

Section 1. PRODUCT DESCRIPTION

CONSTRUCTION FLAT HEAD SCREW, TX – WKCS

Construction screw WKCS is made of yellow, blue (to order) zinc-plated low carbon steel or coated with SQ ceramic coating (to order). Screws are used for connecting structural wood elements including solid wood, glued laminated timber, X-Lam and LVL timber panels and wood-based panels. Screws have counter-sunk head with TX drive and a special cutting point suitable for connections in wooden structures.

Features and advantages of screws:

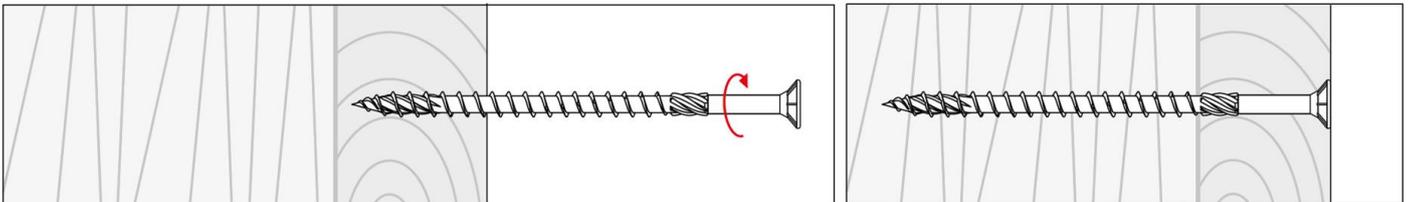
- wax coating – reduced torque, faster and easier installation
- counter-sunk head – ensures flush fitting of the screw in the installed member
- TX drive – guarantees optimum torque transfer as the screw advances
- cutting ribs – ensures aesthetic finish result
- shank ribs – reduce driving torque by reaming the hole
- serrated thread – cuts wood structural fibres as the screw advances
- special cutting point – makes the start of installation easier, without prior drilling
- length of screws up to 400mm



Zn - yellow Zn - blue* SQ ceramic*
*item on request and to order

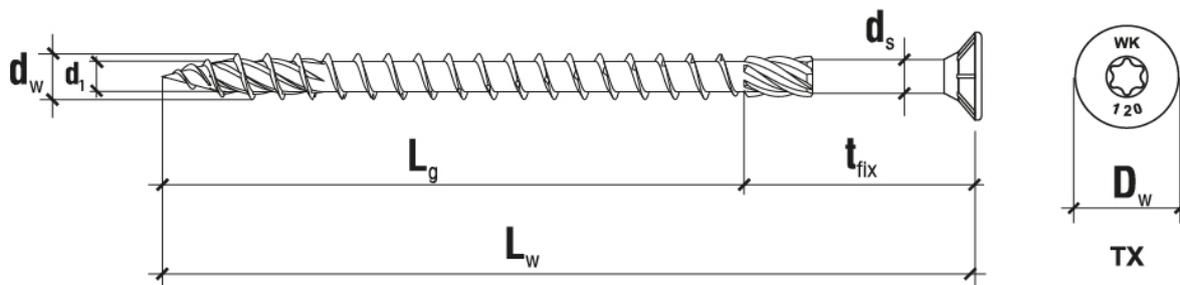
Section 2. METHOD OF INSTALLATION

1. Original screws delivered by the manufacturer can be used only
2. Before installation select adequate length of screws depending on thickness of elements to be fastened and minimum anchorage depth
3. The fastened wooden elements should be defect-free (no knots, cracks, colourations, rots, structure and shape defects, mechanical damages) as any defects reduce their strength
4. Screws should be installed using screw gun and bit suitable for TX drive
5. Screws should be driven directly in wooden substrate without prior drilling



PRODUCT DATA SHEET – WKCS

Section 3. TECHNICAL DATA



TECHNICAL PARAMETERS			
Parameter	Unit	Value	
Thread outer diameter	d_w [mm]	8	10
Thread inner diameter	d_1 [mm]	5,4	6,4
Smooth part diameter	d_s [mm]	5,8	7
Head diameter	D_w [mm]	14,5	18
Head area	A [mm ²]	165	254
Length range	L_w [mm]	80-400	120-400
Drive type	-	TX-40	TX-40
Screw material	-	carbon steel	
Corrosion protection	galvanized	$\geq 5 \mu\text{m}$	
	ceramic coating SQ	$\geq 8 \mu\text{m}$	
Corrosivity category	galvanized	C1/C2	
	ceramic coating SQ	C3	
Substrate material	wood	$\geq \text{C24}$	

