



TECHNONICOL ULTRATHANE SUPER

Hybrid Polyurea Membrane for waterproofing and coating

DESCRIPTION:

TECHNONICOL ULTRATHANE SUPER is a two-component spray applied hybrid polyurea polyurethane that forms a continuous, solid, 100% waterproof membrane without joints or overlaps and completely adhered to the base. Suitable for waterproofing, protection and sealing in general. Due to its liquid application, it is ideal for repair or recoating on top of other PU/polyurea membranes range, once these are already cured.

AREA OF APPLICATION:

TECHNONICOL ULTRATHANE SUPER is used for waterproofing and protection of:

- Walkable roofs.
- Terraces, balconies, and overhangs.
- Metal roofs & Asbestos roofs.
- Other PU / polyurea membranes.

ADVANTAGES:

- TECHNONICOL ULTRATHANE SUPER is a very strong and hard-wearing membrane that offers great stability, durability and a perfect waterproofing and seal.
- Thanks to its versatility and the material adapts to any surface, making it the ideal product for application on uneven surfaces and in areas of any shape, whether curved or squared.
- Finish coating is uniform and makes up a single layer, providing a surface with optimum maintenance and cleaning properties.
- Versatile area of application.
- Resistant to root penetration, so it can be used in green roofs.
- Bonds to any surface, such as concrete, ceramic tiles, polyurethane foam, wood, metals, bitumen sheets, acrylic paints, etc.
- Can be walked on, accepts a rough finish to make it non-slip, sprinkle it with dry silica sand.
- Trafficable during reinforcement during pouring of concrete.

THICKNESS RECOMMENDED:

Recommended thickness is 1.5mm. Environmental temperature for application: 5°C ~ 40°C. Surface temperature for application: 5°C ~ 40°C. Do not proceed with application if atmospheric relative humidity is >85% or if the surface temperature is <3°C above the dew point.

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 harmfully affect the adhesion of the membrane. Maximum moisture content should not exceed 5%. Substrate compressive strength should be at least 25MPa, cohesive bond strength at least 1.5MPa.
- 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 smoothed. Any loose surface pieces and grinding dust need to be thoroughly removed.
- Do not wash the surface with water.

APPLICATION METHOD:

- Ensure substrate is dry and surface moisture content is <5% prior to primer application and applying the TECHNONICOL EPOXY primer, make sure the angle fillets and all cavities, voids, cracks, and construction joints in substrate are properly done/treated.
- Any concrete latencies or release agents should be eliminated, grease from the surface by chipping, grinding, and cleaning up and eliminate all contaminants from the elements, such as dust or particles from the previous processes.
- Apply the TECHNONICOL EPOXY primer at the rate of 0.20-0.25kg/m² to the entire substrate. In general, the primer should be used to promote adherence to the concrete surface, reduce the pinhole appearance, and absorption of moisture in the substrate and leave it for 3-4 hours, while the surface is still tacky. In any case, the waiting time after the application of the primer should not exceed 24 hours.
- Apply the TECHNONICOL ULTRATHANE SUPER hybrid polyurea coating at the rate of 1.5 kg/m² to achieve the thickness of 1.5mm but the consumption can vary depending on the substrate porosity, temperature, and application method.
- The applied membrane is sensitive to UV radiation, so discoloration is possible during exposure. If used under exposure

conditions, cured membrane shall be protected with concrete or UV stable coat.

MAIN CHARACTERISTICS:

Properties	Performance
Density at 23°C, g/cm ³ (ISO 1675)	1.10±0.02
Solids content, % (ISO 1768)	100
Fire reaction, Euro class	F
Hardness Shore A at 23°C (ASTM D2240)	>85
Hardness Shore D at 23°C (ASTM D2240)	>45
Tear strength at 23°C, N/mm (ASTM D 624)	50±10
Tensile strength at 23°C, MPa (ASTM D 412)	15±2
Puncture resistance, N (ASTM E 154)	>1000
Service temperature range	-30°C- 90°C
Elongation at break at 23°C, % (ASTM D 412)	450±100
Adherence to concrete, MPa, (ASTM D4541)	≥2
Static crack bridging ability, mm (ASTM C 836)	≥2
Water head resistance, bar (ASTM D 5385)	>7
Tack free Time at 23°C, 65% R.H., Sec	30~60
Curing time at 23°C, h	12

CONSUMPTION:

Theoretical consumption: 1.5-1.6 kg/m² for the DFT of 1.5mm

STORAGE:

12 months at temperatures between 5°C to 35°C, provided it is stored in a dry place, keep away from direct sunlight, extreme heat, cold, or moisture. Once the bucket has been opened, the product must be used immediately. Once opening, the B side drum must be agitated mechanically before inserting the transfer pumps and use.

HEALTH AND SAFETY

- These safety recommendations for handling are necessary for the implementation process as well as in the pre and post, on exposure to the loading machinery.
- Respiratory Protection: When handling or spraying use an air-purifying respirator.
- Skin protection: Use rubber gloves, remove immediately after contamination. Wear clean body-covering. Wash thoroughly with soap and water after work and before eating, drinking, or smoking.
- Eye / Face: Wear safety goggles to prevent splashing and exposure to particles in the air.
- Waste: Waste generation should be avoided or minimized. Incinerate under controlled conditions following local laws and national regulations.
- Vapor and atomized liquids are harmful. Use only in ventilated areas, wear approved respirators, when necessary, Keep out of reach of children.
- Do not use near high heat or open flame.