DESCRIPTION OF THE PRODUCT

Water-based, white-coloured liquid elastomeric waterproofing membrane with exceptional resistance and durability characteristics. Ideal for large surfaces. Thanks to its reaction to external fire, it can be used to waterproof and protect substrates where a B_{roof} T2 fire reaction class is required.

APPLICABLE REGULATIONS

WINGUM PLUS H_2O meets the following requirements:

- Complies with **EAD** guideline **030350-00-0402 (formerly ETAG 005)**: liquid applied roof waterproofing;
- Complies with the external fire performance class **B_{Roof} T2** in accordance with UNI EN 13501-5

USE FIELDS

The product is suitable for the protection and waterproofing of terraces and flat roofs. It can be applied on substrates with a density of ≥15kg/m^3 such as: EPS thermal insulating panels, wood, fibre cement, cement substrates, concrete, metal surfaces, even oxidizable ones, and damaged bituminous polymer membranes.
It is used where there is a need to improve thermal bridges and lower the heat radiated by the sun with consequent energy-saving in conditioning of buildings and a considerable energy increase of solar and photovoltaic panels.
Its special formulation allows high flexibility, stable even at very low temperatures without being affected over time. The product is normally walkable.

SURFACE PREPARATION

Thoroughly clean the support to remove dust, crumbling parts, foreign or non-sticky substances. On crumbling substrates, it is recommended a preventive application of **WINFIX CONCRETE**, to promote adhesion. For floor grinding use **WINLIVEL**, self-levelling compound for irregularities from 1 to 15mm or **WINLIVEL RAPID**, quick-drying self-levelling compound for irregularities from 1 to 20 mm. For a new screed, use **WINPLAN 370**, a quick-drying screed or **WINPLAN PRO**, quick-drying screed with low water absorption. Check the subfloor for moisture to avoid the formation of bubbles due to vapour pressure. An effective method, if you do not have suitable tools, may be to apply a sheet of polyethylene sheet sealed with adhesive tape on a part of the surface exposed to the sun, checking for condensation after 24 hours. If there is no condensation, proceed with **WINGUM PLUS H_2O REFLEX Broof T2**, otherwise, wait until completely dry.

ADVICE

Do not add any additive.

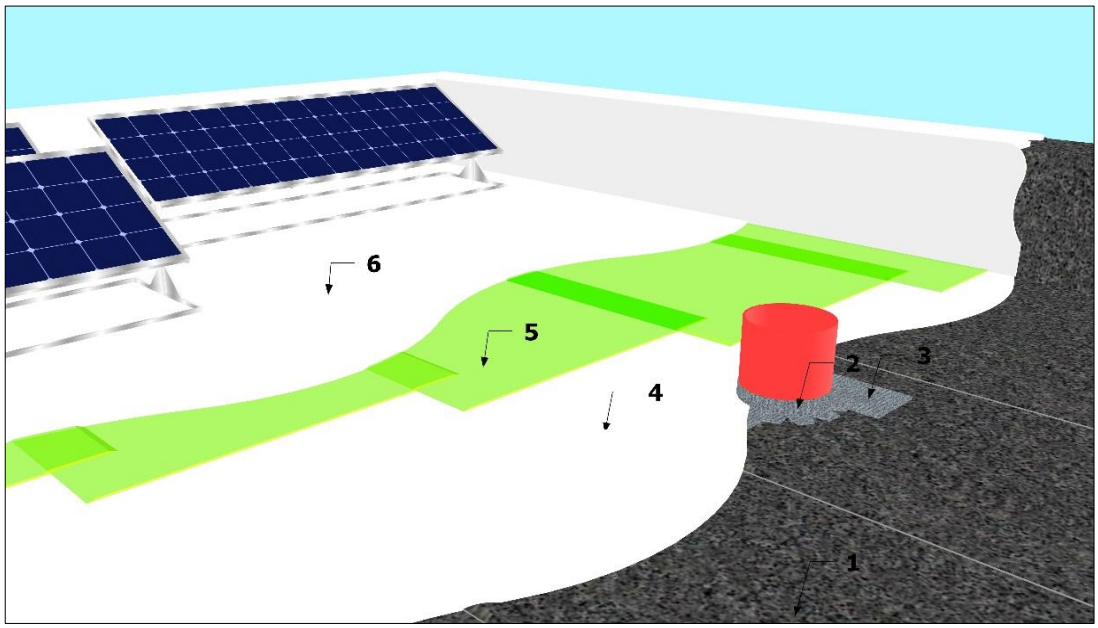
Do not use the packaging if damaged.
Do not add water nor solvents.

WARNING

In case WINGUM PLUS H_2O REFLEX B_{Roof} T2 is applied to a bituminous membrane, the latter must have undergone at least 180 days of oxidation before the product is applied. Apply WINGUM PLUS H_2O REFLEX B_{ROOF} T2 at temperatures between +5°C and +35°C. Protect from water, rain, and snow in the first 24 hours after application. Do not apply in presence of high night humidity.

