

# **CONIPROOF 401**

Two part polyuria spray membrane, pigmented, aromatic, chemical resistant, high elastic, highly reactive, solvent free, used for waterproofing and car park deck system, for machine application (MR 1:1)

## **Product description**

CONIPROOF 401 is a two component, solvent free, highly reactive, fast curing and chemical resistant polyuria spray membrane and part in different systems. The application has to be done with suitable two component hot spray machines (e.g. WIWA, Graco, Gamma or similar).

#### Fields of application

CONIPROOF 401 is used as statically and dynamic crack bridging waterproof coating and liquid impermeable layer and applied onto concrete, bituminous substrates and steel. CONIPROOF 401 is used for waterproofing applications, water containment areas, cut-and-cover tunnelling and car park deck solutions.

Using the suitable primer, CONIPROOF 401 can be applied on many different substrates and on horizontal and vertical surfaces

## **Properties**

CONIPROOF 401 exhibits high elastic properties and is wear resistant. Due to the spray application and its quick curing CONIPROOF 401 can also be applied on walls and ceilings.

CONIPROOF 401 has not sufficient UV and colour stability. It is recommend to protect for outdoor application by a UV-stable top coat (e.g. CONIPROOF 513) or with an aliphatic spray membrane (e.g. CONIPROOF 593) if not other layers are used on top.

The spray membrane CONIPROOF 401 is part in the systems

- CONIPROOF SU
- CONIPROOF PWC SU
- CONIPROOF PWC SU overspray

and for other applications.

## **Technical Data**

Mixing ratio	in parts <b>by volume</b>			1 : 1	
Density	EN ISO 2811-2	part A, part B	at 23 °C at 23 °C	g/cm³ g/cm³	1.00 1.10
Viscosity	EN ISO 2555	part A,	at 23 °C	mPas	550
		part B	at 23 °C	mPas	900
Application	machine applied	only with 2 component spraying machine			
Substrate and application temperature		minimum maximum		°C	5 40
Product temperature for application		minimum maximum		°C °C	60 80
Permissible relative humidity		maximum		%	80
Ready for following layer		at 20 °C		h	2
Consumption		per applied i	mm	approx.	1050 g/m <sup>2</sup>
Tensile strength	ASTM D412			N/mm²	≥ 19
Elongation at break	ASTM D412			%	≥ 350
Hardness shore A / D	DIN ISO 7619-1				95 / 42



## **Application method**

Please also note the information in our general processing guidelines.

CONIPROOF 401 is supplied in the correct proportions of component A and component B in drums.

Part A needs to be homogenized before mixing / application. This is done by using a stirring device especially designed for barrels with screw caps or by using drums with removable lid can be homogenized with the appropriate mixer.

Then both components can be taken out of the drums using a mixing-and spray machine.

CONIPROOF 401 is applied with a special high-pressure machine, which reaches 160 - 200 bar and a temperature of 60 - 80 °C at the spray head.

The application is done wet-in-wet in a couple of layers until reaching the required thickness. We recommend a minimum thickness of 2 mm and as a maximum up to 4mm.

CONIPROOF 401 have to be applied within the recommend temperature and relative humidity limits. The relative humidity level may not exceed 80%. The temperature of the substrate should be min. +3°C above the dew point.

Ensure the re-coating interval of the primer (tack-free).

CONIPROOF 401 is a spray coating, therefore make sure, that the surroundings are protected from drizzle (where applicable: watch direction of the wind or using barriers). Surrounding areas should be protected from overspray by masking off with e.g. polyethylene slide or paper.

Substrate	Primer /		
	Adhesion promoter		
Concrete or cementitious	CONIFLOOR EP 110,		
screed	EP 112, EP 118 or others		
	broadcast with silica		
	sand		
Asphalt or tarmac*	CONIFLOOR 160 or		
	CONIFLOOR 420		
Steel and non-ferrous	CONIFLOOR EP 185 W		
metal			
Existing polyurethane or	CONIFLOOR 165		
polyuria membranes*			
other substrates	on request		

<sup>\*</sup> Due to the large number of different substrates, test areas should be created in advance if in doubt.

## **Substrate condition**

CONIPROOF 401 may only be applied on sufficiently prepared substrates.

The Substrates to be coated must be firm, dry, load bearing and free of loose and brittle particles and substances, which impair adhesion such as oil, grease, rubber skid marks, paint or other contaminants.

As CONIPROOF 401 can be applied on various substrates, the preparation as well as the primer to be used vary.

In the edge zones and overlapping areas, it must be ensured that enough CONIPROOF 401 can be applied.

CONIPROOF 401 is applied to the previously prepared and primed, pore-free substrate.

## Cementitious substrates:

For cementitious screeds and concrete the minimum pull of strength must have min. 1.5 N/mm² and shot blasting is the preferred method for substrate preparation. An additional scratch coat must equalize unevenness > 0.5 mm.

#### Asphalt:

On bituminous substrates (asphalt / mastic asphalt with sufficient strength), CONIFLOOR 160 or CONIFLOOR 420 can be applied directly as a primer coat after the substrate has been pre-treated. Depending on the porosity of the substrate, a scratch coat with CONIFLOOR 420 filled with quartz sand 01/03 MV 1: 0.3 is necessary. This scratch coat has to be sanded with quartz sand 03/08 approx. 1-2 kg/m²

When preparing the substrate using dust-free shot-blasting, it must be ensured that at least 60 - 70% of the aggregate in the asphalt / mastic asphalt is blasted free in order to achieve sufficiently good intermediate adhesion.

In individual cases, a precise inventory of the quality is required. Contamination in the asphalt / mastic asphalt must be ruled out in the case of existing buildings or renovation work

The adhesive tensile strength should be at least 1.0 N/mm<sup>2</sup> on average after blasting.

## Iron / Steel:

Iron and steel must be prepared according to **DIN EN ISO 12944-4** (1998) to a SA 2 ½ surface (sand blasting) or in difficult to reach areas to St 3 (using hand tools or power tools) prior to application of the primer.

Special attention to be paid on the edges ensuring the adhesion.

#### Top Coat

CONIPROOF 401 has not sufficient UV and colour stability. A UV-stable top coat (e.g. CONIPROOF 513 or CONIPROOF 593) or other layers are recommend to protect it.

## Consumption

CONIPROOF 401 is recommend to apply min. 2.2-2.5 kg/m². This corresponds to a thickness of approx. 2 mm depending on substrate roughness. Depending on use layer thickness from 1.5-4.0 mm could be applied.

## Cleaning

The machine could be cleaned with Mesamoll or others plasticizers. The gun is cleaned separate with solvent naphtha. Cured material can only be removed mechanically. (For cleaning and maintain of spray machine and equipment consult the supplier of the machine.)

## Pack size

CONIPROOF 401 is supplied in drums.

Component A containing 210 kg, component B 210 kg.

Small pails are also possible on request.



#### Colour

Component A: grey, component B: unpigmented others on request

## Storage

Store in unopened drums under dry conditions at a temperature range of 15-25  $^{\circ}\text{C}.$ 

Do not expose to direct sunlight.

Before use, please see "best before" date on the pail / drums.

# Safety precautions

CONIPROOF 401 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 (component A and B),

#### **VOC** contents

CONIPROOF 401 meets the requirements of the EC directive 2004/42/EC.

The limit value for products ready for use (product type according to table IIA j Type sb) is:

Level II (from 2010) <500 g/l VOC.

When ready to use, this product contains less than 500 g/l VOC.



## **CE-Label:**

See Declaration of Performance.