

WATER DILUTED EPOXY PRIMER FOR POROUS AND NON-POROUS SUBSTRATES

DESCRIPTION

PENEPOX™ W is a two-components, transparent, water diluted, deep penetrating, epoxy primer. It ensures strong bonding to non-porous substrates, strong resistance to mechanical stresses, abrasion chemicals and detergents. PENEPOX™ W cures by reaction of the two components PENEPOX™ W A and B.

RECOMMENDED FOR

PENEPOX™ W is mainly used as a bonding agent for polyurethane waterproofing coatings and polyurethane joint-sealants on non-porous surfaces like:

- ▶ Metal (various)
- ▶ Power floated concrete
- ▶ Bituminous and asphalt felt
- ▶ Quarry tiles
- ▶ Old acrylic coatings
- ▶ Glass
- ▶ Terrazzo

PENEPOX™ W can also be used as a primer of the following surfaces:

- ▶ Concrete
- ▶ Mortars
- ▶ Plaster

PENEPOX™ W can also be used as a primer on “green” concrete, as a water barrier on concrete surfaces and as tack-coat between coating layers if inter-coating time intervals are overstepped.

ADVANTAGES

- ▶ Easy to apply (nap roller or brush)
- ▶ Excellent anchoring to the non- absorbing surface
- ▶ Low odor
- ▶ Can be used on fresh surfaces without adhesion problems
- ▶ Resistant to heat and frost
- ▶ Resistant to stagnating water
- ▶ Chemical resistant
- ▶ Diluted with water. Low cost
- ▶ Can be applied as substrate stabilizer (50% dilution with water)

TECHNICAL CHARACTERISTICS

Characteristics	Test Result	Test Method
<i>Composition</i>	Epoxy resin + hardener	
<i>Color</i>	Clean – yellowish	
<i>Mixing ratio</i>	A:B = 3:1 (by weight)	
<i>Resistance to water pressure</i>	No leak under 7 atm pressure	DIN 1048
<i>Aluminum bonding</i>	400 kg/cm ² (0,95 lb/ft ²)	ASTM D 903
<i>Hardness (Shore A Scale)</i>	> 95	ASTM D 2240
<i>High temperature resistance</i>	100 °C (212 °F)	Inside Lab Test
<i>Low temperature resistance</i>	-30 °C (-22 °F)	
<i>Application temperature</i>	10 °C to 35 °C (50 °F to 95 °F)	Conditions: 20 °C (68 °F), 50% RH
<i>Treating time</i>	60 min	
<i>Recoat time</i>	12-18 hours	
<i>Final curing time</i>	7 days	

All data are average values obtained under laboratory conditions. Impractical use, temperature, humidity and absorption of the substrate may influence the above given values.

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DIRECTIONS FOR USE

Surface Preparation: The surface needs to be clean, dry and sound, free of any contamination, which may harmfully affect the adhesion of the primer. Maximum moisture content should not exceed 7%. Old, loose coatings, dirt, fats, oils, organic substances and dust need to be removed by a grinding machine. Possible surface irregularities need to be smoothed. Any loose surface pieces and grinding dust need to be thoroughly removed.

Mixing: Pour the content of PENEPOX™ W B container in the PENEPOX™ W A container and mix thoroughly with a mixing drill at low speed (500 rpm) for approximately 3 minutes, until a uniform mix is formed. Mix thoroughly, regarding the bottom and the walls of the container.

NOTE: Dilute the PENEPOX™ W mix with 10-20% fresh water, for better application.

Application: Apply PENEPOX™ W by brush or nap roller, until the surface is fully covered. After 6-12 hours (no later than 24 hours) and while the primer is still "tacky", apply the polyurethane waterproofing coating, e.g. PENEPOAT™ ELASTIC, or the polyurethane joint-sealant, U-SEAL or SiMP®SEAL.

NOTE: If the surface is very brittle, like lightweight concrete or porous cement screed, apply two layers of PENEPOX™ W.

