

CONIFLOOR 160

Two Component, Solvent Free, fast curing Polyurethane Primer

Product description

CONIFLOOR 160 is a solvent free, low viscosity, fast curing, two component **polyurethane** resin based primer.

Fields of application

CONIFLOOR 160 is designed for use as a primer on mineral substrates indoors such as concrete and cementitious screeds. The application on asphalt or timber is possible. Therefore the quality of this substrates have to be analysed. CONIFLOOR 160 as a fast curing primer is applied as thin layer.

If a scratch coat is required, CONIFLOOR 160 can be filled with quartzsand 01/03 or the epoxy primer CONIFLOOR 110 (see technical data sheet) have to be applied also filled with quartzsand 01/03.

Properties

CONIFLOOR 160 has very low viscosity and therefore shows high capillary activity.

The material has very good adhesion to substrates based on minerals and / or cement.

The primer is fast curing and for this purpose reduce the time of the installation of the CONICA polyurethane indoor systems.

The yellowing which occurs when exposed to UV light does not impair its technical properties.

Fully cured, CONIFLOOR 160 exhibits very good mechanical properties. It is resistant to water, sea and waste water as well as to a variety of alkalis, diluted acids, brine, mineral oils, lubricants and fuels.

Conifloor 160 is a polyurethane primer and generally overcoated with a polyurethane bodycoat.

Technical Data

Mixing ratio	in parts by weight	A: B	100 : 65	
Density	mix, at 23 °C	g/cm ³	1.00	
Viscosity	mix, at 23 °C	mPas	640	
Working time (25 kg working packs)	at 10 °C	min	30	
	at 20 °C	min	20	
	at 25 °C	min	10	
Re-coating interval	at 20 °C	min.	h	4
		max.	h	12
Ready for foot traffic	at 10 °C	h	min. 10	
	at 23 °C	h	min. 4	
	at 25 °C	h	min. 3	
Substrate and application temperature	minimum	°C	10	
	maximum	°C	25	
Max. permissible relative humidity		%	75	
Tensile bond strength		N/mm ²	≥ 1.5	

Above figures are guide values and should not be used as a base for specifications!

Consumption

The consumption of CONIFLOOR 160 used as primer is approximately between 0.25-0.4 kg/m² **depending** on the condition and porosity of the substrate.

A 2nd coat of 0.2-0.3 kg/m² of the **primer** CONIFLOOR 160 is **mandatory** in order to seal concrete pores and capillaries completely. CONIFLOOR 160 is applied in a thin layer.

Unevenness >0.5mm must be equalized by an additional scratch coat. If the scratch coat is necessary CONIFLOOR 160 or CONIFLOOR 110 have to be used.

For this higher thicknesses the CONIFLOOR 160 or CONIFLOOR 110 can be filled with quartzsand 01/03 at room temperatures like follows:

CONIFLOOR 160 mixing ratio with quartzsand 01/03 1:0,5
CONIFLOOR 110 mixing ratio with quartzsand 01/03 1:1

(The above consumption figures are intended as a guide only and may be higher on very rough or porous substrates.

Application method

CONIFLOOR 160 is supplied in working packs which contain the correct proportions of component A (resin) and component B (hardener).

Mixing

Before mixing, precondition both A and B components to a **temperature** of approximately +10°C up to max. +25 °C.

Pour component B into component A and ensure that pail containing component B is emptied completely. Scrape the sides and the bottom of the pail several times to ensure complete mixing. Do not mix by hand, **mix** with a **mechanical** drill and paddle at a very low speed (ca. 300 rpm) for **at 2 minutes**. Keep the mixer blades submerged in the material to **avoid** introducing air **bubbles**. Do not work out of the original drum / pail.

After proper mixing to a homogeneous consistency pour the mixture into a **fresh pail** and mix for another minute.

CONIFLOOR 160 should be applied when the ambient **temperature** is **constant** or falling as this will decrease the risk of bubble formation due to evaporation of air that is enclosed in the concrete.

CONIFLOOR 160 is applied to the prepared substrate by rolling, spraying or spreading with a squeegee. **After** waiting for at least max. **2 minutes**, finish with a **roller**. Ponding or spots where the primer is applied thick have to be avoided.

PUR Coatings

Within the re-coating interval the primer must not be broadcasted with silica sand in combination with a following polyurethane coating.

Exceedance of the re-coating interval:

To improve the adhesion to a following coating oven dried **silica sand** (grain size 0.3-0.8mm – approx. 0.5 up to max. 1kg/m²) is **broadcasted** into the primer whilst still in order to improve adhesion of the following polyurethane based product. Bald patches as well as excess broadcasting have to be avoided.

If CONIFLOOR 160 is applied below a elastic spray membrane (see the system CONIPROOF SP or CONIPROOF SU), the primer generally have to be broadcasted as mentioned before.

Temperatures

The working life and curing time of the material is influenced by the ambient, material and substrate temperatures. At low temperatures, the chemical reactions are slowed down; this lengthens the pot life, open time and curing times. High temperatures speed up the chemical reactions thus the time frames mentioned above are shortened accordingly.

To fully cure the material, substrate and application temperature should not fall below the minimum.

After application, the material should be protected from direct contact with water for approx. 4 h (at 20° C). Within this period, contact with water can cause a surface bloom and/or surface tackiness, both of which must be removed else the adhesion to the following coating is impaired.

Cleaning agent

Re-usable tools should be cleaned carefully with CLEANER 40 or other suitable solvents (e.g. butyl acetate).

Substrate condition

All substrates (new and old) must be structurally sound, dry and free of laitance and loose particles. Clean floors of oil, grease, and rubber skid marks, paint stains and other adhesion impairing contaminants.

A pre-treatment of the substrate by grit or shot blasting, high pressure water jetting, grinding or scabbing including the necessary post-treatment is only necessary, when the layer is soiled or the re-coating intervals have been exceeded.

After surface preparation the **tensile strength** of the concrete should exceed 1.5 N/mm² (check with an approved pull-off tester at a load rate of 100 N/s).

The **moisture level** of the sub-base needs to be **less** than **4 %**.

The **temperature** of the substrate must be at least **3 °C** above the current dew point temperature.

There must be a regular DPM between the stone base and the slab.

Notice for **bituminous** sub-bases:

CONIFLOOR 160 is used as a primer and applied as a thin layer directly on bituminous sub-bases (cast asphalt used indoors with sufficient hardness).

When preparing the sub-base by grit blasting with the necessary post-treatment (dust free!) special attention needs to be paid to the grains in the cast asphalt. At least 70 % of the grains need to be open and free of asphalt to allow sufficient adhesion.

If needed the quality of the sub-base needs to be tested carefully – contaminations in the cast asphalt have to be avoided.

Pack size

CONIFLOOR 160 is supplied in 10 kg working packs.

Colour

transparent

Storage

Store in original closed packing under dry conditions at a temperature range of 15 - 25 °C.

Do not expose the drums to direct sunlight.

Please check "best-before" date on the pail before usage.

Safety precautions

CONIFLOOR 160 is non-hazardous in its cured condition.

For protective measures, transport regulations and waste management please refer to the Material Safety Data Sheet of the product.

VOC Contents

CONIFLOOR 160 meets the requirements of the EC directive 2004/42/EC.



CE-Label:

See Declaration of Performance.

CONICA AG
Industriestrasse 26
8207 Schaffhausen
Suisse

Tel.: + 41 52 644 3600
Fax: + 41 52 644 3699
info@conica.com
www.conica.com

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