

Section 1. PRODUCT DESCRIPTION

**SELF-TAPPING SCREW WITH ALUMINIUM/EPDM WASHER FOR FIXING
SANDWICH PANELS IN CONCRETE AND TIMBER – WB6P-D**

Self-tapping screw for fixing sandwich panels WB6P-D is made of heat-treated carbon steel in SQ Ceramic coating. The screw has SW hex head, self-tapping tip and aluminium/EPDM washer.

Use:

- fixing sandwich panels in timber and concrete substrates
- fixing roof sandwich panels
- fixing wall sandwich panels in horizontal configuration
- surface mounting (visible mount)
- mounting in sandwich panel joint (concealed mount)



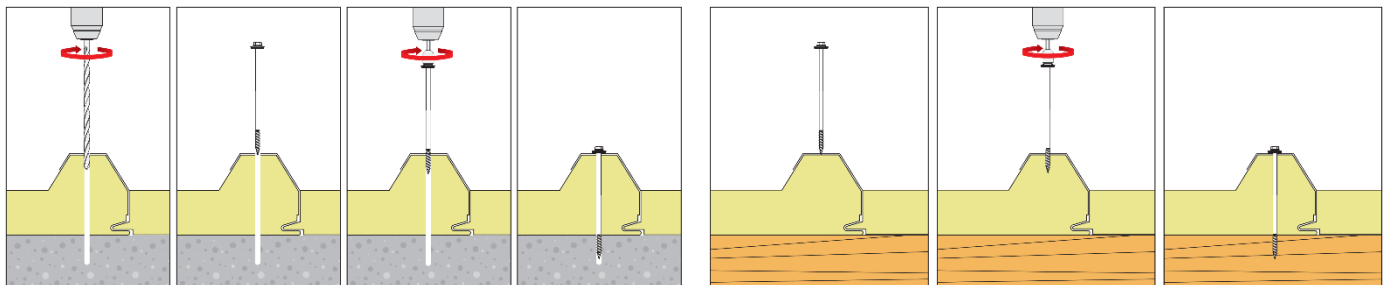
Self-tapping screws hold:

European Technical Assessment: ETA-16/0444 (timber substrate)

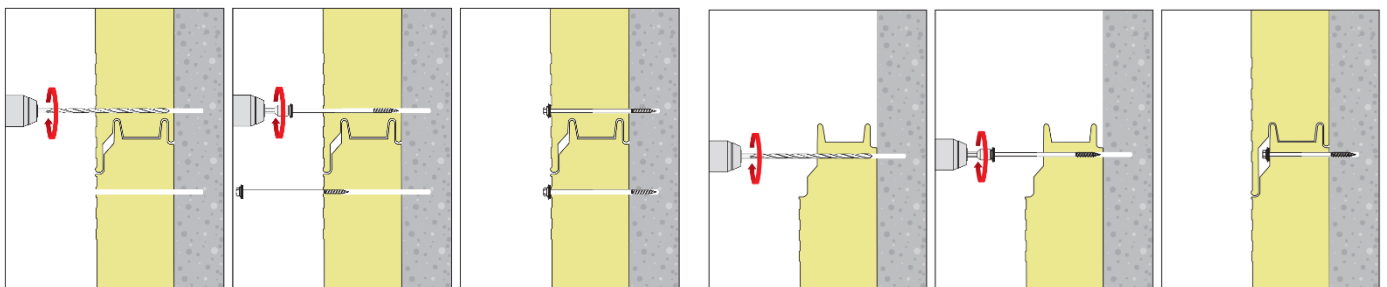
National Technical Assessment: ITB-KOT-2019/0915 edition 1 (concrete substrate)

Section 2. METHOD OF INSTALLATION

1. Original self-tapping screws delivered by the manufacturer can be used only
2. Before installation identify the substrate, its thickness and environmental conditions (expressed as corrosivity categories), and then select screws which meet the above criteria
3. Correctly select type of the screw and its length, while paying particular attention to the effective depth of anchorage in the substrate
4. In concrete substrate pre-drill a hole using drill bit \varnothing 5mm to a depth of min. 40 mm
5. Make sure to set optimum rotary speed when screwing
6. At all times screws should be installed perpendicularly to the substrate surface
7. Make sure to press the washer correctly, as when the washer is pressed either too strongly or too weakly, lack of tightness is likely, which may result in corrosion in the fixing point



Surface mounting of roof sandwich panel (when selecting the length of the screw take into account the height of upper surface of the panel to be fixed)

