



## DESCRIPTION OF THE PRODUCT

WINGUM PRO TECK is an elastomeric, bitumen-based, thixotropic, liquid waterproofing membrane that is resistant to ponding water, and due to the new generation formulation by the WINKLER R&D Lab, it can be exposed without protection, to UV rays up to a maximum exposure of two years.

WINGUM PRO TECK gained the important **EC1 PLUS** brand, which identifies EMICODE certified products: construction products with low emissions of volatile organic compounds (VOC) and semi-volatile ones.

## USE FIELDS

The product can be used for applications in concrete, fibre-cement, wood, natural stone, brickwork and bituminous facing supports in general. Also to waterproof foundations, service terraces, non-drinkable water containment tanks and in the recovery of damaged bituminous facings. It is suitable as waterproofing layer before the application of floating floors and, thanks to the corrosion inhibitor contained within it, it can be used for waterproofing metal surfaces, even oxidizable, without the need for specific primers.

In case of old bituminous membranes, WINGUM PRO TECK can also be used for emergency and localized restoration works.

Because of the maximum exposure times expected for the product, it will be necessary for long-term protection to use products from the WINKLER range systems.

## SURFACES PREPARATION

Accurately clean the substrate area to eliminate: dust, crumbly, foreign or bonding-proof substances. Apply only on dry surfaces and supports. Check the substrate support area is not wet to avoid onset of air bubbles due to vapour 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 foundation, in order to allow the adhesion, it is advised to use the preventive application of **WINFIX CONCRETE**, or you can use **WINGUM PRO TECK** 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 product again.

## BITUMINOUS MEMBRANES

In case of application on a polymer-bitumen membrane, wait at least 180 days for oxidation before applying **WINGUM PRO TECK**. 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**.

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**.

**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**. Any joints between metal sheets must be treated in advance with **BC SEAL BAND**, a self-adhesive butyl tape coated with 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 adhere to the two sheet metal 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 cement nor additives.

Do not use if the packaging is damaged.

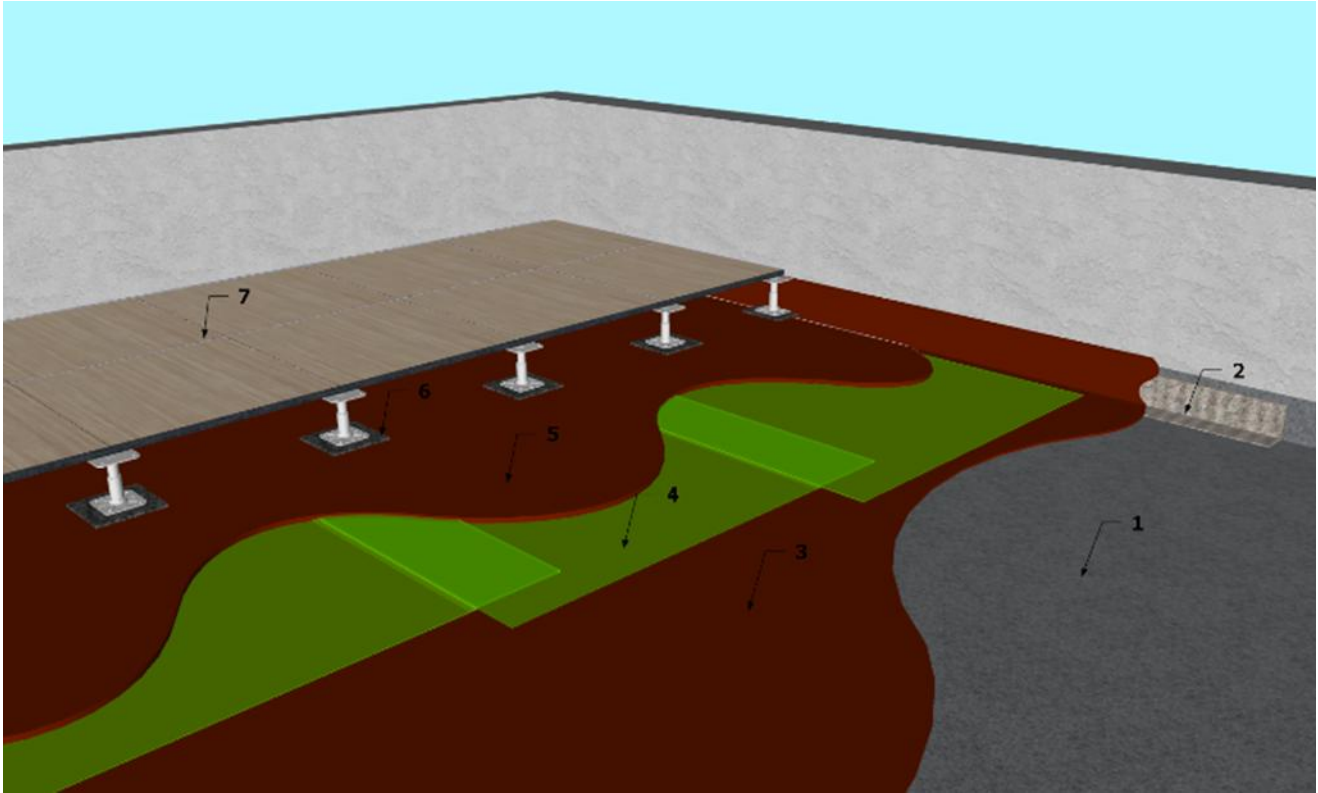
Do not add water, if not request by the desired kind of application.

