## **NUllifire**Smart Protection

### **Product Information**

### **Description**

FS709 HP is a high expansion/pressure exerting, graphite intumescent sealant. FS709 expands when exposed to fire, reinstating the fire performance of compartment walls and floors which have been penetrated with services. FS709 can be used within flexible walls & rigid walls (75 mm or wider), rigid floors (100 mm or wider), and also with FB750 Intubatt and FR230 Intucompound.

### **Usage / Purpose**

FS709 is designed to close off gaps and penetrations in compartment walls and floors, to provide up to 4 hours fire resistance. This product has been formulated to close off combustible pipe penetrations in the event of a fire, negating the need for fire collars or wrap systems. FS709 has been tested with the following service penetrations:

- combustible pipes up to 125 mm (ABS, PE, PP, HDPE, PVC, PEX...)
- insulated non-combustible pipes up to 200 mm; pipe insulation types: nytrile rubber, glass fibre, rock fibre up to 60 mm insulation wall thickness
- individual or groups of cables, perforated & non-perforated cable trays, cable ladders, cable baskets (up to 500 mm), cable bundles (up to 100 mm)

For use in dry internal conditions only. For other conditions, such as high humidity, contact Technical Services.

### **Traceability & Product Identification**

Nullifire is bringing unique identification technologies to the market by offering architects, specifiers, main contractors, and applicators guaranteed traceability of product on-site. Our traceability technologies are not visible to the naked eye and do not affect performance or product aesthetics.

FS709 features Optifire+, a unique pigment technology, visible only with a specific Nullifire detector; Optifire+ offers lifetime identification, and remains traceable even after a fire.

### Colour

**Anthracite** 

### **Packaging**

310 ml cartridges (12 per box/25 per box) 600 ml sausages (12 per box)

### **Availability**

Direct from Tremco CPG UK Limited (see details on this TDS).

### **Usage Guidelines**

Always read SDS, pre-application guidance and relevant application detail prior to application. Ensure the latest documents are downloaded prior to every project commencement.

### **Protective Equipment**

Use in well ventilated conditions and ensure all recommended protective equipment is worn during handling & use of this product. For full recommendation, refer to safety data sheet.

### **Necessary Tools**

- · Sealant caulking gun
- Sealant profiling tool/spatula
- Masking tape (if decorative finish is required to surrounding substrates)

### **Preparation**

- All surfaces must be clean and sound, free from dirt, grease and other contamination.
- Check specification is suitable for service type, substrate, fire rating, annular space and seal depth required.
- We recommend that the surface of substrate temperature be +5°C or above at the time of application.
   Contact Technical Services for advice regarding lower temperature application.

### **Application**

- Insert required backing material (refer to performance on backing materials), oversized to opening to ensure stability, to provide correct depth of seal.
- Using a suitable tool, cut nozzle of cartridge to bead size and angle required.
- Gun sealant into gap to required depth by applying an even pressure to the trigger.
- Work and tool to a smooth finish immediately with a wet profiling tool or spatula.



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- If used around Pegler X-Press Carbon Steel pipes, the pipe manufacturer should be consulted, and their recommendations followed.
- Do not use around CPVC pipes; for this specific application please use FS719 HP Blue for CPVC.

### Coverage

To determine quantity of sealant required, calculate as following example (in mm):

$$\frac{\text{Gap Width}}{\text{Width}} \times \frac{\text{Depth x}}{\text{Depth x}} \times \frac{\text{Total}}{\text{Length}} = \frac{\text{N}^{\circ} \text{ of cartridges}}{\text{cartridges}}$$

For further guidance on application methods, and material requirements, please contact Tremco CPG UK Limited Technical Services Department.

### Maintenance

No maintenance required after installation. Routine inspection recommended to ensure no damage.

### **Health & Safety Precautions**

Safety data sheet must be read and understood before use.

### **Technical Service**

Tremco CPG UK Limited has a team of experienced Technical Sales Representatives who provide assistance in the selection and specification of products. For more detailed information, service and advice, please call Customer Services on +44 (0)1942 251400.

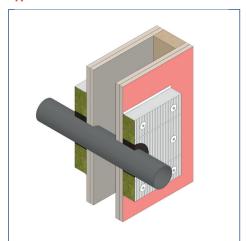
### **Guarantee / Warranty**

Tremco CPG UK Limited products are manufactured to rigid standards of quality. Any product which has been applied (a) in accordance with Tremco CPG UK Limited written instructions and (b) in any application recommended by Tremco CPG UK Limited, but which is proved to be defective, will be replaced free of charge.

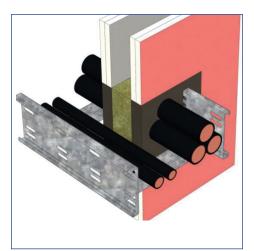
No liability can be accepted for the information provided in this leaflet although it is published in good faith and believed to be correct.

Tremco CPG UK Limited reserves the right to alter product specifications without prior notice, in line with Company policy of continuous development and improvement.

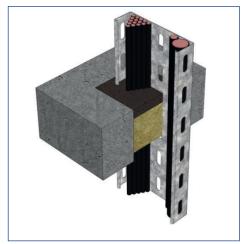
### **Typical Details**



FB750 double batt pattress fit + FS709 HP seal: EI120



FS709 HP direct in drywall opening with various service penetration: El120



FS709 HP direct in concrete floor opening with cable tray & cables: EI120







## **Technical information**

Property	Test Method	Result
Composition	<u> </u>	Water based graphite sealant
Specific Gravity		1.2-1.4
Viscosity		Thixotropic
Durability	EN 13162 or EN 14303, EN ISO 1519	Z1
Reaction to Fire	EN 13501-1	Class E
Hardness Shore A		~ 77
Skin FormationTime		60- 120 minutes depending on temperature & humidity
Cure Rate	at 20°C	1 mm/day
рН		8-9
Application Temperature		+5°C to 35°C
Service Temperature Range		-25°C to +70°C
Storage	Store in shaded dry conditions between +5°C and +35°C.	
Shelf Life	18 months when stored as recommended in original unopened containers.	

### **Backing Material**

This section relates to the change of material used to back a seal or sealant as part of a sealing system for apertures for penetrations of multiple services and linear joint seals. Backing material may not be omitted unless full fill is achieved.

Backing Material	Effect	Comment
Polyethylene / Polyurethane Rod	= or +	May be replaced by mineral wool
Glass Wool	= or +	May be replaced by stone wool or ceramic wool
Stone Wool	= or +	May be replaced by ceramic wool
Ceramic Wool (including ceramic alternatives)	=	May only be replaced by alternative material of equivalent material properties, i.e. density, thermal conductivity, melting point, shrinking, reaction to fire classification - for example alkaline earth silicate fibres
Increase in backing material depth	+	Acceptable for class A1 and A2 materials
Decrease in backing material depth	-	Not acceptable

