

Chelfix PU 100

Highly Elastic Polyurethane Liquid Membrane for Waterproofing and Protection



Product Description

Chelfix PU100 is single component high quality polyurethane based waterproof coating material and it is ready to use. Cures by reaction with ground and air moisture. Chelfix PU100 can be applied on dry concrete, fibrous cement, mosaic cement roof tiles, ceramic, wood, corroded metal, and galvanized steel.

Areas of Application

- Roof tops, balconies and terraces.
 - Light roofing made of metal or fibrous cement.
 - Waterproofing of wet areas under tile in bathrooms and balconies.
 - Precast concrete elements.
 - Gypsum and Cement boards.
 - Asphalt membranes, wood and sheet iron.
 - Waterproofing of external side of buildings
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Advantages

- Single component ready for use.
 - Very easy and economical to use.
 - Resistance to water and UV. The white colour reflects much of the solar energy reducing the internal temperature of the building (used as a thermal insulation coat).
 - Create crack bridges.
 - Excellent thermal resistance. The service temperature is between -30oC to +90 oC.
 - Cold resistance: the film remains elastic up to -30oC.
 - Available in range of colors.
 - Excellent mechanical properties, high tensile and tear strength, highly abrasion resistance with resistance to pedestrian and light vehicle traffic.
 - Perfect adhesion.
 - Good resistance against acidic and alkali solutions, detergents, sea water and oils.
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Standards

Chelfix PU100 complies with ASTM C836 and DIN 53504.

Technical Data

Property	
Color	White and Grey
Density (kg/lit)	Approximately 1.40 ± 0.05
Light Pedestrian Traffic Time	16 - 24 hours. (At +23° C)
Tensile strength	>1 .5 N/mm2 (7 days) DIN 53504
Breaking Strain	% 600 (7 days) DIN 53504
Chemical resistance	Acidic and basic solution
Humidity Tolerance	% 5
Viscosity (mPas)	2500 - 6000
Solid content (%)	Approximately 85±3
Shore Hardness (Shore A)	65 (7 Days)
Crack bridging (mm)	> 5mm
Packaging	25 kg metal tin

Application Instructions

Surface Quality: All Surfaces must be clean, dry, smooth, free from grease, oil, dirt and rust. 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. Damaged surfaces should be repaired with repair mortar. Surface Preparation: If there is dilatation, it is necessary to isolate the dilatation by using Chelfix Chamfer bands before applying Chelfix PU100. If you postpone it later, isolating the dilatation will cost more and it will be more difficult. All outlets and gutters, strainers should be insulated using chamfer bands. The surface must be dry. There mustn't be any puddle or ponding, Two component, epoxy based primer or PU primer should be applied as a primer to the concrete surface with a brush or roller as 0.20 – 0.40 kg/ m2. Primer consumption varies according to the quality and absorbency of the concrete. The primer must be completely cured and hardened. For waterproofing application, wait at least 4 hours and maximum 24 hours.

Surface and ambient temperature: (+5°C) - (+40 °C)

Mixing: Pour Chelfix PU100 in a clean pail or keep it in its own pail and Stir it well before using it. Equipments and Application Methods: After stirring Chelfix PU100, the product will be ready to be applied. Use a hard bristle brush or a spraying machine to apply it on the surface. When you finish the first layer please wait until it completes its reaction. The second layer has to be applied perpendicular to the first layer. The waiting time between two layers should be minimum 1 hour. Please check if it is dry or not before applying the second layer on the first layer. As it does not have any UV resistance, it should be protected from direct sun light by using thermal insulating board, geotextile felt, guard plate and so on. Consumption: Factors like temperature, application method and also the surface porosity might alter consumption. Depending on these factors the consumption 1.20 - 1.50 kg/m2 Cleaning: it should be protected from direct sun light, rain, strong wind, snow, frost and also high temperature (+40° C and more) after the application. Hands should be washed before it is hardened.

Cleaning of Equipment: Immediately after application, before hardened, the skin which has contacted with the product should be washed with soap and water. Also the equipment should be cleaned with Chelfix Thinner before hardened. After the product is hardened, it should be cleaned by mechanical methods.

Pot Life: Approximately 1 hour at +20 ° C

Cleanability Time: Approximately 1 hour at +20 ° C.

Application Notes/ Restrictions

- Foreign materials should not be added.
- Apply it as two layers.
- Shouldn't be applied while it is raining. Surface should be dry.
- Please do not add water to dilute the product.
- It should be protected from direct sun light, rain, strong wind, snow, frost and also high temperature until it is hardened.

Consumtion

- First coat: 0.6 - 0.8 Kg/m².
- Second coat : 0.6 - 0.8 Kg/m².
- Total consumption: 1.2 – 1.6 Kg/m².

Storage and Shelf Life

12 months under proper storage conditions after production date. it should be stored in its original unopened package, in a cool and dry environment. Keep it away from direct sunlight and frost.