For tanks containing water (not drinkable), reinforce both horizontally and vertically.

## APPLICATION

The product is ready to use, mix manually with a spatula until getting a homogeneous appearance. It can be applied with a roller, brush, spatula or trowel.

### Application under floating flooring



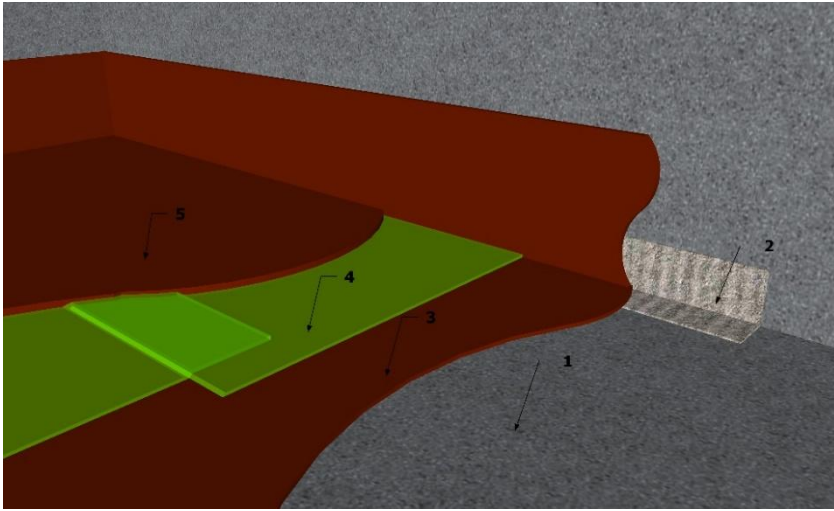
**KEYS:**

1. Structural substrate/ screed
2. **BC SEAL BAND**
3. First coat of **WINGUM PRO TECK**
4. **WINTECHNO MAT**
5. Secondo coat of **WINGUM PRO TECK**
6. Bitumen membrane pad
7. floating flooring

For reinforcement and sealing of the corners, we recommend the application of butyl tape coated with non-woven polypropylene **BC SEAL BAND**.

For waterproofing external features, including pipes, chimneys and drains in general, use **BC SEAL PAD**, which is our square butyl adhesive pad.

