# KLIMAS Sp. z o.o. ul. W. Witosa 135/137 Kuźnica Kiedrzyńska 42-233 Mykanów

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### **PRODUCT DATA SHEET – WKFC**

#### 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:

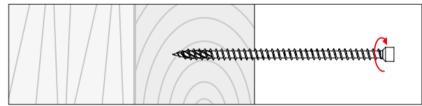
- cylindrical head ensures adequate pressure of the fixed element
- TX drive guarantees optimum torque transfer as the screw advances
- full thread ensures optimal connection of connected elements
- cutting notches cuts the fibers of the wood structure while screwing in
- double thread additional threads 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
- Screws should be installed using screw gun and bit suitable for TX drive 4
- Screws should be driven directly in wooden substrate without prior drilling



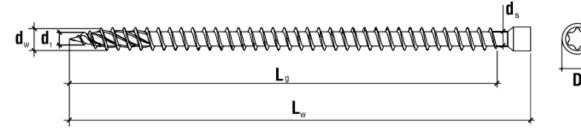




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## Section 3. TECHNICAL DATA



TECHNICAL PARAMETERS								
Parameter	Unit	Value						
Thread outer diameter	d <sub>w</sub> [mm]	8,0	10,0					
Thread inner diameter	d₁ [mm]	5,0	6,2					
Smooth part diameter	d <sub>s</sub> [mm]	5,8	7,0					
Head diameter	D <sub>w</sub> [mm]	10,0	13,0					
Length range	L <sub>w</sub> [mm]	120-500	300-600					
Drive type	-	TX 40	TX 50					
Screw material	-	carbon steel						
Corrosion protection	galvanized	≥ 5 µm						
Substrate material	wood	≥ C24						
European Technical Assessment	-	ETA-18/0817						

STRENGTH PARAMETERS							
Parameter	Unit	WKFC ø8	WKFC ø10				
Material characteristic yield strength	$M_{y,k}[Nm]$	25,0	43,0				
Characteristic pull-out resistance	f <sub>ax,k,90</sub> [N/mm <sup>2</sup> ]	12,0	11,0				
Characteristic resistance to head pull-through	f <sub>head,k</sub> [N/mm <sup>2</sup> ]	9,4	9,4				
Characteristic resistance for tension	f <sub>tens,k</sub> [kN]	25,0	36,0				
Characteristic torsional strength	f <sub>tor,k</sub> [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 <sub>w</sub> [mm]	L <sub>w</sub> [mm]	L <sub>g</sub> [mm]	D <sub>w</sub> [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		

<sup>\*</sup>Product on order



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# Wkręt-met

## **PRODUCT DATA SHEET - WKFC**

## **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.