

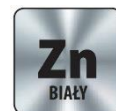
Section 1. PRODUCT DESCRIPTION

SELF-TAPPING SCREW FOR FIXING STEEL SHEETS IN CONCRETE AND TIMBER – WB6

Self-tapping screw WB6 is made of heat-treated carbon steel in galvanized zinc coating 12 µm (WB6) or SQ Ceramic coating (WB6-D). The screw has SW hex head and self-threading tip.

Use:

- fixing trapezoidal sheet in timber
- fixing trapezoidal sheet in concrete
- installation of slings in a concrete base



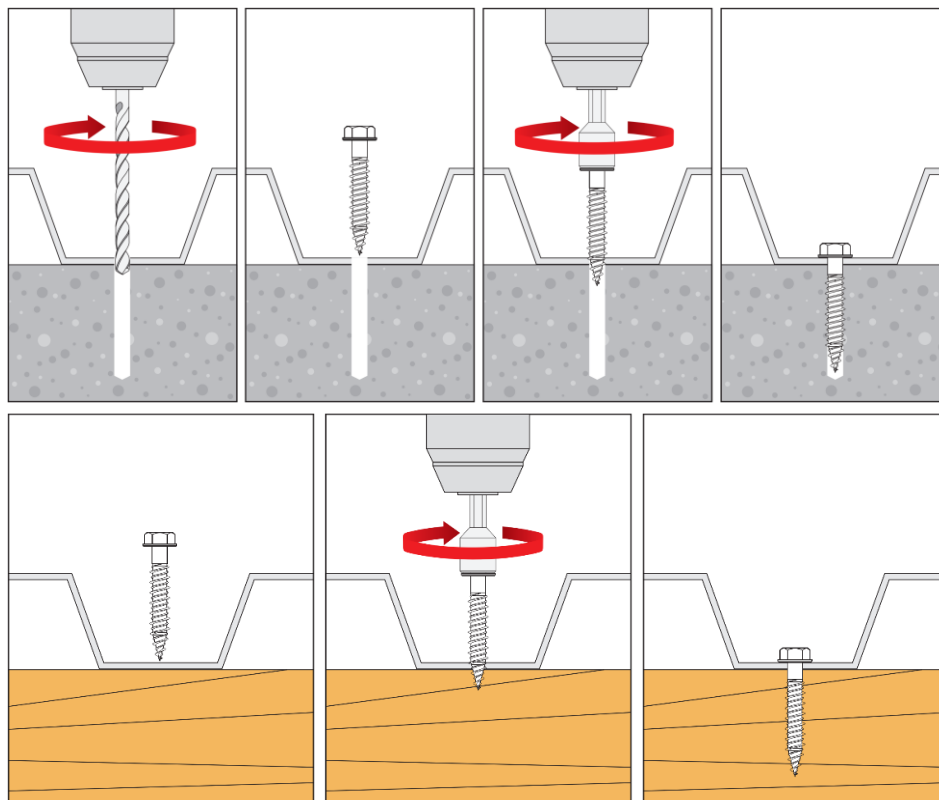
Self-tapping screws hold:

European Technical Assessment: ETA-16/0443 (timber substrate)

National Technical Assessment: ITB-KOT-2020/1057 edition 1 (concrete substrate)

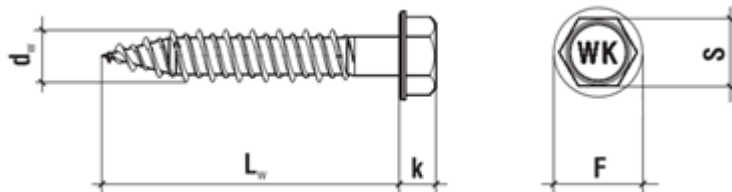
Section 2. METHOD OF INSTALLATION

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 Ø 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



PRODUCT DATA SHEET – WB6

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]	5,3
Head diameter	F [mm]	10,5
Tip length	[mm]	-
Screw material	-	carbon steel
Corrosion protection	WB6	galvanized zinc coating 12 μ m
	WB6-D	SQ Ceramic coating
EPDM washer	D [mm]	-
Coating to RAL palette	-	-
Substrate material	-	timber \geq C24 / concrete \geq C20/25
Document	-	ETA-16/0443 (timber) ITB-KOT-2020/1057 (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]	≥ 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]	Steel sheet thickness [mm]							
	0,40	0,50	0,63	0,75	0,88	1,00	1,25	1,50 ÷ 2,00
Timber C24 ≥ 30 mm	-	3,13/1,35	3,13/1,70	3,13/2,10	3,13/2,10	3,13/2,10	3,13/2,10	3,13/2,10
Non-cracked concrete C20/25 ÷ C50/60 ≥ 30 mm	1,03*/1,03*	1,03*/1,03*	1,27*/1,27*	1,31*/1,31*	1,67*/1,67*	1,83**/1,83**	-	-
Cracked concrete C20/25 ÷ C50/60 ≥ 30 mm	0,75**/0,75**	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					
WB6 (galvanized zinc coating ZN)	WB6-D* (SQ Ceramic coating)	Screw dimensions	Max. usable length	Pre-drilled hole diameter**	Number of pieces in a box
		$d_w \times L_w$ [mm]	t_{fix} [mm]	d_o [mm]	[pcs]
WB6-63035	WB6-D-63035	6,3 x 35	5	5,0	250
WB6-63045	WB6-D-63045	6,3 x 45	15	5,0	250
WB6-63055*	WB6-D-63055	6,3 x 55	25	5,0	250
WB6-63065*	WB6-D-63065	6,3 x 65	35	5,0	250

*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.