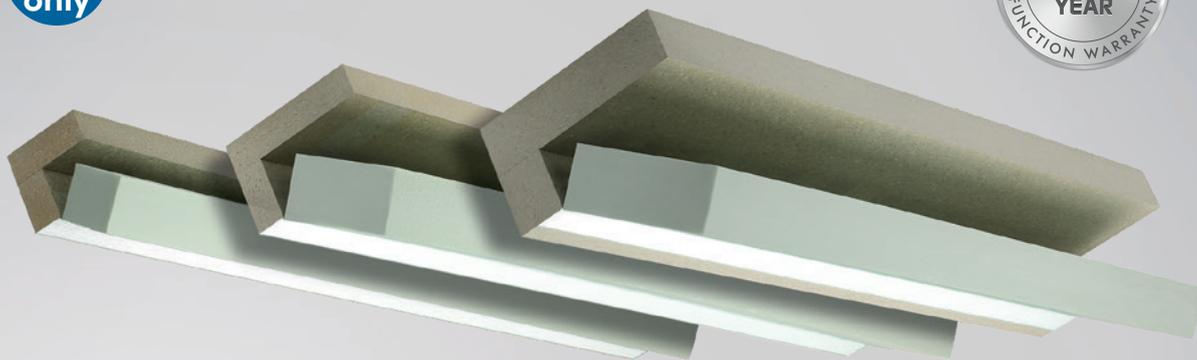


PRODUCT DATA SHEET

IN FRONT OF WALL INSTALLATION SYSTEM ISO-TOP WINFRAMER „TYPE 1“



PRODUCT DESCRIPTION

IN FRONT OF WALL INSTALLATION SYSTEM ISO-TOP WINFRAMER „TYPE 1“ makes it possible to position and fit windows within the insulation plane. The ISO-TOP WINFRAMER „TYPE 1“ comprises a thermally insulating and load-bearing system angle made of PURATHERM which is equipped with a high thermally insulating core. The thermally insulating core is connected to the system angle by means of a hinged mechanism. The advantage of this is that the insulating core can simply be moved out of the way while mechanically securing with screws. System boards are also available for applications where the window is only partially overhanging. In addition, the system brackets can be combined with the system boards to achieve greater overhangs. The system brackets and system boards are prefabricated in many different formats and can be cut to length on site using a mitre saw. Attachment to the masonry is by means of ISO-TOP FLEX-ADHESIVE WF and additional attachment using screws (see ISO-TOP WF FIXINGS).

APPLICATION

The system brackets and boards are suitable for bearing the loads of windows and doors and provide an optimum base for sealing window connection joints. The window and door elements are attached directly and mechanically to the supporting frame system. This is possible with both classic screw fixings through the window frame, or with extended metal lug fixings. The in front of wall installation system is then covered by either an External Wall

PRODUCT ADVANTAGES

- windows can be fitted into the thermal insulation level
- extensive individual tests by testing institutes**
- integrated thermal insulation core (system brackets)
- simple adjustment of length using standard mitre saws
- reduction of structure-related thermal bridges
- simple installation thanks to the convenient insertion system
- complies with the requirements of the Building Energy Act and the recommendations of the RAL "installation guide"
- certified Passive House component
- fire rated for 30 minutes according to BS EN 13501-2
- 10 Year Function Warranty*

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

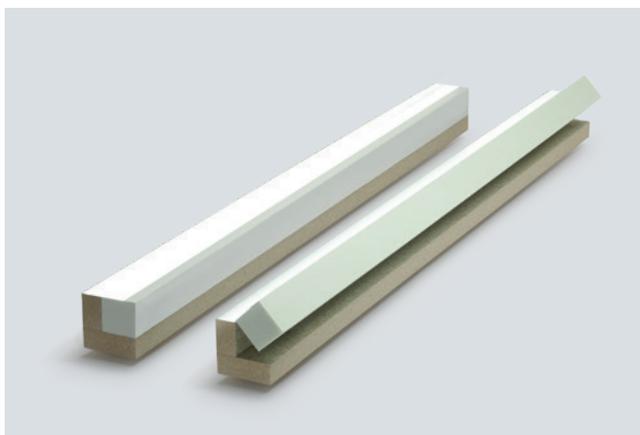
** In front of wall installation systems are currently not subject to any regulation by the DIBt. Approvals such as aBG or abZ must therefore be covered by individual tests. Details on approval as in front of wall installation system for building projects must be obtained individually from the responsible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

