

CI/SfB		Yt4
CAW P22		
Uniclass L6751:P7112		

Description

FM190 is a fire rated gun grade expanding polyurethane foam. It can provide up to 4 hours fire resistance in linear joints, has excellent thermal and acoustic insulation properties and forms a strong bond to most construction materials.

Colour

Grey

Packaging

750 ml pressurised canister (12 per carton)

Technical Information

Property	Test Method	Results
Composition		Polyurethane Foam
Fire Classification	DIN 4102-1	B1
Fire Resistance	EN1366-4	See Performance Data Table
Water Absorption	EN 1609	0.2 kg/m ²
Application Temperature:		+10°C to +30°C
Canister Application Temperature:		+5°C to +35°C
Ambient Density	LAB 015	20 - 30 kg/m ³
Tack Free Time	LAB 001	10 minutes
Cutting Time	FICA TM 1005	60 minutes
Loading Time		24 hours
Compressive Strength (10%)	FICA TM 1011	47 kPa
Elongation at Break	ISO 527	20%
Thermal Conductivity	EN 12667	36 mW/m.K
Maximum Acoustic Rating	EN ISO 140-1 : 2005-03	60 dB
Service Temperature		Short Term: -40°C to +130°C Long Term: -40°C to +90°C
Storage		Store in shaded dry conditions between +10°C and +25°C. Store canisters upright. The product is contained in a pressurised container - observe storage instructions and do not apply heat.
Shelf Life		9 months when stored as recommended in original unopened containers.

Necessary Tools

- illbruck foam gun, cutting knife, tape for masking of adjacent areas. AA290 to clear gun after use. Unstable areas may need to be clamped or secured during curing.

Preparation

- Always carry out a test to confirm compatibility prior to use.
- Protect floor coverings with paper or a plastic film.
- The surfaces must be dry, solid and stable.
- Remove all loose particles, dust and grease.
- A speedier cure can be attained by moistening the substrates if needed.



FM190

Pro Foam B1



Usage / Purpose

FM190 is a modified one component polyurethane foam suitable for the filling / sealing of joints and gaps requiring fire rated properties.

Key Benefits

- Up to 4 hour fire rating tested to BS EN 1366-4 (concrete-concrete/block-block joints of up to 40 mm in walls and floors) and DIN 4102 Pt 1 (B1)
- Suitable for filling, sealing and insulation of joints and gaps in a variety of construction applications
- Forms a strong bond to concrete, brickwork, stone, plaster, wood, fibre concrete, metal, PVC and polystyrene
- Rapid curing formulation: Foam is tack free within 10 minutes, and can be cut or trimmed within 60 minutes

Application

- Shake the canister vigorously at least 20 times. Remove the protective cap and screw canister onto the illbruck PU foam gun.
- Invert can and direct gun into gap, pressing gently on the trigger to establish the correct flow rate.
- Joints should be underfilled to allow for post expansion of the foam. Fill to approximately 80% of joint depth for optimum results.
- For best results always work with the canister in a vertical position and keep the valve pointed downwards.
- On horizontal surfaces always work away from the exuding bead and work upwards on all vertical surfaces.
- When filling deep joints apply in layers, waiting until each layer has skinned and partially cured before applying the next.
- Applying a light misting of clean water between each layer before subsequent application will assist adhesion and cure speed.
- Enhanced performance can be achieved by capping with a suitable intumescent or fire-rated sealant such as Nullifire FS701 or FS703. For further information please consult our Technical Sales Department.

Cleaning

Clean the gun by removing the foam canister and replacing with a can of AA290 PU Solvent Cleaner. Remove excess foam immediately with AA290 or acetone. Ensure any substrate requiring cleaning is solvent resistant before proceeding. Cured foam can only be removed mechanically.

Please Note

FM190 is not UV resistant and should be protected from sunlight with a suitable opaque sealant, filler or paint. As with all PU foams, it does not bond to polythene, Teflon®, siliconised or wax-like surfaces.

Performance Data

Fire performance in accordance with EN 1366-1. Classification 13501 2:2007 + A1: 2009.

The fire resistance of linear joints sealed with illbruck FM190 PU foam, applied in an aerated concrete wall and floor construction. In some cases coated with Nullifire FS711 FR Acrylic at both sides of the separating element, with a wet (applied) thickness of 1 mm. The joints fully filled with the foam. Wall and Floor (nominal 600 kg/m³ density)

Wall Thickness	Joint Width	Coating	Classification
100 mm	5	without coating	EI 180 - V - X
100 mm	10	-	EI 120 - V - X
100 mm	20	-	EI 45 - H - X
100 mm	20	-	EI 60 - V - X
100 mm	20	with coating	EI 120 - V - X
100 mm	25	-	EI 45 - V - X
100 mm	30	-	EI 45 - V - X
100 mm	40	-	EI 120 - V - X
150 mm	5	-	EI 240 - V - X
150 mm	20	-	EI 90 - V - X
150 mm	20	with coating	EI 240 - V - X
150 mm	30	-	EI 90 - V - X
150 mm	40	-	EI 60 - V - X
200 mm	10	-	EI 240 - V - X
200 mm	20	-	EI 180 - V - X
200 mm	30	-	EI 120 - V - X

Floor Thickness	Joint Width	Coating	Classification
150 mm	5	without coating	EI 240 - H - X
150 mm	20	-	EI 90 - H - X
150 mm	30	-	EI 90 - H - X
150 mm	40	with coating	EI 60 - H - X

Fire resistance classification: the following fire protection classes are used: E = integrity, i.e. ability to isolate smoke gases. I = insulation, i.e. ability to prevent heat spread. ACC = Aerated Concrete. H = Horizontal. V = Vertical. W = Widths. X = No specific movement tested.

Health & Safety Precautions

Safety data sheet must be read and understood before use.

Technical Service

tremco illbruck has a team of experienced Technical Service Representatives who provide assistance in the selection and specification of products. For more detailed information, service and advice, please call Customer Service on 01942 251400.

Guarantee / Warranty

tremco illbruck products are manufactured to rigid standards of quality. Any product which has

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