

TECHNICAL DATA SHEET

PENOSIL FireStop Hybrid 720

One-component sealant based on innovative hybrid technology. Is characterized by a fast, neutral and odourless curing, producing a permanently elastic joint particularly fire resistant.

Main benefits

- High elasticity and movement capability.
- Fast curing with nearly no shrinkage.
- Excellent adhesion to a wide range of materials.
- Can be applied to damp surfaces.
- Very good UV-, weather and ageing resistance.
- Silicone, isocyanates and solvent free. It will not emit halogenated by-products under fire conditions.
- Non-corrosive.
- Easy to apply, even in adverse conditions and low temperatures.
- Permits painting, even immediately after application, with water-based paints and many other systems (to be tested).

Fields of application

- Fire-resistant sealing of passive fire safety walls.
- Fire doors and fire wall sealing.
- Sealing of hot air and water vapor piping.
- Fireproof bonding and sealing of gas barrier and smoke-tight joints.
- Fire-resistant sealing of precast concrete wall units.
- Bonding and sealing in tunnels preventing the spread of fire, smoke and toxic gasses.

Adhering

- Metals
- Concrete
- Bricks
- Ceramics
- Marble
- Stones
- Plaster
- Wood
- PVC
- Plastics

Application instructions

Application conditions

Application temperature between +5 °C and +40 °C.

Surface preparation

Substrates (joint flanks) must be clean and preferably dry, free of dust, grease and other contaminant which may affect the adhesion. Non-porous surfaces (such as aluminium, glass, etc.) should be cleaned with a suitable solvent and thoroughly dried with a clean cloth. Porous substrates (such as concrete, brickwork, etc.) must be mechanically cleaned from loose particles. Mask off the joint edges.

Application method

Cartridge: cut off the threaded end of the cartridge and screw on the application nozzle for directing sealant. Cut the threaded end in a way where a suitable opening for application is produced. Place the cartridge together with the applicator in the gun and fill the installation nozzle with sealant, by repeatedly pressing the gun trigger.

Apply sealant in the joint by repeatedly and evenly pressing on gun trigger and smoothly dragging the nozzle along the joint. After application, smooth the surface with a suitable tool (e.g., spatula) and remove excess material.

If necessary, the adjacent surfaces of the joint should be protected to avoid staining. Usually, masking tape is being used for this. Protective masking tapes should be removed before the sealant's skin is formed.

In wider and movable joints, backer rod should be used as a back-up material, to ensure the correct thickness and shape of sealant joint and to avoid three-sided adhesion.

Ensure adequate ventilation in all joint locations. During the curing process, make sure that no impurities can settle on the surface and that the joint surface is not affected by mechanical load.

Cleaning

Uncured product can be cleaned with solvents like white spirit, acetone or with PENOSIL Cleaning Wipes. Cured sealant can be removed mechanically. If needed silicone remover should be used.

Technical data

Properties	Value	Unit
Basis	Hybrid polymers	
Consistency	Non-slump paste	
Density (DIN 53 479-B)	1,34...1,40	g/ml
Tack free time	40...50	min
Skin forming time	70	min
Curing rate	2...3	mm/24h
Loss of volume (ISO 10563)	<5	%
Resistance to flow (ISO 7390)	0	mm
Application temperature	+5...+40	°C
Service temperature	-40...+90	°C
Movement capability (ISO 11600)	25	%
Elastic recovery (ISO 7389)	>80	%
Shore A hardness (ISO 868)	42	
E-Modulus 100% (ISO 8339)	0,60	N/mm ²
Tensile strength (ISO 8339)	1,50	N/mm ²
Elongation at break (ISO 8339)	>500	%
E-Modulus 100% (ISO 37)	0,90	N/mm ²
Tensile strength (ISO 37)	3,50	N/mm ²
Elongation at break (ISO 37)	750	%
VOC content (SCAQMD rule 1168)	25	g/l

The values specified were obtained at +23 °C and 50% relative humidity, unless otherwise specified. These values may vary depending on environmental factors such as temperature, moisture and type of substrates.

Technical classification and certificates

- Sealant for facade for interior and exterior application, suitable for use in cold climate
EN 15651-1: Type F-EXT-INT-CC
- French VOC-emission class A+
- Fire resistance according to EN:13501-2
- Fire performance according to EN:13501-1
- Tested according to EN:1366-4
- Tested according to EN:1366-3
- Tested according to EN:1363-1

Colour

White & grey.

Package

290 ml cartridge, 24 pcs in a box.

Storage conditions and shelf life

Guaranteed shelf life 12 months from the manufacturing date when stored in closed original package in a dry place and protected from direct sunlight at temperatures between +5 °C and +30 °C.

Limitations

- Do not use on bituminous substrates or on building materials which might bleed oils, plasticizers or solvents. (e.g. rubber, chloroprene, EPDM, ...).
- There is no adhesion to PE, PP, PTFE (Teflon®).
- Due to the wide variety of possible substrates, we recommend a preliminary compatibility test.
- Paintability: Due to the large number of paints and varnishes available we strongly suggest a compatibility test before application.
- It must not be used for structural glazing neither for aquariums, nor the product is recommended for applications in direct contact with food.

Safety regulations

Ensure sufficient ventilation during application and wear necessary personal protective equipment. More specific safety information is available on the safety data sheet (SDS).

Note: The instructions in the present documentation are based on tests carried out by the manufacturer and are presented in good faith. Due to variations in materials and substrates as well as the various application possibilities that are beyond our control, the manufacturer is not liable for the results achieved. In any case, it is recommended to test the product suitability at the place of application. Manufacturer reserves the right to modify products without prior notice. This TDS replaces and supersedes all previous data sheets on the same product.