Coverage: PENEPOX™ W coverage is 200 gr/m² (4,7 lb/ft²) in one layer.

This coverage is based on practical application by roller onto a smooth surface in optimum conditions. Surface porosity, temperature, humidity, application method and finishing can alter this consumption.

SPECIAL CONSIDERATIONS

For the best results, the temperature application and curing should be between 10 °C to 35 °C (50 °F to 95 °F). Low temperatures cause curing retardation, while high temperature speed up curing. High humidity may affect the final finish.

Do not apply PENEPOX™ W at ambient and ground temperatures below

Careful compliance with the time margins is essential for an excellent result.

Contact PENETRON HELLAS for additional information, regarding your project.

PACKAGING

PENEPOX™ W A+B is available in 3+1 kg (6,6+2,2 lb) or 15+5 kg (33+11 lb) containers.

STORAGE / SHELF LIFE

PENEPOX™ W can be stored for 12 months in its original packing (unopened container) at 5 °C – 35 °C (41 °F – 95 °F) in a cool, dry place. Keep away from wet areas and direct sunlight.

SAFE HANDLING INFORMATION

Avoid skin and eye contact. If contact is made, flush areas with lots of water and seek medical advice. Protective gloves, mask and goggles should be worn. For further information please refer to Safety Data Sheet. PENETRON HELLAS S.A. has recently updated Safety Data Sheet on the safe use of PENETRON® products. Each Safety Data Sheet contains health and safety information for the protection of your employees and your customers. KEEP OUT OF REACH OF CHILDREN.

WARRANTY - DISCLAIMER

PENETRON HELLAS S.A. warrants that its products are manufactured under certified ISO Standard procedures, are of excellent quality and shall be free from material defects and contain all components in their proper proportion. Should any of the products be proven defective, the liability to PENETRON HELLAS S.A. shall be limited to replacement of the material proven to be defective, since the standard application procedures have been met and the suitability of the product for the particular application have been proven. PENETRON HELLAS S.A. makes no warranty as to merchantability of fitness for a particular purpose. User, after contacting the distributor of the product, shall determine the suitability of the product for his intended use and assume all risks and liability in connection therewith. While every care has been taken, the information provided in this product's data sheet make no part of any contract. All recommendations, technical data and test data contained in this product's data sheet are based upon the results of control laboratory tests or in actual field tests. However, PENETRON HELLAS S.A. makes no warranty of any kind, concerning this data. In any case, this data is given in good faith based in the PENETRON HELLAS S.A. experience, till the publication of this sheet. Due to variance in storage, handling and applications of the materials, PENETRON HELLAS S.A. accepts no liability for the results obtained. It is suggested that potential users try small applications to determine the suitability of each individual product for their specific requirements. The users should always refer to the most recent edition of the product's data sheet. PENETRON HELLAS S.A. may particularly differentiate its versions of the product's data sheet compared with those of PENETRON INTERNATIONAL LTD or respective PENETRON companies worldwide. These changes are due to text formatting, different application weathering and procedures or different product names and aim at the optimal consumer information.

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CERTIFICATION



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DOP NO: 14.026-0110-03D160922-05
EN 1504-2
PENEPOX W

Surface protection product – coating:
Moisture Control [Method 2.2]
Increasing Resistivity [Method 8.2]
Linear shrinkage: NPD

Coefficient of thermal expansion: NPD

Adhesion by cross-cut test: NPD

Permeability to CO₂: NPD

Water vapour permeability: Class II: $5 \text{ m} \leq S_D \leq 50 \text{ m}$

Capillary absorption and permeability to water: $\omega < 0,1 \text{ kg/m}^2 \cdot \text{h}^{0,5}$

Thermal compatibility: NPD

Crack bridging ability: NPD

Adhesion strength by pull-off test: $\geq 1,5 (1,0) \text{ N/mm}^2$

Reaction to fire: Class F

Slip / skid resistance: NPD

Behavior after artificial weathering: NPD

Antistatic behavior: NPD

Adhesion on wet concrete: NPD

Dangerous substances: According 5.3