

3M Science.
Applied to Life.™



3M™ Fire Protection Products

Full Line Brochure
Summer 2017



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3M Firestopping progress and trends.



Protecting lives for more than 30 years

In 1974, the movie *Towering Inferno* sparked the imagination of Richard Licht, a 3M product developer who passionately believed 3M technologies could be used to improve the safety of multi-storey buildings. Several devastating fires – including the 1980 MGM Grand Hotel fire that killed 84 people and injured 679 – inspired Licht to develop the first firestop products based on existing 3M intumescent technology.

Recognised by many as “The Father of Firestopping”, Licht also helped develop some of the first firestop requirements in commercial building codes. He worked tirelessly to make the codes more demanding to improve the safety of all buildings.

As an industry leader, 3M drives technologies that enable lower cost building solutions. For instance, 3M intumescent technology enabled the use of plastic pipes that were originally banned in commercial buildings in some countries due to their combustible nature – providing a cheaper, easy-to-install solution for electrical conduits and plumbing lines.

Leadership you can trust.

Comprehensive fire protection includes fire detection, fire containment and fire suppression. 3M Fire Protection Products address fire containment and are an integral part of a well designed fire protection system. Our understanding of the spread of fire, smoke, and toxic gases helps us continue to create preventative and affordable firestopping solutions.

3M is proud to be a industry leader in firestopping. Our dedication to stringent testing and code developments help make buildings safer today than they were even 10 years ago. And when that dedication is backed by a brand as powerful as 3M, you get what you would expect – proven reliability and outstanding service.

The construction industry is increasingly moving toward easy-to-use firestop solutions. That's why 3M, in its leadership role, provides cutting-edge and fully integrated systems. These systems are designed to help you efficiently build safer buildings that protect lives and property.

The majority of 3M's firestopping innovations are tested on-site in the company's own UL, ULC, FM and Intertek certified fire-test centre. By testing these systems in job-specific conditions, we help you with high-quality, effective firestopping solutions.*

*To learn more about our locally tested systems and technical data sheets visit: www.3M.com.au/fireprotection



From time-tested fire barrier sealants to today's innovative firestop devices and protective wraps, 3M scientists work to develop solutions to firestop virtually anything on a building site.



Building designs and uses continue to evolve and so too must 3M firestop technology. For example, in buildings where telecommunication cables are constantly being upgraded, the 3M™ Fire Barrier Pass-Through Device allows for re-enterability and helps keep cables organised and protected (for more information see page 8).



Pass-Through Devices

3M™ Service Penetration Firestopping Solutions

3M Service Penetration Products and Solutions offer an effective solution for the firestopping of penetrating items through rated walls and floors. During a fire, these products form a seal which helps protect against the spread of fire, smoke and toxic gases.

3M offers pass-through solutions for walls and floors including Fire Barrier Devices, Sealants and Specialty Products. They are easy to install and are designed to take the guess work out of firestopping.

Pass-Through Devices

3M Fire Barrier Devices offer a simple, and in a majority of cases caulk-free, code compliant alternative to complicated caulk systems. Pass-Through devices designed for easy installation and re-enterability – perfect for firestopping structures where electrical, data and communication cables or plumbing pipes pass through fire-rated floors and walls.



3M™ Fire Barrier Pass-Through Devices

Re-enterable and caulk-free.

- Australian standard testing in accordance with AS1530.4, International testing in accordance with EN1366 and ASTM E814 (UL Listed)
- Provides up to a 4-hour integrity rating
- Sizes available in: Round 50.8 mm (2"), Round 101.6 mm (4"), Square 63.5 mm (2.5"), and Square 101.6 mm (4")
- Stackable for penetrant versatility
- Hinged for easy retrofit installation around cables

For local availability and pricing enquiries please contact 3M.

Pass-Through Devices

3M™ Fire Barrier Pass-Through Mounting Brackets

Use for wall or floor mounting applications.

- Mounting brackets available for wall or floor mounting of 3M Fire Barrier Pass-Through Devices:
 - Single mounting bracket available for all devices
 - Triplex and Sixplex mounting brackets available for square devices



3M™ Fire Barrier Putty Sleeve Kits

Use for concrete floors, concrete walls, concrete block walls, and gypsum wall board.

