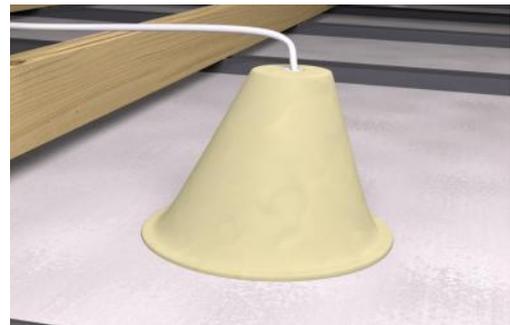




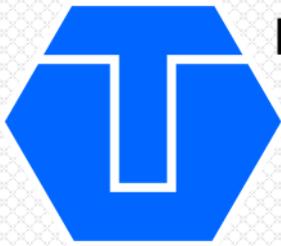
# TENMAT

**FIRE PROTECTION SOLUTIONS**



## LIGHTING

FIRE STOPPING SOLUTIONS



# TENMAT

ADVANCED MATERIALS

## 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.

# LIGHTING

When recessed downlights/luminaires are installed in fire rated ceiling/floors, the penetration must be fire stopped in order to reinstate the fire rating of the ceiling/floor and ensure that fire and smoke are unable to spread through the penetration. There is also often a requirement to provide resistance to the passage of sound, e.g. floors within or between dwellings. **TENMAT** manufactures a range of products to suit a wide range of lighting for fire and acoustic protection.



## **FF109 Downlighter Cover (150, 200, 250mm)**

Fire Rated Light Covers  
Up to 120 minutes fire rating

[More Information on Page 3-4](#)



## **FF109 Downlighter Cover (300, 350mm)**

Fire Rated Light Covers  
Up to 120 minutes fire rating

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



## **FF109X**

UL Rated 2 Hour Fire Rated Light Cover  
Up to 120 minutes fire rating

[More Information on Page 7](#)



## **FF109 Fire Rated Speaker Cover**

Intumescent Fire Rated Speaker Cover  
Up to 60 minutes fire rating

[More Information on Page 8](#)



## **FF130 Luminaire Cover**

Fire Rated Recessed Modular Light Cover  
Up to 120 minutes fire rating

[More Information on Page 9-10](#)



## **FF120/FF130 Loft Covers**

Insulation Protection Covers for Downlights

[More Information on Page 11-12](#)



## **FF120 RF Loft Cover**

Insulation Protection Covers for Downlights  
Meets CSTB CPT 3693 Requirements

[More Information on Page 13](#)

# FF109 Downlighter Cover

## Key Features:

- Flexible and lightweight
- Up to 120 minutes fire rating
- Cost effective
- Ventilated to reduce heat build up
- Provides thermal and acoustic insulation
- Can be fitted from above or below the ceiling



**TENMAT's** FF109 Downlighter Covers are fire and acoustic rated light covers or fire hoods designed to fire rate downlight fixtures and reinstate the performance of ceilings when penetrated by recessed downlights. The covers are available in various sizes to suit a wide range of lighting products over and above those covered by fire rated downlights.

The covers are simple to install and can be retrofitted into position, providing effective performance even if the downlight is removed and replaced. They prevent combustible materials from coming into contact with hot downlighters – thus minimising fire risk. The covers are ventilated to allow heat to disperse from the light, but in the event of a fire the intumescent material expands to seal off the ceiling cut-out and vent holes.

## Test Data

Report Type	Fire Test Lab	Report Number	Test Standard	Fire Rating
Classification	Giordano	311120/3599FR	EN13501-2	120 mins
Fire Test	Giordano	311120/3599FR	EN1365-2	120 mins
Fire Test	BRE	TE94667	EN1365-2	60 mins
Assessment	Exova	A02105 Rev C	BS476	60 mins
Fire Test	BRE	FG8962/208217	BS476	60 mins
Fire Test	BRE	FG8962/208217	BS476	60 mins
Fire Test	Exova	IF99029	BS476	60 mins
Fire Test	Exova	IF03028	BS476	120 mins
Assessment (Aus/NZ)	BRANZ	FAR2032	AS1530.4	60 mins
Application Report	BRANZ	FC2032	AS1530.4	60 mins
Acoustic Test	BRE	213942	EN ISO 140/717	Pass

## Product Dimensions

Cover Size (OD x Height)	Downlighter Cut-out Size
150 x 150 mm	50-75 mm
200 x 200 mm	75-100 mm
250 x 250 mm	100-140 mm

