



# TENMAT

**FIRE PROTECTION SOLUTIONS**



## ELECTRICAL

FIRE STOPPING SOLUTIONS



## INNOVATION

## SAFETY

**TENMAT** is a leading manufacturer of unique, high performance intumescent materials and solutions with over 30 years of passive fire protection experience.

## SERVICE

**TENMAT** manufacture innovative life safety products and we are committed to meeting our customers' needs and exceeding the latest quality standards worldwide.

## QUALITY

### A Leading Manufacturer for the Construction Industry

**TENMAT's** advanced passive fire protection materials are widely recognised as the industry standard for demanding applications within the construction industry.

#### Commitment to Quality

**TENMAT** operates an ISO 9001:2008 Quality Management System for the design, development and manufacture of specialised high performance engineering materials and components.

# ELECTRICAL

When electrical services are installed through compartment walls and floors, their integrity and ability to perform to the required fire and acoustic standards are significantly reduced.

Electrical penetrations, such as sockets, cable trays / baskets or cable conduits, must be fire stopped in order to reinstate the fire rating of the structure in which it is contained, and ensure that fire and smoke are unable to spread through the penetration.

**TENMAT** provides a range of fully tested Passive Fire Protection/Firestopping products for electrical service penetrations, offering a quick and simple way to maintain the fire and acoustic rating where electrical penetrations are involved.



## FF130 Socket Box Insert

Fire & Acoustic Rated pre-formed Inserts for socket protection  
Up to 120 minutes fire rating

[More Information on Page 3](#)



## FF109 Socket Box Cover

Intumescent Covers for socket protection  
Up to 120 minutes fire rating

[More Information on Page 4](#)



## FF108 Cable Basket Sleeve

Intumescent Sleeves for Cable Baskets and Trays  
Up to 120 minutes fire rating

[More Information on Page 5-6](#)



## Firefly OverSleeve

Intumescent sleeve for cable bunch/conduit penetrations  
Up to 60 minutes fire rating

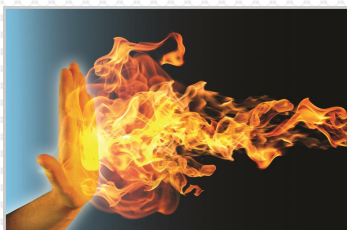
[More Information on Page 7-8](#)



## Fire Stop Block

Alternative to fire pillows  
Can be cut to size  
Up to 120 minutes fire rating

[More Information on Page 9](#)



## Test Data

Our products are fully acoustic and/or fire tested

[More Information on Page 10](#)

# FF130 Socket Insert

## Key Features:

- 2 Hour Fire Rated
- Acoustically Rated to 67dB
- Air Leakage tested
- Made from Fire Resistant Fibre
- Ready to install; no moulding or trimming required



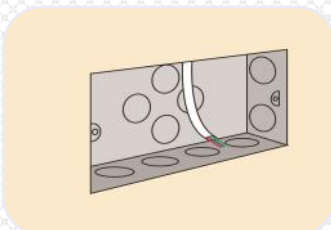
Internal walls create the required barriers to air leakage, fire and acoustic transmission. However, once a hole is made in the wall for a recessed switch or socket box, the ability of the wall to protect against air leakage, fire and acoustic transmission is significantly reduced.

To combat this, **TENMAT** has developed the Fire and Acoustic Rated *FIREFLY* 130 Socket Box Inserts. The FF130 Socket Box Inserts have been developed to improve air tightness and maintain fire and acoustic protection for penetrations created by the introduction of both single and double recessed socket boxes. The fire resistant mineral fibre Socket Box Insert limits the passage of fire and smoke through the wall.

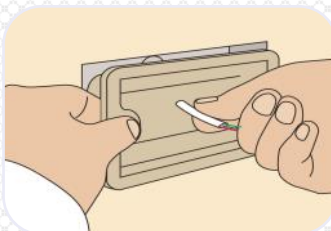
## Availability

Name	Socket Type	Depth
FF130 Socket Box Inserts	Single	35mm, 47mm
FF130 Socket Box Inserts	Double	35mm, 47mm

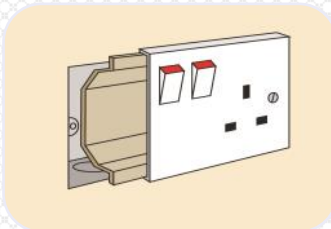
## Fitting Instructions



- Make small, tight fitting hole through Insert, ready for cable



- Pass cable through Insert and fit Insert into socket box



- Fit socket cover as normal. Screws can pass through Insert material
- The flange of the Insert should be hidden by the socket cover. Any rough edges can be trimmed

