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PRODUCT DATA SHEET – WN

Section 1. PRODUCT DESCRIPTION

SCREW FOR EXOTIC HARDWOOD – WN

Screw WN designed for exotic hardwood is made of stainless steel A2 INOX. Its special design prevents wood from cracking and splitting. Head angle of 60° together with ribs ensures its correct sinking in the material. Screws can be used in exotic hardwood, chipboard, plywood, wood, sterling board, MDF board. Pre-drilling is always recommended for exotic hardwood.

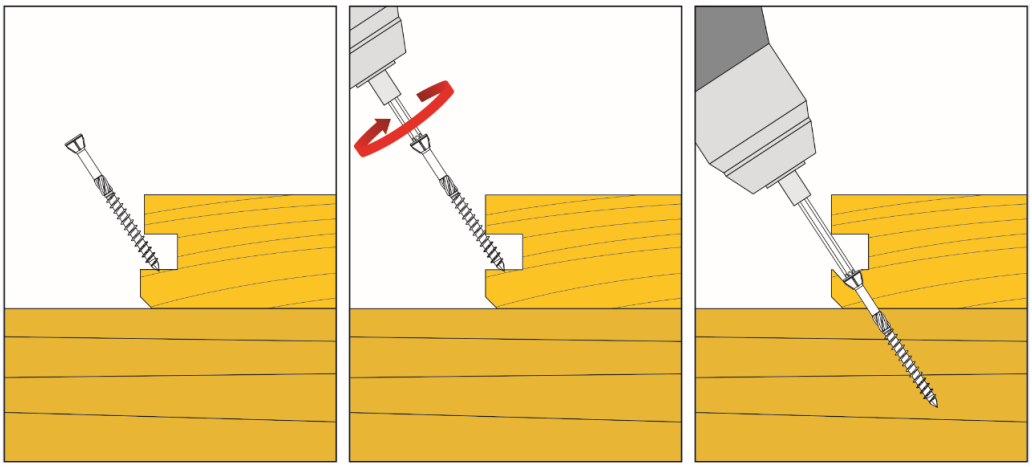
Features and advantages of screws:

- **counter-sunk head – ensures flush fitting of the screw in the installed member**
- **TX drive – guarantees optimum torque transfer**
- **cutting ribs and head 60° – aesthetic finish result thanks to full sinking of the head in the member being fastened**
- **shank ribs – reduce driving torque by reaming the hole**
- **serrated thread – cuts wood structural fibres as the screw advances**
- **special cutting point – makes for a quick start installation of the screw and prevents wood from splitting**

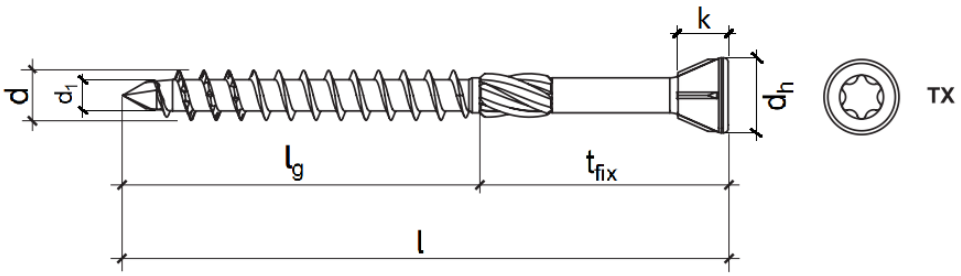
Screws conform to European standard: EN 14592+A1:2012

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 after prior drilling (only for exotic hardwood)



Section 3. TECHNICAL DATA



TECHNICAL PARAMETERS			
Parameter	Unit	Value	
Thread outer diameter	d [mm]	4	5
Thread inner diameter	d_1 [mm]	2,87	3,23
Smooth part diameter	d_s [mm]	-	-
Head diameter	d_h [mm]	6,62	7,98
Head height	k [mm]	3,6	4,0
Head area	A [mm^2]	34	50
Length range	l [mm]	40-60	50-80
Drive type	-	TX-15	TX-20
Screw material	-	stainless steel A2 INOX	
European standard	-	EN 14592+A1:2012	

STRENGTH PARAMETERS			
Parameter	Unit	ø4	ø5
Material characteristic yield strength	$M_{y,k}$ [Nm]	6,149	10,956
Characteristic pull-out resistance	$f_{ax,k,90}$ [N/mm^2]	26,56	23,32
Characteristic resistance to head pull-through	$f_{head,k}$ [N/mm^2]	28,82	41,19
Characteristic resistance for tension	$f_{tens,k}$ [kN]	6,95	7,60
Characteristic torsional strength	$f_{tor,k}$ [Nm]	3,76	7,35
Screw resistance factor	$R_{tor,k}$ [Nm]	2,18	4,41

SELECTION TABLE						
Product marking	Screw diameter	Screw length	Working thread length	Usable length	Drive type	Number of pieces in a box
	d [mm]	l [mm]	l_g [mm]	t_{fix} [mm]	[-]	pcs
WN-40040-A2	4,0	40	22	18	TX-15	200
WN-40045-A2	4,0	45	30	15	TX-15	200
WN-40050-A2	4,0	50	30	20	TX-15	200
WN-40060-A2	4,0	60	35	25	TX-15	200
WN-50050-A2	5,0	50	30	20	TX-20	100
WN-50060-A2	5,0	60	35	25	TX-20	100
WN-50070-A2	5,0	70	40	30	TX-20	100
WN-50080-A2	5,0	80	50	30	TX-20	100

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.