Insulation system, or rain screen facade of whatever type is designed. The integrated thermal core of the system together with the solid installation frame guarantee an optimum Ψ -value (Ψ).



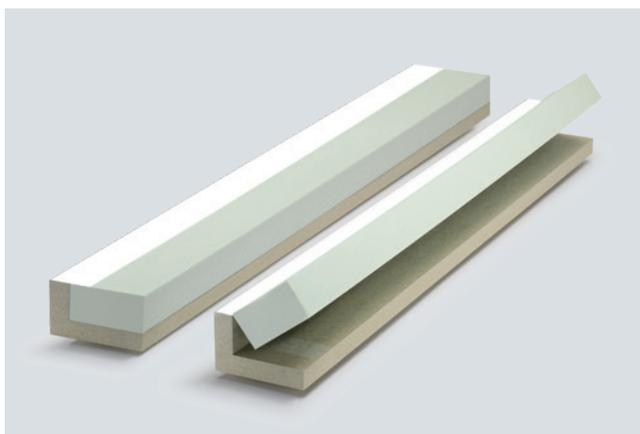
IN FRONT OF WALL INSTALLATION SYSTEM ISO-TOP WINFRAMER „TYPE 1“

SYSTEM COMPONENTS



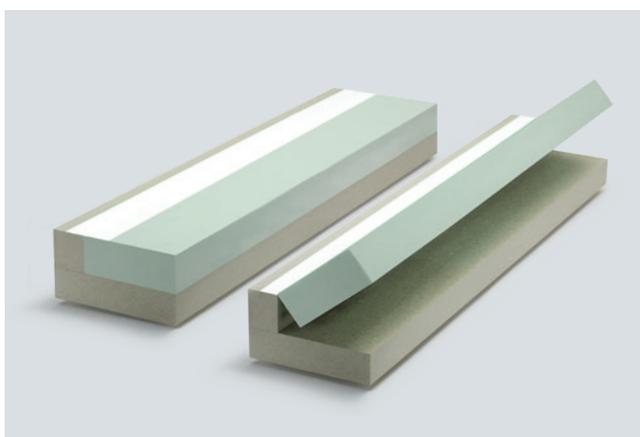
ISO-TOP WINFRAMER SYSTEM BRACKET „TYPE 1“ 80/80, 90/80

The system bracket 80/80 resp. 90/80 is available for typical in front of wall installations. The ISO-TOP WINFRAMER SYSTEM BRACKETS „TYPE 1“ 80/80 resp. 90/80 are suitable whenever windows are fitted in the direct transition area between the wall and the External Wall Installation system. With its 80 mm or 90 mm width dimension it has been adapted to standard window systems. The fixing areas guarantee a straightforward, fast and reliable window installation.



ISO-TOP WINFRAMER SYSTEM BRACKET „TYPE 1“ 140/90

ISO-TOP WINFRAMER SYSTEM BRACKET „TYPE 1“ 140/90 is designed for deeper window profiles, or for use with combination products such as roller shutters etc. These additional products can be fitted within the depth of the ISO-TOP WINFRAMER SYSTEM BRACKET „TYPE 1“ so the perimeter seals are all at the same plane. The sealing can be done within the system bracket level, as planned.



