

DESCRIPTION OF THE PRODUCT

WINGUM PRO TECK ANTIRADICE is a fibre-reinforced, elastomer-bituminous based waterproofing liquid membrane, designed and formulated by WINKLER R&D. It is root-proof and resistant to ponding water. Formulated with new generation raw materials, it can prevent the penetration of roots meeting the requirements of the UNI EN 13948 standard.

USE FIELDS

The product is used for protecting and waterproofing surfaces, including flat surfaces, such as concrete, fibre-cement, wood and brickwork which is intended to hold plants, seeds and roots. This includes planters and raised gardens. It can also be applied on bituminous membranes (both smooth or slated).

SURFACE PREPARATION

Accurately clean the substrate area to eliminate: dust, crumbly, foreign or non-stick substances. Apply on dry surfaces and supports. Check the substrate area is not wet, to avoid onset of bubbles due to vapor pressure.

A practical method to check hidden wet in the support to be treated could be to cover a square metre of the surface (better when exposed to the sun) with a polyethylene sheet of almost 2 tenths, fully sealing it at edges with double-bond tape. After 24-48 check the possible condensation water under it. On powdery floor foundations, in order to allow the adhesion, it is advised the preventive application of **WINFIX CONCRETE**, or **WINGUM PRO TECK ANTIRADICE** as well, which has been previously diluted with 20% clean water (1.0L for 5kg bucket, 2L for 10kg bucket and 4L for 20kg bucket). Wait until the layer is dry (about 30 minutes at +20°C) and then apply the **WINGUM PRO TECK ANTIRADICE**.

BITUMINOUS MEMBRANES

In case of application on a polymer-bitumen membrane, wait at least 180 days for oxidation before applying **WINGUM PRO TECK ANTIRADICE**. Check the condition of the surface is good, in particular looking out for any presence of "crocodile skin effects", reptations, non-adherent overlaps, moisture bubbles and detachments in general and then proceed as described below.

Crocodile skin cracking: if the surface shows this type of phenomenon, evaluate the depth of it, and in case it should be less than 1mm deep, clean thoroughly, for example by vacuuming, and apply the product.

Non-adherent overlaps: check the presence of water under the raised membrane, wait for it to evaporate completely and then seal with **WINSEAL**, cold, bituminous, rubber sealant. Immediately apply **WINGUM PRO TECK ANTIRADICE**.

Moisture bubbles: X-shaped cut the bubbles and wait for the complete evaporation of the underlying water. Seal the membrane again with **WINSEAL** and immediately apply **WINGUM PRO TECK ANTIRADICE**.

For further situations, contact WINKLER technical dept.

METAL SURFACES

On metal substrates, it is recommended to carefully remove any residual rust from the surface to be treated, clean thoroughly and directly apply **WINGUM PRO TECK ANTIRADICE**. Any joints between metal sheets must be treated in advance with **BC SEAL BAND**, a self-adhesive butyl tape coated with a non-woven polypropylene. This will prevent any movements from causing cracks and therefore compromising the continuity of the waterproofing layer. In such specific application it is very important to apply the strip with the method called "OMEGA". This consists in making two ends of the belt to adhere to the two metal sheet portions to be connected, while leaving the central part of the band free to accommodate the movements and expansion of the substrates.

