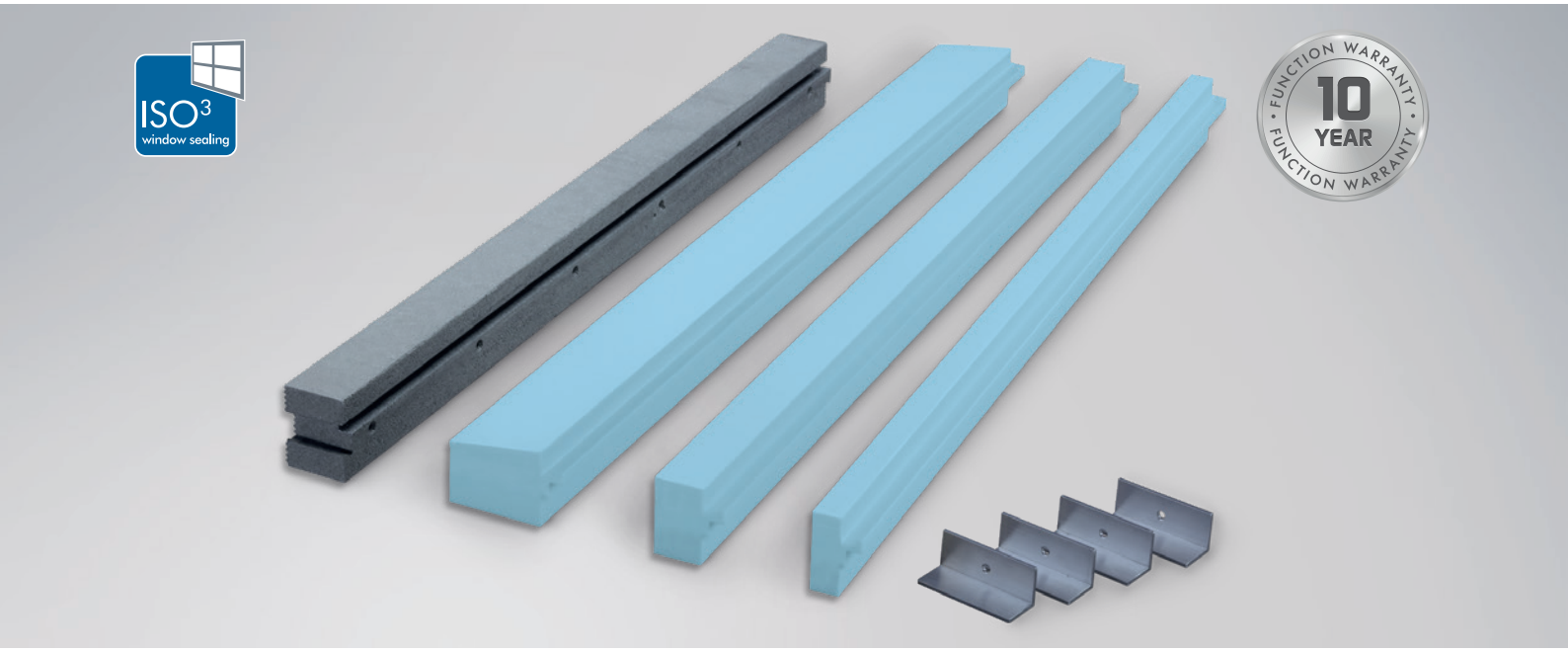
PRODUCT DATA SHEET

IN FRONT OF WALL INSTALLATION SYSTEM ISO-TOP WINFRAMER „TYPE 3“

ISO CHEMIE
Use the blue technology.



PRODUCT DESCRIPTION

The IN FRONT OF WALL INSTALLATION SYSTEM ISO-TOP WINFRAMER „TYPE 3“ is made up of load-bearing, thermally insulating system profiles made of high-compressed THERMAPOR. The excellent thermal conductivity of the moulded parts guarantees perfect integration in the EWIS and optimum Ψ-values (Psi). Thus thermal bridges are optimised and a high degree of insulation achieved in the cavity area. This prevents the risk of mould formation in the connection area around the window opening. The „TYPE 3“ provides a high load-bearing capability and load transfer in one. The high density of 150 kg/m³ not only provides a very good load-bearing capacity for bearing window weights, it is also sturdy enough to transfer all other loads safely to the masonry. The ISO-TOP WINFRAMER SYSTEM PROFILES can be further reinforced using bearing brackets made of aluminium. Tightly fitting console slots have been integrated in the system profiles for this purpose. With large elements in particular, this leaves enough scope for increased loads and fulfilment of the requirements set out in TRAV / DIN 18008-4 and the ETB directive.

