

DESCRIPTION

PENECOAT™ HYPER ELASTIC BLACK is a two components, solvent-based, asphalt and polyurethane membrane, for long lasting waterproofing. PENECOAT™ HYPER ELASTIC BLACK is a high elasticity and permanent, fast curing, cold applied and cold curing membrane. PENECOAT™ HYPER ELASTIC BLACK consists of elastomeric, hydrophobic polyurethane resins, with chemically polymerized asphalt that ensure strong bonding to absorbent substrates, strong resistance to mechanical stresses, abrasion chemicals and detergents. PENECOAT™ HYPER ELASTIC BLACK cures by reaction with the reaction of the two components.

RECOMMENDED FOR

- ▶ Waterproofing of lofts
- ▶ Waterproofing of walls
- ▶ Beneath roof tiles and highly moisture areas, like bathrooms, roofs, etc.
- ▶ Flowerbeds and planter boxes
- ▶ Waterproofing of asphalt and asphalt felts, EDPM membranes
- ▶ Joint sealant for horizontal movement with medium traffic and for construction joints

ADVANTAGES

- ▶ Easy to apply
- ▶ Uniform membrane with no joints, when applied
- ▶ Resistant to water
- ▶ Resistant to frost
- ▶ Provides resistance to root penetration (green roof application)
- ▶ Fast curing
- ▶ Uniform thickness. Zero bubble formation
- ▶ Low modulus of elasticity, which ensures excellent crack bridging
- ▶ Excellent properties as a water barrier
- ▶ Excellent thermal resistance. No softening occurs
- ▶ Retains its mechanical properties at temperature range -22 °F to 194 °F (-30 °C έως 90 °C)
- ▶ Excellent bonding on almost every substrate
- ▶ The surface can return to service
- ▶ Resistance to detergents, oils, sea water and domestic chemicals
- ▶ The membrane can be repaired, if a mechanical damage occurs
- ▶ No need for blowtorch, during the application
- ▶ Mixing ratio 1:1 (by volume)

TECHNICAL CHARACTERISTICS

Characteristics	Test Result	Test Method
Composition	Polyurethane resin	
Color	Black	
Density	A: 61.2 lb/ft ³ (0.98 kg/Lt) B: 63.7 lb/ft ³ (1.02 kg/Lt)	
Elongation at break	> 1000%	ASTM D 412 / DIN 52455
Tensile resistance	> 2 N/mm ²	ASTM D 412 / DIN 52455
Resistance to water pressure	No leakage at head pressure 1 atm	DIN EN 1928
Resistance to root penetration	Resistant	CEN/TS 14416 EX:2014
Concrete bonding	> 2,0 N/mm ²	ASTM D 903
Hardness (Shore A Scale)	35–40	ASTM D 2240 (15")
Thermal resistance (80 °C for 100)	No significant change	EOTA TR-011
Hydrolysis (5% KOH, 7 days cycle)	No significant change	
Temperature resistance	-22 °F to 194 °F (-30 °C έως 90 °C)	Inside Lab Test
Thermal shock	482 °F (250 °C)	
Solid content	~85 %	

POLYURETHANE / ASPHALT ELASTOMERIC RESIN

Characteristics	Test Result	Test Method
<i>Workability</i>	30-35 mins	Conditions: 68 °F (20 °C), 50% RH
<i>Skin formation time</i>	1-3 hours	
<i>Medium traffic</i>	12-24 hours	
<i>Final curing time</i>	7 days	

Chemical resistance of PENECOAT™ HYPER ELASTIC BLACK

Excellent resistance in acidic and alkali solutions (5%), detergents, oils and sea water.

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

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 5%. Compressive strength of the substrate must be at least 3.626 psi (25 MPa) and surface strength of the concrete must be at least 218 psi (1.5 MPa). 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. New concrete must be cured for at least 28 days prior to application.

NOTE: Careful and thorough preparation of the surface is important for excellent results and high durability. Do not wash surface with water or ensure good drying before application.

