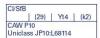
REVISION: 01





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.





REVISION: 01





Technical Information

| Property | Test Method | Result |
|----------------------------------|--|---|
| Composition | | Polyurethane foam |
| E. B. (* | 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 |
| AmbientTemperature 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 AACWalls / Tested to BS EN 1366-4 - Depth Completely Filled Fire Resistance in Minutes | | | | | |
|--|-------------|-------|-------|-------|-------|
| MACHITE L. | 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 | 90 | 90 | 90 | 60 |
| 150 mm - finished with FS711 | 240 | 240 | 240 | 90 | 60 |
| 200 mm | 240 | 180 | 180 | 120 | 60 |
| 200 mm - finished with FS711 | 180 | 240 | 240 | 120 | 60 |

| 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 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 | |

REVISION: 01





| 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 |
| 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 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* |
| | | $\mbox{\ensuremath{^*}}$ 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 | |

REVISION: 01





| 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 experiencedTechnical 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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