APPLICATION

The IN FRONT OF WALL INSTALLATION SYSTEM ISO-TOP WINFRAMER „TYPE 3“ can be used for the installation of windows in the insulating layer. The wind suction, dead and casement loads are absorbed directly by the system profiles and transferred to the load-bearing wall. To achieve this, the system profiles are glued directly to the masonry using the hybrid polymer-based system adhesive ISO-TOP FLEX-ADHESIVE WF and aditionally screwed in place. The mechanical attachment of the window elements is by means of window screws (see ISO-TOP WF FIXINGS).

PRODUCT ADVANTAGES

- extensive individual tests by testing institutes**
- RC2 and RC3 tested for the installation of burglar resistant windows and doors
- optimum integration in EWI systems
- optimisation of the Ψ-value
- simple installation thanks to the dovetail connection
- ideal basis for 3-level-sealing with multi-functional joint sealing strips
- excellent for energy-related building renovation
- complies with the requirements of the Building Energy Act and the recommendations of the RAL “installation guide”
- certified Passive House component
- 10 Year Function Warranty*

* On the conditions of the manufacturer (available on request).

** In front of wall installation systems are currently not subject to any regulation by the DIBt. Approvals such as aBG or abZ must therefore be covered by individual tests. Details on approval as in front of wall installation system for building projects must be obtained individually from the responsible planning office.

GEV-EMICODE EC 1 PLUS very low emission
IMA TESTED
cool, temperate climate
CERTIFIED COMPONENT
Passive House Institute

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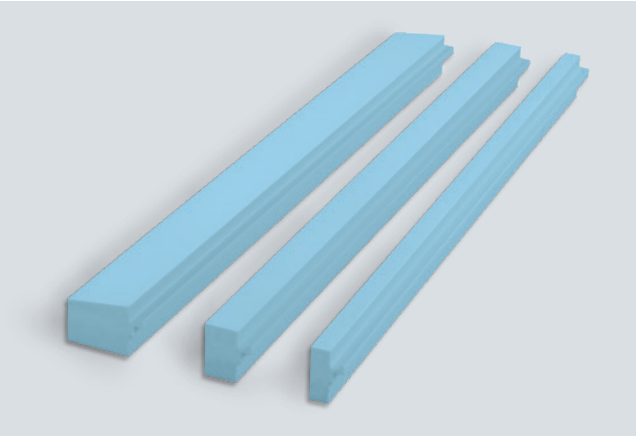
IN FRONT OF WALL INSTALLATION SYSTEM ISO-TOP WINFRAMER „TYPE 3“

SYSTEM COMPONENTS

ISO-TOP WINFRAMER SYSTEM PROFILES

For mounting the window systems in front of the load-bearing wall for a perfect integration into the ETICS or with 2-skin construction, ISO-TOP WINFRAMER SYSTEM PROFILES are available in various dimensions in our product range. With a very high material density of 150 kg/m³ and outstanding properties in terms of load-bearing and thermal properties, the system profiles are ideal for pre-wall installation in single-family and multi-family homes and other building projects. The SYSTEM PROFILES 70/80 and 80/80 are suitable for the installation of windows, for positioning directly in front of the load-bearing wall. In addition to these dimensions, the system profiles are also available with a projection of 100, 120, 140, 160, 180 and 200 mm, each with an overall height of 80 mm. Special dimensions are available on request.

With these dimensions, all standard building applications can be fulfilled. For more stability additional support consoles, made of aluminium, can be inserted into the existing console slots in the system profiles and connected securely to the load-bearing wall during fixing to masonry. The system profiles provide an optimum basis for all-round dealing of the window joint. A GEG (Building Energy Act) and RAL-compliant sealing can be achieved with multi-functional joint sealing tapes, as well as with the other system products of the ISO³-WINDOW SEALING SYSTEM.