APPLICATION

The product is ready to use and does not need to be diluted. Mix briefly before application. Apply the product on a dry and clean substrate with roller, brush, or airless pump.
Apply **WINGUM PLUS H_2O REFLEX B_{ROOF} T2** (about 1/3 of the material to be used) on uniform coat on the substrate to be treated evenly, lay over the WINTECHNO MAT, with the help of a light roller pressure ensure the adherence of the mat to the liquid membrane. Wait until completely dry (18-24 hours), then apply the second coat of WINGUM PLUS H_2O REFLEX B_{Roof} T2 until the consumption indicated in the technical data sheet is obtained.

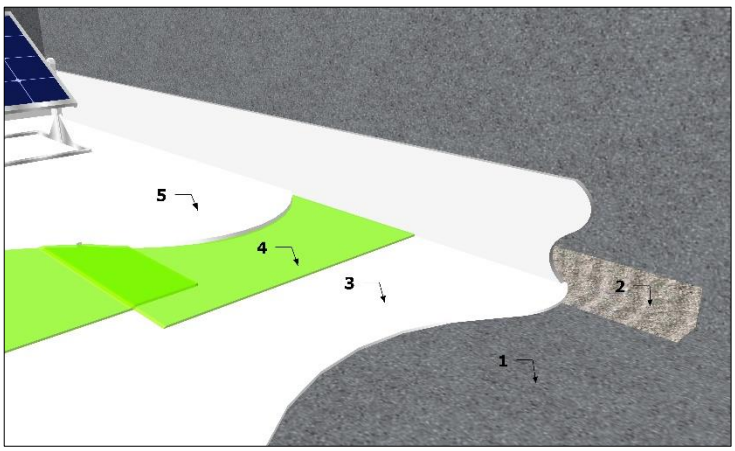


KEYS:

1. Old bituminous membrane;
2. Restoration of raised overlaps using **WINSEAL**;
3. Restoration of depressions using **WIN BITUROOF**;
4. First coat of **WINGUM PLUS H_2O Broof T2**;
5. **WINTECHNO MAT** 70g/m² TNT reinforcement
6. Second coat of **WINGUM PLUS H_2O Broof T2**.

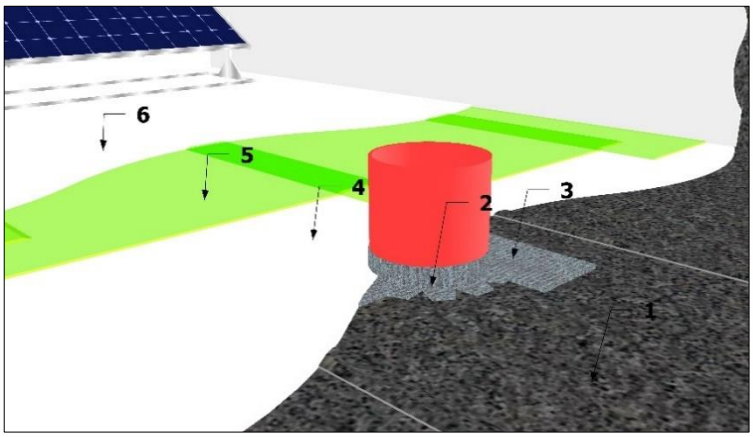
To preserve waterproofing function, apply BC SEAL BAND waterproofing adhesive tape on the perimeter edges of the surface to be treated. For drains, ventilation pipes, aerators etc. use BC SEAL PAD, waterproof self-adhesive butyl square pad.

Perimeter angle treated with BC SEAL BAND



KEYS:
1. Structural substrate/screed
2. **BC SEAL BAND;**
3. First coat of **WINGUM PLUS H_2O REFLEX Broof T2;**
4. **WINTECHNO MAT;**
5. Second coat of **WINGUM PLUS H_2O REFLEX Broof T2**

Roof vent treated with BC SEAL BAND and BC SEAL PAD

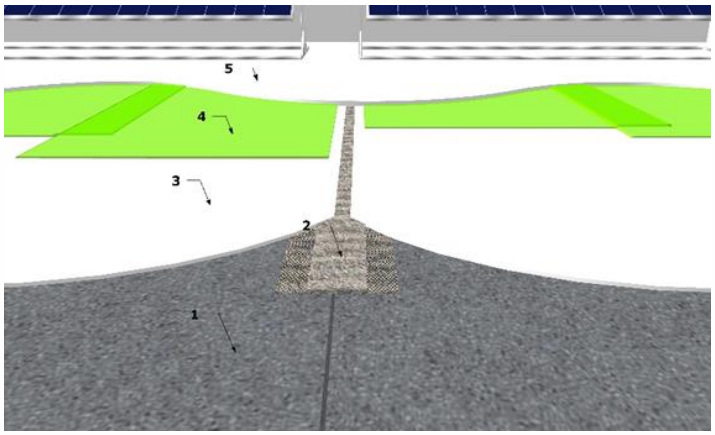


KEYS:
1. Bituminous membrane;
2. **BC SEAL BAND;**
3. **BC SEAL PAD;**
4. First coat of **WINGUM PLUS H_2O REFLEXBroof T2;**
5. **WINTECHNO MAT;**
6. Second coat of **WINGUM PLUS H_2O REFLEX Broof T2.**

SURFACES WITH JOINTS

Joints **up to 1cm** wide should be sealed using WINJOINT BAND (elastic waterproofing band, made of rubber and polyester fabric, suitable for waterproofing joints) as described below: After creating new joints or restoring existing ones, apply WINGUM PLUS H_2O REFLEX B_{roof} T2 laterally to the joint and for a width that is greater than the width of the joint cover.
Apply the joint cover by adhering perforated side strip to the freshly pre-treated area with WINGUM PLUS H_2O B_{roof} T2. Once dry, the product can be completely covered with the final coat of WINGUM PLUS H_2O B_{roof} T2.