ISO-TOP WINFRAMER SYSTEM BRACKET „TYPE 1“ 160/110, 180/110, 200/110

The ISO-TOP WINFRAMER SYSTEM BRACKETS „TYPE 1“ with a maximum projection of 200 mm can be used for cavity wall structures with brick facades. This system component is available for especially large projections of 160, 180 and 200 mm. Thermal insulating layers are becoming thicker not only where External Wall Insulation (EWI) systems are used, but also on buildings with assorted rainscreen facades, such as brick, etc. As with the EWI finish the ISO-TOP WINFRAMER SYSTEM BRACKET „TYPE 1“ should be attached to the front of the load bearing wall.



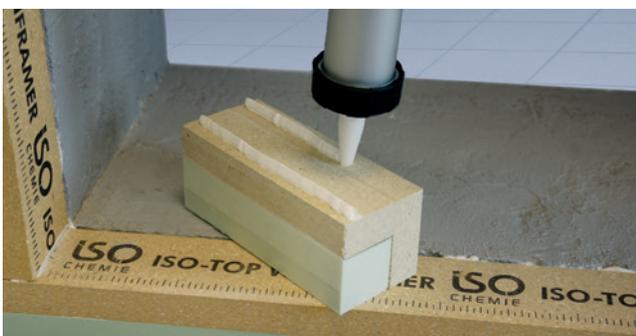
IN FRONT OF WALL INSTALLATION SYSTEM ISO-TOP WINFRAMER „TYPE 1“

SYSTEM COMPONENTS



ISO-TOP WINFRAMER SYSTEM BOARDS

The system boards in the IN FRONT OF WALL INSTALLATION SYSTEM ISO-TOP WINFRAMER „TYPE 1“ offer a range of different application options. ISO-TOP WINFRAMER SYSTEM BOARDS are also available for applications where the window is only partially overhanging with some External Wall Insulation systems. In addition, the system brackets can be combined with the system boards to achieve greater overhang.



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 SYSTEMS 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.



PROCESSING

The IN FRONT OF WALL INSTALLATION SYSTEM ISO-TOP WINFRAMER „TYPE 1“ is sealed to the masonry using ISO-TOP FLEX-ADHESIVE WF. This can also be used for optimum sealing of the material joints and corners. The use of further ISO³-WINDOW SEALING SYSTEM products is recommended for seals between the window and the in front of wall installation system. More detailed processing information can be found in the installation instructions.



ISO-TOP WINFRAMER INSERTION SYSTEM

ISO-TOP WINFRAMER SYSTEM BRACKETS „TYPE 1“ are equipped with a convenient insertion system as standard. The tongue and groove design allows the ends of system brackets to be fitted together easily and quickly. System joints are bonded using ISO-TOP FLEX-ADHESIVE WF. The practical insertion system makes installation significantly easier on long rows of windows, allowing work to be mastered professionally by a single person. In addition, the insertion system makes levelling of the system brackets to be installed easier, enhancing the attractive appearance and technical installation quality.

