R-OTR-63/70 Zinc flake self-drilling screws to composite panels to concrete and timber

Special double thread type HiLo with cuts for drilling in wood and for embedding in concrete after pre-drilling.

Approvals and Reports

- ETA-17/0518

Product information

Features and benefits

- Hardened screw's thread surface. High quality anti-corrosion coating guarantees resistance of 15 Kesternich cycles.
- Shape of the tip facilitating correct turning and allowing penetration in wood and concrete.
- The shape and type of screw's thread is designed specifically for connecting to concrete and wood. The drill point is designed to provide a fast and hassle-free installation. Sharp point of the drill prevents movement of the surface of the fixture.
- Special zinc flake coating for increased corrosion resistance

Applications

- Composite panels to thick wall hot rolled steel sections

Base materials

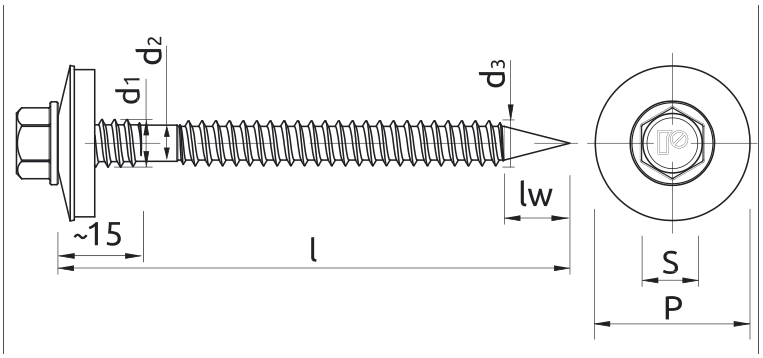
Approved for use in:

- Wood
- Timber
- Concrete

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.
7. Screw must be installed at 90 degrees to substrate.
8. Magnetic driver must be used.
9. Lowest torque setting on impact screwdriver to start.
10. Reduce speed when the washer starts to deform.

Product information



Size	Product Code	Screw				Washer size	Drill diameter	Fixture	
		Diameter		Length	Head size			[English]: Max grubość elementu mocowanego z podkładką - drewno	[English]: Max grubość elementu mocowanego z podkładką - beton
		d	d_1	l	S		Ø	t_{fix}	
		[mm]							
Ø6.3/7.0	R-OTR-63/70095A19	6.3	7	95	8	19	5	60	65
	R-OTR-63/70115A19	6.3	7	115	8	19	5	80	85
	R-OTR-63/70135A19	6.3	7	135	8	19	5	100	105
	R-OTR-63/70155A19	6.3	7	155	8	19	5	120	125
	R-OTR-63/70185A19	6.3	7	185	8	19	5	150	155
	R-OTR-63/70205A19	6.3	7	205	8	19	5	170	175
	R-OTR-63/70235A19	6.3	7	235	8	19	5	200	205
	R-OTR-63/70255A19	6.3	7	255	8	19	5	220	225

Installation data

Size			Ø6.3/7.0	Ø6.3/7.0
Wrench size	Sw	[mm]	8	8
Hole diameter in substrate	d_0	[mm]	-	5
Min. hole depth in substrate	h_0	[mm]	-	35
Min. installation depth	h_{nom}	[mm]	30	25
Min. substrate thickness	h_{min}	[mm]	30	100
Min. spacing	s_{min}	[mm]	30	40
Min. edge distance	c_{min}	[mm]	25	40
Substrate			Timber,	Concrete
Screw diameter	d	[mm]	6.3/7.0	6.3/7.0

Basic performance data

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

Size		TENSION LOAD		SHEAR LOAD	
		Ø6.3/7.0 (A19) Timber	Ø6.3/7.0 (A19) Concrete	Ø6.3/7.0 (A19) Timber	Ø6.3/7.0 (A19) Concrete
MEAN ULTIMATE LOAD					
Substrate thickness hef≥30mm; tn≥0.4	[kN]	2.79	-	1.25	-
Substrate thickness hef≥30mm; tn≥0.5	[kN]	4.79	-	2.07	-
Substrate thickness hef≥30mm; tn≥0.63	[kN]	4.92	-	2.49	-
Substrate thickness hef≥30mm; tn≥0.75	[kN]	4.92	-	3.05	-
Substrate thickness hef≥25mm; tn≥0.4	[kN]	-	2.79	-	1.22
Substrate thickness hef≥25mm; tn≥0.5	[kN]	-	4.79	-	2.07
Substrate thickness hef≥25mm; tn≥0.63	[kN]	-	5.36	-	2.49
Substrate thickness hef≥25mm; tn≥0.75	[kN]	-	5.36	-	3.05

