



COMPLYING WITH DIRECTIVE

EN 14891  
ISO 13007-5

**DM 01 P**

LIQUID-APPLIED WATERPROOFING  
PRODUCTS FOR USE BENEATH  
CERAMIC TILING BONDED WITH

## WINGRIP BITUMINOSO

(Water-Based Under Tile Waterproofing and Adhesion Promoting Membrane)

### DESCRIPTION OF THE PRODUCT

**WINGRIP BITUMINOSO** is an under tile waterproofing and adhesion promoting liquid membrane developed by WINKLER Research & Development Laboratories using the exclusive WINKLERSAFE<sup>®</sup> technology for low environmental impact products. **WINGRIP BITUMINOSO** is a polymer enhanced bituminous waterproofing and adhesion-promoting liquid applied membrane with selected aggregates in water emulsion.

WINGRIP BITUMINOSO has obtained the **EC1 PLUS** brand, which identifies EMICODE certified products: construction products with low emissions of volatile organic compounds (VOC) and semi-volatile ones.

### APPLICABLE STANDARDS

WINGRIP BITUMINOSO meets the following standards:

- American National Standard Specifications for Load Bearing, Bonded, Waterproof Membranes for Thin-set Ceramic Tile and Dimension Stone Installation A118.10;
- American National Standard Specification for Crack Isolation Membranes for Thin-Set Ceramic Tile and Dimension Stone Installation A118.12;
- EN 14891/ISO 13007-5: "Liquid applied water impermeable products for use beneath ceramic tiling bonded with adhesives".

### CHARACTERISTICS AND USE

**WINGRIP BITUMINOSO** is a very low environmental impact product. It has been specifically formulated to create an elastic and highly resistant waterproofing layer and a rough bonding-promoting substrate surface that ensure superior grip to a large variety of adhesives and especially to the cement based tile adhesives. Its silica aggregates content may eliminate the need of using different types of reinforcement and/or special adhesives during the application of tiles or the final coating material.

**WINGRIP BITUMINOSO** can be applied horizontally and vertically in places such as: bathrooms, restrooms, showers, tubs or swimming pools, kitchen decks and terraces over a wide variety of substrate surfaces: concrete, cement boards, plywood, gypsum boards, ceramic tiles.

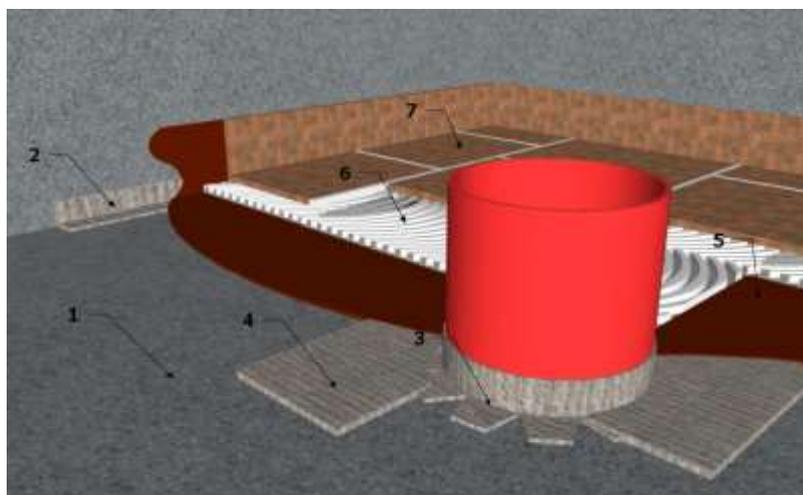
## SURFACE PREPARATION

Clean all support surfaces thoroughly in order to eliminate dirt, dust and loose materials, any form of oil or grease and foreign or bonding-proof matter. The substrate surface must be completely dry prior to the application of **WINGRIP BITUMINOSO**. Check for possible hidden moisture contained in the support to avoid onset of air bubbles due to vapor pressure.

An easy way to find out if there is any hidden humidity contained in the support is by applying a polyethylene sheet over the surface of the support sealed with painter's tape. Leave this exposed to the sun and check for water condensation after 24 hours. If there is no condensation water, proceed with the application of **WINGRIP BITUMINOSO**, contrary, wait for full drying.

Use the following accessories, where necessary:

- Wall to floor type corners and other penetrations (pipes, drains, etc.) must be covered with the waterproofing self-adhesive band **BC SEAL BAND**. If the wall to floor connection is a "cold joint", apply a specifically designated sealant with backer-rod, as needed, before covering with **BC SEAL BAND**. Use solvent-free products only, as **BC SEAL BAND** contains butyl, which may be susceptible to solvents.
- 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, together with **BC SEAL BAND**.