IN FRONT OF WALL INSTALLATION SYSTEM ISO-TOP WINFRAMER „TYPE 1“

PRODUCT DESCRIPTION

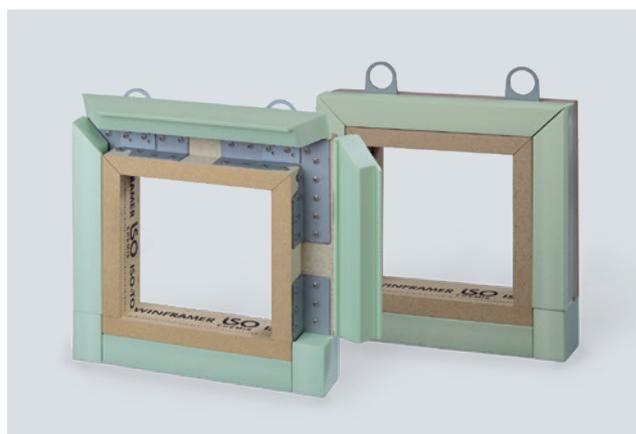
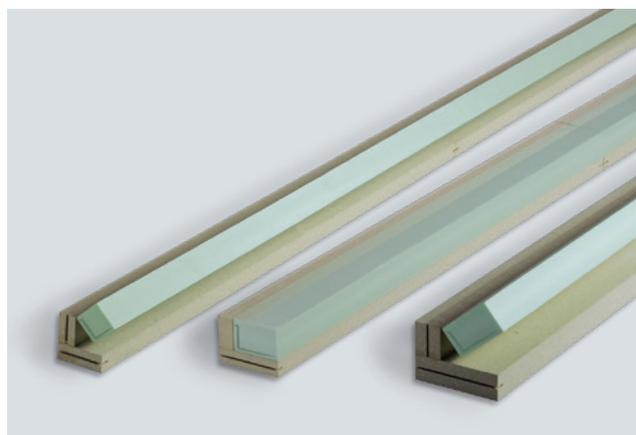
ISO-TOP WINFRAMER „TYPE 1“ PREFAB is the project-related version of the „TYPE 1“ in front of wall installation system prefabricated at the factory to optimise time and costs. The main advantages are its configurable delivery lengths and projection dimensions as well as the option of prefabricating complete supporting frames. In addition, the „TYPE 1“ PREFAB has all the technical advantages of the tried-and-trusted „TYPE 1“.

The system brackets of the IN FRONT OF WALL INSTALLATION SYSTEM ISO-TOP WINFRAMER „TYPE 1“ PREFAB can be produced individually according to the object-specific lengths required. Delivery in tailor-made project lengths makes it possible to prefabricate complete supporting frames for different window openings in your factory. This means corresponding window frames can be pre-assembled with a RAL-compliant sealing system in the prefabricated supporting frame of the IN FRONT OF WALL INSTALLATION SYSTEM ISO-TOP WINFRAMER „TYPE 1“ PREFAB.

There are several advantages to prefabrication. Workflows in your factory can be optimised in terms of time and costs under controlled conditions. This saves money and makes costing calculations more reliable. Assembly in the factory – no matter the weather conditions outside – prevents any problematic assembly delays. Furthermore, assembly times on the construction site can be significantly reduced.

APPLICATION

The IN FRONT OF WALL INSTALLATION SYSTEM ISO-TOP WINFRAMER „TYPE 1“ PREFAB can be used for the complete in front of wall installation with a window element as a closed frame system. The four individual parts of the frame are delivered with a building-specific cut length of up to 2,400 mm and mechanically connected using specially developed ISO-TOP WINFRAMER CORNER CONSOLES made of metal. Optionally available ISO-TOP WINFRAMER CRANE EYELETS allow ready-to-assemble facade elements comprising a supporting frame element and window frame to be transported to the installation location and lifted to the respective instal-



lation spot by crane. The „TYPE 1“ PREFAB is glued to the outside masonry all the way round the window opening first using the system adhesive ISO-TOP FLEX-ADHESIVE WF and then screwed in place. The requirement of using ETA-tested attachment systems to match the outside masonry and the edge projection specifications applies here too. Subsequently, a segment of the movable insulating core is partially broken out via a pre-designed break-off line to positively fit the corner consoles and then fixed using a few adhesive points. The insulating core guarantees reliable integration in the EWIS by reducing thermal bridges.

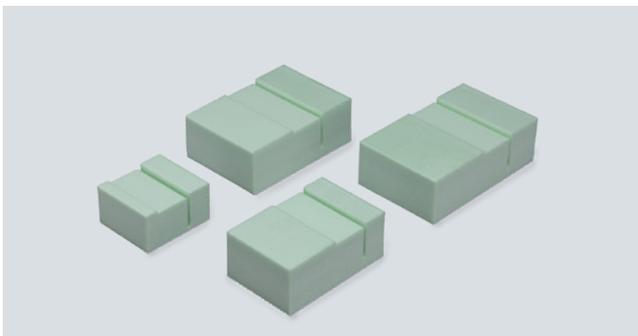
IN FRONT OF WALL INSTALLATION SYSTEM ISO-TOP WINFRAMER „TYPE 1“ PREFAB