- Designed to be used for both new construction and retrofitting
- System offers dual fire and cable through-penetration protection
- Kit includes all components required to meet firestop code for installation of cable and blank applications
- Rolled-out lip on sleeve facilitates smooth cable entry
- Brackets and sleeve work in tandem to help prevent slipping during installation — sleeve won't pull out
- Bracket plate covers smooth and rough irregular shaped openings to fit a variety of installation needs
- Red colour for easy identification and inspection
- Economical — putty sleeve kits are versatile enough to help reduce inventory
- Available in three sleeve sizes: 25 mm, 51 mm and 102 mm



3M™ Fire Barrier Putty Sleeve Kits - Installation



Label holds sleeve together until you need to retrofit around existing cables. Slit label to open sleeve. Close the two halves around the cables.



Bracket covers oversized openings (up to 19 mm annular space). Innovative sleeve design assembles with the brackets to help prevent slipping during installation.



Installation of putty and application of identification label completes pass-through firestop. Putty holds cables in position, helping to prevent cable slippage and movement.

Sealants

Sealants

3M offer a wide range of sealing solutions from high performance fire barrier sealants to simple fire block foam sprays and lightweight packing material. They help prevent the spread of fire, smoke and toxic gases through penetrations.



3M™ FIP 1-Step Firestop Foam

Smoke, sound and firestopping foam for wall and floor penetrations.

- Easy to use and install
- Intumescent. Expands In Fire
- Expands 5 Times Upon Delivery
- Meets ASTM E-814, UL 1479
- bonds to most construction substrates including, but not limited to, concrete, metal, wood, plastic and cable jacketing.
- Dries to a flexible solid.



3M™ Fire Block Foam FB-Foam

Ready-to-use foam fireblock designed to help prevent the spread of flames and smoke.

- Heat-resistant up to 115° C
- Tested to ASTM E 84 Class 1 (modified)
- Draftstop – helps reduce air infiltration
- Thermal insulator
- Ready-to-use (no mixing required)
- Tack-free in approximately 5 minutes
- Expands to quickly and effectively seal openings
- Sag-resistant formulation
- Excellent adhesion—bonds to concrete, brick, metals, wood, plastic and cable jacketing
- Minimal shrinkage



For local availability and pricing enquiries please contact 3M.

Sealants

3M™ Fire Barrier CP 25WB+ Sealant

Our most popular firestop sealant approved up to 4-hours fire protection when used with most plastic and metal pipes.

- Australian standard testing in accordance with AS1530.4
- International testing in accordance with EN1366
- Provides up to 4-hours fire protection
- Superior adhesion – bonds to concrete, metals, wood, plastic and cable jacketing
- Intumescent – expands when heated to seal around items consumed by fire

* Not approved for use with CPVC pipes



3M™ Fire Barrier IC 15WB+ Sealant

Affordable UL, general-purpose sealant approved up to 3-hours fire protection when used with plastic and metal pipes.

- Australian standard testing in accordance with AS1530.4
- Meet International testing in accordance with EN 1366
- ASTM E814 (UL Listed)
- Provides up to 3-hours fire protection
- CPVC compatible
- Superior adhesion – bonds to concrete, metals, wood, plastic and cable jacketing
- Intumescent – expands when heated to seal around items consumed by fire



3M™ Fire Barrier Packing Material PM4

Lightweight packing material to be used with through-penetration firestops.

- Tested in accordance with ASTM E814 (UL Listed)
- Convenient, hand-tear dispensing
- For almost any through-penetrating firestop project
- Easy to use and less irritating to skin than competitive products
- Available in 101.6mm x 6.25m rolls



Watertight Sealants

Fire Barrier Watertight Sealants

Achieve the benefits of firestopping and a watertight seal in one application!

- Provides excellent adhesion on most construction surfaces, including: concrete, gypsum, metal, plastic, wood and insulation
- Ideal for the following interior construction voids: blank openings, metallic pipes, non-metallic pipes, cables, cable trays, insulated pipes, busways, combos



3M™ Fire Barrier Watertight Silicone 3000 WT Sealant

High-performance intumescent silicone achieves the benefits of a firestop and watertight seal.

- Provides up to 4-hours fire protection
- Excellent weatherability – ideal for fast-track construction
- Cures upon exposure to atmospheric humidity
- Re-enterable and repairable



3M™ Fire Barrier Water Tight Sealant 1003 SL

Self-leveling silicone firestop for floor applications.

- Up to 3-hour fire ratings for joint systems per ASTM E 1966 (UL 2079)
- Up to 3-hour fire ratings for through penetrations per ASTM E 814 (UL 1479)
- Compression/extension recovery of $\pm 31\%$ of original joint width



For local availability and pricing enquiries please contact 3M.

