





Solid Masonry, Hollow Masonry or Concrete Wall



Concrete Floor



For further information Call: 1–877–877–0873 TO THE EXTENT PERMITTED BY LAW 3M MAKES NO OTHER WARRANTIES INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. User is responsible for determining whether the 3M product is fit for a particular purpose and suitable for user's application. If this 3M product is defective within the warranty period stated above, your exclusive remedy and 3M's sole obligation under this warranty shall be, at 3M's option, to replace or repair the 3M product or refund the purchase price of the 3M product. Limitation of Liability. Except where prohibited by law, 3M will not be liable for any loss or damage arising from this 3M product, whether direct, indirect, special, incidental or consequential, regardless of the legal theory asserted, including warranty, contract, negligence or strict liability.

3M Building and Commercial Services Division