

TYTAN PROFESSIONAL WINS Internal Liquid Foil 2,4 l anthracite

10045822, 10045170, 10047377

TYTAN WINS internal liquid window foil is a one-component, ready-to-use product that creates a low vapor permeability coating (zone 3) that prevents moisture from migrating to the window gap from the inside of the room, which prevents foam deterioration (zone 2). It is chemically neutral and adheres to most building materials. Creates a flexible and low vapor permeable coating. Thanks to its flexibility, it is ideal for sealing joints between frames and reveals in WINS systems, where small displacements usually occur. The coating in combination with the TYTAN WINS Flex insulating foam and the TYTAN WINS external liquid foil creates a water and wind resistant connection between the reveal and the door frame, preventing energy loss and the possibility of moisture and fungal growth of the joint. WINS internal liquid foil for sealing windows is reinforced with polymer fibres.



BENEFITS

- ready for use
- very good adhesion to most building materials
- highly flexible, permanently elastic
- forms an air and vapor tight elastic membrane after drying
- odourless and chemically neutral
- it can be painted and plastered after drying
- possibility of joint repair using the same material
- does not flow down from vertical surfaces
- for indoor use

RECOMMENDED USES

- sealing the joint between the window joinery and the opening from inside the rooms
- window and door joints - sealing joints of door and window frames: inside application
- walls, cracks, gaps
- connection construction and building elements subjected to tensions
- wall-floor and wall-ceiling connections

NORMS / ATESTS / CERTIFICATES

The product meets requirements of:

- EMICODE: EC1 PLUS
- ITB-KOT-2020/1350

Additional information

- Polish Standard PN-EN 12591:2007 "Windows and doors - terminology"
- Polish Standard PN-EN 1027:2016-4 "Windows and doors. Watertightness. Test method".
- Polish Standard PN-EN 12208:2001 "Windows and doors - Watertightness - Test method".
- Polish Standard PN-EN 12207:2017-01 "Windows and doors - Watertightness - Test method".
- Polish Standard PN-EN 13788:2013-05 "Humidity and heat properties of construction components and elements of the building. Internal surface temperature necessary to avoid critical surface humidity and interlayer condensation. Calculation methods".
- PN-EN 6946 "Construction components and elements of the building. Thermal resistance and heat transfer coefficient. Calculation methods"
- PN-EN ISO 14683 "Thermal bridges in the building. Linear heat transfer coefficient".

TECHNICAL DATA

Uncured - tested at 23°C and 50% relative humidity	Value
Skin formation time [min]	160
Curing rate [mm/24h]	1,3 - 1,5
Density [g/cm ³]	1,30 - 1,32
Run-off from vertical surfaces [mm]	0
Cured - tested after 2 weeks at 23°C and 50% relative humidity	Value

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Module at 100% elongation (ISO 37) [MPa]	1,0 - 1,5
Elongation at break (ISO 37) [%]	140
Vapor permeability - equivalent diffusion resistance coefficient factor Sd [PN-EN 12572-2016] [m]	30
Volume change (ISO 10563) [%]	30 - 35
Adhesion to surface ASTM 903N/m	Value
Aluminium	1000
Brick	2500
Hard PVC (polyvinyl chloride)	500
Adherence to concrete [N/m]	700
Silicate	1400
Adhesion to wood (pine) [MPa]	1600
Adhesion to foamed polystyrene	500
PU Foam	700
Adhesion to ACC [ASTM D903] [N/m]	2500
Conditions of application	Value
Surface temperature [°C]	5 - 30
Container temperature [°C]	5 - 30
Application temperature [°C]	5 - 30
Storage temperature [°C]	5 - 30
Temperature resistance after curing [°C]	-20 - 80
Adhesion of construction materials for liquid tape (PN EN ISO 4624)	Value
Adhesion putty plaster to the product [N/2500 mm ²]	200
Adhesion mineral plaster to the product [N/2500 mm ²]	50
Adhesion cementitious adhesive to styrofoam to the product [N/2500 mm ²]	240
Colour	Value
Anthracite	+

METHOD OF USE

Prior to application, read safety instruction presented in MSDS.

Surface preparation

- The Internal Liquid Foil for Window presents ideal adhesion to typical construction materials, such as: PU foam, brick, concrete, plaster work, wood, metals, styrofoam, hard PVC and rigid PUR.
- The working surface should be cleaned and degreased, if necessary primed.
- A slightly moist surface is allowed.
- Secure surfaces exposed to accidental contamination (using for example masking tape).
- In the case of application for window gaps, it is required to fill with PU Foam or expandable foam tape.