Specialty Products

3M Fire Barrier Specialty Products

From wrap strips and restricting collars to 3M™ Fire Barrier Mortar, these code approved products help round out 3M's comprehensive offering of service penetration firestops.



3M™ Fire Barrier Plastic Pipe Device

Use for firestopping penetrating items such as plastic pipe and cables in new and retrofit installations.

- Australian standard testing in accordance with AS1530.4 in firestop systems up to 4 hours fire protection
- Ultra-fast anchoring system secures the device to most substrates without power tools
- One-piece construction makes installation easy
- Proven technology – intumescent action quickly seals off the penetrating item in a fire
- Can be used to seal the following plastic pipes: ccPVC, PVC, CPVC, FRPP, PVDF, ccABS and ABS
- Available in 36, 51, 76, 102 and 152 mm sizes
- All sizes with the exception of the 152 mm device utilize Ultra GS intumescent material. 152 mm device used FS-195+ strip



Specialty Products

3M™ Fire Barrier Wrap Ultra GS

Flexible, intumescent wrap strip expands when exposed to high temperatures.

- Up to 3-hour fire ratings per ASTM E 814 (UL 1479)
- Excellent weatherability
- For use in drain, waste, vent or closed pipe systems
- Easily cut and shaped with common tools
- Used to firestop the following plastic pipes: ccPVC, PVC, FRPP, PVDF, ccABS and ABS
- Provides a smoke seal when used in conjunction with 3M™ Fire Barrier Sealant (CP 25WB+, IC 15WB+, 3000 WT) or 3M™ Fire Barrier Mouldable Putty MP+
- Available in 50.8 mm x 12 m roll



3M™ Fire Barrier FS-195 + Wrap/Strip

A one-part, intumescent and elastomeric strip with foil on one side.

- Australian standard testing in accordance with AS1530.4 in firestop systems
- International testing in accordance with EN1366 and
- ASTME 814 (UL Listed)
- Can be cut to fit irregular shapes
- Available in 6.35 mm x 50.8 mm x 609.6 mm strips



3M™ Fire Barrier RC-1 Restricting Collar

Works in conjunction with Wrap/Strip to firestop plastic pipes up to 254 mm in diameter.

- 28-gauge steel
- Convenient 7.62 m roll – cut only what you need



3M™ Fire Barrier Tuck-In Wrap Strips

- Three sizes available (200 mm, 300 mm & 400 mm)
- Available in roll of 2.4 m
- Engineered for top-side firestop through penetration installations on concrete floors
- Tested to EN1366 for plastic pipe penetrations
- Labour savings – helps eliminate the need for retaining collar, concrete screws, ladder, etc.
- Flexible foam strip wraps around pipe to fill tough areas and gaps
- Adhesive closure tab for easy installation
- Expands 100x in volume
- Wrap Strip pre-cut to nominal pipe size



3M™ Fire Barrier Tuck-In Wrap Strips are designed for use with PVC, PVCc, PE and PP plastic pipes penetrating through concrete floors, block and concrete walls, and gypsum stud walls. Wrap Strip easily slides into annular space and is topped with 3M™ Fire Barrier IC 15 WB+ and 3M™ Fire Barrier Watertight Silicone 3000 WT Sealant.



For local availability and pricing enquiries please contact 3M.

Specialty Products

3M™ Fire Barrier Mortar

Unlike common mortar, which shrinks when exposed to fire, 3M Fire Barrier Mortar slightly expands (intumesces) to help protect against the spread of fire, smoke and toxic gases.

- Australian standard testing in accordance with AS1530.4 International testing in accordance with EN1366 and ASTM E 814 (UL Listed)
- Provides up to a 3-hour Integrity rating
- Variable mix ratio permits self-leveling and no-sag application consistencies
- Pumpability allows for faster installation
- Asbestos free, non-shrinking, non-load bearing formula
- 20 kg bag yields a minimum 0.25 m² of opening area at 75 mm depth
- Low Voc



Firestops service penetrations passing through fire-rated floor or wall assemblies.*

*Not load bearing.

3M™ Fire Barrier Expantrol Flexible Intumescent Strip (E-FIS)

Designed to seal the air space between doors and frames and for glazing fire resistant glass to help prevent the passage of smoke and flames in the event of a fire.

- Expands when heated to seal around objects consumed by fire
- Retards spread of toxic by-products of combustion
- Excellent flexibility, easy, cost-effective installation
- Low flame spread and smoke development
- Can be cut to fit irregular shapes
- No special tools required
- Non-flame supporting
- Low odour



Specialty Products

3M™ Fire Barrier Self-Locking Pillows

Interlocking strips hold pillows securely together yet release easily for retrofit or reuse – just remove and replace pillows as needed.

