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

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

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.
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**
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**

<table>
<thead>
<tr>
<th>Report Type</th>
<th>Fire Test Lab</th>
<th>Report Number</th>
<th>Test Standard</th>
<th>Fire Rating</th>
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<td>Fire Test</td>
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<td>TE94667</td>
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Product Dimensions

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<thead>
<tr>
<th>Cover Size (OD x Height)</th>
<th>Downlighter Cut-out Size</th>
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<tbody>
<tr>
<td>150 x 150 mm</td>
<td>50-75 mm</td>
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<tr>
<td>200 x 200 mm</td>
<td>75-100 mm</td>
</tr>
<tr>
<td>250 x 250 mm</td>
<td>100-140 mm</td>
</tr>
</tbody>
</table>

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**

<table>
<thead>
<tr>
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<th>Test Standard</th>
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* FF109-300 (300x170mm) only
Product Dimensions

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<tr>
<th>Cover Size (OD x Height)</th>
<th>Downlighter Cut-out Size</th>
<th>Downlighter Height</th>
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</thead>
<tbody>
<tr>
<td>300 x 170 mm</td>
<td>145-270 mm</td>
<td>≤ 170 mm</td>
</tr>
<tr>
<td>350 x 230 mm</td>
<td>145-270 mm</td>
<td>≤ 230 mm</td>
</tr>
</tbody>
</table>

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
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 lightweight 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**

<table>
<thead>
<tr>
<th>Cover Size (OD x Height)</th>
<th>Downlighter Cut-out Size</th>
<th>Downlighter Height</th>
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<tbody>
<tr>
<td>350 x 230 mm</td>
<td>145-270 mm</td>
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**Test Data**

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<td>UL 293</td>
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**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
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

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Inside Height</th>
<th>Outside Diameter</th>
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<tr>
<td>FF109-FRSC</td>
<td>228 mm</td>
<td>370 mm</td>
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<td>FF190-FRSC&lt;sup&gt;XL&lt;/sup&gt;</td>
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Test Data

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</table>

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
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**

<table>
<thead>
<tr>
<th>Report Type</th>
<th>Fire Test Lab</th>
<th>Report Number</th>
<th>Test Standard</th>
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**Product Dimensions**

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<thead>
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<th>To Suit Ceiling Module Size</th>
<th>Nominal Cover Dimensions</th>
<th>Nominal Cover Height</th>
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<tr>
<td>600 x 600 mm</td>
<td>670 x 730 mm</td>
<td>155 mm</td>
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<tr>
<td>1200 x 600 mm</td>
<td>1380 x 750 mm</td>
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**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
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**

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<tr>
<th>Material</th>
<th>Nominal Internal Height</th>
<th>Nominal Diameter (top)</th>
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<tr>
<td>FF120</td>
<td>150 mm</td>
<td>225 mm</td>
<td>275 mm</td>
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<tr>
<td>FF130</td>
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<td>FF130R</td>
<td>220 mm</td>
<td>30 mm</td>
<td>220—230 mm</td>
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<tr>
<td>FF130E</td>
<td>230 mm</td>
<td>249—273 mm</td>
<td>368—405 mm</td>
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<tr>
<td>FF135</td>
<td>273 mm</td>
<td>370 mm</td>
<td>430 mm</td>
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</table>
**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, www.tenmat.com, or contact **TENMAT**.
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**

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**Product Dimensions**

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<th>Nominal Height</th>
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<th>Nominal Diameter (base)</th>
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<td>FF120 RF</td>
<td>200 mm</td>
<td>172.5 mm</td>
<td>290-300 mm (ellipse)</td>
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</table>

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

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