# FF109



Tenmat FF109 is a highly compressible intumescent material which expands to form a resilient and stable char. The material is available in sheets or alternatively in vacuum formed shapes.

FF109 is a lower density material with lower expansion characteristics; this allows the material to function in a controlled manner without the need for additional restraints. Applications include pipe sleeves, door inserts, cable basket trays, vent duct sleeves, and recessed light covers.

FF109 is available supplied in  $610 \times 1000$  mm sheets with 10-60 mm thickness, or alternatively it can be cut into strips or vacuum formed into various shapes. FF109 can be covered with aluminum foil, latex coated, or encapsulated in polythene.

### **Technical Data**

Property	Units	Typical Value
Density	kg/m³	200
Moisture Content	%	3 max
Free Expansion Ratio (@ 400 °C, 15 mins)		5:1
Activation Temperature (under 50 psi load)	°C	200
Thermal Conductivity ISO 8301:1991 and BS EN 12667: 2001	W/mK	0.0343
Reaction to Fire Classification EN 13501-1		Е
Material Approval	UL	R25019

## **Dimensions**

## **Standard Dimensions**

Thickness (mm)	10	20	30	40	50	60
Width (mm)	610	610	610	610	610	610
Length (mm)	1000	1000	1000	1000	1000	1000

\*Custom vacuum formed shapes are available upon request. Please contact Tenmat for enquiries.



FF109 Technical Datasheet

# Safety Considerations

\*Be sure the electricity to the system you are working on is turned off; either the fuse removed or the circuit breaker set at off.

#### **CONTAINS STONE WOOL INSULATION**

Stone fibers may cause temporary mechanical irritation to the skin, throat, nose and eyes.

#### **FIRST AID**

#### Skin

If irritation occurs, do not rub or scratch. Rinse under running water prior to washing with mild soap and water. Consult a physician if irritation persists.

## **Throat and Eyes**

If irritation occurs, flush eyes with water and/or drink water to clear throat. Do not rub the eyes. Consult a physician if irritation persists.

#### **PRECAUTIONS**

Wear long sleeve, loose fitting clothing, gloves and eye protection. For additional information, refer to the Material Safety Data Sheet.

Tenmat Inc. 500 Water Street Newport, DE 19804

(302) 633-6600 info@tenmatusa.com

www.tenmatusa.com

Tenmat warrants the materials it produces will conform to Tenmat specifications and approved drawings where applicable. It is entirely the customer's responsibility to make the final product choice and satisfy themselves of the suitability of the product for the intended application, carrying out testing where required. For construction projects, all products which the customer is intending to use on a particular project must be approved in writing by the customer's building designer, system designer or design control professional, to ensure compliance with the latest regulations.

The information contained in Tenmat data sheets is presented in good faith. Tenmat Limited makes passive fire protection product suggestions based solely upon and limited to the information made available to Tenmat. Tenmat possesses knowledge of fire test data and offers manufacturers installation advice. Within reason, Tenmat is skilled at offering opinion concerning the installations in question, and can comment on interfaces with other construction materials, but this is not a recommendation or decision. Decisions on overall building fire strategy are not made by Tenmat. Tenmat products have been tested for a wide range of construction types, and they must be only used in accordance with Tenmat test evidence. Each specific Tenmat product must be installed into a construction that matches the corresponding test report. Tenmat product performance requires safe and proper handling and correct installation. For construction projects, all products which the customer is intending to use on a particular project must be approved in writing by the customer's building designer, system designer or design control professional, to ensure compliance with the latest regulations. Tenmat can provide the relevant fire test evidence on request.