# FF109 Socket Box Covers

## Key Features:

- 2 Hour Fire Rated
- Acoustically Rated to 67dB
- Can be fitted back to back in uninsulated walls
- Covers are pre-formed to fit the boxes
- Can be retrofitted
- No additional screws, drilling, or support required
- Covers fit in seconds

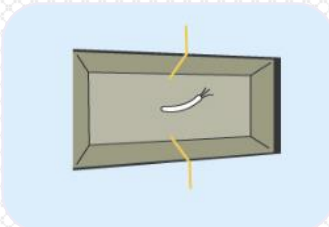
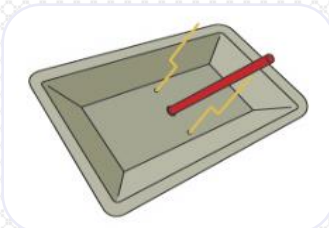


The **TENMAT FIREFLY** 109 Socket Box Covers are designed to be installed behind both single and double recessed switch/socket boxes. In a fire situation, the cover expands internally to fill all of the available space with a fire resistant highly insulating char. The fire is unable to penetrate the hole and the cover is able to give additional insulation protection to the wall void by reducing the chance of fire damage to flammable structural members.

## Availability

Name	Socket Type	Dimensions
FF109 Socket Box Covers	Single	6 x 144 x 144 mm (EN Tested)
FF109 Socket Box Covers	Single	10 x 152 x 152 mm (BS Tested)
FF109 Socket Box Covers	Double	10 x 152 x 219 mm

## Fitting Instructions



- Push wire legs through holes in cover. Pierce the cover with a pencil and pass through cables.
- With the wire legs vertical, fold in the sides until the cover is a tight, flat rectangle
- Holding on to the wire legs, pass the cover through the socket/switch cut out, and allow to spring back into shape
- Pull the wire legs through the cut out, until the steps in the wire can locate on the face of the wall\* - small notches can be made in the plasterboard to allow the wire to sit flush
- Cut away excess wire from legs. Fit box as normal

\* In a wall with two layers of plasterboard on each face, the ends of the fixing wires can be pushed between the plasterboard layers  
See page 10 for Fire Test Data or visit [www.tenmat.com](http://www.tenmat.com)

# FF108 Cable Basket Fire Sleeve

## Key Features:

- 2 hours Fire Rated
- Acoustically rated
- Simple to install
- No mastic, screws, or metal sleeving required
- Can be fitted prior to running cables
- Firestops both the cable basket and cables



The use of Cable Trays and Cable Baskets is on the increase as the amount of cabling within buildings continues to grow. Cables are routed through a wide variety of building types including hospitals, apartments and hotels.

All buildings have walls and floors with fire and acoustic ratings. When cables are installed through such constructions their integrity and ability to perform to the required fire and acoustic standards are significantly reduced.

**TENMAT** as part of its continuing development of passive fire protection solutions, has developed a range of *FIREFLY* 108 Cable Basket Fire Sleeves. The Cable Basket Fire Sleeves offer a quick and simple way to maintain the fire and acoustic ratings of cable basket penetrations.

## Product Dimensions

To Suit Cable Basket Size	Nominal Thickness	Nominal External Width/ Diameter	External Height	Length
75 x 54 mm	25-30 mm	145 mm	114 mm	180 mm
100 x 54 mm	25-30 mm	170 mm	114 mm	180 mm
150 x 54 mm	25-30 mm	220 mm	114 mm	180 mm
200 x 54 mm	25-30 mm	272 mm	114 mm	180 mm
250 x 54 mm	25-30 mm	324 mm	114 mm	180 mm
300 x 54 mm	25-30 mm	374 mm	114 mm	180 mm
400 x 54 mm	25-30 mm	478 mm	114 mm	180 mm
450 x 54 mm	25-30 mm	528 mm	114 mm	180 mm
Infill sheet	20 mm	180 mm	N/A	1000 mm

See page 10 for Fire Test Data or visit [www.tenmat.com](http://www.tenmat.com)