## General Fitting Instructions

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



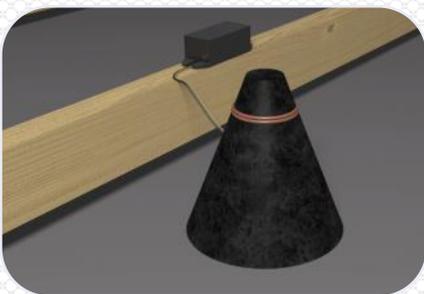
- Grasp legs firmly and roll cover into a tight cylinder. Ensure wiring loom is through slot before installation
- Keeping a tight grip on the legs, feed the cover through the cut out made for the downlighter
- Ensure cover has sprung back into its original cone shape



- Grasp legs and pull down until L section clears the underside of the ceiling
- Move legs out until vertical part of L section is flush with the side of the cut out
- Release the legs so they grip the underside of the tile
- Remove the excess of both legs



- Once cover is in place, downlighter can be fitted as normal, with transformer outside the cover



- If required, an intumescent sealant can be used to ensure a smoke and acoustic seal

# FF109 Downlighter Cover

## Key Features:

- Flexible and lightweight
- Ready to install
- No assembly required
- Up to 120 minutes fire rating
- Cost effective
- Ventilated to reduce heat build up



**TENMAT's** FF109 Downlighter Covers have been developed to provide maximum protection for holes created by the introduction of medium/large downlighters and to allow for maximum ease of fitting. In a fire situation, the cover expands internally to fill 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 ceiling void by reducing the chance of heat build up and the ignition of flammables, such as accumulated dust and insulation. The penetration in the ceiling also provides a path for air, thus creating drafts, the fitting of a FF109 cover reduces this problem.

## Test Data

Report Type	Fire Test Lab	Report Number	Test Standard	Fire Rating
Classification	UL *	R25019	UL263 *	60 mins
Classification Report	Giordano	311120/3599FR	EN13501-2	120 mins
Fire Test	Giordano	311120/3599FR	EN1365-2	120 mins
Fire Test	BRE	TE94667	EN1365-2	60 mins
Fire Test	Exova	IF10047	EN 1364-2	30 mins
Fire Test	Exova	IF03028	BS476	120 mins
Fire Test	BRE	FG8962/208217	BS476	60 mins
Assessment	Exova	A02105 Rev C	BS476	60 mins
Application Report (Aus/NZ)	BRANZ	FC2032	AS1530.4	60 mins
Assessment (Aus/NZ)	BRANZ	FAR2032	AS1530.4	60 mins

\* FF109-300 (300x170mm) only

## Product Dimensions

Cover Size (OD x Height)	Downlighter Cut-out Size	Downlighter Height
300 x 170 mm 	145-270 mm	≤ 170 mm
350 x 230 mm	145-270 mm	≤ 230 mm

## General Fitting Instructions

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



- Flatten cover
- Fold cover into quarters



- Feed cover through cut-out hole
- Ensure cover has sprung back into its original shape and will fit centrally over the fitting



- Fit downlighter as normal, with the transformer outside of the cover



- Cables can be passed through the vent slots or tight fitting holes made in the cover

N.B. For US fitting instructions, see [www.tenmat-us.com](http://www.tenmat-us.com)

# FF109X

## Key Features:

- UL Rated
- 2 Hour Fire Rated
- Significant labour savings
- Maintenance free
- Wide range of floor/ceiling assemblies covered



The **TENMAT** FF109X is the only two hour UL classified fire barrier that can be used with a wide range of recessed lights to effectively prevent the spread of fire through a ceiling opening.

The flexible and light weight enclosures are made out of fire resistant and intumescent materials which will be activated in case of a fire, stopping both flame spread and heat transmission for up to 2 hours.

## Availability

Cover Size (OD x Height)	Downlighter Cut-out Size	Downlighter Height
350 x 230 mm	145-270 mm	≤ 230 mm

## Test Data

Report Type	Fire Test Lab	Report Number	Test Standard	Fire Rating
Classification	UL	R25019/08NK20023	UL 263	120 mins
Classification (Canada)	UL	R25019/09SR4860448	UL 293	120 mins

## Fitting Instructions



- Position dark grey pad inside cover directly over can, and non-padded areas over junction box
- Cut four small slits at the bottom of the cover to fit over hanger bars
- Sit cover flush over the drywall or ceiling tile
- Install light to manufacturer's instructions
- To feed the wire through the side of the cover close to the junction box, poke wire through material or cut a small opening with a knife
- Check for secure fit and make sure cover overhangs the hanger bars. The bottom of the FF109X cover should be in full contact with the drywall/ceiling tile

# FF109 Fire Rated Speaker Cover

## Key Features:

- 60 minutes fire rated
- Enhances acoustic protection of the ceiling
- Lightweight
- Significant labour savings
- Maintenance free



The **TENMAT** FF109-FRSC has been designed to help maintain the integrity of fire rated ceilings when penetrated by in-ceiling loudspeakers.

