

Wethan 280

Waterproofing, thixotropic, fibre-reinforced, UV-stable 1C polyurethane resin



Brief description

Wethan 280 is a high-grade, thixotropic, fibre-reinforced 1C polyurethane resin for the flameless waterproofing of junctions, upstands and edges. As a highly elastic flashing product, Wethan 280 is tested, approved and classified in accordance with ETAG 005 as a category W3 product (minimum service life of 25 years).

Material

1-component, highly elastic, thixotropic, polyurethane-based waterproofing resin with fibre additives

Product characteristics

When cured, Wethan 280 forms a seamless, fibre-reinforced elastic and waterproof membrane. Wethan 280 possesses good water-vapour diffusion capacity. The waterproofing is UV-resistant and offers good chemical and mechanical resistance.

Areas of application

This product can be used on practically any flat roof.

Areas susceptible to cracking, such as upstands, wall junctions, dome lights etc. can be permanently integrated in the waterproofing system without the need for an additional fleece. The junctions between different materials such as bitumenised sheets, PVC membranes, concrete/mortar/screed, various metals, wood etc. can be permanently waterproofed. Designed for residential, commercial and industrial developments with light-duty mechanical and chemical exposure.

Wethan 141 is used as a primer on absorbent substrates such as concrete, stone or wood. Non-absorbent substrates, such as bitumenised sheets, metals, PVC etc. can be waterproofed without the need for a primer. (Please refer to the Weplus substrates table.

Wethan 280 absorbs substrate movements due to temperature fluctuations between – 30 °C and + 80 °C (depending on the layer thickness applied).

Wethan 280 is supplied ready for use. Additional fillers should never be added, as this would reduce the flexibility of the membrane.

When fully cured, Wethan 280 is resistant to water, seawater and waste water as well as to numerous alkali solutions, diluted acids, salt solutions, mineral oils, lubricants and fuels, and to many solvents.

Depending on the substance, concentration and duration, exposure to chemicals may result in superficial colour changes, although this will not affect the reliable function. Polyurethanes with this composition have a strong tendency to change colour under the influence of UV radiation.

Colours

Grey

Product information

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Packaging

6 kg



Shelf life

9 months from date of production if stored in original, sealed containers
Store in a dry, cool and frost-free area!

Application

Mixing ratio:

1-component product

Material consumption:

Recommendation: 1.500 – 3.500 kg/m² (two coats are advisable)

Ambient temperature	+ 10 °C	+ 20 °C	+ 30 °C
1-component product, therefore no pot life and application time indicated			

General information:

These times are extended at higher temperature.

These times are reduced at lower temperatures.

Application / Substrate

Absorbent substrates such as concrete, cement, cement screed etc. must provide a good key and be clean, sound, free from adhesion-reducing substances, e.g. grease, oil etc, and dry. Maximum residual moisture 5 % (CM measurement). The surface must to be properly prepared by grinding, scarifying or sand-blasting. Wethan 141 is first applied as a primer to the dust-free surface.

Non-absorbent substrates such as bitumenised sheets, metal and PVC are directly coated with Wethan 280 after they have been properly prepared. Metal substrates are best prepared by sand-blasting or grinding, incl. de-greasing.

If in doubt, we would advise you to carry out an adhesion test on site.

Application / Tools

Broad brush or roller



Application / Mixing

No mixing required. We recommend using a wooden stirrer to obtain a smooth mixture prior to application. An electric stirrer is not required.

Application



Pour the product onto the prepared area and use a brush to spread it evenly over the vertical and horizontal junctions. A second layer of Wethan 280 can be applied after the appropriate interval. The product can also be applied using a roller (short- or medium-pile). When coating larger areas, please make sure that work can progress rapidly to avoid colour differences and overlap marks.

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Application / General information



The material, air and ground temperatures must be measured and must be between 5 °C and 35 °C throughout the application period. Furthermore, the substrate temperature must always be at least 3 °C above the dew point. The relative humidity must not exceed 80 %. Ensure good ventilation after application and during the curing process. The area must be protected from direct contact with water throughout the hardening phase.

Product data

Adhesive pull strength:	> 2 N/mm ² (concrete failure)
Shore hardness:	A 65-70
Elongation at break [%]	> 250 %
Tear strength	> 2.0 N/mm ²
Rain-proof	after 3 - 4 hours

General information:

Viscosity is reduced at higher temperatures.
Viscosity is increased at lower temperatures.

Information on safety

The product is only approved for trade use.

For the safe handling of polyurethanes and hardeners, please refer to the following information sheets: M 044, Manufacture and application of polyurethanes / isocyanates (published by: Berufsgenossenschaft der Chemischen Industrie [Chemical Industries Association]). Furthermore the important physical, safety, toxicological and ecological data can be found in the substance-specific safety data sheets.

Disposal:

Fully cured material can be disposed of as domestic waste. Recycle emptied containers. Liquid material must be disposed of as waste paint containing solvent or other hazardous substances.

Information on safety

Please refer to the safety data sheets.

General information

The above information, especially information about application of the products, is based on extensive development work as well as many years of experience and is provided to the best of our knowledge. However, the wide variety of requirements and conditions on site mean that it is necessary for the product to be tested to ensure that it is suitable for the intended purpose. Only the most recent version of the document is valid. We reserve the right to make changes to reflect advances in technology or improvements to our products.

Revised: 18.3.2014