CEMENT BASE POLYMER MODIFIED WATERPROOFING COATING

SYSTEMS DESCRIPTION

PENETRON® SEAL COAT™ is a waterproof, cement base, polymer modified, heavy duty masonry coating, the base of SEAL COAT™ SYSTEMS, which stop water penetration and prevent water damage, while protecting concrete and other masonry surfaces. After application, the material will dry in 3-4 hours and will set up in 24 hours to form a hard, waterproof protective coating, that essentially becomes an integral part of the concrete or masonry surface. SEAL COAT™ SYSTEMS can be used anywhere a waterproof masonry coating is required or desired. It is especially effective on masonry walls, where it is applied, either as a finish waterproofing coat or mixed with clean washed sand, as a heavy coat to conceal mortar joints and to bring wall surfaces (such as exterior basement walls) to true. The aggregates in the matrix are specially graded to seal holes in concrete. SEAL COAT™ SYSTEMS can also be used to eliminate the very time consuming and expensive method of rubbing concrete surfaces to obtain smooth and homogeneous surfaces. SEAL COAT™ SYSTEMS provide a uniform, consistent appearance to any concrete or masonry surface. SEAL COAT™ SYSTEMS are ideal for waterproofing block, brick, stone, concrete, and other types of masonry. PENETRON® SEAL COAT™ is designed to mix only with water and combined with the premium technology PENECRYL™ ELASTIC emulsion system, to provide a series of waterproofing solution, depending on application requirements. SEAL COAT™ SYSTEMS can be used inside or outside, above grade or below grade. SEAL COAT™ SYSTEMS are available in white or gray and provide more waterproof protection than paint-type coatings.

A. SEAL COAT™ SYSTEM: LIQUID-APPLIED POROUS WATERPROOFING BARRIER

DESCRIPTION

PENETRON® SEAL COAT™ is a waterproof, cement base, polymer modified, heavy duty masonry coating, the base of SEAL COAT™ SYSTEMS, with specially graded aggregates, which ensure ideal waterproofing and high load and abrasion strength. It ensures strong bonding and mechanical anchoring on the properly prepared surface, after mixing.

RECOMMENDED FOR

PENETRON® SEAL COAT™ is used for concrete or cement base mortar surface waterproofing, which are subject to positive and generally small hydrostatic pressures.

ADVANTAGES

- Easy application (by spray or by brush)
- Single component cement base product
- Excellent bonding on properly prepared surface
- Water vapor permeable
- High abrasion and load strength

DIRECTIONS FOR USE

Surface Preparation: Clean surface area of all dirt, oil, paint, coatings, laitance, loose matter, etc. Tie rod and other holes, cracks, spalled areas and other large surface voids should be properly patched. Tie rod ends and other steel must be cut back to a minimum depth of 1” (2.5 cm), before patching. Patch the areas with the appropriate PENETRON® repairing mortar. Dampen surface with clean water just prior to product application.

Mixing: Mix 6 quarts (5.7 Lt) of water for PENETRON® SEAL COAT™ grey or 6.3 quarts (6 Lt) of water for SEAL COAT™ white, per 50 lb (22.7 kg) PENETRON® SEAL COAT™ bag, using a mixing drill.

Application: Uniformly apply the first coat with a short bristle brush, making sure to fill in all surface pores and voids.

NOTE: For maximum waterproofing performance, apply a second coat after first coat has dried, within 12 hours, if the first coat is not damaged.

Coverage: SEAL COAT™ SYSTEM coverage is 0.4-0.6 lb /ft^2 (2-3 kg/m^2) in two layers. Coverage depends on the roughness of the substrate and the waterproofing demands.

B. SEAL COAT™ FLEX SYSTEM: IMPROVED WATERPROOFING, FLEXIBILITY AND CAPILLARY CRACK BRIDGING PROPERTIES

DESCRIPTION

SEAL COAT™ FLEX is a two component system of cement base, polymer modified PENETRON® SEAL COAT™ and the premium technology PENECRYL™ ELASTIC emulsion system. PENECRYL™ ELASTIC improves bonding and flexural properties, while increases the ability of capillary crack bridging properties, under specific mixing ratios.