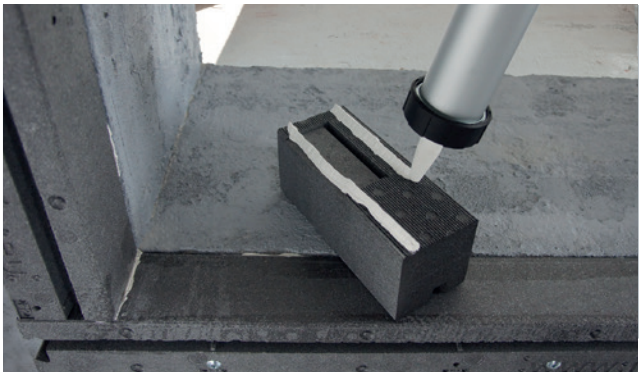
ISO-TOP WINFRAMER INSULATING BARS

The EWIS usually projects significantly beyond the window layer to the outside. In order to ensure a perfect connection between the ISO-TOP WINFRAMER SYSTEM PROFILES and the EWIS every time, ISO-TOP WINFRAMER INSULATING BARS can be used. These system components are available in two different standard dimensions as well as in window sill form. We also offer custom solutions and tailor-made production depending on project requirements.

RC2 TESTED · RC3 TESTED · ift SYSTEM TESTED · PATENT-PENDING

IN FRONT OF WALL INSTALLATION SYSTEM ISO-TOP WINFRAMER „TYPE 3“

SYSTEM COMPONENTS



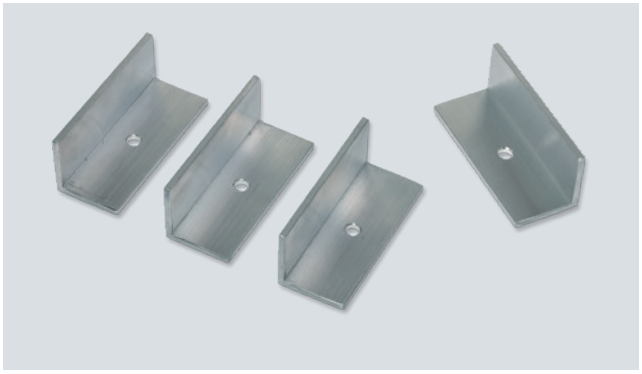
SYSTEM ADHESIVE ISO-TOP FLEX-ADHESIVE WF

ISO-TOP FLEX-ADHESIVE WF is a high-quality, neutral cure, single-component, permanently flexible adhesive on a hybrid-polymer basis. It was developed especially for gluing the IN FRONT OF WALL INSTALLATION SYSTEM ISO-TOP WINFRAMER and makes tension-free structural bonding of the system possible. ISO-TOP FLEX-ADHESIVE WF is also used for sealing and bonding corner connections and can be used on damp surfaces. Refer to the ISO-TOP FLEX-ADHESIVE WF product data sheet for further information.

Dovetail connection

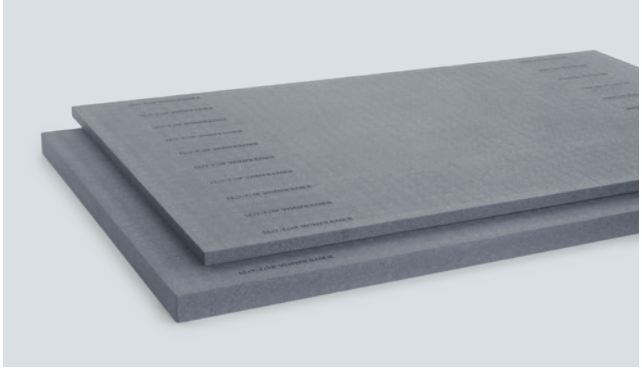
OPTIMUM LENGTH ADJUSTMENT

The system profiles have a dovetail connection on the end. This allows the system profiles to be fitted together easily and quickly. Suitable lengths can be prepared in advance in the workshop. The joints are sealed using the system adhesive ISO-TOP FLEX-ADHESIVE WF. For individual adjustment to the External Wall Insulation system, the ISO-TOP WINFRAMER SYSTEM PROFILES have a through groove on the front. This contains clamping fins to fix optional ISO-TOP WINFRAMER INSULATING BARS in place.



ISO-TOP WINFRAMER ALUMINIUM CONSOLES

The console slots integrated in the ISO-TOP WINFRAMER SYSTEM PROFILES are designed for the insertion of ISO-TOP WINFRAMER ALUMINIUM CONSOLES for additional stability when necessary. The aluminium consoles can be fixed together with the system profiles to the masonry within the course of normal installation. This can be an advantage particularly when very large elements, high casement loads occur or other additional requirements are made on structural design or attachment such as e.g. TRAV / DIN 18008-4 and ETB.