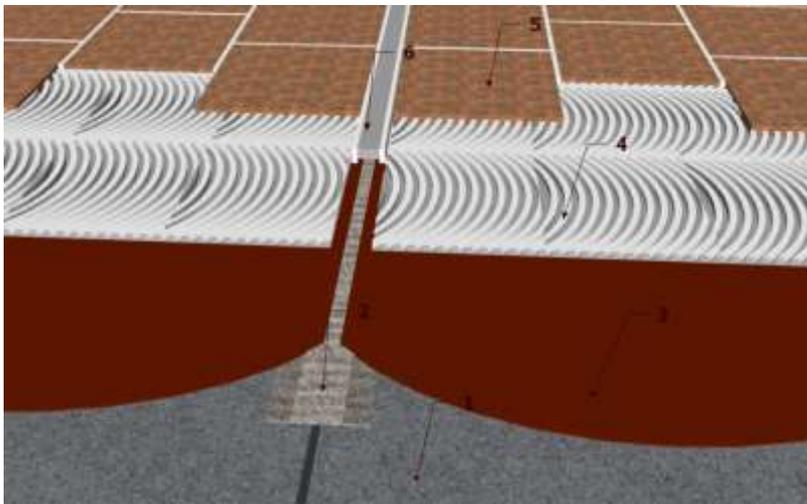
### KEY:

1. Structural support
2. **BC SEAL BAND**, Self-adhesive band for sealing corners;
3. Collar shaped **BC SEAL BAND**, to seal the drain.
4. **BC SEAL PAD**, self-adhesive square pad;
5. **WINGRIP BITUMINOSO**;
6. Tile Adhesive
7. New flooring

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

Apply two 1<sup>1</sup>/<sub>4</sub>inch wide "side-line" of **WINGRIP BITUMINOSO**, one "side-line" along each side of the joint (about 2 inches apart with the joint line in the middle)

Cover the joint with the **WINJOINT BAND** (the central part of the band will cover the joint line and the lateral polyester wings of the band will superpose the side-lines of **WINGRIP BITUMINOSO**. Press the polyester wings into the **WINGRIP BITUMINOSO** for proper embedding. Let the material dry. Cover the lateral wings of the **WINJOINT BAND** with **WINGRIP BITUMINOSO**

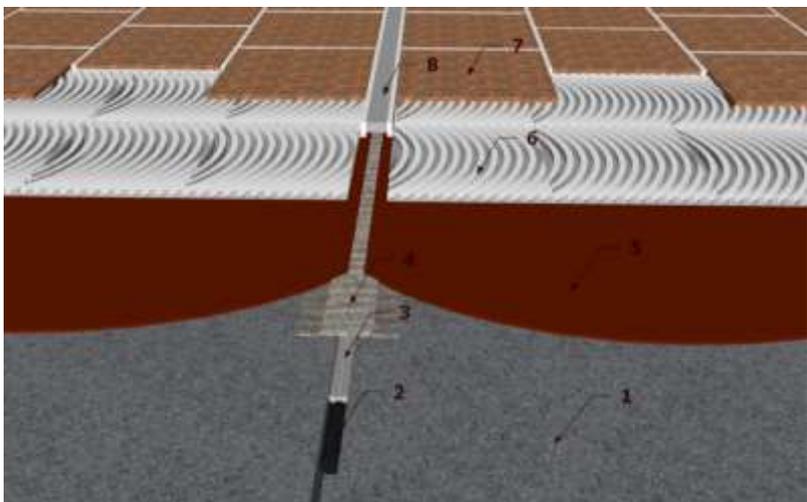


**KEYS:**

1. Concrete substrate
2. **WINJOINT BAND**, joint cover strip
3. **WINGRIP BITUMINOSO**
4. Tile Adhesive
5. New flooring
6. Pre-shaped structure.

