

## DESCRIPTION

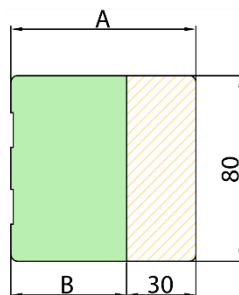
Warmotech **PRO+ system** are pre-wall framing system for window installation in the thermal insulation layer, which ensures the secure connection of the window to the wall.

The profiles are made of a solid layer of Warmotech material for durability, dimensional stability, compressive strength and soundproofing characteristics. Additional layer of extruded polystyrene foam (XPS) on the outside (30 mm) provides additional thermal insulation properties.

## SCOPE OF APPLICATION

Warmotech **PRO+** profiles creates an additional mounting frame for installing windows in the insulation layer. This method of installing windows allows to reduce heat loss through the windows. Due to the mass of the profiles, better acoustic properties are achieved. After installing the windows in the **PRO+** systems, you will have smaller opening edges outside (which will increase the amount of incoming light) and a larger area inside at the windowsills. Profiles are sold in units, standard unit length – 1215, 1235 or 2750 mm.

PRO 70+	Height (A) 70 mm, Height (B) 40 mm
PRO 80+	Height (A) 80 mm, Height (B) 50 mm
PRO 90+	Height (A) 90 mm, Height (B) 60 mm
PRO 100+	Height (A) 100 mm, Height (B) 70 mm



## HEAT TRANSFER COEFFICIENT, U VALUE

PRO 70+ (70 mm)	0,76 W/m <sup>2</sup> K
PRO 80+ (80 mm)	0,70 W/m <sup>2</sup> K
PRO 90+ (90 mm)	0,65 W/m <sup>2</sup> K
PRO 100+ (100 mm)	0,61 W/m <sup>2</sup> K

## PRODUCT COLOR AND STORAGE

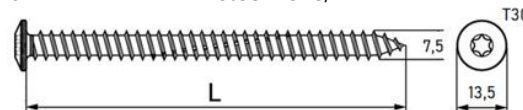
The colors of Warmotech panels and extruded polystyrene foam (XPS) depend on the suppliers of the different materials. The color of the product has no effect on the flammability, mechanical and other declared characteristics of the materials in the profiles. With prolonged exposure to direct sunlight, the profiles acquire a yellowish tint. It is recommended to protect the profiles from long-term, direct sunlight.

## INSTALLATION ACCESSORIES

Warmotech PRO+ system consist of SFS Intec screws for window & door installation and Warmotech elastic hybrid adhesive sealant for joining of construction elements with mechanical loads.

### SFS Intec FB-FK-T30

Screw diameter $d_w$	7,5 mm
Screw length $L_w$	62 – 212 mm
Screw head diameter $D_w$	13,5 mm
Screw drive	TORX-30
Screw material	steel 18B3/ Zn



Declaration of Conformity **190126**

### Warmotech elastic hybrid adhesive sealant

Tack free time	5 minutes (at 23 °C; 50% R.H.)
Colour	grey
Curing rate	approx. 3 mm/24 hr.
Movement capability	± 20 %
Tensile strength	2.00 Mpa
Elongation at break	200 %
Application temperature	Between +5°C to +40°C

Hybrid sealant & adhesive according to  
**EN 15651-1: F-EXT-INT-CC**



## DIMENSIONS

Warmotech panel + XPS core

Width	80 ± 2mm
Length	1215/ 1235 or 2750 mm ± 5 mm
Height	70/ 80/ 90/ 100 mm

## TECHNICAL CHARACTERISTICS (WARMOTECH layer)

Reaction to fire	D-S3, d0
Bending strength	≥ 4.7 MPa
Compressive strength	≥ 7.1 MPa
Density	550 ± 10 % kg/m <sup>3</sup>
Thermal conductivity	0,088 W/(m·K)
Water absorption (by short term, partial immersion)	$W_p \leq 0,4 \text{ kg/m}^2$

European Technical Assessment **ETA-22/0454**

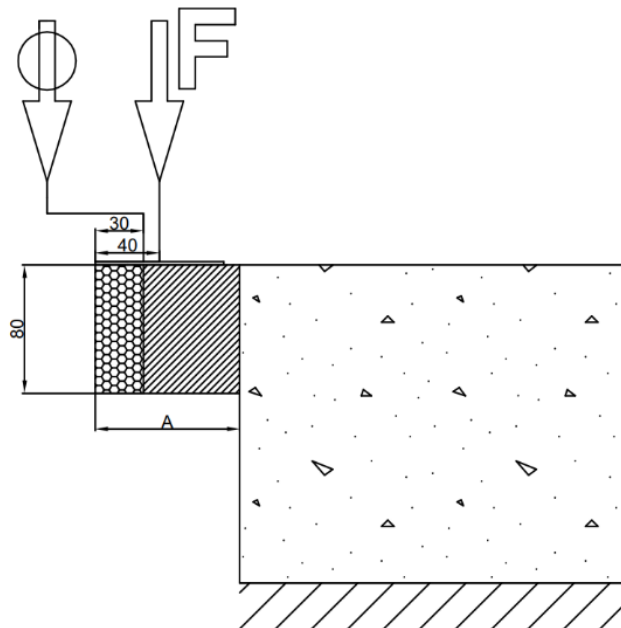
## TECHNICAL CHARACTERISTICS (XPS layer)

Reaction to fire	Euroclass E
Water vapour diffusion resistance factor	150 $\mu$
Compressive strength	$\geq 700$ kPa
Density	$> 45$ kg/m <sup>3</sup>
Thermal conductivity	0,035 W/(m·K)
Water absorption (by total immersion)	WL(T) $\leq 0,7$ %

*Extruded polystyrene foam according to EN 13164*

## INSTALLATION LOADS AT ONE POINT

The specified loads also apply to supports of a different type from those shown in the diagram, including window blocks, metal corners and other elements that are based on the full area of the profile, are wider than or equal to the profile and are not narrower than 30 mm. The maximum load values are the same for all PRO+ systems.



## FOR ALL PRO+ SYSTEMS

Maximum load at support point, **0.5 mm** displacement:

**200 kg.**

Maximum load at support point, **1.0 mm** displacement:

**240 kg.**

Maximum load at support point, **1.5 mm** displacement:

**300 kg.**

Maximum load at support point, **2.0 mm** displacement:

**330 kg.**

