

## DESCRIPTION

PENECOAT™ PU-L is a coloured, elastic, protective, one component 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, subject to high wear conditions and natural chalking. PENECOAT™ PU-L 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-L is used as a top-coat for protection over the exposed PENECOAT™ ELASTIC on:

- ▶ Rooftops
- ▶ Lofts
- ▶ Balconies and terraces
- ▶ Flowerbeds and planter boxes
- ▶ Bitumen and asphalt felts

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

## ADVANTAGES

- ▶ Simple application (single component, ready-to-use)
- ▶ Color stable
- ▶ No 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 °C to 90 °C (-40 °F to 194 °F). No seasonal softening or hardening occurs
- ▶ Resistant to frost
- ▶ Increases the abrasion and wear resistance of the waterproofing membrane underneath
- ▶ Provides high solar reflectance (white colour)
- ▶ UV and colour stable
- ▶ Ensures good elasticity. Follows the surface movement
- ▶ The waterproofed surface can return to service (light pedestrian traffic)
- ▶ Excellent aesthetic result

## TECHNICAL CHARACTERISTICS

<i>Type</i>	Aliphatic polyurethane	
<i>Color</i>	White, grey, red, green	
<i>Application temperature</i>	5 °C to 35 °C (41 °F to 95 °F)	
<i>Re-coat time</i>	1-3 hours	[20 °C (68 °F), 50% RH]
<i>Light pedestrian traffic time</i>	12-18 hours	[20 °C (68 °F), 50% RH]
<i>Final Curing Time</i>	7 days	[20 °C (68 °F), 50% RH]

**Technical characteristics of PENECOAT™ PU-L**

Characteristic	Test Result	Test Method
Resistance to water pressure	No leakage under pressure	DIN 1928
Elongation at break	180%	ASTM D412
Tensile strength	>20 N/mm <sup>2</sup>	ASTM D412
Gloss retention after 2000h of accelerated ageing (DIN EN ISO 4892-3, 400 MJ/m <sup>2</sup> )	Good	DIN 67530
Surface chalking after 2000h of accelerated aging (DIN EN ISO 4892-3, 400 MJ/m <sup>2</sup> )	No chalking observed. Chalking grade 0.	DIN EN ISO 4628-6
Bonding to PENECOAT™ ELASTIC	>2 N/mm <sup>2</sup>	EN 1542
Adhesion to cement	4,5 N/mm <sup>2</sup>	EN 13892-8
Hardness (Shore A Scale)	85-90	ASTM 2240 (15")
Solar reflectance (SRI) (White colour)	107	ASTM E903-96
Infrared emittance	0,89	ASTM E903-96
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 °C to +90 °C (-40 °F to 194 °F)	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:** 8-12 hours after the final layer of PENECOAT™ ELASTIC or PENECOAT™ ELASTIC PROFESSIONAL, apply crosswise the coloured protective coating of PENECOAT™ PU-L, using roller, brush or airless spray. After 1-3 hours and while the surface is still "tacky", apply the next layer of PENECOAT™ PU-L.

24 hours after the final layer of SiMP® COAT 25, apply crosswise the coloured protective coating of PENECOAT™ PU-L, using roller or airless spray. After 1-3 hours and while the surface is still "tacky", apply the next layer of PENECOAT™ PU-L.

**COVERAGE**

120 to 150 gr/m<sup>2</sup> (0,02 to 0,03 lb/ft<sup>2</sup>) per layer.  
Apply on one or two layers.

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 during application and cure should be between 5 °C and 35 °C (41 °F and 95 °F). 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 PENECCLEANER™ 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-L is available in 10 kg (22 lb), 5 kg (11 lb) and 1 kg (2,2 lb) containers.

## ALIPHATIC POLYURETHANE ELASTIC PROTECTIVE TOP-COAT

**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 °C – 35 °C (41 °F – 95 °F).

**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**

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15

DOP NO: 14.026-31-05D070722-05  
EN 13813

PENECOAT PU-L

Synthetic resin screed system for internal use:  
EN 13813 SR-B2,0-AR0,5-IR19

Reaction to fire: E<sub>fl</sub> \*

Release of corrosive substances: SR

Water permeability: NPD

Wear resistance: AR0,5

Bond strength: B2,0

Impact resistance: IR19

Impact sound insulation: NPD

Sound insulation: NPD

Heat insulation: NPD

Chemical resistance: NPD

**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 are 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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