## Product Description

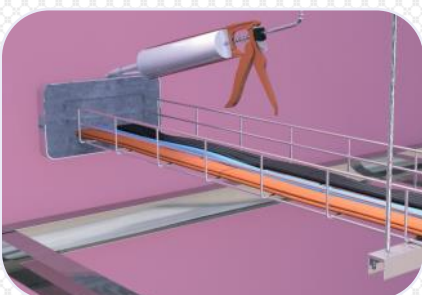
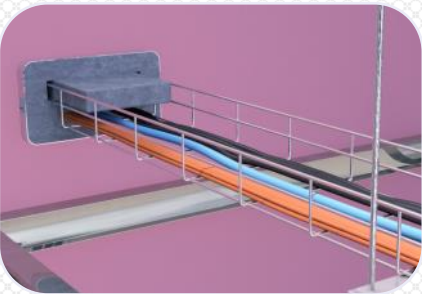
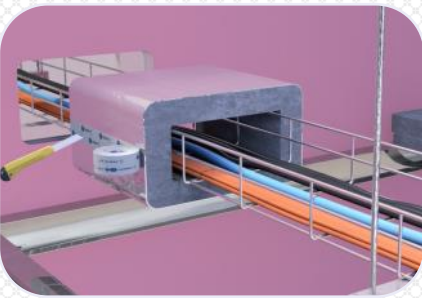
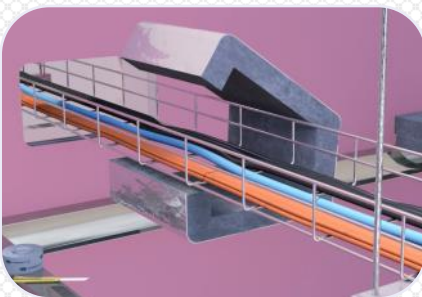
**TENMAT's FIREFLY 108 Cable Basket Fire Sleeves** are a unique range of products designed to speed up and simplify the firestopping of cable trays or baskets.

The compressible and fully intumescent material provides an effective fire and acoustic seal around both the cables and the cable basket itself. The Sleeves have been fire tested to BS 476: Part 20 and acoustically tested in accordance with BS EN ISO 140-3:1995 and BS EN ISO 717-1:1997.

The Cable Basket Fire Sleeves are supplied in a standard length to suit all common wall constructions. The ready to install design does not require any additional metal work, support, fire rated sealants or foams.

## General Fitting Instructions

For detailed fitting instructions for various applications please contact **TENMAT**.



- Use the Fire Sleeve as a template when cutting the plasterboard to provide a snug fit around the Fire Sleeve
- Slit the sleeve along its length to allow easy installation around cable tray or basket
- Fit sleeve around tray or basket and re-seal with aluminium repair tape supplied
- Once cables have been installed they should be tightly sealed with **TENMAT** Infill Material
- If required, an intumescent sealant can be used to ensure a smoke and acoustic seal
- Installation in solid walls is also approved

# Firefly OverSleeve Plus

## Key Features:

- 60 Minutes Fire Rated
- Low profile
- Can be retrofitted
- One Product Solution—suits both cable bundles and cable conduit penetrations



The **TENMAT FIREFLY** OverSleeve is a universal, one-product-fits-all solution for the firestopping of cable bundles and cable conduits. The thin and flexible intumescent is quickly and simply wrapped directly onto the conduit. The red branded foil can be easily checked and identified on site to confirm that firestopping is in place.

The unique *FIREFLY* intumescent material rapidly expands to crush and seal off the conduit to provide up to 600 minutes fire resistance.

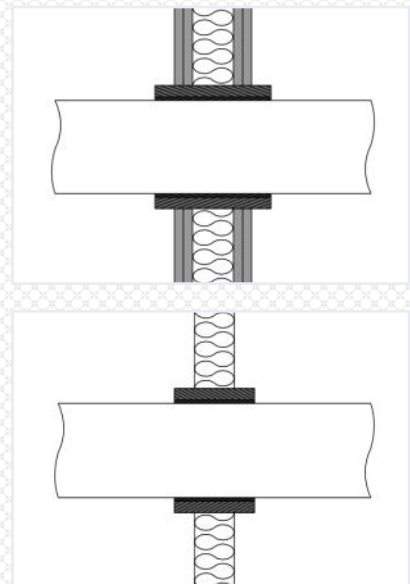
## Product Dimensions

Length	Width	Thickness	Contents of Pack as Supplied
1000 mm	180 mm	2 mm	5 metre lengths, plus repair tape

## Examples of Approved Applications

### Fire Tested in accordance with BS EN 1366-3: 2009

- Data Cable Bunches up to 60 mm diameter
- Plastic Cable Conduit up to 60 mm outside diameter
- Suitable for Drywall/Plasterboard Partitions
- Suitable for Ablative Coated Fire Batts
- Suitable for Solid Walls



See page 10 for Fire Test Data or visit [www.tenmat.com](http://www.tenmat.com)



