CI/SfB			
	(29)	Yt4	(k2)
CAW P10 Uniclass JP10:L68114			

Nullifire
Smart Protection

FF197

Fire Rated PU Construction Foam

up to 240 mins

Product Information

Description
FF197 is a modified, single component, fire rated polyurethane foam.

Usage / Purpose
FF197 is used to seal door frames and linear gaps throughout the fire rated areas of a building.

Colour
Pink

Packaging
750 ml pressurised canister (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
- PU foam application gun
- Masking tape
- Suitable cutting knife
- PU gun cleaning solvent

Preparation
- Ensure suitability of product prior to use.
- Protect all surrounding areas & substrates which are required to remain free of FF197, using a suitable protective barrier.
- The surfaces must be solid and stable.
- Remove all loose particles, dust and grease.
- A speedier cure can be attained by moistening the substrates if needed.

Application
- Immediately prior to use, shake the canister vigorously at least 20 times.
- Remove the protective cap and screw onto the Nullifire PU foam gun or use the nozzle provided.
- Fill approximately 80% of the required depth of the cavity because the foam will expand.
- Work upwards on all vertical surfaces.
- The foam is firmly set in approximately 1 hour (depending on temperature and humidity); excess can be trimmed with a suitable cutting knife.
- Applying a light misting of clean water between each layer before subsequent application will permit faster cure and increase density.

Cleaning
- Immediately after application, clean the gun by removing the foam canister and replacing with a can of illbruck AA290 PU foam cleaner, and follow instructions on AA290 can.
- Remove excess foam from unintentional application immediately with illbruck AA290 PU foam cleaner or acetone and a dry cloth.
- Cured foam can only be removed mechanically.

Important Information
- Use in well ventilated conditions.
- As with all PU foams, FF197 will not adhere to Teflon, polyethylene or silicone coated surfaces.
- The cured foam is adversely affected by UV light and should be covered with a suitable sealant such as FS703 or FS702.
- For nozzle application, invert can and direct nozzle into gap and press gently on the adaptor to establish the correct flow rate.
- Ensure the surface to be cleaned is solvent resistant prior to using or applying AA290 as a cleaning agent. AA290 TDS & SDS are available at www.illbruck.com/AA290.

Key Benefits Summary

- **Tested to BS EN 1634-1 (fire door) : FD60 performance achieved**
- **Gaps up to 35 mm (fire door)**
- **Tested without architrave (fire door)**
- **Tested with plastic packers (fire door)**
- **Tested to BS EN 1366-4 (linear gaps) : up to 4 hours fire resistance (coated or uncoated)**
- **Excellent acoustic performance - up to 62 dB**
- **Pink coloured foam for easy identification**
- **Tack free in 10 minutes**
- **2-in-1 gun & nozzle canister**

CE
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Technical Information

Property	Test Method	Result
Composition		Polyurethane foam
Fire Performance*	Tested to BS EN 1366-4	Up to 4 hours
	Tested to BS EN 1634-1	60 minutes
Classification	DIN4102: Part 1	B1
Application Canister Temperature Limits		+10°C to +30°C
Application Ambient Temperature Limits		+5°C to +35°C
Density	LAB015 - 3 cm in width at 23°C and 50% RH	20-30 kg/m^3
Yield	FEICA TM 1003	45 litres
Tack Free Time	FEICA TM 1014	10 minutes
Cutting Time	FEICA TM 1005	60 minutes
Tensile Strength	FEICA TM 1018	81 kPa
Shear Strength	FEICA TM 1012	57 kPa
Compression Strength (10%)	FEICA TM 1011	47 kPa
Thermal Conductivity	EN 12667	0.036 W/m.K
Operating Temperature Conditions (extruded and cured)		Peak: -40°C to +130°C Continuous: -40°C to +90°C

*Please note that achievable fire rating depends upon specific joint configuration

Performance Data

Vertical Joints in AAC Walls / Tested to BS EN 1366-4 - Depth Completely Filled
Fire Resistance in Minutes