SYSTEM COMPONENTS



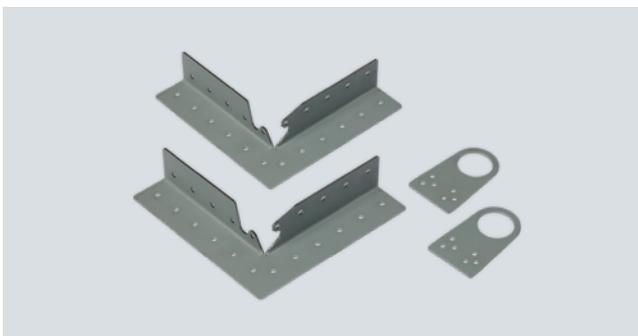
ISO-TOP WINFRAMER SYSTEM BRACKETS „TYPE 1“ PREFAB 80/80 - 200/110

We have ISO-TOP WINFRAMER SYSTEM BRACKETS „TYPE 1“ PREFAB in the dimensions 80/80, 90/80, 140/90, 160/110, 180/110 and 200/110 in the range for typical in front of wall installation applications. Since most building projects have differently dimensioned window openings, we provide the system brackets for „TYPE 1“ PREFAB in individual cut lengths up to 2,400 mm. This avoids residue on site and makes expensive adaptation unnecessary. The ISO-TOP WINFRAMER CORNER CONSOLES screwed into the rebate area are covered with the ISO-TOP WINFRAMER INSULATING CORE „TYPE 1“ PREFAB to reduce structural thermal bridges.



ISO-TOP WINFRAMER INSULATING BLOCKS

The corners of the 4-sided frame system can be mitre-cut or butt-jointed. The prefabricated ISO-TOP WINFRAMER INSULATING BLOCKS can be used for thermal insulation at butt-jointed corners. They are available as an option for the standard dimensions.



ISO-TOP WINFRAMER CORNER CONSOLES & CRANE EYELETS

We supply specially developed corner consoles made of metal for the connection of the four ISO-TOP WINFRAMER SYSTEM BRACKETS „TYPE 1“ PREFAB to a prefabricated supporting frame. The ISO-TOP WINFRAMER CORNER CONSOLES are screwed in the rebate area and then covered with the movable insulating core. The optional ISO-TOP WINFRAMER CRANE EYELETS allow the ready-to-assemble facade element made up of a supporting frame and window frame to be transported by crane to the respective installation spot.

IN FRONT OF WALL INSTALLATION SYSTEM ISO-TOP WINFRAMER „TYPE 1“

Technical data:	Standard	Classification
ISO-TOP WINFRAMER SYSTEM BRACKETS „TYPE 1“, „TYPE 1“ PREFAB and SYSTEM BOARDS:		
Material description		PURATHERM (PUR composite)
Colour		beige
Building material class	BS EN 13501-1	E
Airtightness	DIN EN 12114	$\alpha \leq 0,1 \text{ m}^3 / [\text{h} \cdot \text{m} \cdot (\text{daPa})^{2/3}]$
Impermeable to driving rain	DIN EN 1027	$\geq 1,050 \text{ Pa}$
UV stability		6 months direct weathering during the construction phase
European technical assessment (PURATHERM)	EAD 04019-00-1201	ETA-19/0199
Fire resistance period	BS EN 13501-2	EI 15 and E 30
Thermal conductivity	BS EN 12667	$\lambda = 0.096 \text{ W} / (\text{m} \cdot \text{K})$
Average U-value: finish 80/80		$0.51 \text{ W} / (\text{m}^2 \cdot \text{K})$
Average U-value: finish 140/90		$0.27 \text{ W} / (\text{m}^2 \cdot \text{K})$
Average U-value: finish 200/110		$0.20 \text{ W} / (\text{m}^2 \cdot \text{K})$
Sound insulation / evaluated joint sound reduction index	EN ISO 10140-1 / -2	$R_{s,w} (C; C_{tr}) = 53 (0; -1) \text{ dB}$
Burglar resistant	DIN EN 1627	resistance class RC2 and RC3
Temperature resistance		-50°C to $+100^\circ\text{C}$
Ageing resistance		resistant to rotting, non-rotting
Humidity resistance		high humidity resistance / resistant to mould and termites
Dimensional stability		high dimensional stability even with natural weathering
Load transfer		200 kg/m depending on wall substrate and projection
Dimension tolerance	DIN 7715 T5 P3	requirements fulfilled
Shelf life (system brackets, system boards and insulating core)		24 months
ISO-TOP WINFRAMER INSULATING CORE „TYPE 1“, „TYPE 1“ PREFAB and INSULATING BLOCKS:		
Material description		XPS insulating core
Building material class	DIN 4102	E
Thermal conductivity	BS EN 12667	$\lambda = 0.034 \text{ W} / (\text{m} \cdot \text{K})$
Resistance		usual construction materials, except solvents
Dimension tolerance	DIN 7715 T5 P3	requirements fulfilled

