

Wethan 484

Multi-functional wearing layer



Brief description

Wethan 484 is used as a coloured, crack-bridging, multi-functional wearing layer that is able to withstand high levels of mechanical stress and chemical exposure. The flexible polyurethane-polyurea surfacing can be sprayed, poured and rolled onto the substrate at room temperature. Wethan 484 is UV-resistant, weather-resistant, lightfast and highly resistant to oils, fuels and other chemicals.

Material

2-component, pigmented wearing layer based on polyurethane-polyurea elastomers

Properties and advantages

- Highly abrasion-resistant
- Highly scratch-resistant
- Lightfast
- UV-resistant
- Easy and fast application
- Tough and resilient
- Outstanding chemical resistance

Areas of application

Wethan 484 is used in many industrial areas as a multi-functional, pigmented wearing layer with high chemical resistance. The product is mainly used in heavy-duty applications, where areas are subjected to high levels of mechanical stress and chemical exposure, such as filling stations, sewage treatment works, the petroleum industry, the chemicals industry, kitchens etc.

The product is supplied in separate containers (resin and hardener).

Pack size



Mixing ratio 1.5 : 1 (by weight)

4.50 kg Wethan 484 Component A
3.00 kg Wethan 484 Component B (pigmented)
7.50 kg

Colours

RAL 7032; other colours are available on request

Storage

Store products sealed in their original airtight container and in a cool, dry and frost-free place. Unopened products have a shelf life of at least 6 months. Direct sunlight on the containers should be avoided, including on site. After removing some of the contents, reseal the containers so they are airtight.

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Application conditions



Temperatures

The product can be applied within the following temperature ranges:

Product	Temperature range, in °C		
	Air	Substrate*	Material
Wethan 484	-5 to +35	-5 to +35*	+10 to +30

* The substrate temperature must be at least 3 °C above the dew point during application and curing.

Humidity and moisture

The relative humidity must be ≤ 90 %.

The surface to be coated must be dry.

The surface must be protected from moisture until the coating has hardened.

Reaction times

	Wethan 484 (at 10 °C)	Wethan 484 (at 20 °C)	Wethan 484 (at 30 °C)
Pot life	approx. 60 minutes	approx. 40 - 50 minutes	approx. 20 minutes
Can be walked on/ Overcoatable	min. 3 - 4 hours max. 18 hours	min. 2 hours max. 12 hours	min. 1 - 2 hours max. 8 hours
Curing time	approx. 7 days	approx. 3 - 5 days	approx. 2 - 3 days

Higher temperatures will reduce reaction times, while lower temperatures will increase reaction times.

Consumption rates

Substrate

With topping:

Consumption

approx. 600 - 800 g/m²

Technical data

Density at 23 °C / 50 % rel. h.

Solids content:

Tear strength

Tear propagation resistance

Shore A

Elongation at break

Surface abrasion

Tensile strength

Viscosity (25 °C, V03.1):

Chemical resistance:

approx. 1.35 g/cm³

approx. 70 %

≥ 25 N/mm²

≥ 35 N/mm²

approx. 90

> 350 %

≤ 100 mm³

≥ 25 N/mm²

Comp. A: 2200 - 2600 mPas

Comp. B: 1600 - 2000 mPas

- Exposure to frost / de-icing salt

- Caustic soda solution 20 %

- Hydrochloric acid 20 %

Data for resistance to other chemicals on request

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Product application



Application equipment / tools

For mixing the product:

- Twin-paddle stirrer

For applying the product:

- Short-pile sealing roller
- Rubber squeegee

Substrate preparation

The substrate must be dry, clean, sound and free from adhesion-reducing substances, such as grease and oil. Wethan 484 is used on surfaces topped with silicon carbide or Durop. The main area must be sealed with Wethan 484 within the period allowed for overcoating. Please contact our technical advisory service for further information.



Mixing

Stir the hardener component and then pour all of it into the resin component. Mix thoroughly for approx. 3 minutes with a slow-speed stirrer (recommended: double stirrer with stirrers rotating in opposite directions). Re-pot and then stir thoroughly once again for approx. 1 minute. Before the product can be applied to the substrate it must have a smooth consistency without streaks. Wethan 484 is ready formulated and must not have any fillers or thinners added to it.

Application

On smooth substrates pour the product onto the prepared surface, spread it with a rubber squeegee and then distribute it evenly with short-pile or medium-pile rollers, working in a criss-cross pattern. When coating larger areas, please make sure that work can progress rapidly to avoid colour differences and overlap marks.

General information:

The material, air and ground temperatures must be measured and must be between -5 °C and +30 °C throughout the application period.

Furthermore the substrate temperature must be 3 °C above the dew point. The relative humidity must not exceed 90 %. Ensure good ventilation after application and during the curing process.

The area must be protected from direct contact with water throughout the hardening phase.

Cleaning

If work is interrupted or when it is completed, clean the tools thoroughly with Weplus Cleaning Agent within the pot life of the material (approx. 30 minutes). This can be done with a brush. Do not use the tools again until the Cleaning Agent has evaporated fully.

Simply immersing the tools in the cleaning agent will not prevent the material from hardening.

Product information

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Information on safety and risks

Please refer to the safety data sheets for the products used.

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: 22.4.2014