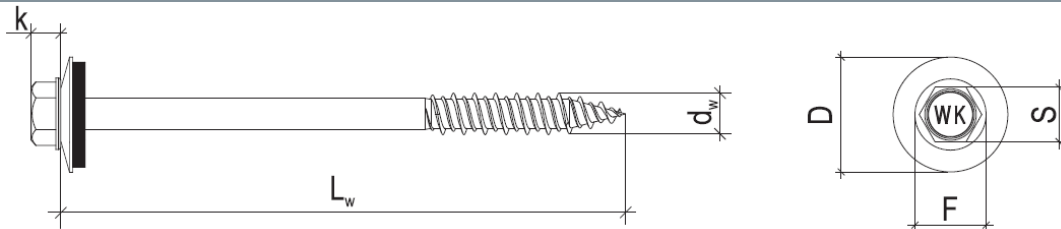


Surface mounting of wall sandwich panel – visible mount

Mounting of wall sandwich panel in joint – concealed mount
(when selecting the length of the screw take into account the height of joint of the panel to be fixed)

PRODUCT DATA SHEET – WB6P-D

Section 3. TECHNICAL DATA



TECHNICAL PARAMETERS		
Parameter	Unit	Value
Screw diameter	d_w [mm]	6,3
Drilling capacity	Σt_i [mm]	-
Wrench size	S [mm]	SW-8
Head height	k [mm]	5,4
Head diameter	F [mm]	10,5
Tip length	[mm]	-
Screw material	-	carbon steel
Corrosion protection	-	SQ Ceramic coating
EPDM washer	D [mm]	aluminium A19
Coating to RAL palette	-	min. 60 μm
Substrate material	-	timber \geq C24 / concrete \geq C20/25
Document	-	ETA-16/0444 (timber) ITB-KOT-2019/0915 (concrete)

INSTALLATION PARAMETERS		
Parameter	Unit	Value
Screw diameter	d_w [mm]	6,3
Diameter of hole in the substrate	d_o [mm]	-/5,0*
Min. depth of hole in the substrate	h_o [mm]	-/40*
Anchorage depth	h_{eff} [mm]	\geq 30
Min. substrate thickness	h_{min} [mm]	50/80*
Min. spacing	s_{min} [mm]	90
Min. distance from edge	c_{min} [mm]	45

*For timber/concrete substrate

RESISTANCE						
Characteristic pull-out / shear strength [kN]						
Anchorage depth in substrate [mm]	Panel cladding sheet thickness [mm]					
	0,40	0,50	0,63	0,75	0,88	1,00
Timber C24 \geq 30 mm	1,83/0,87	3,13/1,35	3,13/1,70	3,13/2,10	3,13/2,10	3,13/2,10
Non-cracked concrete C20/25 ÷ C50/60 \geq 30 mm	-	3,05**/1,35*	3,05**/1,70*	3,05**/2,10**	3,05**/2,10**	3,05**/2,10**
Cracked concrete C20/25 ÷ C50/60 \geq 30 mm	-	0,75**/0,75**	0,75**/0,75**	0,75**/0,75**	0,75**/0,75**	0,75**/0,75**

It is recommended that a partial safety factor equal to: wooden substrate - 1,33; concrete substrate - 1,33; concrete substrate - 2,52**

SELECTION TABLE					
WB6P-D (SQ Ceramic coating)	WB6P-D-RAL* (SQ Ceramic coating + RAL)	Screw dimensions	Panel thickness	Pre-drilled hole diameter**	Number of pieces in a box
		$d_w \times L_w$ [mm]	[mm]	d_o [mm]	[pcs]
WB6P-D-63085-A19	WB6P-D-63085-A19-RAL	6,3 x 85	40-50	5,0	100
WB6P-D-63095-A19	WB6P-D-63095-A19-RAL	6,3 x 95	50-60	5,0	100
WB6P-D-63115-A19	WB6P-D-63115-A19-RAL	6,3 x 115	70-80	5,0	100
WB6P-D-63135-A19	WB6P-D-63135-A19-RAL	6,3 x 135	90-100	5,0	100
WB6P-D-63155-A19	WB6P-D-63155-A19-RAL	6,3 x 155	110-120	5,0	100
WB6P-D-63185-A19	WB6P-D-63185-A19-RAL	6,3 x 185	140-150	5,0	100
WB6P-D-63205-A19	WB6P-D-63205-A19-RAL	6,3 x 205	150-170	5,0	100
WB6P-D-63235-A19	WB6P-D-63235-A19-RAL	6,3 x 235	180-200	5,0	100
WB6P-D-63255-A19	WB6P-D-63255-A19-RAL	6,3 x 255	200-220	5,0	100

*Screw on request and to order

**For concrete substrate

Section 4. REMARKS

1. All previous versions of this Product Data Sheet shall cease to be valid
2. Data given in this Product Data Sheet is in accordance with current knowledge and published in good faith. KLIMAS Sp. z o.o. is not responsible for correctness and quality of the fixing if recommendations regarding method of use and installation are not followed.