

# WINS FAST INSULATING FOAM



## PRODUCT DESCRIPTION

The WINS Fast insulating foam is a new generation of high performance polyurethane foam for gun application in turquoise colour. It is an excellent solution for joinery insulation in WINS systems.

It constitutes a part of the 3-layer WINS Fast and WINS Fix window insulation and sealing systems (area 2). It is a perfect solution for insulating the space between the reveal and windows and doors frames, made of wood, metal or PVC. In the WINS Fast and WINS Fix systems it constitutes the filling of the layer n. 2, i.e. the insulation area, and its function in these systems is primarily insulation.

It is recommended for insulation and sealing of joinery in modernised buildings, when replacing windows in the WINS Fast system and in historic buildings - in external walls with the jamb in the WINS Fix system. Its application is possible also in new construction and in all the cases in which it is advisable to accelerate installation works considerably. It adheres well to most building substrates.

It provides fire class B3. Due to the new technology, the working time of the installer can be significantly reduced - the layer of applied foam can be processed as early as approx. 10 minutes after the application (wet application, i.e. when the surface is wetted with water before the application and the foam is wetted immediately after the application at a minimum temperature of +20°C). As the temperature decreases, the curing time of the foams increases.



Ultra fast installation



Completely solidified after 1.5 hrs



High yield over 70l



No frames deformation



Thermal and acoustic insulation



Protection against mould and fungal

## APPLICATION



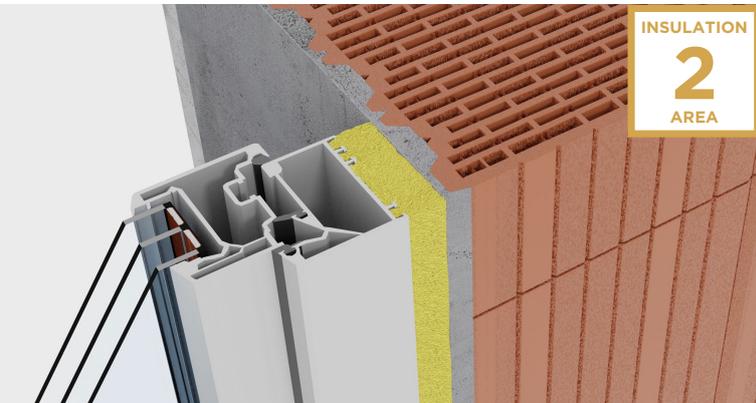
The product is intended for insulating the joints between the frame and the reveal in the area 2. The product has an excellent structure and adheres very well to substrates such as: aluminium, PVC, wood, silicate blocks, cellular concrete, ceramic blocks, bricks, plaster, etc. It protects joints against freezing and provides excellent thermal and acoustic insulation of the joint. It eliminates linear thermal bridges.



## WINS - NEW WINDOW INSULATION STANDARD BASED ON LIQUID FOILS

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## FUNCTIONAL 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. Performance characteristics of the functional insulation area should be ensured in a permanent manner within an economically justified period.

## TECHNICAL PARAMETERS <sup>1</sup>

Colour	turquoise
Yield (free foaming) (RB024)	70-77 l
Yield in gap (RB024) <sup>2</sup>	38-45 l
Secondary foam growth (post-expansion, TM 1010-2012*)	30-50%
Cutting time (TM 1005-2013*) <sup>3</sup>	≤ 10 min.
Full cure time (RB024) <sup>4</sup>	≤ 1.5 h
Thermal conductivity coefficient (RB024)	λ = 0.036 W/mK
Dimensional stability (TM 1004-2013*)	≤ 2%
Acoustic insulation (EN ISO 10140)	63 dB
Flammability class (DIN 4102/PN 13501)	B3/F
Compressive stress at 10% deformation	≥ 20 kPa
Tensile strength perpendicular to the front area	≥ 55 kPa
Shear strength	≥ 30 kPa
Adhesion of foam applied at +5°C to wood, metal and PVC substrates	≥ 65 kPa
Adhesion of foam applied at +30°C to wood, metal and PVC substrates	≥ 65 kPa
Water absorption after 24 hours in the water at partial immersion	≤ 1.0 kg/m <sup>2</sup>

<sup>1</sup> All parameters given are based on laboratory tests and trials in accordance with the manufacturer's internal standards and strongly depend on the curing conditions of the foam (temperature of the can, environment, substrate, quality of equipment used and the skills of the person applying the foam). The given parameters refer to following conditions: can temperature 23°C, air temperature 23°C, substrate temperature 23°C, humidity 50% RH.

