

# CONIPROOF 410

**Two part polyurethane (hybrid) spray membrane, aromatic, high elastic, highly reactive, solvent free, for waterproofing and car park deck systems, machine applied**

## Product description

CONIPROOF410 is a two component, solvent free, [highly reactive polyurethane \(hybrid\) 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, 2K spray equipment or similar).

## Fields of application

CONIPROOF 410 is used as statically and dynamic [crack bridging waterproof coating](#) and liquid impermeable layer and applied onto concrete, bituminous substrates and steel. CONIPROOF 410 is used for waterproofing applications, water containment areas, cut-and-cover tunnelling and car park deck solutions.

Using the suitable primer, CONIPROOF 410 can be applied on many different substrates.

## Properties

CONIPROOF 410 exhibits high elastic properties also at low temperatures and is statically and dynamic crack bridging. Due to the spray application and its quick curing CONIPROOF 410 can also be applied on walls and ceilings.

CONIPROOF 410 has [not sufficient UV and colour stability](#). It must be protected for outdoor application by a UV-stable top coat (e.g. CONIPROOF 513) if not other layers are used for protection.

The spray membrane CONIPROOF 410 is part in the systems

- CONIPROOF SP
- CONIPROOF PWC SP

and for other applications.

## Technical Data

<b>Mixing ratio</b>		in parts by volume			1 : 1
<b>Density</b>	EN ISO 2811-2	part A,	at 23 °C	g/cm <sup>3</sup>	1.04
		part B	at 23 °C	g/cm <sup>3</sup>	1.08
<b>Viscosity</b>	EN ISO 2555	part A,	at 23 °C	mPas	2000
		part B	at 23 °C	mPas	2800
<b>Application</b>	machine applied	only with 2 component hot spraying machine			
<b>Substrate and application temperature</b>		minimum		°C	5
		maximum		°C	40
<b>Product temperature for application</b>		minimum		°C	60
		maximum		°C	80
<b>Permissible relative humidity</b>		maximum		%	80
<b>Ready for following layer</b>		at 20 °C		h	2 - 3
<b>Consumption</b>		per applied mm		approx.	1100 g/m <sup>2</sup>
<b>Tensile strength</b>	ASTM D412			N/mm <sup>2</sup>	≥ 12
<b>Elongation at break</b>	ASTM D412			%	≥ 400
<b>Hardness shore A</b>	DIN ISO 7619-1				80

## Application method

Please also [note the information in our general processing guidelines](#).

CONIPROOF 410 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 410 can only be applied by means of a suitable two-component hot spray machine.

CONIPROOF 410 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 2mm and as a maximum up to 6mm.

CONIPROOF 410 has 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 410 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 screed	CONIFLOOR EP 110, EP 112, EP 118 or others broadcast with silica sand
Asphalt or tarmac*	CONIFLOOR 160 or CONIFLOOR 420
Steel and non-ferrous metal	CONIFLOOR EP 185 W
Existing polyurethane or polyuria membranes*	CONIFLOOR 165
other substrates	on request

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

### Substrate condition

CONIPROOF 410 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 410 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 410 can be applied.

CONIPROOF 410 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/mm<sup>2</sup> 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/m<sup>2</sup>

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

### Consumption

CONIPROOF 410 is [recommend to apply min. 2.2 – 2.5 kg/m<sup>2</sup>](#). 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 410 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

## Storage

Store in unopened drums under dry conditions at a temperature range of 15-25 °C.

Do not expose to direct sunlight.

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

## Safety precautions

CONIPROOF 410 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 410 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.