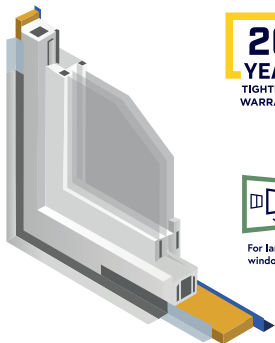


SYSTEM DESCRIPTION



20
YEAR
TIGHTNESS
WARRANTY



INNOVATION FOR NEW AND DEMANDING INSTALLATIONS

WINS Flex is highly flexible, highly resistant to extreme weather conditions 3-layer insulation and sealing system for windows, not requiring any special preparation of the substrate. It protects even the largest windows from deformation, perfectly transmits all the building's vibrations and it retains its tightness even under heavy loads.



Air tightness



Extreme weather conditions resistance



Water vapour diffusion



UV resistance



Thermal and acoustic insulation



Protection against mould and fungal



Flexibility

| THE FEATURE OF THE WINDOW - REVEAL JOINT | REFERENCE DOCUMENT | CLASS/LEVEL/VALUE |
|--|--------------------|---|
| Resistance to rainwater penetration | EN 1027 | pressure 1200 Pa |
| Resistance to rainwater penetration | EN 12208 | class E1200 |
| Air permeability | EN 1026 | pressure 600 Pa |
| Air permeability | EN 12207 | class 4 |
| Air permeability | EN 12207 | $Q_L \leq 0.46 \text{ m}^3/\text{hm}$ |
| Air permeability | EN 1026 | $a \leq 0.1 \text{ [m}^3/\text{hm}(\text{daPa})^{2/3}]$ |
| Temperature coefficient value f_{Rsi} | EN 13788 | ≥ 0.80 |
| Linear thermal transmittance | EN ISO 14683 | $\leq 0.15 \text{ W/mK}$ |

APPLICATION

Recommended uses

Insulation and sealing of large joinery and window sets in constructions in new buildings:

- ▶ single-layer walls,
- ▶ double-layer walls (ETICS),
- ▶ framed walls,
- ▶ tree-layer walls without the jamb.

Possible uses

Insulation and sealing of joinery in existing buildings.

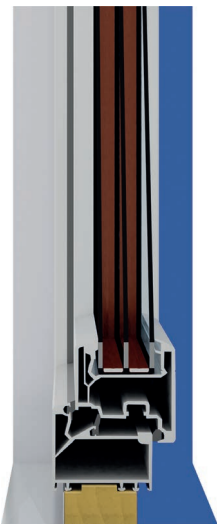


WINS - NEW WINDOW INSULATION STANDARD BASED ON LIQUID FOILS

COMPLIANT WITH:



3 AREAS OF WINDOW INSULATION AND SEALING



| EXTERNAL 1 AREA | Sd | ≤ 2 |
|-------------------------|---------------------------------|----------------|
| | Application temperature | +5°C to +30°C |
| | Minimum coating layer thickness | 1 mm |
| | Minimum gap thickness | 10 mm |
| INSULATION 2 AREA | Thermal conductivity | 0.035 W/mK |
| | Acoustic insulation | 62 dB |
| | Application temperature | -10°C to +35°C |
| | Full cure time | 1.5 h |
| | Yield | to 48 l |
| | Fire reaction class | B2 |
| INTERNAL 3 AREA | Sd | ≥ 30 |
| | Application temperature | +5°C to +30°C |
| | Minimum coating layer thickness | 2 mm |
| | Minimum gap thickness | 10 mm |

External area

External sealing is responsible for protecting the joint between the frame and the reveal against external factors and weather conditions. The sealing function is performed by WINS external liquid foil.

Insulation area

Functional insulation area - is responsible for the required level of thermal and acoustic insulation of the joint between the frame and the reveal. The insulating function is performed by WINS Flex insulating foam.

Internal area

The internal sealing is the actual barrier separating the interior environment from the outdoor environment, preventing uncontrolled air infiltration through the frame to reveal joint. The sealing function is performed by WINS internal liquid foil.

WINS FLEX SYSTEM PRODUCTS

WINS external, vapour-permeable liquid foil

WINS external liquid foil is one-component product. It creates a very flexible film with a creamy texture based on pure acrylic polymers in a water-based emulsion that forms a flexible, waterproof and durable film.

WINS Flex foam

WINS Flex polyurethane insulation foam with very good thermal and acoustic insulation properties. Resistant to mould and fungus formation. Highly flexible foam.

WINS internal, low vapour-permeability liquid foil

WINS internal liquid foil is one-component product. It is chemically neutral and adheres to most construction materials.