Use the following system to seal **joints more than 1cm wide**: **WINJOINT FOAM** (compressible polyethylene foam backer rod), **WINJOINT SEAL** (polyurethane sealant) and **WINJOINT BAND**, as described below:

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

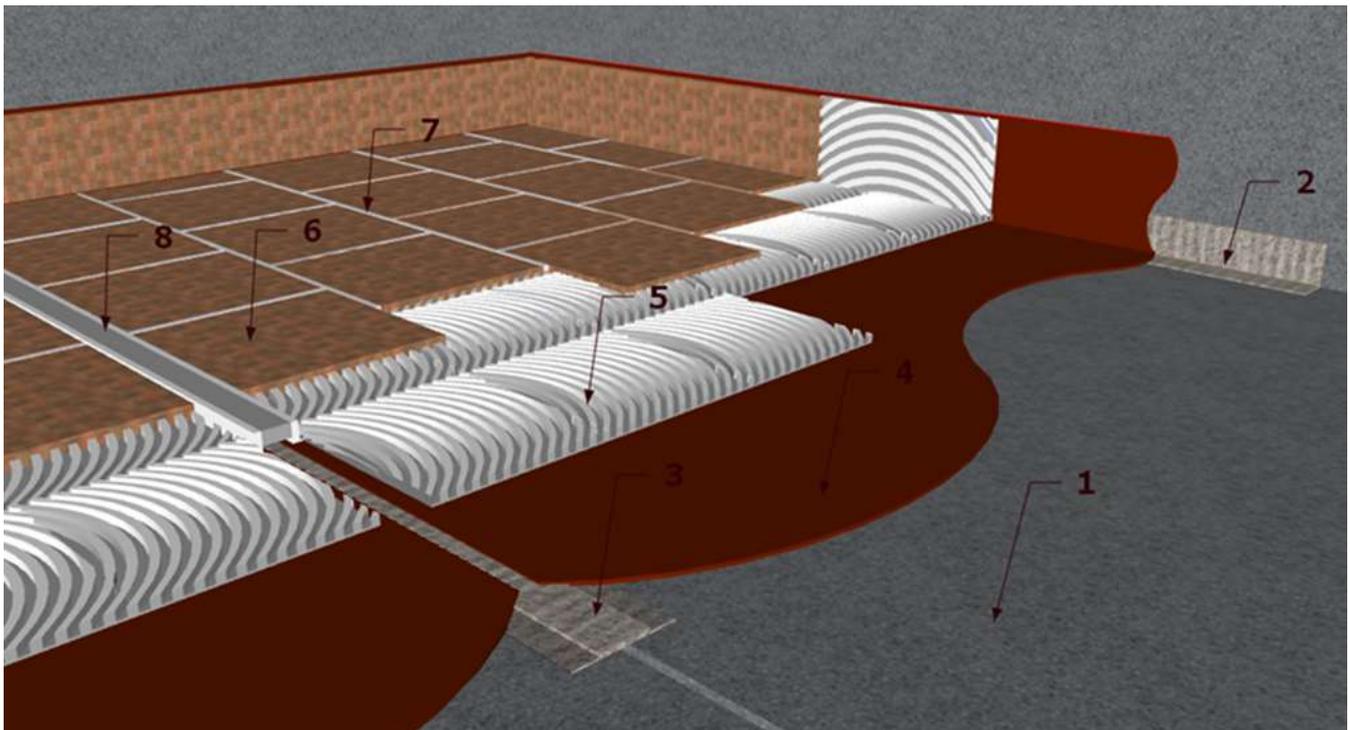


**KEYS:**

1. Concrete Substrate;
2. **WINJOINT FOAM**, compressible polyethylene foam backer rod
3. **WINJOINT SEAL**, polyurethane sealant
4. **WINJOINT BAND**
5. **WINGRIP BITUMINOSO**;
6. Tile Adhesive
7. New flooring
8. Pre-shaped structure.

## APPLICATION

Before starting the application, mix the product to homogenize it. The product is ready to use and can be applied by roller, paintbrush, airless gun. Apply WINGRIP BITUMINOSO in one coat and without using any primer. To ensure waterproofing, apply WINGRIP BITUMINOSO in a continuous and uniform layer, visible from the intense black color. The application of the tile adhesive over the surface covered with WINGRIP BITUMINOSO, must be done after minimum 7 hours.



### KEY:

1. Concrete substrate
2. **BC SEAL BAND**
3. **WINJOINT BAND**
4. **WINGRIP BITUMINOSO**
5. Tiles Adhesive
6. New floor
7. Cementitious grouts
8. Pre-shaped structure.

## WARNING

**WINGRIP BITUMINOSO** must be applied in environmental conditions suitable to guarantee its full drying as soon as possible. Therefore **WINGRIP BITUMINOSO** must be applied and fully cured without the presence of water generated from rain, fog, and frost or from other external sources. Do not apply the product on supports with hidden humidity. Before applying **WINGRIP BITUMINOSO** on concrete, ensure that the concrete support is fully cured (usually 28 days after casting, although when certain additives or special cements are used in the concrete mix the curing time for the concrete may be shorten), and there is no hidden humidity contained in the structure.

