



# **Recessed Light Protection Covers**

Innovative insulation protection products and solutions designed to keep insulation away from hot recessed lights and to reduce energy loss through light fixtures.

# Leaders in innovation

For over 100 years, Tenmat has been a leader in the development, engineering and manufacturing of specialist non-metallic materials that offer advanced passive fire protection capabilities.

Tenmat stands for innovation, safety products, commitment to our customers and the latest quality standards worldwide.

Insulation Protection Covers

Tenmat's FIREFLY® range of technically advanced recessed light covers eliminates the risk posed by insulation getting in contact with hot recessed lights. The proprietary fire safe material is manufactured by Tenmat under the latest ISO 9001:2015 quality standards.

Passive Fire Protection Covers

Tenmat also offers a wide choice of fire rated covers for recessed lights, low-profile LEDs, LED luminairies, and in-ceiling loudspeakers used by the construction industry in multi-residential and commercial applications.



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#### **FF130E**



#### Standard Recessed Light Cover

The FF130E Recessed Light Cover has been specifically designed to keep insulation away from standard recessed lights. The cover is made out of fire resistant mineral wool material and maintains sufficient space around the fixture for proper functionality when surrounded by insulation.

The durable and lightweight covers will significantly reduce thermal loss through the light and condensation on roof timbers.

#### **Key Benefits**

- Fire resistant.
- Fire tested in accordance with IEC 60598-1.
- Can be covered with sprayed foam insulation, blown-in insulation and lay-in insulation.
- Keeps insulation away from hot light can.
- Reduces heat loss through the fixture.
- · Added flange for improved draftstopping capabilities.
- Lightweight (approx. 1 lb.).
- Easy Installation can be fitted in seconds no screws or drilling required.
- Enhances the acoustic protection of the ceiling
- Prevents insects and other small animals from entering through the light.
- Fits most popular recessed light fixtures.
- Maintenance free.

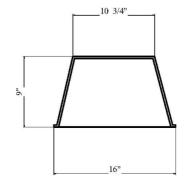
#### Compatible With

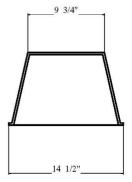
- Standard Recessed Lights
- Insulated Ceilings
- · Attic Spaces
- · Ceiling Spaces
- · Roof/Ceiling

#### Technical Product Specification

Model Number	Inside Height	Inside Length	Inside Width
FF130E	9"	15"	14"







#### FF135



#### Oversized Recessed Light Cover

The FF135 Draft Stop Cover is the larger version of the FF130E and has been designed to keep insulation away from oversized recessed lights. Without additional insulation, TENMAT covers exhibit excellent draft stopping capabilities, significantly reducing air flow and energy loss through the light fixture.

Both covers can be used with a wide range of existing, remodel or new construction recessed light fixtures.

#### **Key Benefits**

- · Fire resistant.
- Fire tested in accordance with IEC 60598-1.
- Can be covered with sprayed foam insulation, blown-in insulation and lay-in insulation.
- Keeps insulation away from hot light can.
- · Reduces heat loss through the fixture.
- Can be used in roof/ceiling (attics), as well as floor/ceiling assemblies.
- Flexible and lightweight (approx. 2 lb.).
- Easy Installation can be fitted in seconds no screws or drilling required.
- Enhances the acoustic protection of the ceiling.
- · Prevents insects and other small animals from entering through the light.
- Fits most popular recessed light fixtures.
- Maintenance free.

