

TWO COMPONENT POLYURETHANE SELF LEVELING FLOOR COATING

DESCRIPTION

PENECOAT™ SL is a two component, semi-rigid, polyurethane based industrial floor coating, free of solvents. It provides high mechanical strength, high abrasion and chemical resistance. Provides elasticity, mechanical strength and is abrasion resistant and alkali and chemical resistant. Cures by reaction (cross linking) of the two components.

RECOMMENDED FOR

PENECOAT™ SL is mainly used in medium duty floor coating, as a semi-rigid self leveling coating, such as:

- ▶ Car parking areas
- ▶ Car repair garages
- ▶ Warehouses
- ▶ Interior sports floors
- ▶ Offices, stores
- ▶ Exhibition areas
- ▶ Cold storage rooms
- ▶ Storage rooms

PENECOAT™ SL is also suitable for coating of metal surfaces in marine like: interior and exterior ship decks, cabins, bathrooms, engine rooms, etc. It is a specialized product used for filling shallow holes on floors, which will be coated by a thin-layer polyurethane floor coating.

ADVANTAGES

- ▶ Odourless, solvent free
- ▶ Semi-rigid
- ▶ Provides high tensile and impact strength
- ▶ Provides enough elasticity to withstand movements of the surface
- ▶ Provides strong resistance to acidic solutions, common chemicals and detergents
- ▶ Self-leveling
- ▶ Resistant to bacteria and fungus
- ▶ Low cost
- ▶ Gives a glossy and easy-to-clean surface

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TECHNICAL CHARACTERISTICS

Characteristics	Test Result	Test Method
Composition	Polyurethane resin and Hardener	
Color	Grey	
Mixing ratio	A : B = 100 : 30 (by weight)	
Hardness (Shore A Scale)	75 ± 5	ASTM D 2240
Impact Resistance (measured in CE systems)	> 6Nm	EN 13813
Adhesion to concrete	> 2 N/mm ² (concrete failure)	ASTM D 7234 / EN 1542
Solid content	100%	INHOUSE LAB TEST
Flash point	> 200 °C (392 °F)	INHOUSE LAB TEST
Application temperature	5 °C to 35 °C (41 °F to 95 °F)	
Pot Life	30 minutes	Conditions: 20 °C (68 °F), 50% RH
Traffic timeLight Trafficking	24 hours	
Final curing time	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.

DIRECTIONS FOR USE

Surface Preparation: The surface needs to be grinded with a grinding machine. The surface needs to be clean, dry and sound, free of any contamination, which may harmfully affect the adhesion of the coating. Maximum moisture content should not exceed 5%. New concrete structures need to dry for at least 28 days. Old 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.

NOTE: Careful surface preparation is essential for optimum finish and durability. Do not wash surface with water. Use only stone grinding machine (Stone No 12) or diamond grinding machine.

Priming: Pour the content of PENEPOX™ SF PRIMER B into the PENEPOX™ SF PRIMER A container and mix thoroughly for at least 3-4 mins, until the mixture becomes fully homogeneous. The mixing of the components has to be effected very thoroughly, especially on the walls and bottom of the pail, with a drilling mixer and a mixing wand. Apply the PENEPOX™ SF PRIMER A+B mixture by roller or brush, until the surface to be primed, is covered. Disperse 0,5-1 Kg/m² (0,1-0,2 lb/ft²) of dry quartz sand mix onto the primer, before it gets dry, and then let it dry. After 12 – but not later than 18 hours – apply PENECOAT™ SL.

Expansion joint sealing: Prime the expansion joints with the appropriate primer (U-SEAL 110 for porous substrates). Apply a polyethylene backing rod, of the appropriate section (PENETRON® BACKING ROD) inside

the joint and fill the joint with the appropriate sealer, U-SEAL or SIMP®SEAL

Mixing: After 12 hours, but not later than 24 hours, pour the content of PENECOAT™ SL B into the PENECOAT™ SL A container and mix thoroughly for at least 3-5 mins, until the mixture becomes fully homogeneous. You may add suitable graded quartz aggregates (QUARTZ SAND MIX 0,06-0,18 mm, or similar) in the mix, up to 50% by weight. The mixing of the components has to be effected very thoroughly, especially on the walls and bottom of the pail, with a drilling mixer and a mixing wand.

Mixing ratios: Mixing ratio of PENECOAT™ SL is A : B = 100 : 30 (by mass).

Application: Pour PENECOAT™ SL A+B mixture onto the surface and lay it out by a 1-2 mm (1/64”-5/64”) teeth trowel as a scratch coat, until all the surface is covered. Backroll with a spike roller, until encapsulated air can escape. Ensure that backrolling is done efficiently.

After 12 hours, but not later than 24 hours, apply another layer of PENECOAT™ SL A+B, by suitable sized 1 mm (1/64”) teeth trowel and use same procedure, to help encapsulated air escape, while the coating is still wet. Backroll with a spike roller, until encapsulated air can escape. Ensure that backrolling is done efficiently. Use the roller thoroughly, as the second layer will ensure excellent smoothness on the surface.

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NOTE: The mix content must be poured immediately on the surface, otherwise it may increase in temperature, start curing rapidly and may prevent you apply it properly. When applying PENECOAT™ SL, please ensure you are within the curing time margins.

Finishing (Paint): After 12 hours, but not later than 24 hours, apply a layer of coloured PENEFFLOOR™ PU-COAT, by roller or airless spray. In case the surface is exposed to sunlight, one or two layers of PENECOAT™ PU-H, instead of PENEFFLOOR™ PU-COAT, are highly recommended. Apply a second layer of PENEFFLOOR™ PU-COAT, if desired.

Coverage: 1,5 - 3 kg/m² (0,31 – 0,61 lb/ft²) in total.

SPECIAL CONSIDERATIONS

For the best results, the temperature application and curing should be between 5 °C to 35 °C (41 °F to 95 °F). Low temperatures cause curing retardation, while high temperatures speed up curing. High humidity may affect the final finish.

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

Contact PENETRON HELLAS S.A. for further information regarding your project.

PACKAGING

PENECOAT™ SL is available in 9+3 kg (13,2+4,4 lb) and 3+1 kg (6,6+2,2 lb) containers.

STORAGE / SHELF LIFE

PENECOAT™ SL can be stored for 9 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

Flammable. No smoking. 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.

CERTIFICATION

PENECOAT™ SF ELASTIC is certified by the current European and German regulations for use on surfaces with permanent contact with potable water. PENECOAT™ SF ELASTIC is certified by the General Chemical State Laboratory, based on the German Standard Kunststoffe im Lebensmittelverkehr, par. 1.3.2.5.2), the Greek Standard (Codex Aliimentarius, articles. 21,21a,24,26,28) and the current European regulations. All test were carried out based on ELOT EN 1484, prEN 12873-1, prEN 14395-1 Standards.



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EN 13813

PENECOAT SL

Synthetic resin screed system for internal use:

EN 13813 SR-B2,0-AR0,5-IR6

(Used with PENEPOX SF PRIMER and
PENEFFLOOR PU COAT)

EN 13813 SR-B2,0-AR0,5-IR6

Reaction to fire: E_{fl} *

Release of corrosive substances: SR

Water permeability: NPD

Wear resistance: AR0,5

Bond strength: B2,0

Impact resistance: IR6

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 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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