

Water-borne Intumescent Acrylic Sealant

KEY BENEFITS SUMMARY

- Can achieve up to 5 hours joint fire resistance tested in accordance with BS EN 1366-4
- Ideal for sealing low movement joints (up to 20 %) – suitable for gaps up to 50 mm wide
- Provides a durable seal resistant to mould, fungus and vermin attack
- Safe to use: asbestos and halogen free
- Easily paintable

PRODUCT INFORMATION

Description

Nullfire M701 is a one-part fire resistant joint sealant based on an emulsion acrylic.

Usage / Purpose

Nullfire M701 cures to give a firm, but flexible seal in low movement fire rated joints (up to 20 %).

The sealant is suitable for internal use in a variety of fire rated structures. Typical applications include joints in compartment walls and floors, providing a perimeter seal around partitioning and service penetrations, and bedding of fire door locks and hinges.

SUBSTRATES

- Masonry to masonry
- Steel to steel
- Masonry to timber
- Masonry to steel
- Around pipes and services

NOTE

For other substrates please contact Tremco illbruck Technical Services Department.

Colours

White and grey

Packaging

310 ml cartridges (12 per box)
600 ml sausages (12 per box)
830 ml cartridge (9 per box)

Availability

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

USAGE GUIDELINES

Necessary Tools

Standard cartridge/skeleton gun; sharp knife; palette knife or spatula

Joint Design Considerations

Refer to published test results for guidance on joint design.

Preparation

- All surfaces must be clean and sound, free from dirt, grease and other contamination.
- Wood plaster and brick may be damp but not running wet.
- Use mechanical abrasion to clean porous surfaces if necessary before application.
- Check specification is suitable for movement, fire rating and gap size required.

Priming

Priming is not required with most construction materials but very porous surfaces should be primed with illbruck WD110 PVA Adhesive.

Application

- Insert backing material, oversized to joint width to ensure stability, to provide correct depth of seal (minimum 5 mm).
- For single seal, use non-flammable backing (mineral fibre or ceramic fibre). For double seal: Use M710 Backing Rod.
- Using a sharp knife, 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.
- Tool to a smooth finish immediately with a wet palette knife or spatula.

Coverage

To determine quantity of sealant required, calculate as follows:

$$\frac{\text{Gap width} \times \text{Depth} \times \text{Total length}}{310} = \text{N}^{\circ} \text{ of cartridges}$$

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

Cleaning

Immediately remove all excess sealant adjacent to the joint (use masking tape where appropriate). Clean tools in hot water.

Storage

Store in dry conditions between +5 °C and +27 °C. Do not allow to freeze.

Shelf Life

12 months when stored in its original unopened containers.

Health & Safety Precautions

Product Health and Safety Data Sheets must be read and understood before use.



TECHNICAL INFORMATION

| Property | Test Method | Result |
|------------------------------------|---|---|
| Composition | | An intumescent acrylic mastic |
| Fire Performance* | | |
| Period of Fire Resistance | BS EN 1366-4 Up to 5 hours / BS476:Part 20 | 1, 2, 3, 4 & 5 hours integrity 1, 2, 3, 4 & 5 hours integrity & insulation |
| Acoustic Rating | BS EN ISO 140-3:1995 | up to 38 dB |
| Air Permeability | BS EN ISO 1314-1:2004 | Air tight up to 100 Pa |
| Depth of Sealant Required | Gap width up to 50 mm | 50 % of width (2:1 ratio) |
| Properties (Typical Values) | | |
| Solids Content | | 82 % to 85 % |
| pH Value | | 8.8 to 10.0 |
| Flash Point | | n/a |
| Specific Gravity | | 1.5 to 1.6 |
| Viscosity | | Thixotropic |
| Tensile Strength | | 170 kN/m ² (0.17 MPa) |
| Touch Dry | at 20 °C | 30 minutes |
| Cure Through Time | at 20 °C - 20 mm depth | 20 days |

*NOTE: For installation ratings and gaps outside of this range please refer to Tremco illbruck Technical Services Department.

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 01942 251400.

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.

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

PERFORMANCE

FIRE PERFORMANCE: Tested in accordance with BSEN1366-4 Up to 5hrs

ACOUSTIC PERFORMANCE: Tested in accordance with BSEN ISO 140-3:1995

AIR PERMEABILITY: Tested in accordance with EN 1026

| Tested Gap Widths (mm) | Substrate | Integrity (Minutes) | Insulation (Minutes) | Orientation | Seal to Depth Ratio (span / depth) |
|------------------------|-------------------|---------------------|----------------------|-------------|------------------------------------|
| Up to 29 | Concrete-Concrete | 300 | 180 | Wall | 2:1 |
| 30-50 | Concrete-Concrete | 300 | 300 | | |
| Up to 29 | Concrete-Softwood | 90 | 60 | | |
| 30-49 | | 90 | 90 | | |
| 50 | | 180 | 180 | | |
| Up to 49 | Concrete-Hardwood | 120 | 120 | | |
| 50 | | 180 | 180 | | |
| Up to 12 | Concrete-Steel | 300 | 60 | | |
| 13-29 | | 240 | 60 | | |
| 50 | | 300 | 120 | | |
| Up to 12 | Concrete-Concrete | 300 | 180 | Floor | 2:1 |
| 13-50 | | 300 | 60 | | |
| Up to 50 | Concrete-Steel | 240 | 30 | | |

