NUllifireSmart Protection

Product Information

Description

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

Usage / Purpose

FF197 is used to seal door frames, window frames and linear gaps throughout the fire rated areas of a building.

LIMITATIONS

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 silicone or FS702 acrylic.

Colour

Pink

Packaging

750 ml pressurised canister (12 per box)

Availability

Direct from tremco illbruck (see back of leaflet for address and telephone details).

Usage Guidelines

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

Cutting knife, tape for masking of adjacent areas, brush to remove all loose particles. illbruck PU solvent cleaner to clear gun after use. Unstable areas may need to be clamped or secured during curing.

Preparation

- Ensure suitablility of product prior to use.
- Protect floor coverings with tremco illbruck self-adhesive floor protection
- 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

- 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.
- Invert can and direct nozzle into gap and press gently on the adaptor to establish the correct flow rate.
- 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 sharp blade.
- Applying a light misting of clean water between each layer before subsequent application will permit faster cure and increase density.

Cleaning

Clean the gun by removing the foam canister and replacing with a can of illbruck AA290 PU foam cleaner. Remove excess foam immediately with illbruck AA290 PU foam cleaner or acetone. Ensure surface is solvent resistant before cleaning. Cured foam can only be removed mechanically. AA290 technical data sheet and safety data sheets are available at www.illbruck.com/AA290.

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- keep away from

open flames and other ignition sources.

EFI97 Fire Rated PU **Construction Foam** up to 240 mins **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 Tested to BS EN 1366-4 (linear gaps): up to 4 hours fire resistance Pink coloured foam for easy identification Tack free in 10 minutes 2-in-1 gun & nozzle canister





Technical Information

Property	Test Method	Result
Composition		Polyurethane foam
Fire Performance*	Tested to BS EN 1366-4	Up to 4 hours
Fire Performance"	Tested to BS EN 1634-1	60 minutes
Classification	DIN4102: Part 1	B1
CanisterTemperature Limits		+10°C to +30°C
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	FEICATM 1003	45 litres
Tack Free Time	FEICATM 1014	10 minutes
CuttingTime	FEICATM 1005	60 minutes
Tensile Strength	FEICATM 1018	81 kPa
Shear Strength	FEICATM 1012	57 kPa
Compression Strength (10%)	FEICATM 1011	47 kPa
Thermal Conductivity	EN 12667	0.036 W/m.K
Continuous Operating Temperature		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					
Mall This lands	Joint Width				
WallThickness	5 mm	10 mm	20 mm	30 mm	40 mm
100 mm	180	120	60	45	30
100 mm - finished with FS711	180	120	120	120	120
150 mm	240	120	90	90	60
150 mm - finished with FS711	240	240	240	120	120
200 mm	240	240	180	120	60
200 mm - finished with FS711	240	240	240	120	120

Horizontal Joints in AAC Floors / Tested to BS EN 1366-4 - Depth Completely Filled Fire Resistance in Minutes					
Floor Third	Joint Width				
Floor Thickness	5 mm	10 mm	20 mm	30 mm	40 mm
150 mm	240	90	90	90	-
150 mm - finished with FS711	240	90	90	90	60

Door and AAC & Plasterboard Walls - Tested to 1634-1 (Hardwood Frame 94 mm) Fire Resistance in Minutes		
WallThickness	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. El 60 classified (EN 13501-2)	
Aperture Lining	None	None, gypsum or other non-combustible board	
	94 mm deep hardwood – 620 kg/m³	Hardwood	
Door Frame		Min. 94 mm deep	
		Min. 620 kg/m³ density	
Packers	Plastic	Plastic or timber	
Fixings	Steel screws	Steel screws	
Doorset	Timber leaf/timber frame El 60 classified (EN 13501-2)	Timber leaf/timber frame- min. E 60 or El 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. El 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)		
	Softwood or hardwood		
Door Frame	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 El 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		





Up to FD 120 Tested Door Sets		
Component	Minimum Assessed Requirement	
Wall	150 mm thick masonry/concrete – min. El 120 classified (EN 13501-2)	
Aperture Lining	None	
	Hardwood	
Door Frame	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 El 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	

Technical Service

tremco illbruck 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 01322 551010.

Guarantee / Warranty

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

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