RECOMMENDED FOR

SEAL COAT™ FLEX is used for improved concrete, cement base mortar, stone or brick surface waterproofing, which are subject to positive or negative, low and medium hydrostatic pressures. In case of high hydrostatic pressures, the use of PENETRON® crystalline integral waterproofing system is highly recommended. SEAL COAT™ FLEX is used neat or with FIBERGLASS MESH between layers, which will cover the FIBERGLASS MESH.

- Basement and retaining walls
- Fire extinguishing reservoir, watering tank, etc.
- Planters

ADVANTAGES

- Easy mixing and application (by brush)
- Standard mixing ratios
- Excellent bonding on properly prepared surface
- Water vapor permeability
- Good flexibility
- Capillary crack bridging properties up to 1/32'' (0.8 mm)
- Non toxic. Non corrosive

DIRECTIONS FOR USE

Surface Preparation: Clean surface area of all dirt, oil, paint, coatings, laitance, loose matter, etc. Tie rod and other holes, cracks, spalled areas and other large surface voids should be properly patched. Tie rod ends and other steel must be cut back to a minimum depth of 1" (2.5 cm), before patching. Patch the areas with the appropriate PENETRON® repairing mortar. Dampen surface with clean water just prior to product application.

Mixing: Mix PENECRYL™ ELASTIC with water at 1:2 to 2:1 mixing ratios, regarding flexural and bonding requirements. Mix 13 lb (6 kg) of PENECRYL™ ELASTIC/water per 50 lb (22.7 kg PENETRON® SEAL COAT™ bag, using a mixing drill. See the table below with the indicative mixing ratios, for lower or higher system flexibility.

Mixing ratios:

1 : 2	4.4 lb (2 kg) PENECRYL™ ELASTIC with 8.8 lb (4 kg) Water
2 :1	8.8 lb (4 kg) PENECRYL™ ELASTIC with 4.4 – 6.6 lb (2-3 kg) Water

Application: Uniformly apply the slurry coat of SEAL COAT™ FLEX with a short bristle brush, making sure to fill in all surface pores and voids.

NOTE: For maximum waterproofing performance, apply a vertical second coat, within 12 hours, if the first coat is not damaged.

Coverage: SEAL COAT™ FLEX coverage is 0.4 lb/ft^2 (2 kg/m^2) per mm coating. Two layers are usually recommended for low and medium demands and three layer for high waterproofing demands. In case SEAL COAT™ FLEX is with FIBERGLASS MESH between layers, which will cover the FIBERGLASS MESH, the total coating thickness will be up to 5/64'' – 1/8'' (2-3 mm).

C. SEAL COAT™ ELASTIC SYSTEM: IMPROVED WATERPROOFING AND FLEXIBILITY, ELASTIC AND CAPILLARY CRACK BRIDGING PROPERTIES

DESCRIPTION

SEAL COAT™ ELASTIC is a two component, specially designed, hyper-elastic, waterproofing system of cement base, polymer modified PENETRON® SEAL COAT™ and the premium technology PENECRYL™ ELASTIC emulsion system. SEAL COAT™ ELASTIC presents excellent bonding and elongation characteristics, which make it an ideal solution for surface waterproofing, under temperature variations, crack bearing and moving surfaces (dynamic behavior). It is usually being used with PENETRON® crystalline integral waterproofing system, in case of crack bridging above 0.4 mm cracks.

RECOMMENDED FOR

SEAL COAT™ ELASTIC is designed to be used to deal with temperature variations and is appropriate for:

- Balconies and terraces, exposed to open conditions or to be coated with ceramic tiles, marbles, natural stones or roof tiles
- Concrete wall with positive or medium negative hydrostatic pressures
- Planters, tanks and water reservoirs
- Fountains
- Surfaces undergoing compaction and contraction

ADVANTAGES

- Easy mixing and application (by brush)
- UV stable
- Standard mixing ratios
- No water permeability
- High elongation capacity
- Excellent elastic behavior
- Excellent flexibility
- Excellent bonding on properly prepared surface
- Water vapor permeability. The concrete is able to "breath"
- Compact. Retains its properties under extreme weather conditions
- Excellent resistance to freezing conditions up to – 2 ºF (-19 ºC)
- Resistance to compaction and contraction