#### Compatible With

- Oversized Recessed Lights
- Insulated Ceilings
- Attic Spaces
- Ceiling Spaces
- · Roof/Ceiling

# Technical Product Specification

Model Number	Inside Height	Inside Diameter
FF135	10 3/4"	16 1/2"





#### **FF130R**



#### LED Recessed Downlight Cover

Tenmat FF130R LED Recessed Downlight Cover is a fire resistant enclosure that is specifically designed to keep insulation away from low profile LED lights in retrofit applications. The ultra flexible nature of the material allows the cover to get rolled up for easy retrofit, remodel or new construction installation. This unique design helps protect modern low profile LED light fixtures from insulation and to stop unwanted air leakage through the light fixtures

#### **Key Benefits**

- Fire tested in accordance with IEC 60598-1.
- Thermally tested according to UL 1598 for usage with IC and Non-IC rated low profile LED recessed downlights (Max. wattage 13.5W).
- Ultra flexible (Ideal for retrofitting applications).
- Lightweight (approx. 7 oz.).
- · Reduces draft problems.
- Prevents heat loss through the fixture.
- Reduces airflow from the outside.
- · Enhances the acoustic protection of the ceiling.
- · Prevents insects and other small animals from entering through the light.
- Easy to fit without special tools.
- Maintenance free.

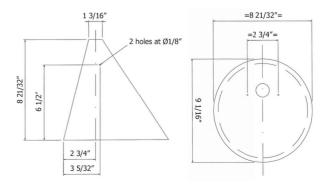
#### Compatible With

- Low-profile LED recessed lights (max. wattage 13.5W)
- Insulated Ceilings
- Attic Spaces
- · Ceiling Spaces
- · Roof/Ceiling

# Technical Product Specification

Model Number	Inside Height	Inside Length	Inside Width
FF130R	8"	8 1/4"	8"





### Fire Prevention



It is widely recognized that flammable materials such as cardboard and plastic, should not be used around hot light fixtures, due to the obvious fire hazard.

Surface treated cardboard boxes are not acceptable because they do not guarantee a consistent level of performance over a extended period of time.

Open metal dams conduct heat and allows free fibers and dust to potentially have contact with the recessed can. Dust and loose fibers must be kept away from the lamp to prevent potential fires.

Testing & Approval

Tenmat covers are made from a mineral wool material which meets the standard IEC 60598-1 non-combustibility test. This test includes a needle flame and glowing wire test at 1,200°F.

Outlined by the most stringent standards, multiple independent third party laboratories have tested and approved Tenmat materials.

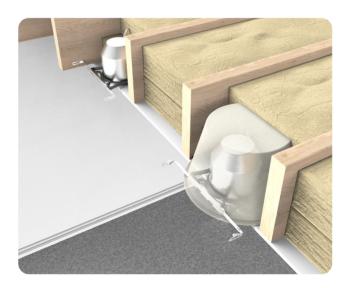
## Keep Insulation Away



Most recessed lights are not compatible with insulation and often times start cycling on/off after they have been buried within cellulose, foam, fiberglass, etc.

The lights' malfunction is a concern and safety hazard. Pushing the insulation away is not an effective solution since it can create air passages in the building envelope, and wasting energy.

Due to the improved airtightness and insulation, Tenmat users experience significant energy savings. Tenmat Recessed Light Protection Covers allow the insulation to be continuous and uninterrupted over the whole area of the ceiling, therefore saving energy and carbon emissions.





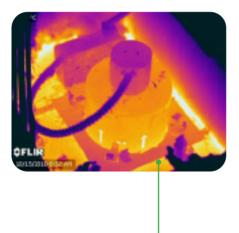
## Insulation Efficiency

According to the Department of Energy, a home loses costly heat and cooling through ceiling openings for recessed lights.

Energy losses originating from recessed lights often account for 50% of the total thermal losses of a ceiling. Non-insulated areas create a path for heat loss via cold bridging and therefore should be minimized.

The ENERGY STAR® qualified new home guidance program recommends eliminating these air leaks to reduce high energy bills, improve comfort and help to protect the environment.

An advisable safe methodology is to install a fire resistant barrier to keep insulation from getting in contact with all types of light fixtures. Tenmat covers are made out of a non-combustible mineral wool material and are compatible with sprayed foam insulation, blown-in insulation, low-density foam, lay-in insulation, mineral wool, fiber glass, and blown-in cellulose. Tenmat covers have been tested in accordance with UL 1598 and will keep insulation at a safe distance from the hot light can.



