

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
- UKTA-22/6345



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:

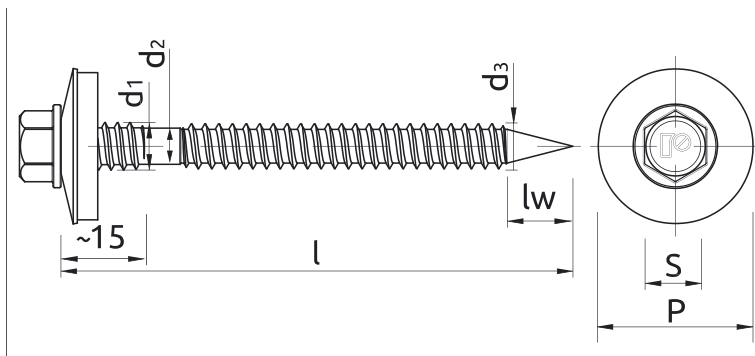
- Wood
- Timber
- Concrete

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 torque.
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 Ø	Fixture	
		Diameter		Length	Head size			[English]: Max grubość elementu mocowanego z podkładką - drewno	[English]: Max grubość elementu mocowanego z podkładką - beton
		d	d _i	l	S			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	-
Substrate thickness hef≥25mm; tn≥0.5	[kN]	-	4.79	-
Substrate thickness hef≥25mm; tn≥0.63	[kN]	-	5.36	-
Substrate thickness hef≥25mm; tn≥0.75	[kN]	-	5.36	-

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 Diameter [mm]	Washer size [mm]	Drill diameter [mm]	Quantity [pcs]			Weight [kg]			Bar Codes
				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