CEMENT BASE POLYMER MODIFIED WATERPROOFING COATING

- Excellent crack bridging properties between 1/64'' and 5/64'' (1 and 2 mm).
- Non toxic. No solvents

DIRECTIONS FOR USE

Surface Preparation: Clean surface area of all dirt, oil, paint, coatings, laitance, loose matter, etc. Tie rod and other holes, cracks, spalled areas and other large surface voids should be properly patched. Tie rod ends and other steel must be cut back to a minimum depth of 1" (2.5 cm), before patching. Patch the areas with the appropriate PENETRON® repairing mortar. Dampen surface with clean water just prior to product application. In case of very porous substrates, prime the surface with a slurry coat of PENETRON® SEAL COAT™ and PENECRYL™ ELASTIC mix at 1:1 (by weight) mixing ratio, post to dampening.

Mixing: Mix 26.5 lb (12 kg) PENECRYL™ ELASTIC with 50 lb (22.7 kg) PENETRON® SEAL COAT™, using a mixing drill. No water adding is required.

Application: Uniformly apply the slurry coat of SEAL COAT™ ELASTIC with a short bristle brush, making sure to fill in all surface pores and voids.

NOTE: For maximum waterproofing performance, apply a vertical second coat, after 12 hours, if the first coat is not damaged. Usually apply the second layer the next day, when the first layer is already dry.

Coverage: SEAL COAT™ ELASTIC coverage is 0.3 lb /ft^2 (1.4 kg/m^2) per mm coating. Do not exceed 1/64'' (1 mm) per layer or 0.3 lb /ft^2 (1.4 kg/m^2), as cracks are expected to form in its structure. Two layers are usually recommended for low and medium demands and three layer for high waterproofing demands. In case SEAL COAT™ ELASTIC is with FIBERGLASS MESH between layers, which will cover the FIBERGLASS MESH, the total coating thickness will be up to 5/64'' – 1/8'' (2-3 mm) or total consumption of 0.5-0.6 lb /ft^2 (2.5-3 kg/m^2).

Curing: SEAL COAT™ ELASTIC retains its workability for 35 minutes at 68 ºF (20 ºC). Protect the surface coated with SEAL COAT™ ELASTIC from rain and water, until it is dry. Leave it to cure for 14 days, before the surface is permanently covered with water.

SPECIAL CONSIDERATIONS

DO NOT apply SEAL COAT™ SYSTEMS at temperatures below 40 ºF (4 ºC) or to a frozen substrate. This product is not recommended for use in expansion or construction joints.

DO NOT paint part of a wall at a time. The entire wall or section must be completed using consistent quantity of mix water, PENECRYL™ ELASTIC and PENETRON® SEAL COAT™, to insure uniform color.

If the second layer is applied on the same day, it is expected to form bubbles, especially in applications, which are exposed to sun. The substrate does not have concentrated excess water.

Always use a freshly mixed batch of SEAL COAT™ SYSTEMS (less than 3 hours old).

Clean all tools and equipment with clean water.

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

PACKAGING

PENETRON® SEAL COAT™ is available in 50 lb (22.7 kg) multi-wall bags. Product is available in grey or white color.

STORAGE / SHELF LIFE

PENETRON® SEAL COAT™ must be stored in a dry enclosed area off the ground at a minimum temperature of 45 ºF (7 ºC). Shelf life, when stored in proper conditions in unopened, undamaged packaging, is 12 months.

SAFE HANDLING INFORMATION

This product contains Portland cement and is highly alkaline. The use of rubber gloves, goggles and other appropriate protective gear, during mixing and application, is recommended. Avoid contact with eyes and skin. In case of eye contact, 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

CE

1085-CPR-0080
EN 1504-2
Penetron International Ltd.
601 South Tenth Street, Unit 300
Allentown, PA 18103
08
SEAL COAT
Cement Base Polymer Modified Waterproofing Coating

Water-Vapor Transmission: Class I
Capillary water absorption: < 0.1 kg/m^{2}h$^{0.5}$
Bond strength by pull-off: ≥ 1.5 N/mm^2
Reaction to fire: NPD
Dangerous substances: 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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