Two convenient cover sizes give the architect, audio professional, or installer more freedom in loudspeaker selection.

The sound absorbing properties of the FF109 enhance the acoustic rating of the structure for crisp and clear sound

## Availability

Model Number	Inside Height	Outside Diameter
FF109-FRSC	228 mm	370 mm
FF190-FRSC <sup>XL</sup>	278 mm	430 mm

## Test Data

Report Type	Fire Test Lab	Report Number	Test Standard	Fire Rating
Engineering Evaluation	Intertek	3147019SAT-001	ASTM E119-00a	60 mins

## Fitting Instructions



- Install loudspeaker in accordance with speaker manufacturer's instructions. The speaker opening must be no more than max. 6 inches diameter
- Electrical wiring may penetrate the cover
- Place FF109 cover over the loudspeaker
- If working with a tile bridge and rail, slit the cover (up to 1 inch max.) to fit over the hanger bars
- Ensure cover overhangs the hanger bars (if using)
- FF109 Cover must fit flush with the drywall board

# FF130 Luminaire Cover



## Key Features:

- Up to 60 minutes fire rating
- Provides thermal and acoustic insulation
- Lightweight and flexible, offering easy installation
- No assembly required

**TENMAT** FF130 Luminaire Covers are fire rated covers or fire canopies designed to fire rate recessed luminaire or fluorescent module fixtures and reinstate the performance of ceilings when penetrated by recessed lights. They maintain the fire protection performance of the ceiling – preventing or delaying the spread of fire.

The covers are available to suit all common 600 x 600 mm and 1200 x 600 mm fixtures. The covers are ready to install, with no assembly required, and can even be retrofitted into position due to their flexible and durable design. They can be fitted from above or below the ceiling – through the diagonal in the ceiling grid, or folded for tight ceiling spaces.

The insulating nature of the covers also offers significant thermal and acoustic benefits to the ceiling system.

## Test Data

Report Type	Fire Test Lab	Report Number	Test Standard	Fire Rating
Classification	Giordano	311120/3599FR	EN13501-2	120
Fire Test	Giordano	311120/3599FR	EN1365-2	120
Classification	UL	20120928-R25019	UL 263 & ULC S101-07	Up to 120
Fire Test	UL	R25019/12NK05094	UL 263	Up to 120
Assessment	Exova	A04038 Rev C	BS476	60
Fire Test	BRE	FG8962/208217	BS476	60
Fire Test	Exova	IF03060	BS476	60
Fire Test	Exova	IF05045	BS476	60
Fire Test	Exova	IF03076	BS476	60

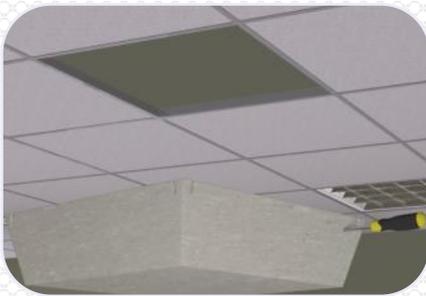
## Product Dimensions

To Suit Ceiling Module Size	Nominal Cover Dimensions	Nominal Cover Height
600 x 600 mm	670 x 730 mm	155 mm
1200 x 600 mm	1380 x 750 mm	140 mm

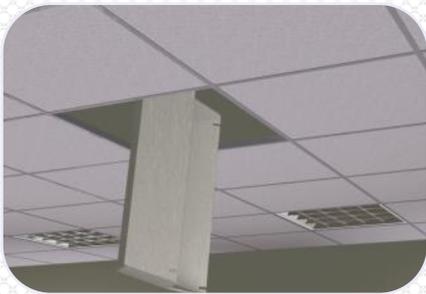
## General Fitting Instructions

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

**TENMAT**'s FF130 Luminaire Cover is supplied ready to fit, and no assembly is required. With the cover in place, the modular light fitting can be installed as normal. The cover requires no maintenance, and is easy to remove for maintenance of the light fitting.



