

R-ONR-55/63 Zinc flake self-drilling screws up to 12mm

Special zinc flake corrosion-resistant coating for highly effective protection



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.
- 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.
- The shape of the thread and its height is designed for applications into sandwich panels and steel construction.
- Two types of threads: one designed for mounting into a steel structure, second under head thread, prevents external panel dents and helps to seal the connection.
- 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.

Applications

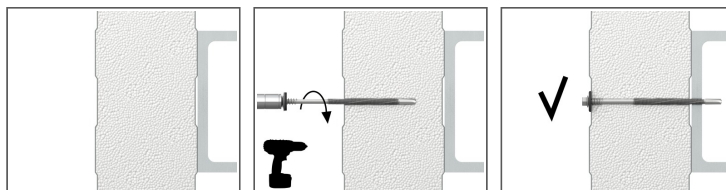
- For fixing of: Composite panels to thick wall hot rolled steel sections
- For fixing of: Composite panels to cold formed sections structures

Base materials

Approved for use in:

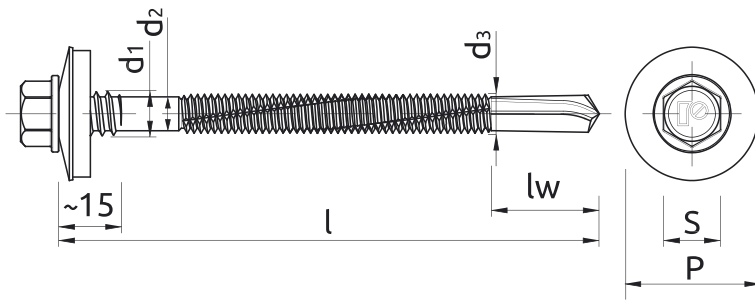
- Structural Steel up to 12mm

Installation guide



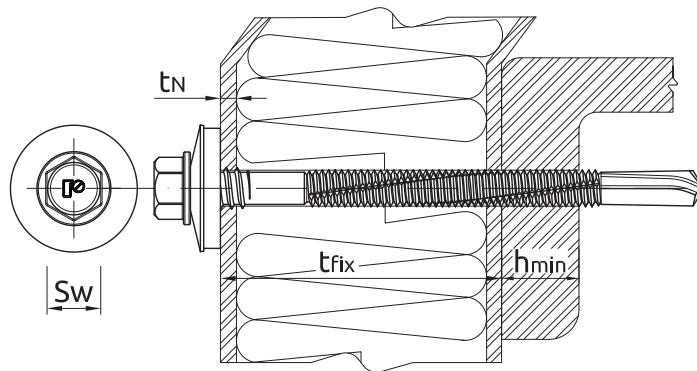
1. Screw must be installed at 90 degrees to substrate.
2. Magnetic driver must be used.
3. Lowest torque setting on impact screwdriver to start.
4. Reduce speed when the washer starts to deform.
5. Use a cordless Impact screwdriver. Note: Never use a power drill.
6. For installation please use screwdriver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

Product information



Size	Product Code	Screw				Fixture	Max. drilling thickness	Washer size
		Diameter		Length	Head size	Max. thickness with washer		
		d	d ₁	l	s	t _{fix}		
		[mm]						
Ø5.5/6.3	R-ONR-55/63101A19	5.5	6.3	101	8	65	12	19
	R-ONR-55/63121A19	5.5	6.3	121	8	85	12	19
	R-ONR-55/63141A19	5.5	6.3	141	8	105	12	19
	R-ONR-55/63161A19	5.5	6.3	161	8	125	12	19
	R-ONR-55/63191A19	5.5	6.3	191	8	155	12	19
	R-ONR-55/63211A19	5.5	6.3	211	8	175	12	19
	R-ONR-55/63241A19	5.5	6.3	241	8	205	12	19
	R-ONR-55/63261A19	5.5	6.3	261	8	225	12	19
	R-ONR-55/63291A19	5.5	6.3	291	8	255	12	19
	R-ONR-55/63341A19	5.5	6.3	341	8	305	12	19