<sup>2</sup> The value given for the gap of 30 x 1000 x 35 (width x length x depth [mm]).

<sup>3</sup> The result given for a foam line 6 cm wide and 3 cm high.

<sup>4</sup> The value given for the gap of 60 x 1000 x 60 (width x length x depth [mm]).

\* The manufacturer uses FEICA-approved test methods designed to provide clear and reproducible test results that provide customers with a product with consistent properties.

## DIRECTIONS FOR USE

**Before use read the safety recommendations in the Safety Data Sheet.**

### 1. PREPARATION OF THE SUBSTRATE

The foam adheres well to typical construction materials such as: brick, concrete, plaster, wood, metals, polystyrene, hard PVC and rigid PU foams. The working surface should be cleaned and degreased, it can be wetted with water at application temperature above 0°C. Surfaces exposed to accidental contact with foam should be adequately protected.

### 2. PREPARATION OF THE PRODUCT

A can that is too cold should be brought to room temperature, e.g. by immersion in warm water up to +30°C or by leaving it at room temperature for a minimum of 24 hours. The applicator temperature must not be lower than the can temperature.

### 3. APPLICATION

Wear protective gloves before applying the WINS Fast foam. Shake the can vigorously (10-20 sec. with the valve directed downwards) to thoroughly mix the ingredients, then screw the can to the dispenser. The working position of the can is the "valve downwards" position. The foam should be applied from the bottom in the upwards direction, filling the gap with fresh foam in 100% of the section. In case of joinery insulation, it is not recommended to fill in gaps larger than 3 cm. It is not allowed to fill in gaps larger than 5 cm. In case of application in gaps larger than 3 cm, the application should be done from the bottom upwards, from one wall to the other one alternately, creating a zigzag pattern. If the application is interrupted for more than 5 minutes, the fresh foam applicator nozzle and valve should be cleaned with a polyurethane foam cleaner and the can shaken well before reapplying.

### 4. POST-APPLICATION WORK

Immediately after full curing, the foam should be protected against UV radiation using WINS external liquid foil. After finishing work, the applicator must be thoroughly cleaned. To do so, screw the can with the cleaner onto the applicator and press its trigger until clear liquid flows out.

### CONDITIONS FOR APPLICATION

TEMPERATURE OF THE APPLICATOR PACKAGING (OPTIMAL +20°C)	min. +10°C, max +30°C
AIR AND SUBSTRATE TEMPERATURE FOR APPLICATION	min. +5°C, max +30°C
YIELD (FREE FOAMING)	70-77 l
POST-EXPANSION	30-50%
CUTTING TIME*	10 minutes
FULL CURE TIME	1.5 h

\* The result given for a foam line 6 cm wide and 3 cm high.

## STORAGE AND TRANSPORTATION

WINS Fast foam retains its suitability for use within 12 months from the date of production provided that it is stored in its original packaging in an upright position (with the valve upwards), in a dry place at temperature between +5°C and +30°C. Storage at the temperature exceeding +30°C shortens the shelf life of the product, adversely affecting its parameters.

It is possible to store the product at -5°C, but not longer than for 7 days (excluding transport). It is not allowed to store foam containers at temperatures above +50°C or near to open flames.

Storing the product in a position different from the recommended one may cause the valve to clog. The can must not be crushed or punctured even when completely emptied. Do not store the foam in the passenger compartment of the car. Transport it only in the trunk. Detailed information on transport is included in the Safety Data Sheet (MSDS).

TRANSPORT TEMPERATURE	TRANSPORT PERIOD OF THE FOAM
< -20°C	4 days
from -19°C to -10°C	7 days
from -9°C to 0°C	10 days

## STANDARDS AND CERTIFICATES

ITB-KOT-2018/0521

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".



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, confirmed by tests at ITB, KOT- 2020/1350.

Find out more on [www.wins.tytan.pl](http://www.wins.tytan.pl)



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