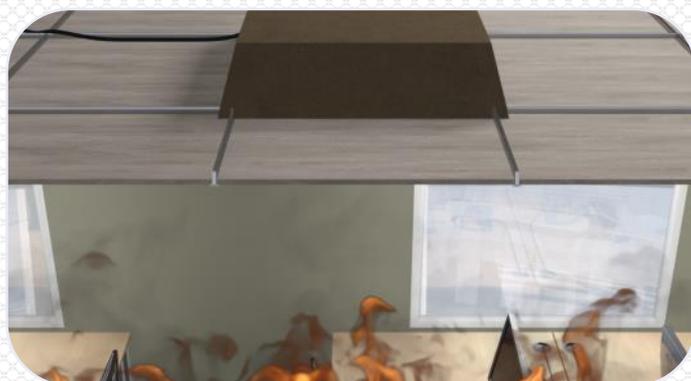
- Pierce suitable holes in cover for cables to pass through. Note: cables should be a tight fit



- Pass cover diagonally through ceiling opening, or fold if the space is tight



- Ensure cover slots are located over ceiling grid, and cover sits flush with ceiling tiles
- Pass cables through pre-made holes, and fit light fitting as normal
- Transformers should be situated outside the cover



- In a fire situation, the cover prevents the fire from penetrating the ceiling for up to 120 minutes

# FF120 / FF130 Loft Covers



## Key Features:

- Fire resistant material
- Improves air tightness
- Limits cold drafts
- Prevents overheating
- Reduces fire risk by keeping combustibles (insulation) away from hot downlight
- EN/IEC 60598 tested

The **TENMAT** Loft Covers are insulation protection covers designed to provide a fire resistant solution and overcome thermal and vapour transmission into loft voids when installing recessed lights. The “F-capped” tested and approved Loft Covers maintain sufficient space around the fitting to allow continuous insulation to be laid directly over light fittings minimising overheating or fire risk.

The durable and lightweight covers are simply placed over the light fittings to allow the safe installation of loft insulation. The Loft Covers are certified “F-capped” in

accordance with relevant industry standards having been tested to both EN 60598.1 and IEC 60598. In addition the Loft Covers are Fire Resistance, Flammability and Airtightness tested and are certified IP6 Dust Tight.

## Product Dimensions

Material		Nominal Internal Height	Nominal Diameter (top)	Nominal Diameter (base)
FF120		150 mm	225 mm	275 mm
FF130		150 mm	85 mm	240—250 mm
FF130R		220 mm	30 mm	220—230 mm
FF130E		230 mm	249—273 mm	368—405 mm
FF135		273 mm	370 mm	430 mm

## Test Data

Report Type	Fire Test Lab	Test Standard	Report Number	Rating
Reaction to Fire (FF120)	BRE	EN 13501-1	302306-2	A1
Flammability Test	LIA	EN60695	L12459A	Pass
Heat Build Up Tests	LIA	EN60598	L9807C, L10539 B (Amd 1), L9807 B, L10539 (Amd 2)	Pass
Heat Build Up and Flammability	LIA	UL1598 & IEC60598	L11911 Amd2	Pass
IP6X Resistance Test	LIA	EN60598	L12459	Pass

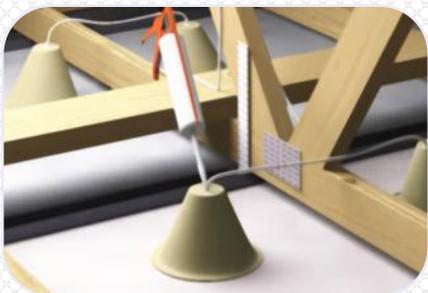
Report Type	Fire Test Lab	Report Number	Test Standard
Reaction to Fire	BRE	302306-1	EN ISO 1182:2010
Air Tightness	Exova	P09020/01	EN1026:2000
Air Tightness	Exova	P11032	EN1026:2000
Lumen Output	LIA	L13178	EN60598
Energy Efficiency	Exova	TT/F09323-1	N/A

## General Fitting Instructions—FF130 depicted

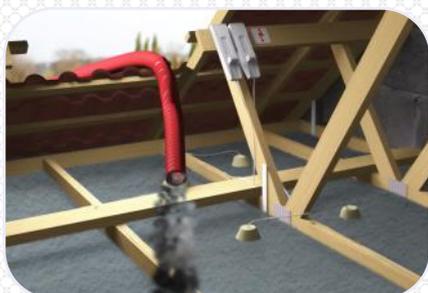
For detailed fitting instructions for various applications please contact **TENMAT**.



