



## TECHNONICOL ULTRATHANE SUPER CA

Cold applied hybrid polyurea membrane for waterproofing and coating

### DESCRIPTION:

TECHNONICOL ULTRATHANE SUPER CA is a liquid applied two-component hybrid polyurea urethane based coating 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. Its properties make it an excellent choice to be applied to a multitude of substrates of new buildings and in refurbishments. It is applied manually and with airless spray machines.

### AREA OF APPLICATION:

TECHNONICOL ULTRATHANE SUPER CA is used for waterproofing and protection of:

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

### ADVANTAGES:

- Simple application (roller, brush, trowel)
- When applied forms a seamless membrane without joints.
- Resistant to water & frost
- Resistant to root penetration, so it can be used in green roofs.
- Provides water vapor permeability, so the surface can breathe.
- Waterproofs old bitumen-, asphalt felts by covering them, without the need to remove them prior to application.
- Maintains its mechanical properties over a temperature span of -30°C to +90°C
- Provides excellent adhesion to almost any type of surface.
- The waterproof surface can be used for domestic and public pedestrian and vehicular traffic.
- Resistant to detergents, oils, seawater and domestic chemicals.
- Even if the membrane gets mechanically damaged, it can be easily repaired locally within minutes.
- Does not need the use of open flames (torch) during application.
- Can be walked on, accepts a rough finish to make it non-slip.
- Provides excellent thermal resistance, it never turns soft.

### THICKNESS RECOMMENDED:

Recommended thickness is 1.5mm. Environmental temperature for application: +5°C ~ 35°C. Surface temperature for application: 5°C ~ 35°C. Do not proceed with application if atmospheric relative humidity is >80% 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 20-0.25kg/m<sup>2</sup> 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.

- Pour entire Part A into Part B and mechanically stir well before using it at low speed. Pour the TECHNINICOL ULTRATHNE SUPER CA on the prepared surface and lay it out by roller, brush or trowel, until all surface is covered. You can use airless spray allowing a considerable saving of manpower.
- After 12-18 hours (not later than 48 hours) apply another layer of TECHNINICOL ULTRATHNE SUPER CA.
- 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 <sup>3</sup> (ISO 1675)	1.30±0.07
Solids content, % (ISO 1768)	>93
Hardness Shore A at 23°C (ASTM D2240)	>65
Tear strength at 23°C, N/mm (ASTM D 624)	>25
Tensile strength at 23°C, MPa (ASTM D 412)	8±2
Elongation at break at 23°C, % (ASTM D 412)	>500
Service temperature range	-30°C - 90°C
Puncture resistance, N (ASTM E 154)	≥300
Resistance to water pressure, (DIN EN 1928)	No Leak (1m water column, 24h)
Adherence to concrete, MPa, (ASTM D4541)	≥2
Static crack bridging ability, mm (ASTM C 836)	≥2
Trafficable Time, h	6-8
Currently at 23°C, days	7
Tear strength at 23°C, N/mm (ASTM D 624)	>25

#### CONSUMPTION:

The consumption depends on the application. For a 1mm thickness film, the consumption will be approximately 1.3-1.5kg/sqm. This coverage is based on application by roller, airless spray onto a smooth surface in optimum conditions. Factors like surface porosity, temperature and application method can alter consumption. In the case of TECHNINICOL GEO FABRIC reinforcement, consumption increases.

#### 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.