Product preparation

- If product is too cold should be brought a warm room leaving it for at least 24 h. The optimal temperature of the product packaging is +20°C.
- If the product is not homogeneous after opening the packaging, it should be mixed thoroughly to obtain a uniform consistency.

Application

- Work in protective gloves.
- After application and full foam PU Foam hardening cut off the excess foam.
- To protect against dirt, cover the window frame with masking tape, so that the coating overlaps min 1-2 mm on the window.
- Apply Liquid Foil for Window undiluted and evenly by means of a suitable a special flexible spatula or wall paint brush in the desired layer thickness on the substrate.
- Vertical gaps should be filled with Liquid Foil for Window starting at the bottom and moving up.
- Min. 2 mm thickness for 1 layer is recommended.
- If necessary applicable in several layers.
- To ensure full tightness, apply the product from 0,5 cm to 1 cm with a spatula on the wall and window frame.
- Apply a second layer, depending on the porosity of the substrate and conditions (temperature, humidity).
- Liquid foil in sausages (600 ml pack) needs to be applied with a special squeeze gun to the surface or directly into the joint. Then use a flexible spatula to spread the product in an even layer about 2 mm thick.
- If a masking tape is used, it should be removed immediately after the application of the sealant has been completed.
- The curing process is dependent on temperature and humidity.
- Liquid Foil for Window can be cleaned before hardening with water.

- Do not freeze until fully cured (the temperature during curing cannot be lower than +5°C).

Works after completion of application

- Before curing, product should be removed from substrates and tools.
- After completion of work, the applicator and tool should be thoroughly cleaned.

Remarks / restriction

- Static joints, gaps or seals up min. 10mm, max. 30 mm.
- Not suitable for expansion and dilatation joints.
- The works should be carried out in accordance with the technical documentation prepared for a specific object, in accordance with the provisions of the law, taking into account the recommendations of expert opinions and the technical characteristics of the product,
- Curing time depends on temperature and humidity.
- Avoid prolonged contact with water and rain until the coating cures.
- Avoid freezing until fully cured.
- The product reaches full properties after 72 hours.
- Install the joinery in accordance with the manufacturer's instructions, paying particular attention to the correct positioning of the anchors.
- Do not apply Liquid Foil on bituminous surfaces, natural rubber, chloroprene or construction materials that may exude oils, plasticizers or solvents.
- Do not apply Liquid Foil on sensitive metal surfaces, such as Copper and its alloys, because it will discolor the surface.
- Before painting it is recommended to conduct a trial test, especially in a case of solvent-based paints.
- Liquid Foil is not intended for contact with food or medical applications.
- Product is packing in 600 ml sausage and 2,4 l bucket.
- Capacity in running metres: 600 ml (10 running metres), 2.4 l (40 running metres) for a gap 30 mm wide.
- Performance values are dependent on layer thickness and environmental factors such as temperature, humidity and substrate type. Performance values were calculated in the standard window O32 / O33 (dimensions: 1165 mm x 1435 mm), for a layer width of 30 mm and a thickness of 2 mm.

ADDITIONAL INFORMATION

All given parameters are based on laboratory tests compliant with internal manufacturer's standards and strongly depend on product hardening conditions (c.a., ambient, surface temperature, quality of used equipment and skills of person applying the product).

TRANSPORT / STORAGE

Do not freeze. Do not store or transport at minus temperatures.

Transport and storage from + 5°C up to +30°C.

The product should be transported and stored in dry conditions and in original, undamaged packaging at a temperature of +5°C to +25°C.

Storage in temperature exceeding +30°C shortens the shelf life of the product, adversely affecting its parameters.

Protect from frost and direct sunlight.

After opening, close the packaging tightly and use the remaining contents as soon as possible.

The product so stored has a shelf life of 12 months.

The product is packed in foil with a capacity of 600 ml or in PE buckets to a weight of 2, 4 l.

Detailed information on the conditions of transport is given in the Material Safety Data Sheet (MSDS).

SAFETY AND HEALTH PRECAUTIONS

For detailed information find Material Safety Data Sheet available at producer upon request.

All written or oral information, recommendations and instructions are given according to our best knowledge, tests and experience, in good faith and in compliance with manufacturer's principles. Each user of this material will make sure in every possible way, including verification of the final product in proper conditions, about suitability of the supplied materials for their intended purposes. The manufacturer is not liable for any losses incurred due to inaccurate or erroneous application of the manufacturer's materials.