ISO-TOP CONSTRUCTION SHEETS WF3

The construction sheets made of high-density THERMAPOR offer the possibility of individual, constructive adaptation for assembly and sealing details on the EXTERNAL WALL INSULATION SYSTEM ISO-TOP WINFRAMER. They can be cut to size and geometry, to individual requirements, on the construction site. They can be used both as adapter sheets in combination with the system profiles or individually as substructure profiles, liners and window sill moldings and in the fitting of blinds and shutters.

IN FRONT OF WALL INSTALLATION SYSTEM ISO-TOP WINFRAMER „TYPE 3“

Technical data	Standard	Classification
ISO-TOP WINFRAMER SYSTEM PROFILES & CONSTRUCTION SHEETS:		
Material description		THERMAPOR (EPS-F / flame-retardant)
Colour		silver grey
National test certificate for a construction product Building material class	 DIN 4102-1	P-23-001616-PR02-ift B2 (normal flammability)
Fire behaviour	DIN EN 13501-1	E
Building material class	DIN 4102-1	B1 (test report on mineral substrates)
Airtightness	DIN EN 12114	$a \leq 0{,}1\ m^3/[h \cdot m \cdot (daPa)^{2/3}]$
Impermeable to driving rain	DIN EN 1027	≥ 1,200 Pa
Bulk density		150 kg / m³ ± 10 %
Flame retardant		HBCD-free flame retardant
UV light stability		6 months direct weathering during the construction phase
Compatibility with adjacent building materials	internal	requirements fulfilled
Compatibility with salt water, hydrochloric acid (10 %) and caustic soda (10 %)		resistant
Air permeability coefficient	DIN EN 12114	$a = 0.00\ m^3/[h \cdot m \cdot (daPa)^n]$
Thermal conductivity	DIN EN 12667	$\lambda = 0.040\ W/(m \cdot K)$
Sound insulation / evaluated joint sound reduction index	EN ISO 10140-1 / -2	$R_{S,w}$ (C; C_{tr}) = 46 (0; -1) dB
Burglar resistant	DIN EN 1627	resistance class RC2 and RC3
Form stability under thermal load		-40 °C to +85 °C
Temperature resistance	ISO 75-1	long-term +85 °C
Ageing resistance		resistant to decay, non-rotting
Compressive strength at 2 % / 10 %	DIN EN 826	1,194 N/mm² / 1,793 N/mm²
Bending resistance	DIN EN 12089	≥ 650 kPa
Shearing stress	DIN EN ISO 14130	X = 0.217 N/mm²
Creep characteristics at 20 % and 60 %		Em = 0.68 0/00 up to 5.2 0/00
Water absorption (28 days storage)	DIN 12087	≤ 1.5 Vol. %
Water vapour diffusion resistance μ	DIN EN ISO 12572	< 500
Waste code		170604 / 170904
Load transfer		200 kg / m depending on wall substrate and projection
Dimension tolerance	DIN 7715 T5 P3	requirements fulfiled
Shelf life		24 months
ISO-TOP WINFRAMER INSULATING BARS:		
Material description		XPS polystyrene
Colour		light blue
Building material class	DIN 4102-1	B1
Thermal conductivity	DIN EN 12667	$\lambda = 0.034\ W/(m \cdot K)$
Resistance		usual construction materials, except solvents

System components	Dimensions
ISO-TOP WINFRAMER SYSTEM PROFILE 20/80 to 90/80	width / height: 20 / 80; 30 / 80; 40 / 80; 50 / 80; 60 / 80 and 90 / 80 mm, fix length: 1,200 mm
ISO-TOP WINFRAMER SYSTEM PROFILE 70/80 to 200/80	width / height: 70 / 80; 80 / 80; 100 / 80; 120 / 80, 140 / 80, 160 / 80, 180 / 80 and 200 / 80 mm, fix length: 1,200 mm
ISO-TOP WINFRAMER INSULATING BAR 30/80 and 50/80	width / height: 30 / 80; 50 / 80 mm and in window sill form, lenght: 1,200 mm, individual measures on request
ISO-TOP CONSTRUCTION SHEET WF3 800/20 to 800/100	width / height: 800/20, 800/30, 800/40, 800/50, 800/60, 800/70, 800/80, 800/90, 800/100 mm, lenght: 1,200 and 2.400 mm, individual measures on request
ISO-TOP WINFRAMER ALUMINIUM CONSOLES	available for all dimensions
ISO-TOP FLEX-ADHESIVE WF	for fixing on the wall and sealing the system joints
ISO-TOP WF FIXINGS	for mechanical mounting on the wall