- Pierce suitable holes in cover for cables to pass through.  
Note: cables should be a tight fit
- Seal around base of the Loft Cover with silicone sealant to secure in place



- Pass cable through Loft Cover
- Seal up all holes or slits with silicone sealant
- The Loft Cone is approved for installation in contact with combustible surfaces, e.g. timber. The downlight must be min. 25mm away from joist.



- If insulation level will not completely cover or bury Loft Cone, the transformer can be located on the top of the Loft Cone, securing with a nylon cable tie
- If insulation will cover or bury the Loft Cone, the transformer must be mounted clear of insulation following transformer manufacturer's recommendations

For other cover types, please visit [www.tenmat-us.com](http://www.tenmat-us.com), [www.tenmat.com](http://www.tenmat.com), or contact **TENMAT**.

# FF120 RF Loft Cover

## Key Features:

- Meets CSTB CPT 3693
- Class A1 Reaction to Fire
- IP6X Dust Tight
- Can be covered with insulation



The most recent fire safety requirements call for recessed spotlights to be protected from contact with all kinds of insulation and other combustibles. To meet these requirements, **TENMAT** has developed the FF120-RF Loft Covers.

Thermal insulation must be installed to ever increasing thicknesses and recessed downlights become completely buried. It is no longer acceptable to install insulation without protecting downlights, or use non-accredited products such as lengths of pipe, or upturned flowerpots.

The **TENMAT** FF120-RF Loft Covers are specifically designed to ensure a fire safe installation for a wide range of downlighters and to meet CSTB CPT 3693 requirements.

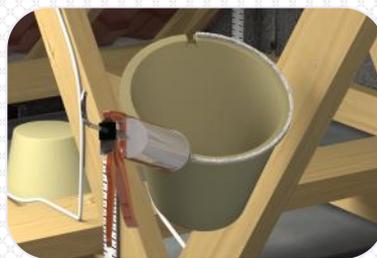
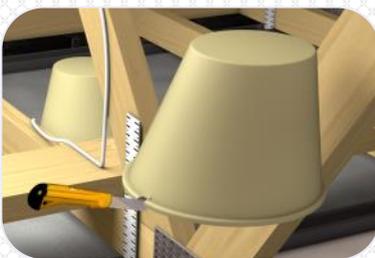
## Test Data

Report Type	Test Lab	Report Number	Result
Reaction to Fire - Euro Class	BRE	302306-2 Issue 1	A1
Heat Build Up Testing	LIA Laboratories	L15199A	Pass
Dust Tightness/Particle Ingress	LIA Laboratories	L15199	IP6X

## Product Dimensions

Loft Cover	Nominal Height	Nominal Diameter (top)	Nominal Diameter (base)
FF120 RF	200 mm	172.5 mm	290-300 mm (ellipse)

## Fitting Instructions



- Make a small slit at base of loft cover for cable
- Cover base of loft cover with sealant
- Sit loft cover over downlight and press into place. Ensure a dust tight seal
- Blow or roll insulation over the cover until required depth reached. Cover can be fully buried.

# LEADERS IN INNOVATION

**TENMAT**'s ongoing commitment to the development of new products and solutions in the field of composite and engineering materials has been recognised in 2012 and 2013 by receiving the highest official award in Great Britain, the prestigious Queen's Award for Enterprise in the categories Innovation and International Trade.

## Custom Component Manufacture

**TENMAT** materials can be supplied as semi-finished products or, if required by the customer, our ISO9001-2008 certified machine shop can produce fully machined items to specification.

## Materials Expertise

With over 100 years of experience in Composite Engineering Materials, **TENMAT** offers customers information on material developments, characteristics, suitability, and applications.

## Technical Ingenuity

**TENMAT** has been proven to consistently produce industry leading advanced composites, developed in our in-house R&D Technical Laboratories.

## Problem Solvers

The diverse range of high performance composite materials manufactured by **TENMAT**, offer the engineer a wide array of solutions to improve wear resistance, withstand extreme temperatures, resist high impacts, and survive in harsh, corrosive environments. Our Technical Services department is available to provide guidance on material selection, part design and technical solutions.

## Component Design

If design services, drawings and fitting instructions are required, **TENMAT** will work with customers in developing the most suitable solution to their particular problem.





*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)