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together for better

InsuSeal 207

Flexible Protective and Waterproofing Slurry.

PRODUCT DESCRIPTION

A cement base, 2 component polymer modified waterproofing slurry. It is applied to concrete and mortar structures to prevent water infiltration.

USES

InsuSeal 207 is used for external and internal water-proofing, crack sealing, repair work and protection from frost and detrimental effects of de-icing agents in the following structures:

- Sewage treatment facilities including concrete tanks, digestors, clarifiers etc...
- Water treatment facilities.
- Waterproofing basement and cellars.
- Terraces and balconies.
- Bridges & Sea walls.
- Retaining walls & for sealing "hairline" cracks in concrete structures not subject to movement surfaces.
- Swimming pools and waterproofing of drinking water tanks and reservoirs.

ADVANTAGES

InsuSeal 207 provides the following beneficial properties:

- Pre-batched components.
- Mixed and applied easily & it can be spry applied
- Slurry or trowelable consistency.
- Good adhesion to sound substrates.
- Impermeable and protection against concrete carbonation (80 microns InsuSeal 207 is equivalent to 6 inches of concrete).
- Increased frost and salt resistance.
- Non-toxic and slightly flexible.
- Non-corrosive to steel or iron & over-paintable

CERTIFICATES OF APPROVAL

The Egyptian National Organization for Water and Sewage. InsuSeal 207 has been tested as per SCAQMD Rule 1168. Result: VOC Content < 5 g/L.

PRODUCT DATA

Colour: Grey, White
Packaging: 25 kg (A+B) Storage
Conditions: Free from frost and moisture.
Shelf Life: 12 months when unopened.

TECHNICAL DATA

Chemical Base:	
Part A:	**liquid (Styrene acrylic) polymer and additive**
Part B:	**Portland cement selected aggregate and admixtures**
Density:	**Comp (A+B) = 2.0 kg/l (mixed)**
Compressive Strength:	**30 - 40 N/mm2 at 20°C after 28 days (mortar consistency) (ASTM-C-942 / C-579) I.S.O. Quality assurance laboratory Results.**
Flexural Strength:	**10 - 12 N/mm2 at 20°C after 28 days (mortar consistency). (ASTM-C-580)**
Bond Strength:	**Approx. 2 - 3 N/mm2 after 28 days (sand blasted) (ASTM-C1042/85 - C-321)**

SURFACE PREPARATION:

Concrete, mortar and masonry surfaces must be clean, free from grease, oil and loosely adhering particles. All surfaces must be as true and flat as possible. Saturate absorbent surfaces thoroughly with water before application.

Mixing Ratio: Slurry 1: 4 by weight Mortar 1: 4.5 by weight Coverage Depending on type of application, two (2) coats always required. Three (3) coats may be required in areas of extremely high infiltration.

1st coat consumption 1-1.5 kg/m2 on damp surface.

2nd coat consumption 0.8 - 1 kg/m2 approx.

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MIXING

The consistency of the mix can be altered by reducing the amount of component (A) (liquid) to be used. Under normal circumstances, when the full quantities of both components are mixed together, a slurry consistency will result. For a trowelable consistency use only 90% of component (A) (approx. 4.5 kg) Mix in a clean container by slowly adding the powder component to the liquid component and stirring with slow speed mixer.

APPLICATION

While the surface is still damp (no standing water) apply the first coat and leave to harden (2-6 hours). For slurry consistency, apply with a hard-plastic bristled brush or broom. For trowelable mortars, use a notched trowel. After the second coat has been applied, finish by rubbing down with a soft dry sponge. After application of the second coat, finish InsuSeal 207 by rubbing down with a soft dry sponge. In case of a third coat, scratch the surface of the second coat with the edge of the trowel to provide a mechanical key.

AS BALCONY WATERPROOFING LAYER

Substrate must be SSD with no standing water at time of application. Apply a thick layer of InsuSeal 207 over the entire balcony. While the material is still wet apply a non-alkaline, woven fiberglass mesh to reinforce the 207 layer along static hairline cracks, wall to slab transitions and patched areas. Using trowels remove any wrinkles in the mesh by forcing down into the InsuSeal 207. Ensure the mesh is completely embedded and covered with InsuSeal 207. If any areas are not covered apply additional InsuSeal 207 over top of mesh to cover. Trowel to a smooth uniform finish. Allow curing so that surface can take light foot traffic without harming the coating. In case of needed plaster layer over InsuSeal 207, broadcasting rough sand is recommended to apply as bonding agent

OVER-COATING

Time between coats:
+10°C ~ 12 hours
+20°C ~ 6 hours
+30°C ~ 3 hours
If waiting time period exceeds 24 hours, lightly blast clean the surface.
InsuSeal 207 can be over-painted using solvent based primers or coatings.
InsuSeal 207 must cure for a minimum of 7 days before over-coating.

CLEANING

Do not leave material to harden before cleaning tools and equipment with water. Hardened material can only be removed mechanically

IMPORTANT RECOMMENDATIONS

Minimum ambient and substrate temperature +8 °C.
Never apply more than 4 kg/m2 for one layer.
Avoid application in direct sun and/or strong wind. Do not add water in any circumstances. Apply only to sound, prepared substrates. Do not exceed maximum layer thickness.
For waterproofing or damp proofing application, always use at least 2 coats to give a total thickness of between 1.0 to 1.50 mm. In areas of severe water penetration, three coats might be required.
Allow 2 days of air curing before subjecting InsuSeal 207 to submersion Protect freshly applied material from freezing conditions and rain etc.

CURING

As with all cement based products, curing is important. Protect newly applied product against direct sunlight, wind, rain and frost In severe heat and/or wind, protection of the InsuSeal 207. is recommended For water tanks and swimming pools, it is essential to cure InsuSeal 207. immediately after application for a minimum of 3 to 5 days to ensure full cement hydration and to minimize cracking. Use polythene sheeting or similar approved methods

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SAFETY INSTRUCTIONS

Ecology
Do not dispose of into water or soil, but according to local regulations.
Transport
Non-hazardous.
Safety Precautions
Wear gloves and goggles. In contact with eyes or skin product, may cause irritation.
Toxicity
Non-Toxic under relevant health and safety codes.
Pot Life: 35 minutes at 20°C, at higher temperature consult Insumat Technical Services.

NOTE

Field service, where provided, does not constitute supervisory responsibility. For additional information, contact Insumat's representative.

Insumat reserves the right to have the true cause of any difficulty determined by accepted test methods.

QUALITY STATEMENT

All products manufactured by Insumat Egypt, are manufactured to procedures certified to conform to the quality, environment, health & safety management systems described in the ISO 9001:2015, standard.

* Properties listed are based on laboratory controlled tests.

Actual measured data may vary due to circumstanes beyond Insumat's control.

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