3M™ Fire Barrier Pillows

Stackable and conformable firestop pillows for new and retrofit projects.



- Australian standard testing in accordance with AS1530.4
- International testing in accordance with EN1366 and ASTM E814 (UL Listed)
- Provides up to a 3-hour integrity rating
- No wire mesh reduces safety issues
- Easy to install, easy to remove and reuse
- No cutting and no mess – just lock pillows together, compress and place (use 3M™ Fire Barrier Mouldable Putty+ around edges to ensure proper seal)
- No graphite
- Excellent aging properties
- Available in 51 × 102 × 229 mm (small), 51 × 152 × 229 mm (medium) and 76 × 152 × 229 mm (large) pillow sizes



Self-contained, highly intumescent pillows are designed to firestop a wide variety of through-penetrations including cable trays, conduit and blank openings.



Multiple pillow sizes and ability to field-cut allow for a secure fit in most openings (seal cut edges with polypropylene box sealing tape).

For local availability and pricing enquiries please contact 3M.

Specialty Products

3M™ Fire Barrier CS-195+ Composite Sheet

Ideal for fire-stopping blank openings and through-penetrations of multiple cables, pipe ducts and cable trays.

- Australian standard testing in accordance with AS1530.4
- International testing in accordance with EN1366 and ASTM E 814 (UL Listed)
- Provides up to a 4-hour Integrity rating
- Great substitute to firestop mortar in the wall
- No mixing or damming required
- Easy to install using common trade tools
- Easy to fasten, bolt punch or drill through and use self-tapping screws or anchor bolts
- Re-enterable
- Available in the following sizes:
 - 40.64 × 71.12 cm
 - 91.44 × 60.96 cm
 - 91.44 × 91.44 cm
 - 91.44 × 104.14 cm
 - 71.12 × 132.08 cm



3M™ Fire Barrier Mouldable Putty Stix MP+

Designed to firestop a wide variety of through penetrations, including: cable, conduit, insulated pipe and metal pipe.

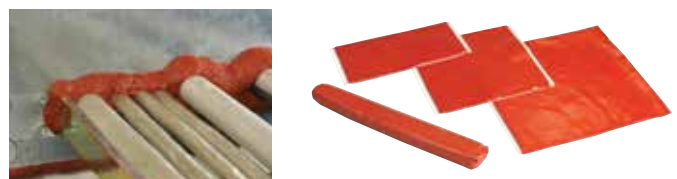
- Australian standard testing in accordance with AS1530.4 in firestop systems
- International testing in accordance with EN1366 and ASTM E 814 (UL Listed)
- Pliable – can form into almost any desired shape
- Will not dry out or crumble
- Can be sealed for reuse
- Available in 36 × 279 mm stick size



3M™ Fire Barrier Mouldable Putty Pads MPP+

Designed to firestop a wide variety of through penetrations, including: cable, conduit, insulated pipe and metal pipe.

- Australian standard testing in accordance with AS1530.4 in firestop systems
- International testing in accordance with EN1366 and ASTM E 814 (UL Listed)
- Pliable – can form into almost any desired shape
- Will not dry out or crumble
- Can be sealed for reuse
- Available in 3 mm thick pads: 102 × 203 mm, 178 × 178 mm and 241 × 241 mm sizes



Sprays and Sealants

3M Construction Joint Firestopping Solutions

Whether you are a drywaller, carpenter, caulker, waterproofer, glazer or masonry contractor, one thing you know is construction joints move. When construction joints require firestopping, you need a tested product that can meet the demands of expanding and contracting joints day in and day out.



Sprays and Sealants

3M Fire Protection Systems developed fire barrier sealants and sprays that meet the movement needs of head of wall, wall to wall, bottom of wall and perimeter joints. These products undergo stringent building movement testing prior to firestop testing and are designed to meet the challenges of firestopping construction joints for many years.

3M™ FireDam™ Spray 200

This sprayable coating is a quick and easy method for firestopping fire rated construction joints, including: head-of-wall, wall-to-wall, floor-to-floor and perimeter joints.

- Tested in accordance with ASTM E814 (UL Listed)
- High coverage rate reduces installation time
- Fast-dry, low-sag formula
- Grey colour blends well with both concrete and gypsum
- Dries quickly to dark grey or red
- Applies with conventional airless spray equipment
- Paintable when cured
- Elastomeric – forms a flexible seal with compression/extension of up to ± 25% of nominal joint width
- Easy clean-up with water
- Available in 20 Litre pails



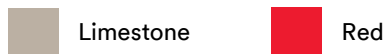
For local availability and pricing enquiries please contact 3M.