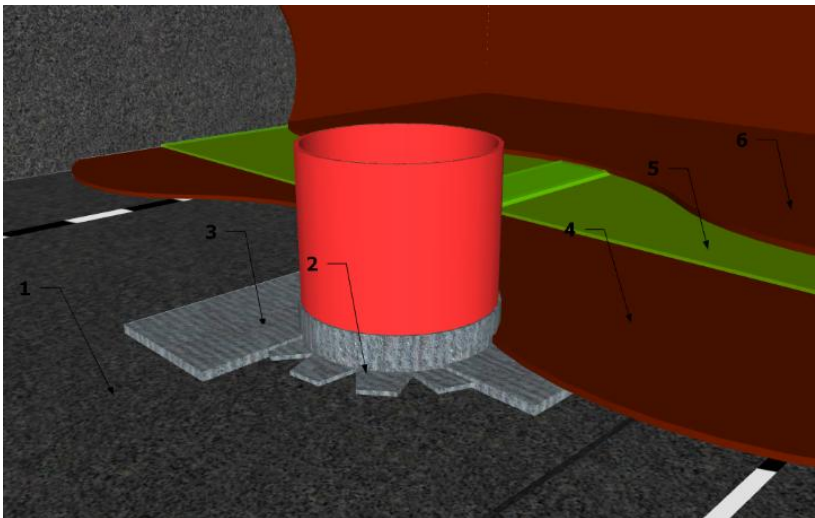
## Perimeter edge treated with BC SEAL BAND



### KEYS:

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

## 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**
5. **WINTECHNO MAT**
6. Secondo coat of **WINGUM PRO TECK**

Due to changes in weather and climate, there will be movement within the structure over time. In order to try and obtain a continuous layer, we recommend that a minimum two coats are applied in the system. The second coat must be applied after the first coat is completely cured. If there are vertical applications involved, we recommend that a waterproofing layer of **WINGUM PRO TECK** continues on the vertical part by 20cm. This will ensure that a waterproofing layer is protecting the horizontal areas.

## APPLICATION WITH REINFORCEMENT

For those areas subject to deformation, for example floating floors or area's larger than 50m<sup>2</sup>, there is a high risk of cracking. We recommend reinforcing **WINGUM PRO TECK** with **WINTECHNO MAT**. The application must be applied as described below:

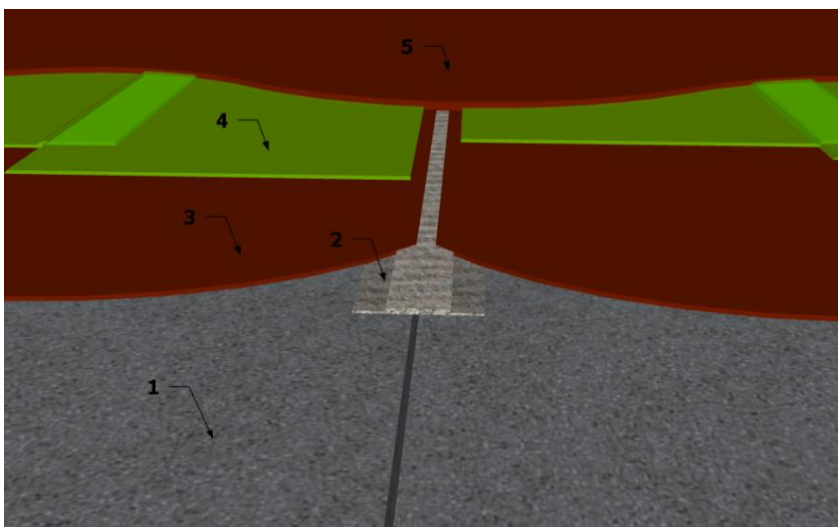
Apply **WINGUM PRO TECK** (for about 2/3 of the material or 1kg/m<sup>2</sup>) on the substrate evenly. Place the reinforcement tape into the liquid and soak it with the help of a roller and make sure it is completely covered. Add more liquid if necessary. Wait for the product to completely dry (24 hours), then apply a second coat of **WINGUM PRO TECK**, using the consumption recommended in this technical data sheet. The tape must overlap by 10cm along the sides and 15cm above the application. On bituminous membranes, lay the reinforcement offset from the existing overlaps. Apply the **WINTECHNO MAT** only over horizontal surfaces. To ensure the continuity of the waterproofing layer, apply **WINGUM PRO TECK** for around the application by 20cm vertically so this will provide extra protection to the floor.

## 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** 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**, the area must be already wet.
- Once dried, soak it with a last coat of **WINGUM PRO TECK**.