Wall Thickness	Joint Width				
	5 mm	10 mm	20 mm	30 mm	40 mm
100 mm	180	120	45	45	30
100 mm - finished with FS702*	180	120	45	45	30
150 mm	240	180	90	90	60
150 mm - finished with FS702*	240	240	240	90	60
200 mm	240	240	180	120	60
200 mm - finished with FS702*	240	240	180	120	60

* FS702 Install Method - 1 mm on both sides for walls

Horizontal Joints in AAC Floors / Tested to BS EN 1366-4 - Depth Completely Filled
Fire Resistance in Minutes

Floor Thickness	Joint Width				
	5 mm	10 mm	20 mm	30 mm	40 mm
150 mm	240	90	90	90	-
150 mm - finished with FS702*	240	240	240	240	240

* FS702 Install Method - 1 mm on top face for floors

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Door and AAC & Plasterboard Walls - Tested to 1634-1 (Hardwood Frame 94 mm) Fire Resistance in Minutes	
Wall Thickness	35 mm Joint Width
100 mm	60

Up to FD 60 Tested Door Sets		
Component	Tested Specification	Minimum Assessed Requirement
Wall	100 mm thick Gyspum/timber stud	100 mm thick masonry/concrete/timber or steel stud – min. EI 60 classified (EN 13501-2)
Aperture Lining	None	None, gypsum or other non-combustible board
Door Frame	94 mm deep hardwood – 620 kg/m³	Hardwood
		Min. 94 mm deep
		Min. 620 kg/m³ density
Packers	Plastic	Plastic or timber
Fixings	Steel screws	Steel screws
Doorset	Timber leaf/timber frame EI 60 classified (EN 13501-2)	Timber leaf/timber frame– min. E 60 or EI 60 classified (EN 13501-2)
Depth of Nullifire FF197	94 mm (min.) full depth of frame	Full depth of frame and min. 94 mm
Frame to Wall Gap	10-35 mm	10-35 mm
Configuration	Single-action, single-leaf	Single/double-action, single/double-leaf/leaf and half* * Leaf configuration is not considered critical to the frame to wall seal provided the door has the required classification.
Architrave	None	Any, no restriction

Up to FD 30 Tested Door Sets	
Component	Minimum Assessed Requirement
Wall	100 mm thick masonry/concrete/timber or steel stud – min. EI 30 classified (EN 13501-2)
Aperture Lining	None, gypsum or other non-combustible board (must be lined in the case of frames less than 70 mm deep)
Door Frame	Softwood or hardwood
	Min. 94 mm deep without aperture lining/ Min. 70 mm deep with aperture framed and lined
	Min. 450 kg/m³ density
Packers	Plastic or timber
Fixings	Steel screws
Doorset	Timber leaf/timber frame– min. E 30 or EI 30 classified (EN 13501-2)
Depth of Nullifire FF197	Full depth of frame and min. 70 mm
Frame to Wall Gap	10-35 mm
Configuration	Single/double-action, single/double-leaf/leaf and half* * Leaf configuration is not considered critical to the frame to wall seal provided the door has the required classification.
Architrave	Any, no restriction

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Up to FD 120 Tested Door Sets (FF197 used as a backing material only for FS702)	
Component	Minimum Assessed Requirement
Wall	150 mm thick masonry/concrete – min. EI 120 classified (EN 13501-2)
Aperture Lining	None
Door Frame	Hardwood
	Min. 150 mm deep
	Min. 620 kg/m³ density
Packers	Plastic or timber
Fixings	Steel screws
Doorset	Timber/composite leaf/timber frame– min. E 120 or EI 120 classified (EN 13501-2)
Depth of Nullifire FF197	Min. 115 mm
Depth of Nullifire FS702	Min. 17.5 mm to both faces
Frame to Wall Gap	10-35 mm
Configuration	Single/double-action, single/double-leaf/leaf and half* * Leaf configuration is not considered critical to the frame to wall seal provided the door has the required classification.
Architrave	Any, no restriction

Storage

Store between +5°C and +25°C in dry conditions.

Shelf Life

12 months when stored in its original unopened containers.

Health & Safety Precautions

Safety data sheet must be read and understood before use.
Extremely flammable aerosol. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

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 01942 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.
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