

# PERESEAL

EXPERTISE IN SEALANT TECHNOLOGY

PERESEAL FR FIRE-RATED ACRYLIC SEALANT

Technical Data Sheet

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# **Technical Data**

Base	Acrylic emulsion
Consistency	Stable paste
Curing system	Physical drying
Skin formation	25 minutes
Hardness	25±5 Shore A
Specific gravity	1.56 – 1.60
Service temperature	-20°C to +70°C
Application temperature	+5°C to +30°C
Flashpoint	None
Expansion in fire	1:2-3
Paint acceptance	Very good
Thermal conductivity	0.845 W/mK (+/- 3%) @ 20mm depth
Sound insulation	62 dB (single sided seal, $\geq$ 12mm depth)
Maximum deformation (ISO 11600)	±12.5%

# Product

PERESEAL® FR Fire-rated Acrylic sealant is a fire-rated, intumescent acrylic joint sealant that cures to form a firm yet flexible seal, ideal for a variety of fire-rated applications. Pereseal FR chars and intumesces when exposed to heat to prevent the spread of heat, smoke and fire through the joint.

To ensure that fire-rating and intumescent properties are maintained, most current available sealants sacrifice sealing performance. Pereseal® FR was formulated to give improved sealing and application performance coupled with good fire retardant properties.

Thermal activation takes place at about 180C when the material will expand (intumesce) and prevent the passage of fire and smoke for periods up to and beyond 4 hours.

# Application

PERESEAL® FR's properties makes it an excellent sealant for:

- Internal perimeter pointing of fire-rated doors, window frames, and duct systems
- Sealing joints, voids and irregular holes in fire walls, partitions and other structures
- Maintaining integrity when sealing around pipes and cables

#### **Properties**

- High-end formula
- Classified for fire sealing all types of constructions and service penetrations
- Fire-rated for both horizontal and vertical joints
- Fire-rating of up to 4 hours tested to BS 476 Part 20: 1987
- Good adhesion to most building materials without needing a primer
- Excellent slump resistance: suitable for use in joints up to 50 mm wide
- Very easy to apply
- Excellent sound insulation
- UV radiation resistant
- Permanent colour
- Halogen-free, solvent-free
- Low VOC complies with EMICODE emission class EC 1Plus
- Qualifies for LEED IEQc4.1: Low-Emitting Materials – Adhesives and Sealants
- Fast cure and tack-free within an hour
- Paintable

#### Substrate

Suitable for most building materials. Surfaces must be clean and dry, free of dirt, wax, oil and grease. No primer required for aluminium, airconditioner ducting materials, and most porous surfaces of building materials.

The directives contained in this document are the result of our experiments and of our experience and have been submitted in good faith. Because of the diversities of materials and substrates and the great number of possible applications which are out of our control, we cannot accept any responsibility for the results obtained. In every case, it is recommended to carry out preliminary tests.

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# **Application method**

- Use an applicator gun (manual or pneumatic caulking gun.
- Clean with white spirit immediately after application
- Finish and tool with soapy water solution before skin formation
- Tool with wet or damp spatula
- Repair with PERESEAL FR.

## Storage and shelf life

24 months for unopened packaging in a cool and dry storage place at temperature between  $+5^{\circ}C$  to  $+25^{\circ}C$ 

## Packaging

300 ml per cartridge, 20 cartridges per box.

**Colour** White, grey

#### **Joint Size**

- Min. width 5 mm
- Max. width 50 mm
- Min. depth 5 mm
- Recommendation 2 x joint width = joint depth

#### Safety Measures

Take usual hygiene precautions. Refer to the Material Safety Data Sheet of the product for other safety measures.

#### Remarks

The sealant must be protected from water for 24 hours after application. It must not be used on areas where it will be constantly submerged in liquids.

# Conformity

Singapore: COC No. 012131 – TÜV SÜD PSB Pte. Ltd. United Kingdom: WARRES No. 181672 – BS 476:Part20:1987

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