## General Fitting Instructions

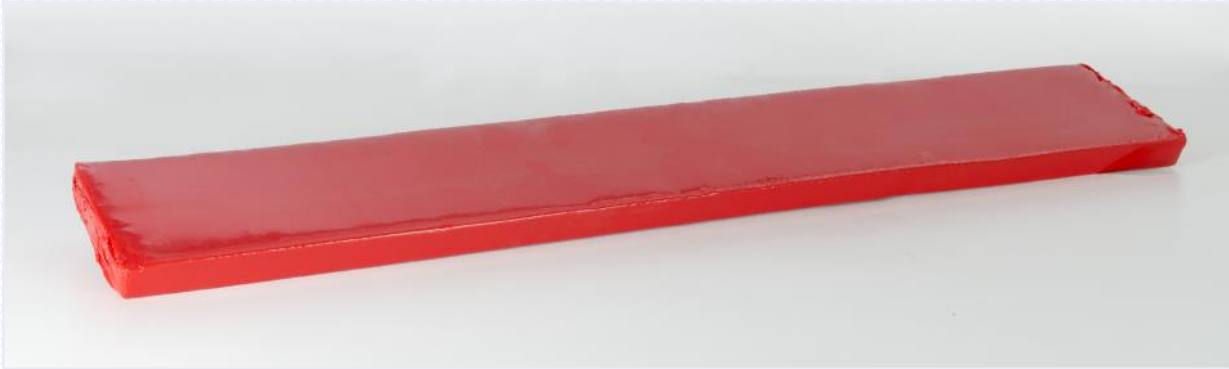
For detailed fitting instructions for various applications please contact **TENMAT**.



- The FIREFLY OverSleeve can be retrofitted over cable conduits/cable bundles.
- Cut the FIREFLY OverSleeve to the correct length for the conduit diameter/cable bundle, and wrap around conduit/cables.
- Seal edges together using repair tape provided. Ensure no gap between meeting edges of OverSleeve.
- Slide FIREFLY OverSleeve into place.
- Seal around the FIREFLY OverSleeve at the wall, using intumescent acrylic sealant.
- OverSleeve must protrude by min. 25 mm in partitions/solid walls, and 60 mm in ablative coated fire batts.



# FF108 Fire Stop Block



## Key Features:

- 2 Hour Fire Rating
- Alternative to fire pillows
- Easy to stack
- Compressible material
- Used with PVC/Metal Trunking, Cable Baskets, and Cables

**TENMAT's FIREFLY 108** Fire Stop Block is a unique, compressible and fully intumescent alternative to fire pillows/intumescent pillows. The Fire Stop Block is supplied in 1 metre lengths and can be cut to size on site. This ensures maximum flexibility and minimum wastage compared to traditional fire pillows. The material can be installed within and around various openings and electrical

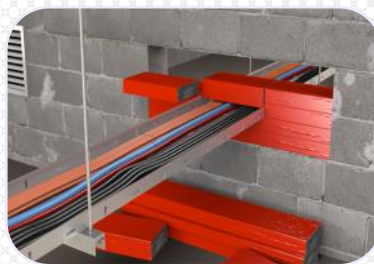
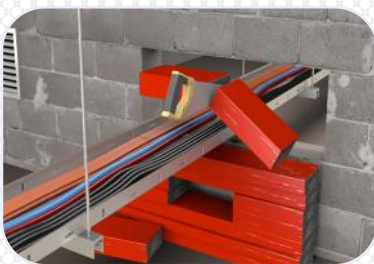
penetrations including cable trays, cable baskets and both PVC and steel electrical cable trunking where intumescent fire pillows are traditionally used.

The product is easily identified on site and can be added and removed as required making this an ideal option for both permanent and temporary fire protection applications. This electrical firestopping solution provides up to 120 minutes fire integrity and insulation rating (EI120).

## Product Dimensions

Thickness	Width	Length
30 mm	150 mm	1000 mm

## Fitting Instructions



- Measure the opening in the wall, trunking, or around the cable basket/cables
- Cut the Fire Stop Block to size in order to achieve a friction fit. Use a suitable knife or fine bladed saw
- Ensure the product is tightly friction fitted with no visible gaps

See page 10 for Fire Test Data or visit [www.tenmat.com](http://www.tenmat.com)

# Test Data

**TENMAT's** full range of Passive Fire Protection products for fire stopping electrical service penetrations are third party fire tested to fire test standards such as BSEN 1366-3: 1999 and/or BS 476. We test our products in a wide range of applications to cover a variety of construction types.