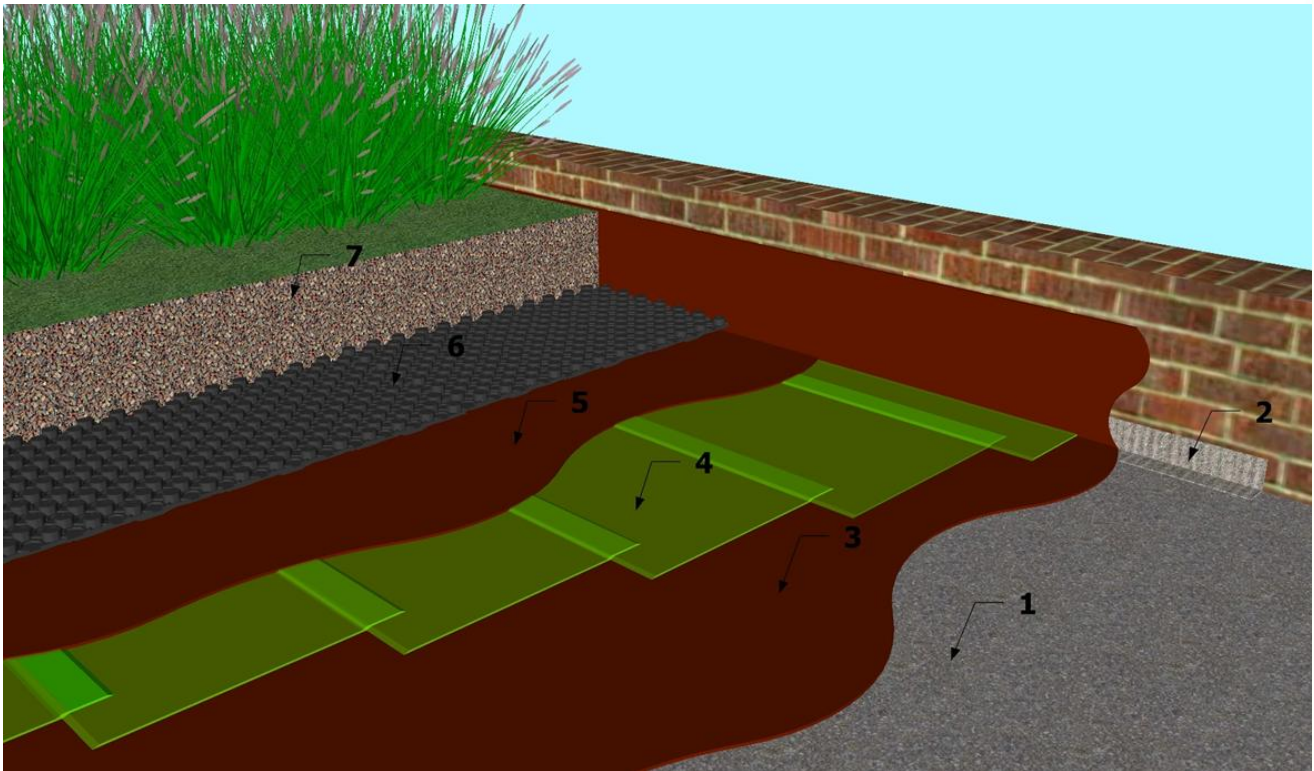
WARNING

Do not add any additive.
Do not use if the packaging is damaged.
Do not add water.

APPLICATION

The product is ready to use. Apply **WINGUM PRO TECK ANTIRADICE** by roller, paintbrush, spatula or trowel. As performances depend on possible superficial damages, in addition to support porosity, to achieve a homogenous and continuous layer, it is advised to apply two or more coats, by soaking/inserting the reinforcement WINTECHNO MAT, between the first and the second coat. Apply the second coat exclusively when the first one is fully dried (12-24 hours depending on temperatures).

Flower box application

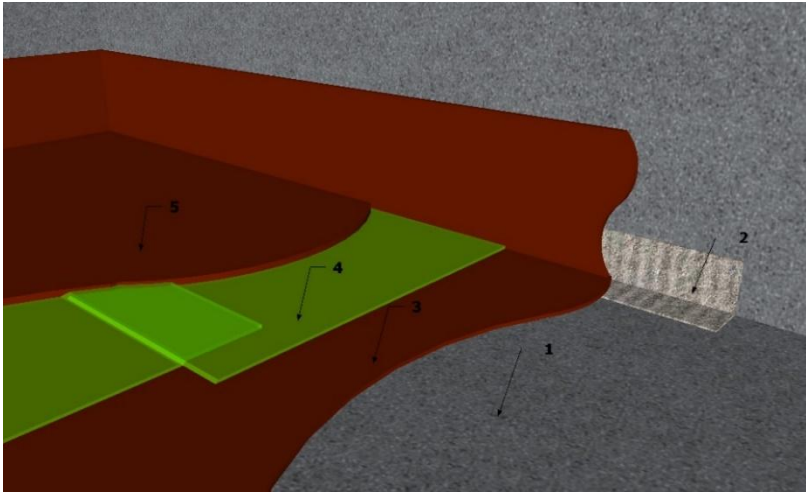


KEY:

1. Planter's foundation;
2. **BC SEAL BAND**;
3. **WINGUM PRO TECK ANTIRADICE** first layer;
4. **WINTECHNO MAT**, 70 g/m² non-woven reinforcement;
5. **WINGUM PRO TECK ANTIRADICE** second layer;
6. Draining pad;
7. Ground.

On perimeter edges of the surface, apply the waterproofing adhesive band **BC SEAL BAND**. For waterproofing and sealing around roof penetrations such as drain, ventilation pipes, other roof penetrations or around plumbing pipes and drains, use **BC SEAL PAD**, self-adhesive butyl square pad.