Installation data



Size			Ø5.5/6.3
Wrench size	Sw	[mm]	8
Min. substrate thickness	h_{min}	[mm]	4
Max. substrate thickness	h_{max}	[mm]	12
Min. spacing	s_{min}	[mm]	30
Min. edge distance	c_{min}	[mm]	10
Screw diameter	d	[mm]	5.5/6.3

Basic performance data

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

Size		TENSION LOAD	SHEAR LOAD
		Ø5.5/6.3 (A19)	Ø5.5/6.3 (A19)
MEAN ULTIMATE LOAD			
Substrate thickness ≥ 4.0 mm; t _n ≥ 0.4	[kN]	2.79	1.26
Substrate thickness ≥ 4.0 mm; t _n ≥ 0.5	[kN]	4.79	2.09
Substrate thickness ≥ 4.0 mm; t _n ≥ 0.63	[kN]	6.06	2.70
Substrate thickness ≥ 4.0 mm; t _n ≥ 0.75	[kN]	6.23	3.35
CHARACTERISTIC LOAD			
Substrate thickness ≥ 4.0 mm; t _n ≥ 0.4	[kN]	1.86	0.86
Substrate thickness ≥ 4.0 mm; t _n ≥ 0.5	[kN]	3.19	1.38
Substrate thickness ≥ 4.0 mm; t _n ≥ 0.63	[kN]	4.04	1.80
Substrate thickness ≥ 4.0 mm; t _n ≥ 0.75	[kN]	4.15	2.23
DESIGN LOAD			
Substrate thickness ≥ 4.0 mm; t _n ≥ 0.4	[kN]	1.40	0.67
Substrate thickness ≥ 4.0 mm; t _n ≥ 0.5	[kN]	2.40	1.04
Substrate thickness ≥ 4.0 mm; t _n ≥ 0.63	[kN]	3.04	1.35
Substrate thickness ≥ 4.0 mm; t _n ≥ 0.75	[kN]	3.12	1.67
RECOMMENDED LOAD			
Substrate thickness ≥ 4.0 mm; t _n ≥ 0.4	[kN]	1.00	0.47
Substrate thickness ≥ 4.0 mm; t _n ≥ 0.5	[kN]	1.71	0.74
Substrate thickness ≥ 4.0 mm; t _n ≥ 0.63	[kN]	2.17	0.97
Substrate thickness ≥ 4.0 mm; t _n ≥ 0.75	[kN]	2.23	1.20

Product commercial data

Product Code	Screw	Washer size [mm]	Quantity [pcs]			Weight [kg]			Bar Codes
	Diameter [mm]		Box	Outer	Pallet	Box	Outer	Pallet	
R-ONR-55/63101A19 ¹⁾	6.3	19	100	800	25600	1.89	15.1	514.3	5906675435497
R-ONR-55/63121A19 ¹⁾	6.3	19	100	800	25600	2.2	17.7	596.9	5906675435503
R-ONR-55/63141A19 ¹⁾	6.3	19	100	800	25600	2.5	19.9	665.3	5906675435329
R-ONR-55/63161A19 ¹⁾	6.3	19	100	800	25600	2.8	22.1	737.0	5906675435336
R-ONR-55/63191A19 ¹⁾	6.3	19	100	800	25600	3.2	25.2	836.3	5906675435343
R-ONR-55/63211A19 ¹⁾	6.3	19	100	800	25600	3.4	27.3	903.2	5906675435350
R-ONR-55/63241A19 ¹⁾	6.3	19	100	100	28800	3.8	3.8	1128.5	5906675435367
R-ONR-55/63261A19 ¹⁾	6.3	19	100	100	11200	4.2	4.2	497.7	5906675435510
R-ONR-55/63291A19 ¹⁾	6.3	19	100	100	11200	4.6	4.6	547.5	5906675435374
R-ONR-55/63341A19 ¹⁾	6.3	19	100	100	11200	5.4	5.4	636.4	5906675435381

1) ETA-17/0518