Detail of joints up to 1cm wide

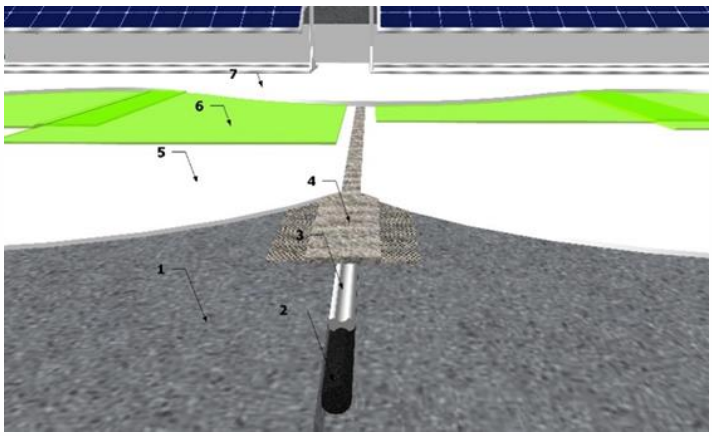


KEYS:
1. Structural substrate/screed;
2. **WINJOINT BAND;**
3. First coat of **WINGUM PLUS H_2O REFLEX Broof T2;**
4. **WINTECHNO MAT;**
5. First coat of **WINGUM PLUS H_2O RTEFLEX Broof T2;**

Sealing of joints up to 1cm wide

Joints wider than 1cm must be sealed using a system consisting of **WINJOINT FOAM** (compressible polyethylene foam cord), **WINJOINT SEAL** (polyurethane sealant) and WINJOINT BAND as described below:
After creating new joints or restoring existing ones, insert **WINJOINT FOAM** into the joint to the desired depth and then extrude **WINJOINT SEAL** along the entire length of the joint. After the sealant has dried, apply **WINJOINT BAND** as described above.

Joint detail wider than 1cm



KEYS:
1.Structural substrate/screed
2. **WINJOINT FOAM**
3. **WINJOINT SEAL**
4. **WINJOINT BAND**
5. First coat of **WINGUM PLUS H_2O REFLEX Broof T2**
6. **WINTECHNO MAT**
7. Second coat of **WINGUM PLUS H_2O REFLEX Broof T2**

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DRYING TIMES (at 20 ° C)
The product is dry to the touch 12 hours after application. 24 hours after the application of the last coat, it is waterproofing and resistant to stagnation.
After 48 hours from the last coat, it acquires the mechanical resistance necessary to be walkable. The above times may vary depending on temperature and humidity.

CONSUMPTION
2,0-2,2 kg/m² in two coats with WINTECHNO MAT in between.

PACKAGING
5-10-20 kg buckets.

STORAGE
The product in its undamaged packaging and stored in a dry and protected place has a stability of 24 months. Protect against frost. Store at temperatures between between +5°C and +35°C.

SAFETY INSTRUCTIONS

PRECAUTIONS
For information about safety, the 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 dispose 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

Features	Standard	Results
Look	-	Fibred fluid paste
Colour	-	White, grey, red, green
Specific weight at 20°C	EN ISO 2811-1	1.45 ± 0.05 g/cm³
Solid content	UNI EN ISO 3251	75 ± 3 %
Brookfield viscosity at 20°C	UNI EN 8490	18,000 ± 2000 cps

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OPERATIONAL PRODUCT PERFORMANCES

Features	Standard	Results
Operational temperature:	-	From -20°C to +80°C
Reaction to fire	(UNI EN 13501-5)	B_{roof} T2
Impermeability	(UNI EN 1928)	≥ 1.0 bar
Tensile strength	(UNI EN ISO 527-1)	≥ 1.5 N/mm²
Elongation at break	(UNI EN ISO 527-1)	≥ 150 %
Accelerated ageing	(UNI EN 1062-11)	No break nor delamination
Tensile strength after ageing	(UNI EN ISO 527-1)	≥ 2. N/mm²
Elongation at break after ageing	(UNI EN ISO 527-1)	≥ 100
Adhesion strength on concrete	(UNI EN 15412)	≥ 1.0 N/mm²
Water absorption	(ASTM D 471)	≤14% on weight

Results according to ASTM E903-96, ASTM C1371 and ASTM E 1980

Solar reflection index "SRI"	> 107%
Solar reflection factor "ρ_e"	0.85
Solar absorption factor "a"	0.151
Emissivity "ε"	0.919

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