

TECHNICAL DATA SHEET

PENOSIL EPDM Adhesive 740

One-part elastic hybrid adhesive, that cures under the influence of moisture and leaves a permanent layer of elastic rubber, specially designed to join EPDM membranes.

Main benefits

- Excellent primerless adhesion on different EPDM membranes. High performance mechanical properties.
- Silicone, isocyanates and solvent free. Low VOC content. Non-corrosive and neutral odourless cure.
- Quick, easy, clean and secure installation. Single-side wet lay application.
- Can be applied underwater.
- Fast curing through, forming a flexible elastic rubber and showing a minimum shrinkage once cured.
- Very good and durable adhesion on virtually all common building surfaces.
- Resistant to atmospheric agents (weather, extreme temperatures, ozone, UV ray exposure, overnight condensation, rain, etc.).
- Good heat and chemical resistance.
- The adhesive accommodates a wide fluctuation in temperature from -40°C up to +90°C.
- Permits painting (previous tests should be carried out).

Fields of application

- Adhering EPDM membranes, both vertically and horizontally, to itself and to typical construction substrates: concrete, asbestos-cement, bricks, bitumen, steel and other porous and non-porous materials.
- Suitable for roof EPDM works.
- Bonding and repairing EPDM sheets for waterproofing gutters, cavities, pipes and tanks.
- Repairing submerged leaks and liner splits.
- Many different elastic bonding and sealing applications, even onto damp surfaces, in both indoor and outdoor.
- Can also be used on slightly uneven surfaces.

Adhering

- Metals
- Wood
- PVC
- Concrete
- Cement
- Masonry
- Bricks
- Tiles

Application instructions

Application conditions

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

Surface preparation

Substrates must be dry, clean and sound, free from dust, grease, loose particles and other contaminant which may affect the adhesion. Any release agent present must be removed.

A pre-test for compatibility is recommended.

It adheres without the use of a primer for bonding of EPDM rubber to itself and to other EPDM membranes. The temperature of the substrate must not fall below +5°C.

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.

Foil package: open the end of the foil pack and place the pack inside the gun so that the dosing nozzle keeps covering its open portion. Place the dosing nozzle on the open end and screw on the cap to close the tube. Cut the nozzle to create a suitable opening for dosing sealant.

Apply sealant in the joint by repeatedly and evenly pressing on gun trigger in a continuous bead on the construction substrate (nozzle diameter 8/10 mm), to align 10/15 mm inside the edge of the membrane.

Place the membrane onto the fresh adhesive bead and ensure a good contact using a seam roller, taking care that the adhesive does not exude out. Compressed adhesive bead should be 2/3 mm in thickness (minimum 1 mm).

The product has to overlap the membranes for at least 10 cm. and must be adhered to the subsurface. The marginal edge has to be fastened mechanically to the foundation and in no case with tension. In application you should follow the EPDM sheet producer application rules.

Excess adhesive can be removed with a spatula.

When bonding wider or longer sections of membrane, temporary fixing may be required until sufficient adhesive loading capacity is achieved.

Total bonding strength is reached when the adhesive is cured. Curing can be accelerated by lifting slightly the membrane after initial contact of the bond and allowing an increased air access for a few seconds before remaking the bond.

During the curing process avoid contact of the supports and the adhesive to alcohol, hydrocarbons, cleaners and solvents.

Optimum bonding will be obtained after complete curing.

Cleaning

Uncured sealant can be cleaned with solvents like white spirit, acetone or with special cleaning wipes.

Cured sealant can be removed mechanically. If needed silicone remover should be used.

Technical data

Properties	Value	Unit
Basis	Hybrid	
Consistency	Non-slump paste	
Density (DIN 53 479-B)	1,62	g/ml
Tack free time	20	min
Skin forming time	45	min
Curing rate	2...3	mm/24h
Loss of volume (ISO10563)	<5	%
Application temperature	+5...+40	°C
Service temperature	-40...+90	°C
Shore A hardness (ISO 868)	47	
E-Modulus 100% (ISO 37)	1,00	N/mm ²
Tensile strength (ISO 37)	1,50	N/mm ²
Elongation at break (ISO 37)	700	%

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

- French VOC-emission class A+
- EMICODE® EC 1 Plus - very low emission

Colour

Black.

Package

290 ml cartridge, 12 pcs in a box.

600 ml foil package, 20 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 at temperatures between +5 °C and +30 °C.

Limitations

- Do not use on building materials which might bleed oils, plasticizers or solvents.
- It is not suitable for direct application onto natural stone, PE, PP, PC, PMMA, PTFE, PVC, neoprene, asphalt or some bitumen containing materials.
- Paintability: Due to the large number of paints and varnishes available we strongly suggest a compatibility test before application.
- Please observe the expiration date!

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.