PRODUCT DATA SHEET

PENECOAT™ PU-H

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ALIPHATIC POLYURETHANE SEMI-RIGID PROTECTIVE TOP-COAT

PENETRON® ADVANCED WATERPROOFING & PROTECTION SYSTEMS

DESCRIPTION

PENECOAT™ PU-H is a one component, semi-rigid, durable, protective aliphatic polyurethane coating, used as a top-coat for protection over the exposed waterproofing coating of PENECOAT™ ELASTIC, PENECOAT™ ELASTIC PROFESSIONAL and SiMP® COAT 25 subjected to high wear conditions and natural chalking. PENECOAT™ PU-H ensured high resistance against UV radiation, no yellowing and no chalking. It is easy to clean and presents high resistance against discoloration. Cures by reaction with ground and air moisture.

RECOMMENDED FOR

PENECOAT™ PU-H is used as a top-coat for protection over the exposed PENECOAT™ ELASTIC, PENECOAT™ ELASTIC PROFESSIONAL and SiMP® COAT 25 on:

- Stadium stands
- Common areas
- Balconies
- Outdoor parking areas

PENECOAT™ PU-H is used as a top-coat for protection over the exposed PENECOAT™ ELASTIC, PENECOAT™ ELASTIC PROFESSIONAL and SiMP® COAT 25 on heavy pedestrian traffic surfaces.

ADVANTAGES

- Simple application (single component, ready-to-use)
- Good resistance to abrasion
- Color stable
- Gives a glossy and easy-to-clean surface
- No surface chalking effect
- No yellowing
- Resistant to water. Can be applied on areas with puddled water
- Maintains its mechanical properties over a temperature span of -40 ºC to 90 ºC (-40 ºF to 194 ºF). No seasonal softening or hardening occurs
- Resistant to frost
- Ensures good elasticity. Follows the surface movement
- The waterproofed surface can return to service (heavy pedestrian traffic)

TECHNICAL CHARACTERISTICS

Type	Aliphatic polyurethane	
Color	White, grey, red, yellow	
Application temperature	5 ºC to 35 ºC (41 ºF to 95 ºF)	
Re-coat time	1-4 hours	[20 ºC (68 ºF), 50% RH]
Light pedestrian traffic time	12 hours	[20 ºC (68 ºF), 50% RH]
Final Curing Time	7 days	[20 ºC (68 ºF), 50% RH]

Technical characteristics of PENECOAT™ PU-H

Characteristic	Test Result	Test Method
Resistance to water pressure	No leakage	DIN EN 1928
Elongation at break	150%	ASTM D412
Tensile strength	>20 N/mm^2	ASTM D412
Surface chalking after 2000h of accelerated aging (DIN EN ISO 4892-3, 400 MJ/m^2)	No chalking observed. Chalking grade 0.	DIN EN ISO 4628-6
Bonding to PENECOAT™ ELASTIC	>2 N/mm^2	EN 1542
UV Resistance	Excellent	
Hardness (Shore A Scale)	>90	ASTM 2240 (15'')
UV accelerated ageing, in the presence of moisture	Passed – No significant changes	EOTA TR-010
Hydrolysis (5% KOH, 7 days cycle)	No significant elastomeric change	Inside Lab Test
Service temperature	-40 ºC to +90 ºC (-40 ºF to 194 ºF)	Inside Lab Test

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: Surface must be clean, dry and sound, free of any contamination, which may harmfully affect the adhesion of the membrane. Remove any loose materials. Maximum moisture content should not exceed 5%.

NOTE: Careful surface preparation is essential for optimum finish and durability. Do not wash surface with water.

Application: Apply crosswise the coloured protective coating PENECOAT™ PU-H over the final layer of PENECOAT™ ELASTIC, PENECOAT™ ELASTIC PROFESSIONAL and SiMP® COAT 25 using roller or airless spray. After 1-4 hours (not more than 36 hours) and while the surface is still "tacky", apply the next layer of PENECOAT™ PU-H.

During the time of polymerization of PENECOAT™ ELASTIC, PENECOAT™ ELASTIC PROFESSIONAL and SiMP® COAT 25, you can dry-shake quartz aggregate sand 0,4-0,8 mm (QUARTZ SAND MIX), to increase hardness and durability of the layer. The next day, remove the excess amount of quartz aggregates, using a broom, and apply the two layers of the protective coating PENECOAT™ PU-H.

COVERAGE

200 to 300 gr/m^2 (0,04 to 0,06 lb/ft^2) per layer.
Apply on two layers.

SPECIAL CONSIDERATIONS

For the best results, the temperature during application and cure should be between 10 ºC and 35 ºC (50 ºF and 95 ºF). Low temperatures may cause retardation in curing, while higher temperatures may accelerate the process. High humidity may affect the final finish.

Hands and tools should be cleaned before polymerization with the solvent PENECLEANER™ A PLUS.

In case of stagnating water, PENECOAT™ PU-L and its system should be cleaned on regular basis, to avoid biological and microbial attack.

Contact PENETRON HELLAS S.A. for specific instructions, regarding your project.

PACKAGING

PENECOAT™ PU-H is available in 20 kg (44 lb), 10 kg (22 lb), 5 kg (11 lb) and 1kg (2,2 lb) containers.

STORAGE / SHELF LIFE

When stored in a dry and cool place in their original, unopened containers, shelf life is 9 months. Protect the material against moisture and direct sunlight. Storage temperature should be between 5 ºC – 35 ºC (41 ºF – 95 ºF).

SAFE HANDLING INFORMATION

Flammable. Wear appropriate eye, skin and breathing protection, when using this product. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. 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.

CERTIFICATION

PENECOAT™ PU-L is tested and certified by the German state testing institute for construction materials, MPA-Braunschweig, as a protective coating of PENECOAT™ ELASTIC.

CE

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DOP NO: 14.026-40-05D070722-05
EN 13813
PENECOAT PU-H
Synthetic resin screed system for internal use:
EN 13813 SR-B2,0-AR0,5-IR10
Reaction to fire: E_{fl} *
Release of corrosive substances: SR
Water permeability: NPD
Wear resistance: AR0,5
Bond strength: B2,0
Impact resistance: IR10
Impact sound insulation: NPD
Sound insulation: NPD
Heat insulation: NPD
Chemical resistance: NPD

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