System components	Length	Width	Height	Load transfer
ISO-TOP WINFRAMER SYSTEM BRACKETS „TYPE 1“ 80/80	1,200 mm	80 mm	80 mm	200 kg/m
ISO-TOP WINFRAMER SYSTEM BRACKETS „TYPE 1“ 90/80	1,200 mm	90 mm	80 mm	200 kg/m
ISO-TOP WINFRAMER SYSTEM BRACKETS „TYPE 1“ 140/90	1,200 mm	140 mm	90 mm	200 kg/m
ISO-TOP WINFRAMER SYSTEM BRACKETS „TYPE 1“ 160/110	1,200 mm	160 mm	110 mm	200 kg/m
ISO-TOP WINFRAMER SYSTEM BRACKETS „TYPE 1“ 180/110	1,200 mm	180 mm	110 mm	200 kg/m
ISO-TOP WINFRAMER SYSTEM BRACKETS „TYPE 1“ 200/110	1,200 mm	200 mm	110 mm	200 kg/m
ISO-TOP WINFRAMER SYSTEM BOARDS	width/height: 30/50; 30/60; 30/80; 30/90; 50/60; 50/80 and 50/110mm; length: 1,200mm			
ISO-TOP WINFRAMER SYSTEM BRACKETS „TYPE 1“ PREFAB 80/80	building-specific	80 mm	80 mm	200 kg/m
ISO-TOP WINFRAMER SYSTEM BRACKETS „TYPE 1“ PREFAB 90/80	building-specific	90 mm	80 mm	200 kg/m
ISO-TOP WINFRAMER SYSTEM BRACKETS „TYPE 1“ PREFAB 140/90	building-specific	140 mm	90 mm	200 kg/m
ISO-TOP WINFRAMER SYSTEM BRACKETS „TYPE 1“ PREFAB 160/110	building-specific	160 mm	110 mm	200 kg/m
ISO-TOP WINFRAMER SYSTEM BRACKETS „TYPE 1“ PREFAB 180/110	building-specific	180 mm	110 mm	200 kg/m
ISO-TOP WINFRAMER SYSTEM BRACKETS „TYPE 1“ PREFAB 200/110	building-specific	200 mm	110 mm	200 kg/m
ISO-TOP WINFRAMER INSULATING BLOCKS	width/height: 80/80; 90/80; 140/90; 160/110; 180/110; and 200/110mm; length: 50mm (80/80, 90/80) and 60mm (140/90, 160/110, 180/110 and 200/110)			
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			

The details and information given in this literature are based on best current knowledge. They are intended to serve as general information only and it is advised that the user conducts their own tests for their specific set of conditions to determine the suitability of the product for its proposed use. No warranty or liability is given or implied regarding any part of these instructions or details, or the completeness of the information. We reserve the right to modify, or change, the specifications and information without advance notification. All goods are supplied subject to our standard conditions of sales, copies of which are available upon request.