Do not add any additive, solvents or water.

Do not use the product if the packaging is damaged.

We strongly suggest testing a mock-up sample in order to observe the adhesion to the support surface and the drying time, and, if still in doubt with anything, always contacting our Technical Department with questions or concerns.

For vertical applications, it is advisable using covers which do not weigh more than 25 kg/m<sup>2</sup>.

## CONSUMPTION

### HORIZONTAL APPLICATION

1 gallon/100 sq.ft. (500 g/m<sup>2</sup>) when applied over existing floors.

2.02 gallons/100 sq.ft. (1 kg/m<sup>2</sup>) over concrete.

### VERTICAL APPLICATION

0.81 gallons/100 sq.ft. (400 g/m<sup>2</sup>) over existing coverings including tiles.

1.61 gallons/100 sq.ft. (800 g/m<sup>2</sup>) over concrete.

## PACKAGING

4.3 gallons per pail. Weight 44.09 lbs. (20 kg)

## STORAGE

The product in its original and undamaged packaging has a shelf time of 12 months. Please store it at temperatures between 41F and 95F (5°C and 35°C)

## SAFETY INSTRUCTION

### PRECAUTIONS

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

### ECOLOGY

Do not dispose the product and/or empty containers in the environment. Consult the most recent Safety Data Sheet for further information about proper disposal.

## TECHNICAL FEATURES

### PRODUCT FEATURES

Aspect	Liquid-cream
Color	Dark Brown (Black when cured)
Specific weight at 68F (20°C)	10.18 lbs./gallon (1.22 g/cm <sup>3</sup> )
pH	8.5 ± 0.5
Brookfield viscosity at 68F (20°C)	3000 ± 500

Test Method	Result	Requirement
Water Absorption (ASTM D 471) after 7 days immersion	≤11%	≤20%
Crack-bridging (EN 14891/ISO 13007-5) (+23°C)	1,96 mm	≥0,75 mm
Crack-bridging (EN 14891/ISO 13007-5) (+5°C)	1,82 mm	≥0,75 mm
Water permeability (EN 14891/ISO 13007-5)	No permeability	No permeability

#### Tensile adhesion strength according to EN14891/ISO 13007-5 Initial (after 28 days):

Adhesion to concrete support	≥123 psi (0,85 N/mm <sup>2</sup> )	≥73 psi (0,50 N/mm <sup>2</sup> )
Adhesion to the support on tile	≥145 psi (1,00 N/mm <sup>2</sup> )	≥73 psi (0,50 N/mm <sup>2</sup> )

#### Tensile adhesion strength according to EN14891/ISO 13007-5 after water immersion (after 28 days):

Adhesion to concrete support	≥188 psi (1,30 N/mm <sup>2</sup> )	≥73 psi (0,50 N/mm <sup>2</sup> )
Adhesion to the support on tile	≥152 psi (1,05 N/mm <sup>2</sup> )	≥73 psi (0,50 N/mm <sup>2</sup> )

#### Tensile adhesion strength according to EN14891/ISO 13007-5 after frost-defrost cycles (after 28 days):

Adhesion to concrete support	≥123 psi (0,85 N/mm <sup>2</sup> )	≥73 psi (0,50 N/mm <sup>2</sup> )
Adhesion to the support on tile	≥101 psi (0,70 N/mm <sup>2</sup> )	≥73 psi (0,50 N/mm <sup>2</sup> )

#### Adhesion to the support (EN14891/ISO 13007-5) after thermal shock after 28 days

Adhesion to concrete support	≥116 psi (0,80 N/mm <sup>2</sup> )	≥73 psi (0,50 N/mm <sup>2</sup> )
Adhesion to the support on tile	≥104 psi (0,72 N/mm <sup>2</sup> )	≥73 psi (0,50 N/mm <sup>2</sup> )

#### Adhesion to the support (EN14891/ISO 13007-5) after contact with calcium hydroxide after 28 days

Adhesion to concrete support	≥125 psi (0,86 N/mm <sup>2</sup> )	≥73 psi (0,50 N/mm <sup>2</sup> )
Adhesion to the support on tile	≥110 psi (0,76 N/mm <sup>2</sup> )	≥73 psi (0,50 N/mm <sup>2</sup> )

### Volatile Organic Compounds Emission

Parameter	Max. allowed concentration ( $\mu/m^3$ )
TVOC after 3 days	$\leq 750$
TVOC after 28 days	$\leq 60$

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\_2

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.