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PRODUCT DATA SHEET – WKFS

Section 1. PRODUCT DESCRIPTION

SCREW FOR WOODEN CONSTRUCTIONS WITH FULL THREAD AND COUNTERSUNK HEAD – WKFS

Construction screw WKFS 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 countersunk head with a TX socket.

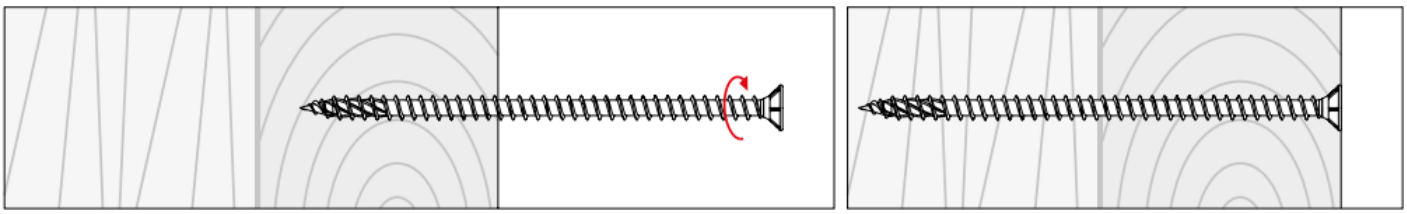
Features and advantages of screws:

- **countersunk head – ensures flush fitting of the screw in the installed member**
- **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**

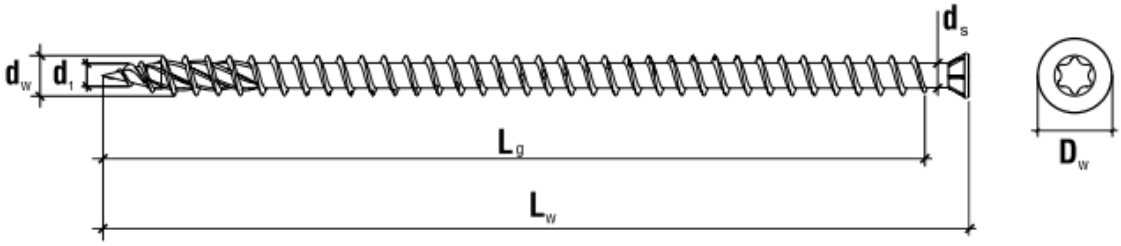
Screws hold European Technical Assessment: ETA-18/0817

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



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]	14,0	18,0
Length range	L_w [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	WKFS ø8	WKFS ø10
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]
WKFS-08120-B*	8,0	120	105	14	TX 40	50
WKFS-08140-B*	8,0	140	125	14	TX 40	50
WKFS-08160-B*	8,0	160	145	14	TX 40	50
WKFS-08180-B*	8,0	180	165	14	TX 40	50
WKFS-08200-B*	8,0	200	185	14	TX 40	50
WKFS-08220-B*	8,0	220	205	14	TX 40	50
WKFS-08240-B*	8,0	240	225	14	TX 40	50
WKFS-08260-B*	8,0	260	245	14	TX 40	50
WKFS-08280-B*	8,0	280	265	14	TX 40	50
WKFS-08300-B*	8,0	300	285	14	TX 40	50
WKFS-08350-B*	8,0	350	335	14	TX 40	50
WKFS-08400-B*	8,0	400	385	14	TX 40	50
WKFS-08450-B*	8,0	450	435	14	TX 40	50
WKFS-08500-B*	8,0	500	485	14	TX 40	50
WKFS-10300-B*	10,0	300	285	18	TX 50	25
WKFS-10330-B*	10,0	330	315	18	TX 50	25
WKFS-10360-B*	10,0	360	345	18	TX 50	25
WKFS-10400-B*	10,0	400	385	18	TX 50	25
WKFS-10450-B*	10,0	450	435	18	TX 50	25
WKFS-10500-B*	10,0	500	485	18	TX 50	25
WKFS-10550-B*	10,0	550	535	18	TX 50	25
WKFS-10600-B*	10,0	600	585	18	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.