Energy Loss through Uncovered Recessed Light



Recessed Light with Tenmat Insulation Protection Cover





## Airtightness

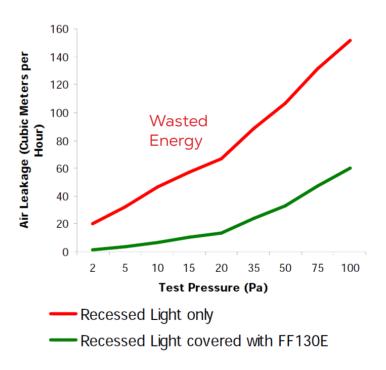
Recessed lights are the source of a high proportion of air leakage in the home. Independent lab reports show that each recessed light loses 32 cubic meters of conditioned air from the house into the ceiling space per hour, resulting in an annual energy loss of 1 million BTU's per fixture.

The ENERGY STAR® qualified new home guidance program recommends eliminating these air leaks to reduce high energy bills, improve comfort and help to protect the environment.

#### Chiltern Dynamics Airtightness Test

Installing Tenmat Recessed Light Protection Covers dramatically reduces the volume of air leakage through each light fixture and completely eliminates perceived drafts.

Airtightness tests conducted by Chiltern Dynamics confirmed that Tenmat covers reduce air leakage up to 94%, which translates into annual energy savings of over 30 dollars per fixture.







## Frequently Asked Questions

Why do I need Tenmat Recessed Light Covers?

According to the Department of Energy, a home loses costly heat and cooling through ceiling openings for recessed lights. However simply burying the fixture with insulation can impair the performance of the light and can pose a safety hazard.

How do Tenmat Light Covers work?

Tenmat covers are placed on top of the recessed light without an additional need for screws or drilling. The covers serve as a barrier between hot recessed lights and insulation, keeping potentially combustible material at a safe distance. The covers are unaffected by mold and fungal growth and do not require any maintenance.

What are Tenmat Light Covers made out of?

Tenmat covers are made out of a fire resistant mineral wool that exhibits excellent thermal and acoustic insulating properties.

Can Tenmat Light Covers be buried with insulation?

Yes, the unique Tenmat material is compatible with all kinds of insulation, including cellulose, sprayed foam, low-density foam, blown-in and lay-in insulation. To ensure the light's proper performance you must strictly follow the recommendations regarding lamp wattage and type.

How much energy can I expect to save by using Tenmat Light Covers?

Energy efficiency tests have shown that Tenmat Light Covers will reduce air flow by 94%. A single recessed light fixture allows 2.5 million cubic feet of air to pass through it in one year and wastes 1 million BTU's of energy loss. At an average cost of \$0.14 per kWh in the U.S., reducing the air leakage by 94% will result in savings of over \$30.00 per fixture every year.

Can I use Tenmat Light Covers in a 1 or 2 hour fire-rated ceiling? Tenmat Insulation Protection Covers are soley intended to keep insulation away from hot recessed lights and do not provide a fire-rating. If you are working in a 1 or 2 hour fire rated ceiling assembly, you must use Tenmat's Fire Rated Recessed Lights, such as the FF109 series.

Are Tenmat Recessed Light Covers easy to install?

Yes. Tenmat covers are supplied ready to install and are simply placed over the light fixture. No additional assembly is required.

The covers can be installed in seconds without screws and nails! The flexible nature of the proprietary Tenmat material makes installation also possible in places with limited space. The covers are extremely lightweight (about 1 lb.) and can be easily handled by one person.



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# Insulation Protection Solutions

Tenmat consists of four divisions Passive Fire Protection, Composite Wear Parts, High Temperature Materials, and Engineering Ceramics.

The Tenmat group is a multinational manufacturer of advanced materials with representation in the USA, France, Italy, Germany, the Czech Republic and the United Kingdom, as well as a global network of resellers and distributors.

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