## FF130 Socket Inserts All tests were carried out in a Plasterboard Partition

Report Type	Fire Test Lab	Report Number	Test Standard	Rating
Acoustic Test	BRE	247-373	BS EN ISO 140-3:1995	68 dB
Air Leakage	Exova Warringtonfire	PO09020/02	BS EN 1026: 2000	-
Fire Test	Exova Warringtonfire	RF08071 AR1	BS EN 1364-1: 1999	120 min
Fire Test	Exova Warringtonfire	IF08039 Rev A	BS EN 1363-1: 1999	120 min

## FF109 Socket Covers All tests were carried out in a Plasterboard Partition

Report Type	Fire Test Lab	Report Number	Test Standard	Rating
Acoustic	BRE	266220	BS EN ISO 140-3:1995	54 dB
Acoustic Test	BRE	237429	BS EN ISO 140-3:1995	54 dB
Air Leakage	Exova Warringtonfire	P09020/03	BS EN 1026: 2000	-
Fire Test	Exova Warringtonfire	IF07015	BS 476: Part 20: 1987	120 min
Fire Test	Exova Warringtonfire	RF12096 AR2	BS EN 1366-3: 2009 & BS	60 min
Fire Test	Exova Warringtonfire	IF07001	BS 476: Part 20: 1987	120 min
Fire Test	Exova Warringtonfire	IF07055 Rev A	BS 476: Part 20: 1987	120 min

## FF108 Cable Basket Fire Sleeve

Report Type	Fire Test Lab	Report Number	Test Standard	Construction	Rating
Assessment	Chiltern Fire	A12121	BS 476 & BS EN 1366-3	Plasterboard, Blockwork	60-120 min
Fire Test	Exova Warringtonfire	IF05040	BS 476	Concrete floor, Partition	120 min
Fire Test	Exova Warringtonfire	IF05044	BS 476	Partition	90-120 min
Fire Test	Exova Warringtonfire	IF08029	BS 476	Partition	60 min

## Firefly OverSleeve Plus

Report Type	Fire Test Lab	Report Number	Test Standard	Construction	Rating
Fire Test	Exova Warringtonfire	PF16154	BS EN 1366-3	Plasterboard Partition	60 min

## FF108 Fire Stop Block

Report Type	Fire Test Lab	Report Number	Test Standard	Construction	Rating
Fire Test	Chiltern	IF11059B	BS EN 1366-3	Solid Wall	120 min



*FEROFORM* **RAILKO** *FEROGLIDE* *FEROBIDE*

**REFRAVER** **REFEL** **ARCLEX**

***FIREFLY*** **NITRASIL** **SINDANYO**

**TENMAT** is committed to the highest standards in customer service and our international staff is looking forward to assist you.

**CORPORATE HQ**

**TENMAT Ltd.**

Ashburton Rd West  
Trafford Park  
Manchester M17 1TD  
England  
Tel.: +44(0)161 872 2181  
Fax: +44(0)161 872 7596  
Email: [info@tenmat.com](mailto:info@tenmat.com)  
Web: [www.tenmat.com](http://www.tenmat.com)

**NORTH AMERICA**

**TENMAT Inc.**

23 Copper Drive  
Newport, DE 19804  
USA  
Tel.: +1 302-633-6600  
Fax: +1 302-633-6838  
Email: [info@tenmatus.com](mailto:info@tenmatus.com)  
Web: [www.tenmatus.com](http://www.tenmatus.com)

**SCANDINAVIA**

**TENMAT**

Stureplan 13  
111 45 Stockholm  
Sweden  
Tel: +46 (0) 8 612 68 50  
Fax: +44 (0) 161 872 7596  
Email: [info@tenmat.com](mailto:info@tenmat.com)  
Web: [www.tenmat.com](http://www.tenmat.com)

Visit us on the web at [www.TENMAT.com](http://www.TENMAT.com)

**ITALY**

**TENMAT**

Via Dante, 2/48  
16121 Genova  
Italy  
Tel.: +39 (0) 10 5451343  
Fax: +39 (0) 10 5760553  
Email: [info@tenmat.it](mailto:info@tenmat.it)  
Web: [www.tenmat.it](http://www.tenmat.it)

**FRANCE**

**TENMAT**

56 Avenue Foch  
77370 Nangis  
France  
Tel.: +33 (0) 1 60 585656  
Fax: +33 (0) 1 64 083617  
Email: [info@tenmat.fr](mailto:info@tenmat.fr)  
Web: [www.tenmat.fr](http://www.tenmat.fr)

**GERMANY**

**TENMAT**

Tel.: +49 (0) 7151 1338468  
Fax: +44 (0) 161 872 7596  
Email: [info@tenmat.de](mailto:info@tenmat.de)  
Web: [www.tenmat.de](http://www.tenmat.de)