

Section 1. PRODUCT DESCRIPTION

SCREW FOR WOODEN CONSTRUCTIONS WITH FULL THREAD AND CYLINDRICAL HEAD – WKFC



Construction screw WKFC is made of carbon steel covered with a protective layer of white galvanic zinc. Screws are primarily used for structural connections and reinforcement of wooden elements. The screws have a full thread and a cylinder head with a TX socket.

Features and advantages of screws:

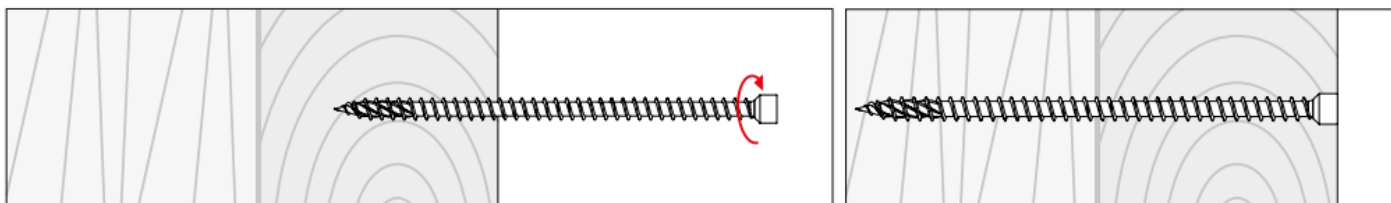
- cylindrical head – ensures adequate pressure of the fixed element
- TX drive – guarantees optimum torque transfer as the screw advances
- full thread - ensures optimal connection of connected elements
- cutting notches – cuts the fibers of the wood structure while screwing in
- double thread – additional threads on the tip make it easier to start screwing with less pressure
- high torque – enables screws to be screwed in without pre-drilling in hard types of wood
- wax coating – reduced torque, faster and easier installation



Screws hold European Technical Assessment: ETA-18/0817

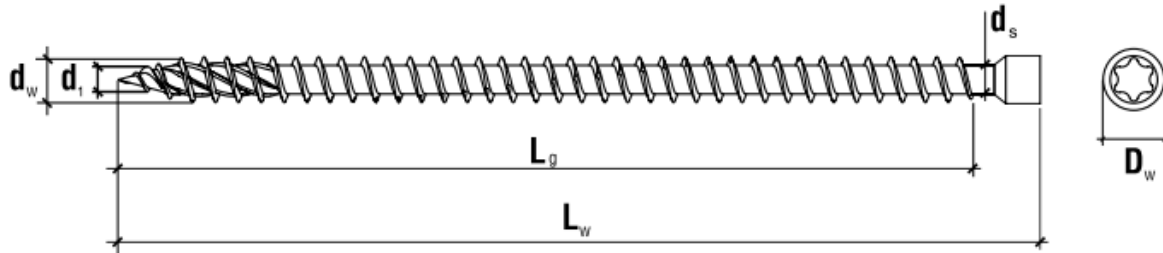
Section 2. METHOD OF INSTALLATION

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 – WKFC

Section 3. TECHNICAL DATA



TECHNICAL PARAMETERS			
Parameter	Unit	Value	
Thread outer diameter	d_w [mm]	8,0	10,0
Thread inner diameter	d_1 [mm]	5,0	6,2
Smooth part diameter	d_s [mm]	5,8	7,0
Head diameter	D_w [mm]	10,0	13,0
Length range	L_w [mm]	120-500	300-600
Drive type	-	TX 40	TX 50
Screw material	-	carbon steel	
Corrosion protection	galvanized	$\geq 5 \mu\text{m}$	
Substrate material	wood	$\geq \text{C24}$	
European Technical Assessment	-	ETA-18/0817	

STRENGTH PARAMETERS			
Parameter	Unit	WKFC $\phi 8$	WKFC $\phi 10$
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	Head diameter	Drive type	Number of pieces in a box
	d_w [mm]	L_w [mm]	L_g [mm]	D_w [mm]	[-]	[pcs]
WKFC-08120-B*	8,0	120	105	10	TX 40	50
WKFC-08140-B*	8,0	140	125	10	TX 40	50
WKFC-08160-B*	8,0	160	145	10	TX 40	50
WKFC-08180-B*	8,0	180	165	10	TX 40	50
WKFC-08200-B*	8,0	200	185	10	TX 40	50
WKFC-08220-B*	8,0	220	205	10	TX 40	50
WKFC-08240-B*	8,0	240	225	10	TX 40	50
WKFC-08260-B*	8,0	260	245	10	TX 40	50
WKFC-08280-B*	8,0	280	265	10	TX 40	50
WKFC-08300-B*	8,0	300	285	10	TX 40	50
WKFC-08350-B*	8,0	350	335	10	TX 40	50
WKFC-08400-B*	8,0	400	385	10	TX 40	50
WKFC-08450-B*	8,0	450	435	10	TX 40	50
WKFC-08500-B*	8,0	500	485	10	TX 40	50
WKFC-10300-B*	10,0	300	285	13	TX 50	25
WKFC-10330-B*	10,0	330	315	13	TX 50	25
WKFC-10360-B*	10,0	360	345	13	TX 50	25
WKFC-10400-B*	10,0	400	385	13	TX 50	25
WKFC-10450-B*	10,0	450	435	13	TX 50	25
WKFC-10500-B*	10,0	500	485	13	TX 50	25
WKFC-10550-B*	10,0	550	535	13	TX 50	25
WKFC-10600-B*	10,0	600	585	13	TX 50	25

*Product on 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.