Sprays and Sealants

3M™ Fire Barrier Silicone Sealant 2000+

Bonds to most common construction materials to form a flexible seal.

- Tested in accordance with ASTM E 814 (UL Listed)
- Superior adhesion
- Remains elastomeric and is weather resistant.
- Up to 4-hour fire ratings for joint systems per ASTM E 1966 (UL 2079)
- Up to 3-hour fire ratings for through penetrations per ASTM E 814 (UL 1479)
- Compression/extension recovery of $\pm 13\%$ of original joint width
- Superior adhesion
- Weather-resistant
- Sound damping



3M™ Fire Barrier Watertight Sealant 1000 NS

Non-slumping silicone with up to 3-hour fire protection

- Up to 3-hour fire ratings for joint systems per ASTM E 1966 (UL 2079)
- Up to 3-hour fire ratings for through penetrations per ASTM E 814 (UL 1479)
- Compression/extension recovery of $\pm 31\%$ of original joint width



3M Flexible Wrap Fire Protection Systems

3M Flexible wrap fire protection systems

3M Flexible Wrap Systems address a variety of application needs including air ducts, grease ducts, chemical exhaust ducts and plenum. They are also excellent for oil and gas refineries and other industrial applications. The insulative properties help keep heat, fire and smoke contained.

3M™ Fire Barrier Duct Wrap 615+

Manufactured with a man-made vitreous spun fibre, a calcium-magnesium silicate (CMS) wool technology which is bio-soluble, allowing for low thermal transfer properties in a lightweight, low profile, easy to apply product.

- Lightweight 96 kg/m³ and thin 38 mm for easier application
- Broadest and most economical tested duct hanging support system in the industry
- Up to 2 hour fire protection tested to AS1530.4 for External and internal Fire
- Single and double layer systems available
- Available in three sizes:
 - Small Roll (38mm x 609 mm x 7.62m roll)
 - Large Roll (38mm x 1220 mm x 7.62m roll)
 - Collar (38 mm x 152 mm x 7.62m roll)



For local availability and pricing enquiries please contact 3M.

3M Flexible Wrap Fire Protection Systems

3M™ Interam™ E-5A-4 Mat

3M™ Interam™ Endothermic Mat (3M™ E-mat) opens up new opportunities in building design in allowing engineers to fulfill the requirement of the different fire exposure; cellulosic, hydrocarbon and jet fire while enhancing design flexibility. Using advanced endothermic materials, the 3M™ Interam™ Endothermic Mat helps prevent the transfer of heat from the expose side to the protected items via a chemical reaction, which absorbs the heat energy. Its space-saving, conformable construction offers easy installation in a broad range of applications, providing flexible, full envelope protection in critical areas of all types.

Applications

Electrical:

- Cable Trays
- Cable Bundles
- Electrical Panels

Mechanical:

- Vessels
- Storage Tanks

Structural:

- Columns
- Structural Steel
- Support Members

Instrumental:

- Process Measurement Instrumentation
- Control Valves & Regulators
- Instrument Air & Piping
- Safety Instrumented Systems



3M™ Interam™ E-5A-4 Mat

Resists heat and fire to protect structural steel and provide electrical circuit protection around cables, cable trays and conduits.

- Tested in accordance with ASTM E 814 (UL Listed)
- AS1530.4 for insulation of metal pipes
- Hydrocarbons pool fire approved systems
- Endothermic – releases chemically bound water to cool the outer surface when exposed to high temperatures
- Made of a combination of ceramic fibres and inorganic endothermic material
- Easily cuts to size and flexible
- 10 mm thick x 62.23 cm width x 6.1 m length roll size

3M™ 425 Aluminium Foil Tape

Aluminium foil tape is a 5 mil nominal dead soft aluminium foil backing combined with a transparent acrylic adhesive designed to seal the cut edges of 3M Duct Wrap and Interam mats to complete the total encapsulation.

- 0.127mm aluminium foil
- Acrylic adhesive
- Tensile strength: 30 lbs./in. width (525N/100 mm)





Scan the QR code to visit our Technical Library

www.3M.com.au/fireprotection

Industrial applications systems are tested in accordance with ASTM E814. Systems are UL Listed.

User is responsible for determining whether the 3M product is fit for a particular purpose and suitable for user's application. 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.



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