OD Self-drilling screws for timber

Special design of the drill point guaranteeing quick and firm installation in wooden substrate

Approvals and Reports

- ETA-13/0203

According to colorsystems:

RAL

Product information

Features and benefits

- Coloured polyester protective coating with a thickness of 45-50 um (RAL, NCS, RR), provides additional protection against corrosion. Various colours available to suit all metal sheet variants. UV stabilizers ensure colour quality over a long period of use.
- Hardened surface of the thread (flexible core). Corrosion resistant zinc coating has a thickness of no less than 12um. Shape and type of thread designed specifically for use in wood construction.
- Self vulcanizing EPDM washer. Temperature and UV resistant. The special shape of the washer ensures proper seating of the sealing material on the outer cladding material fixture which guarantees a proper seal.
- The drill point is designed to provide a fast and hassle-free installation in wood. Sharp point of the drill prevents movement of the surface of the fixture.

Applications

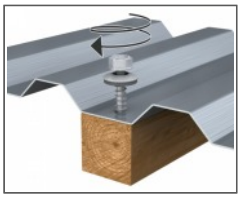
- For fixing of: Profiled sheet to wood

Base materials

Approved for use in:

- Timber

Installation guide

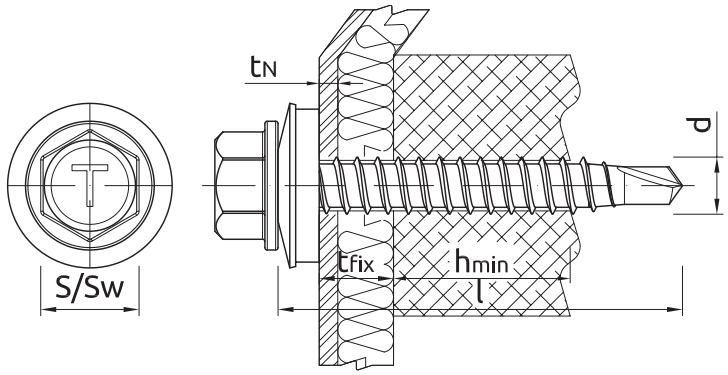


1. Screw must be installed at 90 degrees to substrate.
2. Magnetic driver must be used.
3. Lowest torque setting on impact screwdriver to start.
4. Reduce speed when the washer starts to deform.
5. Use a cordless Impact screwdriver. Note: Never use a power drill.
6. For installation please use screwdriver of load capacity 1600 - 2000 rpm with regulated trogue.

Product information

Size	Product Code	Screw			Fixture	Max. drilling thickness	Washer size
		Diameter	Length	Head size	Max. thickness with washer		
		d	l	S	t_{fix}		
		[mm]					
Ø4.8	OD-48028	4.8	28	8	2.5	2.5	14
	OD-48035	4.8	35	8	1.5	2.5	14
	OD-48055	4.8	55	8	19.5	2.5	14

Installation data



Size			Ø4.8
Screw diameter	d	[mm]	4.8
Hole diameter in substrate	d_0	[mm]	-
Min. hole depth in substrate	h_0	[mm]	-
Min. installation depth	h_{nom}	[mm]	30
Min. substrate thickness	h_{min}	[mm]	30
Min. spacing	s_{min}	[mm]	30
Min. edge distance	c_{min}	[mm]	25
Wrench size	Sw	[mm]	8

Basic performance data

Performance data for single screw without influence of edge distance and spacing

Size		TENSION LOAD	SHEAR LOAD
		Ø4.8 (T14)	Ø4.8
MEAN ULTIMATE LOAD			
Substrate thickness min. 20mm	[kN]	2.21	0.96
CHARACTERISTIC LOAD			
Substrate thickness min. 20mm	[kN]	1.80	0.74
DESIGN LOAD			
Substrate thickness min. 20mm	[kN]	1.35	0.56
RECOMMENDED LOAD			
Substrate thickness min. 20mm	[kN]	0.97	0.40

Design performance data

DESIGN PERFORMANCE DATA Ø4.8

TENSION LOAD

Size			Ø4.8
Substrate thickness	**h_{min}**	**[mm]**	**0.20**
Characteristic load	N_{Rk}	[kN]	1.80
Design resistance γ_{Ms} = 1.33	N_{Rd}	[kN]	1.35

TENSION LOAD TO PULL SCREW WITH WASHER 14 THROUGH FIXTURE

Size			Ø4.8				
Sheet metal thickness	**t_N**	**[mm]**	**0.40**	**0.63**	**0.50**	**0.75**	**1.00**
Characteristic resistance	$N_{o,Rk}$	[kN]	1.62	3.56	2.64	4.27	4.75
Design resistance γ_{Ms} = 1.33	N_{oRd}	[kN]	1.22	2.68	1.98	3.21	3.57

SHEAR LOAD

Size			Ø4.8		
Sheet metal thickness	**t_N**	**[mm]**	**0.50**	**0.63**	**0.75**
SUBSTRATE THICKNESS 0.20 mm					
Characteristic resistance	V_{Rk}	[kN]	0.74	1.22	1.25
Design resistance γ_{Mc} = 1.33	V_{Rd}	[kN]	0.56	0.92	0.94

Product commercial data

Product Code	Washer size [mm]	Quantity [pcs]			Weight [kg]			Bar Codes
		Box	Outer	Pallet	Box	Outer	Pallet	
OD-48028[1)]	14	250	4000	96000	1.02	16.3	421.7	5906675209166
OD-48035[1)]	14	250	3000	96000	1.13	13.6	463.9	5906675334325
OD-48055[1)]	14	100	1600	38400	0.64	10.2	275.8	5906675013305

1) ETA-13/0203