Mixing: Mix thoroughly PENECOAT™ HYPER ELASTIC BLACK A, before use, with a mixing drill for up to 3 min. Then, mix equal quantity of PENECOAT™ HYPER ELASTIC BLACK A and PENECOAT™ HYPER ELASTIC BLACK B and mix thoroughly with a mixing drill, at low speed, for 3-5 min. Apply the mixed material immediately.

Mixing ratios: Mix equal quantity of PENECOAT™ HYPER ELASTIC BLACK A and PENECOAT™ HYPER ELASTIC BLACK B at 1:1 ratio (by volume).

NOTE: BLACK A and BLACK B components must be mixed thoroughly, until a uniform mixture is form. Attention must be paid in the bottom and the walls of the container.

Priming: Prime the porous substrates, such as concrete, mortars and wood, with PENEPRIMER™ PU. For non-porous substrates, such as metal, ceramic tiles, asphalt, asphalt felts and old coatings, use PENEPOX™ W. Allow primer to cure, according to its technical guidance. No primer is required for good quality concrete.

Application: Apply PENECOAT™ HYPER ELASTIC BLACK A+B by brush, spike trawler or nap roller, until the surface is fully covered.

For demanding applications or substrates with tiles or cracks, reinforcement of the entire surface with the FABRIC geotextile is recommended. After 12-24 hours (but not later than 72 hours), apply a second coat of PENECOAT™ HYPER ELASTIC BLACK A+B. If PENECOAT™ HYPER ELASTIC BLACK A+B is about to be covered by quarry tiles, disperse dry quartz sand (QUARTZ SAND MIX grade 0.4-0.8 mm) over the surface, until the surface is fully covered, while the last coat is still damp. The quartz sand dispersion will form a bonding bridge for the thinset ceramic tile.

NOTE: It is highly advised to apply the product within its workability time margins [30-35 min. at 68 °F (20 °C)].

COVERAGE

PENECOAT™ HYPER ELASTIC BLACK coverage is at least 0.02-0.04 gal/ft² (1.1 – 1.5 Lt/m²), applied in one or two layers. The use of FABRIC is expected to double the PENECOAT™ HYPER ELASTIC BLACK A+B consumption per ft² (m²).

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 41 °F to 95 °F (5 °C to 35 °C). Low temperatures cause curing retardation, while high temperature speeds up curing. High humidity may affect the final finish.

PENECOAT™ HYPER ELASTIC BLACK is a slippery material, when wet. To lower slip, disperse quartz aggregate sand over the surface, while fresh, to create an anti-slip surface.

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

Contact PENETRON ROMANIA for further information regarding your project.

POLYURETHANE / ASPHALT ELASTOMERIC RESIN

PACKAGING

PENECOAT™ HYPER ELASTIC BLACK is available in 1.3+1.3 gal (10.8+11.2 lb) [5+5 Lt (4.9+5.1 kg)] and 5.3+5.3 gal (43.7+45.2 lb) [20+20 Lt (19.8+20.5 kg)] containers.

STORAGE / SHELF LIFE

PENECOAT™ HYPER ELASTIC BLACK can be stored for 9 months in its original packing (unopened container) at 41 – 86 °F (5 – 30 °C) in a cool, dry place. Keep away from wet areas and direct sunlight.

WARRANTY – DICLAIMER

BEST IMPORT PRODUCTS PENETRON 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 BEST IMPORT PRODUCTS PENETRON 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. BEST IMPORT PRODUCTS PENETRON 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, BEST IMPORT PRODUCTS PENETRON makes no warranty of any kind, concerning this data. In any case, this data are given in good faith based in the BEST IMPORT PRODUCTS PENETRON experience, till the publication of this sheet. Due to variance in storage, handling and applications of the materials, BEST IMPORT PRODUCTS PENETRON 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. BEST IMPORT PRODUCTS PENETRON 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.

SAFE HANDLING INFORMATION

Contains isocyanates. 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 Material Safety Data Sheet. KEEP OUT OF REACH OF CHILDREN.

BEST IMPORT PRODUCTS PENETRON
Departament Tehnic
Tel: 0742 454 382 / 0368 734 003
tehnic@penetron-romania.eu
Adresa : Complex Duplex 2
Str. Fundatura Harmanului, Brasov
www.penetron-romania.eu