CONDITIONS FOR APPLICATION

| | |
|---|--------------------|
| TEMPERATURE | from +5°C to +30°C |
| PACKAGING TEMPERATURE APPLICATOR PACKAGING (OPTIMAL +20°C) | from +5°C to +30°C |
| SUBSTRATE TEMPERATURE | from +5°C to +30°C |

HIGHLY FLEXIBLE



INSTALLATION GUIDE

1. PREPARATION OF THE SUBSTRATE AND WINDOW FRAME INSTALLATION

Clean the substrate with a wire brush from loose and unbound components of the construction material, then dust off with a vacuum cleaner. Large defects of the reveal should be filled with dedicated mortar. Fix the window frame mechanically to the reveal in accordance with the design guidelines of the window manufacturer or RAL technical guidelines. Wet the working surface with water using a suitable sprayer.

2. WINS FLEX INSULATING FOAM APPLICATION IN AREA 2

The recommended can temperature is room temperature. During application, the can should be positioned in the "valve down" position. The foam should always be applied from the bottom in the upwards direction, filling the gap with fresh foam always in 100% of the section, gradually in layers of about 4 cm deep. WINS Flex foam full cure time is 1,5 h (+23°C / 50% RH). When the WINS Flex system foam has completely cured, cut off the excess foam with a sharp knife evenly to the frame surface.

3. WINS FAST LIQUID FOIL APPLICATION IN AREA 3

Before applying the liquid foil, after opening the bucket the product should be stirred. For its application from the bucket use a dedicated Tytan silicone applicator or an appropriate brush. When using liquid films available in 600 ml sausage packs, a suitable manual or electric caulk gun must be used. The anthracite-coloured WINS internal liquid foil should be applied on the internal side and the coating thickness should be min. 2 mm (while wet). The coating should be applied over the entire surface of the cut-off PU foam and should overlap at least 3 mm on the surface of the joinery frame and at least 5 mm on the reveal surface. The full curing time depends on the ambient (air temperature and relative humidity) as well as on the thickness of the liquid foil layer applied.

| AMBIENT TEMPERATURE | CURING TIME RECOMMENDED THICKNESS 2 MM |
|---------------------|--|
| +5°C | > 5 h |
| +23°C | ≈ 2,5 h |
| +30°C | ≈ 2 h |

4. WINS FAST LIQUID FOIL APPLICATION IN AREA 1

Before applying the liquid foil, after opening the bucket the product should be stirred. For its application from the bucket use a dedicated Tytan silicone applicator or an appropriate brush. When using liquid films available in 600 ml sausage packs, a suitable manual or electric caulk gun must be used. WINS external liquid foil should be applied on the external side. White-coloured foil should be applied in one layer of ca. 1 mm (while wet). The external coating should be applied over the entire surface of the PU foam and overlap at least 3 mm on the surface of the joinery frame and at least 5 mm on the reveal surface. The full curing time depends on the ambient conditions (air temperature and relative humidity) and on the thickness of the applied liquid foil layer.

| AMBIENT TEMPERATURE | CURING TIME RECOMMENDED THICKNESS 1 MM |
|---------------------|--|
| +5°C | ≈ 5 h |
| +23°C | ≈ 1 h |
| +30°C | < 1 h |

STORAGE AND TRANSPORTATION

Do not freeze. Do not store or transport at negative temperatures. Transport and storage from +5°C to +30°C. The product should be transported and stored in dry conditions and in original, undamaged packaging at temperatures from +5°C to +25°C. Storage at the temperature exceeding +30°C shortens the shelf life of the product, adversely affecting its parameters. Protect against negative temperature and direct sunrays. After opening, close the package tightly and use the remaining contents as soon as possible. Shelf life of the product stored according to the above guidelines is 12 months.



Fast application



Easy application



For large windows

**20
YEAR**
**TIGHTNESS
WARRANTY**



Air tightness



Extreme weather conditions resistance



UV resistance



Thermal and acoustic insulation



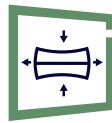
Protection against mould and fungal



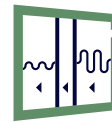
Passive fire protection



For new installations



Flexibility



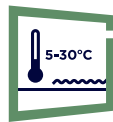
Suppressed vibrations in window gaps



Independently of the joint's width



No frames deformation



Application temperature 5°C - 30°C



Energy efficiency of the building



Indoor air quality



Neutral smell

STANDARDS AND CERTIFICATES

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".

**20
YEAR**
**TIGHTNESS
WARRANTY**

A building project in which WINS systems were used in accordance with the Sealing and insulation standard for joints between the reveal and the frame developed by Selena, carried out by Certified WINS Contractors, may be covered by a 20-year tightness guarantee.



SELENA
GLOBAL EXPERIENCE

Selena S.A.
ul. Wyścigowa 5E, 53-012 Wrocław

CUSTOMER SERVICE

e-mail: scc@selena.com
tel. +48 71/783 83 40,
fax +48 71/783 83 10

TECHNICAL DEPARTMENT

e-mail: wins@selena.com
+48 608 492 111
+48 604 496 777
+48 606 298 463
+48 606 298 445

www.wins.tytan.pl