## SEALING OF JOINTS UP TO 1cm WIDE



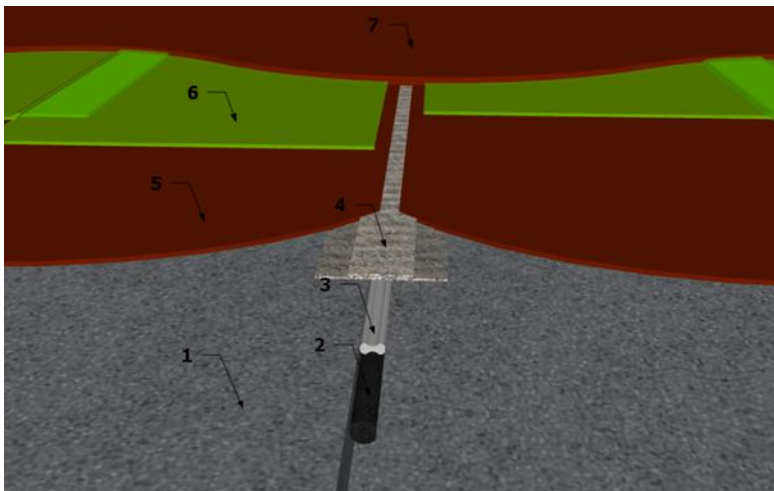
### KEYS:

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

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**
6. **WINTECHNO MAT**
7. Second coat of **WINGUM PRO TECK**

### WARNING

Apply **WINGUM PRO TECK** at temperatures between +5°C and +35°C.

**WINGUM PRO TECK** 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 in case of high night dampness. If **WINGUM PRO TECK** has to be applied on a bitumen-polymer membrane, make sure that it has undergone at least 180 days of oxidation. Better protection and durability characteristics against UV are reached by using the products of **ECOSILVERALL**, **COVERAME**, **2000 PLUS** and **2000 PLUS REFLEX** series, as protective coatings. Wait at least 48 hours after the last coat before applying other products. In case of backfill, we recommend to wait at least 3 days from the final coat application and protect the surface treated with **WINGUM PRO TECK** with a HDPE draining embossed membrane.

The temperature, humidity and porosity of the substrate could influence the drying times of the product.

### CONSUMPTION

1 - 1.2 kg/m<sup>2</sup> in two or more coats, on vertical surfaces.

1.2-1.6 kg/m<sup>2</sup> in two or more coats, on horizontal surfaces.

1.6 – 1.8 kg<sup>2</sup> in two coats, with reinforcement **WINTECHNO MAT**.

## PACKAGING

5-10-20kg buckets.

Boxes composed of 30 x 1kg pails.

## STORAGE

The product in its undamaged packaging can be stored for 24 months.

Please store it at temperatures between +5°C 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 DATA (AVERAGE VALUES)

#### PRODUCT FOR PROFESSIONALS

Color	Brown (fresh) Black (dried)
Appearance	Fluid with high thixotropy
Density at 20°C (g/cm <sup>3</sup> )	1.20 ± 0.10
Dry residue (%)	60 ± 3
pH	9.5 ± 1
Minimum thickness of wet product	0.85mm vertically (1kg/m <sup>2</sup> ) 1.00mm horizontally (1.2kg/m <sup>2</sup> )
Minimum thickness of dry product	0.5mm vertically (1kg/m <sup>2</sup> ) 0.6mm horizontally (1.2kg/m <sup>2</sup> )
Rain- proof	After 7 hours
Waiting time for second coat application	24 hours
Hardening	Complete after 48 hours
Operating temperatures	From -15°C to +70°C

\* All data are intended at a temperature of 22 ° C and 50% humidity.

## OPERATIONAL PRODUCT PERFORMANCES

Elongation without reinforcement (ASTM D 2371)	350 %
Tensile strength without reinforcement (ASTM D 2370)	0.8 N/mm <sup>2</sup>
Water absorption (ASTM D 471)	<20%
Water resistance	Very good after full drying
Adhesion to substrate (EN 14891): concrete	≥1.0 N/mm <sup>2</sup>
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 <sup>2</sup>
Cold flexibility/pliability (ASTM D 522)	-15°C

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

## Volatile Organic Compounds Emission

Parameter	Max. allowed concentration (µ/m <sup>3</sup> )
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\_02

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.