Basic performance data

Size		TENSION LOAD		SHEAR LOAD	
		Ø6.3/7.0 (A19) Timber	Ø6.3/7.0 (A19) Concrete	Ø6.3/7.0 (A19) Timber	Ø6.3/7.0 (A19) Concrete
CHARACTERISTIC LOAD					
Substrate thickness hef≥30mm; tn≥0.4	[kN]	1.86	-	0.81	-
Substrate thickness hef≥30mm; tn≥0.5	[kN]	3.19	-	1.38	-
Substrate thickness hef≥30mm; tn≥0.63	[kN]	3.28	-	1.66	-
Substrate thickness hef≥30mm; tn≥0.75	[kN]	3.28	-	2.03	-
Substrate thickness hef≥25mm; tn≥0.4	[kN]	-	1.86	-	0.81
Substrate thickness hef≥25mm; tn≥0.5	[kN]	-	3.19	-	1.38
Substrate thickness hef≥25mm; tn≥0.63	[kN]	-	3.57	-	1.66
Substrate thickness hef≥25mm; tn≥0.75	[kN]	-	3.57	-	2.03
DESIGN LOAD					
Substrate thickness hef≥30mm; tn≥0.4	[kN]	1.40	-	0.61	-
Substrate thickness hef≥30mm; tn≥0.5	[kN]	2.40	-	1.04	-
Substrate thickness hef≥30mm; tn≥0.63	[kN]	2.47	-	1.25	-
Substrate thickness hef≥30mm; tn≥0.75	[kN]	2.47	-	1.53	-
Substrate thickness hef≥25mm; tn≥0.4	[kN]	-	1.40	-	0.61
Substrate thickness hef≥25mm; tn≥0.5	[kN]	-	2.40	-	1.04
Substrate thickness hef≥25mm; tn≥0.63	[kN]	-	1.70	-	1.25
Substrate thickness hef≥25mm; tn≥0.75	[kN]	-	1.70	-	1.53
RECOMMENDED LOAD					
Substrate thickness hef≥30mm; tn≥0.4	[kN]	1.00	-	0.43	-
Substrate thickness hef≥30mm; tn≥0.5	[kN]	1.71	-	0.74	-
Substrate thickness hef≥30mm; tn≥0.63	[kN]	1.76	-	0.89	-
Substrate thickness hef≥30mm; tn≥0.75	[kN]	1.76	-	1.09	-
Substrate thickness hef≥25mm; tn≥0.4	[kN]	-	1.00	-	0.44
Substrate thickness hef≥25mm; tn≥0.5	[kN]	-	1.71	-	0.74
Substrate thickness hef≥25mm; tn≥0.63	[kN]	-	1.21	-	0.89
Substrate thickness hef≥25mm; tn≥0.75	[kN]	-	1.21	-	1.09

Product commercial data

Product Code	Screw	Washer size [mm]	Drill diameter [mm]	Quantity [pcs]			Weight [kg]			Bar Codes
	Diameter [mm]			Box	Outer	Pallet	Box	Outer	Pallet	
R-OTR-63/70095A19 [1]	7	19	5	100	100	28800	2.1	2.1	640.0	5906675438054
R-OTR-63/70115A19 [1]	7	19	5	100	100	28800	2.1	2.1	640.0	5906675435442
R-OTR-63/70135A19 [1]	7	19	5	100	100	28800	2.4	2.4	724.3	5906675435459
R-OTR-63/70155A19 [1]	7	19	5	100	100	28800	2.7	2.7	802.8	5906675435565
R-OTR-63/70185A19 [1]	7	19	5	100	100	28800	3.1	3.1	924.6	5906675435466
R-OTR-63/70205A19 [1]	7	19	5	100	100	28800	3.4	3.4	1019.6	5906675435473
R-OTR-63/70235A19 [1]	7	19	5	100	100	11200	3.9	3.9	471.2	5906675438061
R-OTR-63/70255A19 [1]	7	19	5	100	100	11200	4.2	4.2	497.9	5906675435480

1) ETA-17/0518