



## DESCRIPTION OF THE PRODUCT

WINGLUE is a bond based on bitumen substance modified with synthetic polymers for bituminous membranes, insulating panels and expanded glass panels. The product is fully free from organic solvents, so must it has no environmental impact.

WINGLUE has obtained the **EC1 PLUS** brand, which identifies EMICODE certified products: building products with very low emissions of volatile organic compounds (VOCs) and semi-volatile ones.

## APPLICATION FIELDS

WINGLUE is a bond suitable for the horizontal laying and vertical sides within 40-50 cm height, without mechanical fixing, of bituminous membranes and insulating panels, when we a cold bonding system is needed. Used for getting total adhesion on concrete surfaces, cementitious screeds, wood, on both existing and new smooth and slated bituminous membranes and on insulating panels.

In order to get total adhesion of the waterproofing layer, we recommend the use of bituminous membranes sanded on both sides or, in any case, for self-protected membranes, with the bonding face treated by sandblasting.

WINGLUE complies with UNI 11442 "Criteria for the Design and Execution of Continuous Roofing Systems" in the case of cold-bonding constraint on a (or part of) roofing system.

## SURFACE PREPARATION

WINGLUE has very good impregnating performance; however it is advised to accurately clean the support to eliminate: dust, crumbly parts and foreign substances. The application must be made on dry surface; on the contrary drying time will be hugely slowed down.

## PRECAUTION

The product must be applied on fully dry surfaces at temperatures between +5°C and + 35°C. Therefore do not apply the product on frost surfaces or subject to night chill or with rainy weather.

## WARNING

No additives needed.  
Do not use if the packaging is damaged.  
Do not add any solvent nor water.

## APPLICATION

WINGLUE must be applied by roller, brush working to ensure the application of an appropriate and constant layer.

The product is ready to use and must absolutely not be diluted with water or other solvents.

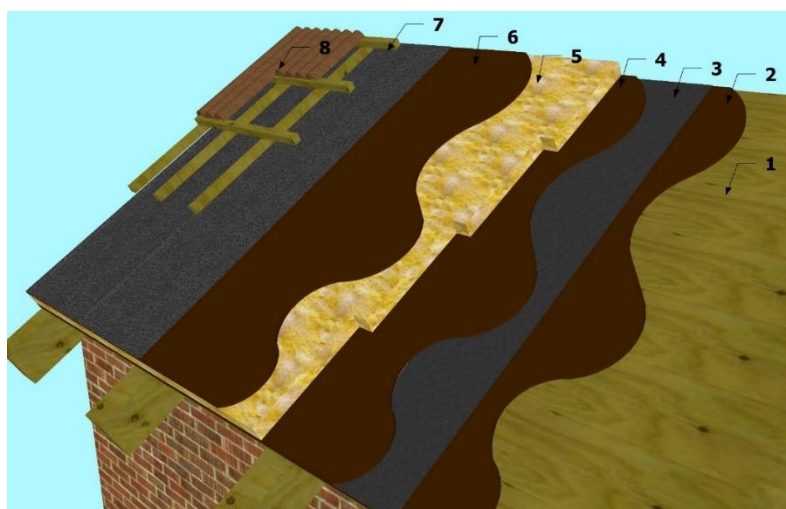
Before starting the assemblage of the bituminous membrane, please wait that the product is fully dust dry to achieve the optimal bonding strength. This condition can be simply checked by touch, verifying that, albeit water has evaporated, WINGLUE achieved high tack strength that it will later keep in time.

The time necessary to achieve superficial drying depends on the porosity of the support and on the weather conditions. Generally, with low-porosity support at 20°C, the membrane can be applied after 90 minutes.

When supports are highly porous at 20 °C, the membrane application can be made also after 30 minutes. Due to the high range of supports and environmental conditions, we suggest to check by means of a test the time necessary to overlap the membrane.

The sealing of bituminous membrane overlapped parts can be made by WINSEAL.

In case of sealing of insulating panels, the max. allowed size is 125x125cm.



### KEY:

1. Wood board
2. **WINGLUE** for vapour barrier bonding.
3. Vapour barrier.
4. **WINGLUE** for insulating panels bonding.
5. Insulating panels
6. **WINGLUE** for bonding under-tile membrane
7. Under-tile bituminous membrane
8. Battens and roof tiles.

## CONSUMPTION

- 0.500-0.600 kg/m<sup>2</sup> for non-porous and undamaged supports (membrane, panels)
- 0.600-0.750 kg/m<sup>2</sup> depending on unevenness of supports.

## PACKAGING

5-20 kg pails.

## STORAGE

The product in its undamaged packaging and stored in a dry and protected place has 12 months of life. No frost-proof. Please store it at temperatures between +5 and 35 °C.

## 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

### PRODUCT FEATURES

LOOK:	Fluid, viscous
COLOUR	Brown (black once dried)
PH	11 ± 0.5
DUST DRY TIME (20°C)	90 minutes
DENSITY AT 20°C (g/cm <sup>3</sup> )	1.08
SOLID CONTENT (%)	70
CONSUMPTION PER kg/m <sup>2</sup>	0.500 -0.750 kg/m <sup>2</sup>
MIN. TEMPERATURE OF APPLICATION:	+ 5°C

### OPERATIONAL PRODUCT PERFORMANCES

<b>Adhesion Winglue + Insulating Panels</b>	Constant delamination of insulating panels observed.
<b>Adhesion Winglue + bituminous membranes</b>	Average Value: 1.28 MPa

### PHYSICAL FEATURES ASTM D 3747

HEAT TEST 1 panel 4"x 4"x 1/16" Cond. 48h @ 73.6 ± 3.6°F	ASTM D 2939	PASS	After the test, the emulsion do not show any bubble, detachment.
ADHESIVE STRENGTH 2 specimens; 2.0g 2"x 2" (ASTM C 208) Cure 24h @room temperature (72±3°F) Test vertical with 5.0lb mass for 2h Visual inspection for "loss of bond"	ASTM D 3747	PASS	None

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### VOC emission

Parameter	Limit content ( $\mu/m^3$ )
TVOC after 3 days	≤ 750
TVOC after 28 days	≤ 60

Tests performed by the EUROFINS institute according to EN 16516, ISO 16000-3-6-9-11 and ASTM D5116-10 regulations, 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 update said data sheets without prior notice. Clients are kindly requested to verify that they are in possession of the current edition.