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TECHNONICOL ULTRATHANE PUD

Liquid-applied polyurethane waterproofing membrane

DESCRIPTION:

ULTRATHANE PUD is a liquid-applied, highly permanent elastic, cold applied and cold curing,water based, one component, modified polyurethane membrane used for long-lasting waterproofing. When the ULTRATHANE PUD is applied, it forms a hydrophobic, 100% waterproof, seamless membrane without joints or leak possibilities, that protect old and new structures efficiently and on a long-term basis.

ADVANTAGES:

- Simple application (roller or airless spray).
- When applied forms a seamless membrane without joints.
- UV stable.
- Suitable for exposed surfaces.
- Resistant to water.
- Resistant to frost.
- Maintains its mechanical properties over a temperature span of -20°C to +80°C.
- Provides water vapor permeability.
- Full surface adherence without any additional anchoring.
- The waterproof surface can be walked on (domestic use).
- Even if the membrane gets damaged, it can be easily repaired locally within minutes.
- Can withstand medium traffic movement.
- Low cost.

AREA OF APPLICATION

- Waterproofing of roofs.
- Waterproofing of balconies and terraces.
- Waterproofing of decks.
- Waterproofing of wet-areas (under tile).
- Waterproofing and protection of concrete constructions.
- Waterproofing and protection of drywall and cement-boards.
- Protection of polyurethane foam insulation.

SURFACE PREPARATION

- Careful surface preparation is essential for optimum finish and durability.
- The surface needs to be clean, dry, and sound, free of any contamination, which may harmfullyaffect the adhesion of the membrane.
- Maximum moisture content should not exceed 8%. Substrate compressive strength should be at least 25MPa, cohesive bond strength at least1.5MPa.
- New concrete structures need to dry for at least 28 days. Old, loose coatings, dirt, fats, oils,organic substances, and dust need to be removed by a grinding machine.
- Possible surface irregularities need to be smoothened.
- Any loose surface pieces and grinding dust need to be thoroughly removed.
- Clean concrete cracks, hairline cracks and joints of dust, residue, or other contamination. Fill all prepared cracks and joints with TECHNONICOL PRIMER PU sealant. Then apply a layer of ULTRATHANE PUD, 200mm wide centered over all cracks and while wet, cover with a correct cut stripe of the TECHNONICOL GEO TEXTILE. Press it to soak. Then saturate the TECHNONICOL GEOTEXTILE with enough ULTRATHANE PUD until it is fully covered. Allow to cure.

APPLICATION METHOD:

- Prime absorbent and brittle surfaces like concrete, cement screed, mortar, plaster, wood with ULTRATHANE PUD diluted with 20-30% clean water primer and apply at the rate of 8-10 /m^2/litre. Substrate must be in SSD condition for application of primer. Allow the primer coat to cure.
- Stir well before using ULTRATHANE PUD. Pour the ULTRATHANE PUD onto the prepared / primed surface and lay it out by roller or brush, until all surface is covered. You can use airless spray allowing aconsiderable saving of manpower.
- After 6-24 hours apply another layer of the ULTRATHANE PUD. For demanding applications and better waterproofing results apply a third layer of the ULTRATHANE PUD.
- Reinforce always with the TECHNONICOL GEOTEXTILE at problem areas, like wall-floor connections, chimneys, pipes, waterspouts (siphon), etc. In order to do that, apply on the stillwet ULTRATHANE PUD a correct cut piece of TECHNONICOL GEOTEXTILE, press it to soak, and saturate again with enough ULTRATHANE PUD.

IMPORTANT RECOMMENDATION:

Do not apply the ULTRATHANE PUD in negative (Deg.C) temperatures or when rain or frost is imminentin the next 48 hours. For best results, the temperature during application and cure should be between 5°C and 35°C. Low temperatures retard cure while high temperature speed up curing. High humidity may affect the final finish.

The ULTRATHANE PUD is slippery when wet. In order to avoid slipperiness during wet days, sprinklesuitable aggregates onto the still wet coating to create an anti-slip surface. Please contact our R+D Dept. for more details.

MAIN CHARACTERISTICS:

Properties	Performance
Specific weight UNI EN ISO 2811-1	1.34± 0,02 g/ml
Appearance	Viscous liquid
Solid content EN ISO 3251	>66
Tensile strength UNI EN 12311-2	>1.5 N/mm^2
Elongation at failure UNI EN 12311-2	>.400%
Adhesion to concrete EN 1542	>1.5 N/mm^2
Resistance to water pressure	No Leak (1m water column, 24h)
Chemical resistance	Good resistance against alkali
Shore A Hardness EN ISO 868	>70
Capillary absorption and permeability to water EN ISO 1062-3	< 0.1 kg/$m^2 \cdot h^{0.5}$
Crack bridging EN 1062-7	Upto 2.00mm
Pedestrian traffic (allowed)	Medium traffic
Tack free time	6-12Hours / 20°C / 50% RH
Light pedestrian traffic time	18 Hours / 20°C / 50% RH
Final curing time	7 days / 20°C / 50% RH
Flash point	Non-flammable

CONSUMPTION:

2 kg/m^2/mm applied in two or three layers. This coverage is based on application by roller onto a smooth surface in optimum conditions. Factors lesurface porosity, reinforcement, temperature and application method can alter consumption.

STORAGE:

ULTRATHANE PUD pails should be stored in dry and cool rooms for up to 18 months. Protect thematerial against frost and direct sunlight. Storage temperature: 5°-30°C. Products should remainin their original, unopened containers, bearing the manufacturer's name, product designation, batch number and application precaution labels.

HEALTH AND SAFETY INFORMATION:

- As with all construction chemicals products caution should always be exercised.
- Protective clothing such as gloves and goggles shall be worn.
- Treat any splashes to the skin or eyes immediately with fresh water.
- Should any of the products be accidentally swallowed, do not induce vomiting, but call for medical assistance immediately.
- Do not use empty containers for food storage.
- PROFESSIONAL USE ONLY.