STRENGTH PARAMETERS			
Parameter	Unit	WKCS $\varnothing 8$	WKCS $\varnothing 10$
Material characteristic yield strength	$M_{y,k}$ [Nm]	25,0	43,0
Characteristic pull-out resistance	$f_{ax,k,90}$ [N/mm ²]	12,0	11,0
Characteristic resistance to head pull-through	$f_{head,k}$ [N/mm ²]	9,4	9,4
Characteristic resistance for tension	$f_{tens,k}$ [kN]	25,0	36,0
Characteristic torsional strength	$f_{tor,k}$ [Nm]	27,0	45,0

SELECTION TABLE								
Product marking			Screw diameter	Screw length	Working thread length	Max. usable length	Drive type	Number of pieces in a box
Galvanized - yellow	Galvanized - white*	SQ Ceramic*	d_w [mm]	L_w [mm]	L_g [mm]	t_{fix} [mm]	[-]	pcs
WKCS-08080	WKCS-08080-B	WKCS-08080-D	8,0	80	50	30	TX-40	50
WKCS-08100	WKCS-08100-B	WKCS-08100-D	8,0	100	50	50	TX-40	50
WKCS-08120	WKCS-08120-B	WKCS-08120-D	8,0	120	80	40	TX-40	50
WKCS-08140	WKCS-08140-B	WKCS-08140-D	8,0	140	80	60	TX-40	50
WKCS-08160	WKCS-08160-B	WKCS-08160-D	8,0	160	80	80	TX-40	50
WKCS-08180	WKCS-08180-B	WKCS-08180-D	8,0	180	80	100	TX-40	50
WKCS-08200	WKCS-08200-B	WKCS-08200-D	8,0	200	80	120	TX-40	50
WKCS-08220	WKCS-08220-B	WKCS-08220-D	8,0	220	80	140	TX-40	50
WKCS-08240	WKCS-08240-B	WKCS-08240-D	8,0	240	80	160	TX-40	50
WKCS-08260	WKCS-08260-B	WKCS-08260-D	8,0	260	80	180	TX-40	50
WKCS-08280	WKCS-08280-B	WKCS-08280-D	8,0	280	80	200	TX-40	50
WKCS-08300	WKCS-08300-B	WKCS-08300-D	8,0	300	80	220	TX-40	50
WKCS-08320	WKCS-08320-B	WKCS-08320-D	8,0	320	80	240	TX-40	50
WKCS-08340	WKCS-08340-B	WKCS-08340-D	8,0	340	80	260	TX-40	50
WKCS-08360	WKCS-08360-B	WKCS-08360-D	8,0	360	80	280	TX-40	50
WKCS-08380	WKCS-08380-B	WKCS-08380-D	8,0	380	80	300	TX-40	50
WKCS-08400	WKCS-08400-B	WKCS-08400-D	8,0	400	80	320	TX-40	50
WKCS-10120	WKCS-10120-B	WKCS-10120-D	10,0	120	80	40	TX-40	50

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WKCS-10140	WKCS-10140-B	WKCS-10140-D	10,0	140	80	60	TX-40	50
WKCS-10160	WKCS-10160-B	WKCS-10160-D	10,0	160	80	80	TX-40	50
WKCS-10180	WKCS-10180-B	WKCS-10180-D	10,0	180	80	100	TX-40	50
WKCS-10200	WKCS-10200-B	WKCS-10200-D	10,0	200	80	120	TX-40	50
WKCS-10220	WKCS-10220-B	WKCS-10220-D	10,0	220	80	140	TX-40	25
WKCS-10240	WKCS-10240-B	WKCS-10240-D	10,0	240	80	160	TX-40	25
WKCS-10260	WKCS-10260-B	WKCS-10260-D	10,0	260	80	180	TX-40	25
WKCS-10280	WKCS-10280-B	WKCS-10280-D	10,0	280	80	200	TX-40	25
WKCS-10300	WKCS-10300-B	WKCS-10300-D	10,0	300	80	220	TX-40	25
WKCS-10320	WKCS-10320-B	WKCS-10320-D	10,0	320	80	240	TX-40	25
WKCS-10340	WKCS-10340-B	WKCS-10340-D	10,0	340	80	260	TX-40	25
WKCS-10360	WKCS-10360-B	WKCS-10360-D	10,0	360	80	280	TX-40	25
WKCS-10380	WKCS-10380-B	WKCS-10380-D	10,0	380	80	300	TX-40	25
WKCS-10400	WKCS-10400-B	WKCS-10400-D	10,0	400	80	320	TX-40	25

*item on request and to order

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.