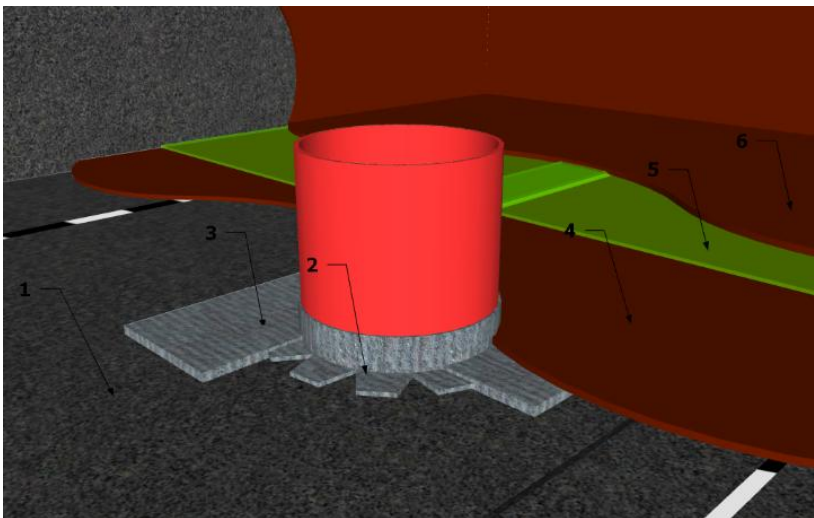
Perimeter edge treated with BC SEAL BAND



KEYS:

1. Structural substrate/ screed
2. **BC SEAL BAND**
3. First coat of **WINGUM PRO TECK ANTIRADICE**
4. **WINTECHNO MAT**
5. Secondo coat of **WINGUM PRO TECK ANTIRADICE**

Roof vent treated with BC SEAL BAND and BC SEAL PAD



KEYS:

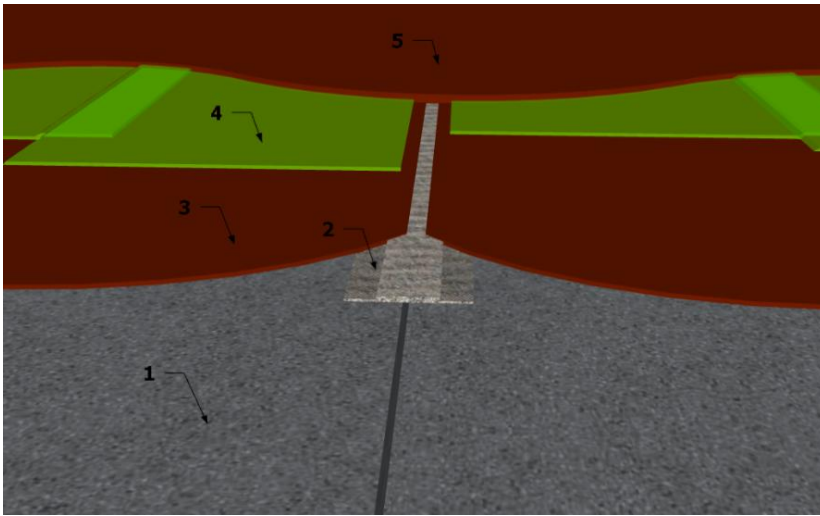
1. Bituminous membrane
2. **BC SEAL BAND**
3. **BC SEAL PAD**
4. First coat of **WINGUM PRO TECK ANTIRADICE**
5. **WINTECHNO MAT**
6. Secondo coat of **WINGUM PRO TECK ANTIRADICE**

SURFACES WITH JOINTS

Seal joints **up to 1cm wide**, using **WINJOINT BAND** (waterproof elastic band, made of rubber and polyester fabric, suitable for waterproofing joints), as described below:

- After making new joints or restoring the existing ones, apply **WINGUM PRO TECK ANTIRADICE** laterally to the joint and for a width that is larger than the joint cover.
- Lay the joint cover placing the perforated side strip on the area already treated with **WINGUM PRO TECK ANTIRADICE**, that must be wet yet.
- Once dried, soak it with a last coat of **WINGUM PRO TECK ANTIRADICE**.

SEALING OF JOINTS UP TO 1cm WIDE



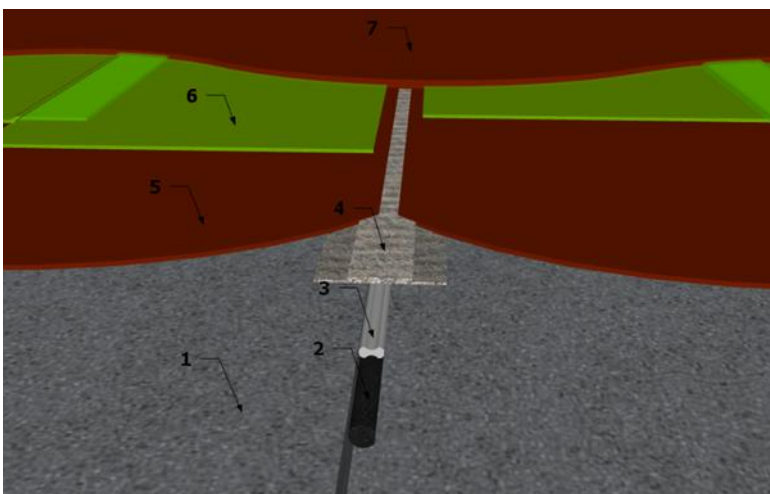
KEYS:

1. Structural substrate/Screed
2. **WINJOINT BAND**
3. First coat of **WINGUM PRO TECK ANTIRADICE**
4. **WINECHNO MAT**
5. Second coat of **WINGUM PRO TECK ANTIRADICE**

Seal joints **more than 1cm in wide**, using the system composed by **WINJOINT FOAM** (compressible polyethylene foam backer rod), **WINJOINT SEAL** (polyurethane sealant) and **WINJOINT BAND** as described below:

- After making new joints or restoring the existing ones, enter **WINJOINT FOAM** inside the joint to the desired depth and then extrude **WINJOINT SEAL** through the entire length of the joint. Once the sealant has dried, lay **WINJOINT BAND** as previously described.

SEALING OF JOINTS MORE THAN 1cm WIDE



KEYS:

1. Structural substrate/screed
2. **WINJOINT FOAM**
3. **WINJOINT SEAL**
4. **WINJOINT BAND**
5. First coat of **WINGUM PRO TECK ANTIRADICE**
6. **WINECHNO MAT**
7. Second coat of **WINGUM PRO TECK ANTIRADICE**

USEFUL SUGGESTIONS

WINGUM PRO TECK ANTIRADICE cannot perform its waterproofing functions if it does not dry completely at least once, therefore it must not be applied with bad weather, rainy weather and on frost surfaces or subject to night chill. Protect it during the first 24 hours from water, rain, snow. Do not apply on wet surfaces.

CONSUMPTION

2 - 2.5 kg/m² in two or more coats, by inserting WINTECHNO MAT in between.

PACKAGING

5-20 kg buckets.

STORAGE

The product in its undamaged packaging can be stored for 24 months. Please store it at temperatures between +5 and +35 °C. No frost-proof.

SAFETY INSTRUCTIONS

PRECAUTIONS

For information about safety, user must refer to the most recent Safety Data Sheet, edited in accordance with the regulations in force, which contains physical, toxic and other data about the product in use.

ECOLOGY

Do not through out the product and/or empty containers in the environment. Consult the most recent Safety Data Sheet for further information about disposals.

TECHNICAL FEATURES (average values)

PRODUCT FEATURES

Colour	Brown (if wet) – black (once dried)
Density at 20°C (g/cm ³)	1.05
Solid content (%)	48 ± 1.0
Hardening at 20°C	Full after 48 hours
Limit temperatures of application	+ 5°C + 35°C

OPERATIONAL PRODUCT PERFORMANCES

Elongation without reinforcement (ASTM D 2371)	350 %
Tensile strength without reinforcement (ASTM D 2370)	0.8 N/mm ²
Water absorption (ASTM D 471)	<20%
Water resistance	Very good after full drying
Adhesion to substrate (EN 14891): concrete	≥1.0 N/mm ²
Crack-Bridging (EN 14891) +23°C	≥1.5 mm

Crack-Bridging (EN 14891) -5°C	≥1.0 mm
Elongation with reinforcement (ASTM D 2371)	30%
Tensile strength with reinforcement (ASTM D 2370)	7.0 N/mm ²
Cold flexibility/pliability (ASTM D 522)	-15°C
Resistance to roots penetration (UNI EN 13948)	No penetration.

* All tests were performed at a temperature of +22°C and with 50% humidity.

Volatile Organic Compounds Emission

Parameter	Max. allowed concentration (µ/m ³)
TVOC after 3 days	≤ 750
TVOC after 28 days	≤ 60

Test performed by the EUROFINS institute according to EN 16516, ISO 16000-3-6-9-11 and ASTM D5116-10, Test report n. 392-2017-00404101_G_EN

The information contained in this technical data sheet is to the best of our knowledge correct. However, by no means can it be considered a guarantee, as usage, working area and application of the product in accordance with the instructions given and their success in application is beyond our control and is dependent on a number of factors. We decline any responsibility for the improper use of the product as the application recommendations contained herein are to be considered as a general guideline. If at all in doubt, preliminary tests should be carried out. WINKLER S.r.l. reserves the right to modify and up-date said data sheets without prior notice. Clients are kindly requested to verify that they are in possession of the current edition.