

R-WBT Screw for concrete

Screw for concrete substrates, TX25 head. Shape and type of the thread specially design to allow connecting to concrete and wood.



Approvals and Reports

- ETA-09/0346
- UKTA-22/6338



Product information

Features and benefits

- Hardened thread surface
- High quality anti-corrosion coating guarantees resistance of 15 Kesternich cycles.
- Shape and type of the thread specially design to allow 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.
- Pre-assembly with other component is possible before installation

Applications

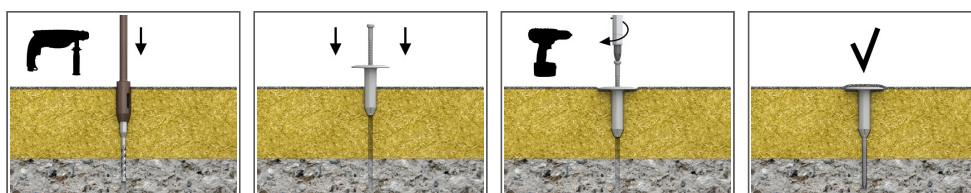
- Insulation materials in flat roof applications in conjunction with telescopic connector and steel washer

Base materials

Approved for use in:

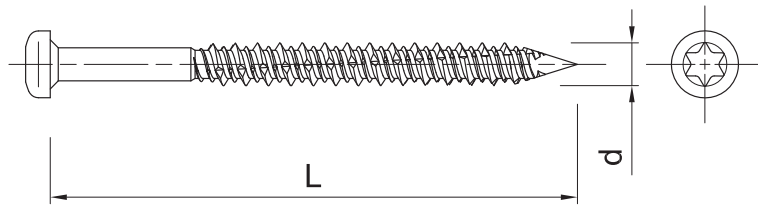
- Concrete
- Concrete Slab
- Timber

Installation guide



1. Drill the hole of required diameter and depth (where applicable)
2. Lightly insert plastic sleeve into insulation material
3. Using drilling machine, drive the WBT screw into substrate until fixing depth is reached

Product information



Product Code	Screw	
	Diameter	Length
	d	L
	[mm]	[mm]
R-WBT-61050	6.1	50
R-WBT-61075	6.1	75
R-WBT-61090	6.1	90
R-WBT-61100	6.1	100
R-WBT-61120	6.1	120
R-WBT-61140	6.1	140
R-WBT-61160	6.1	160
R-WBT-61180	6.1	180
R-WBT-61200	6.1	200
R-WBT-61220	6.1	220
R-WBT-61240	6.1	240
R-WBT-61260	6.1	260
R-WBT-61300	6.1	300

Product Code				Plastic sleeve			Fixture		Length	Bite type
				Diameter	Length	Plate diameter	Min. thickness	Max. thickness		
				d	L	D	t _{fix}	t _{fix}		
				[mm]	[mm]	[mm]	[mm]	[mm]		
R-GOK-015		GOK-PLUS-015		15.5	15	50	30	270		
R-GOK-035		GOK-PLUS-035		15.5	35	50	50	290		
R-GOK-065		GOK-PLUS-065		15.5	65	50	80	320		
R-GOK-075		GOK-PLUS-075		15.5	75	50	90	330		
R-GOK-085		GOK-PLUS-085		15.5	85	50	100	340		
R-GOK-095		GOK-PLUS-095		15.5	95	50	110	350		
R-GOK-105		GOK-PLUS-105		15.5	105	50	120	360		
R-GOK-125		GOK-PLUS-125		15.5	125	50	140	380		
R-GOK-135		GOK-PLUS-135		15.5	135	50	150	390		
R-GOK-165		GOK-PLUS-165		15.5	165	50	180	420		
R-GOK-185		GOK-PLUS-185		15.5	185	50	200	440		
R-GOK-225		GOK-PLUS-225		15.5	225	50	240	480		
R-GOK-255		GOK-PLUS-255		15.5	255	50	270	510		
R-GOK-285		GOK-PLUS-285		15.5	285	50	300	540		
R-GOK-325		GOK-PLUS-325		15.5	325	50	340	580		
R-GOK-385		GOK-PLUS-385		15.5	385	50	400	640		
R-GOK-425		GOK-PLUS-425		15.5	425	50	440	680		
	R-GOK-525-N			15.5	525	50	540	780		
	R-GOK-625-N			15.5	625	50	640	880		
	R-GOK-725-N			15.5	725	50	740	980		
			TORX-025/100						10010010 0100100	
									TORX-02 5TORX-0 25TORX- 025TORX -025TOR X-025	

Installation data

Substrate			Concrete C20/25	Thin-walled slab C16/20	Timber
Hole diameter in substrate	d_o	[mm]	5	5	-
Min. hole depth in substrate	h_o	[mm]	35	25	-
Min. installation depth	h_{nom}	[mm]	30	20	30
Min. substrate thickness	h_{min}	[mm]	35	30	30
Min. spacing	s_{min}	[mm]	120	120	120
Min. edge distance	c_{min}	[mm]	30	30	50
Screw drive	-	[-]	TX25	TX25	TX25
Screw diameter	d	[mm]	6.1	6.1	6.1

Basic performance data

Size		Concrete C12/15	Concrete C20/25	Thin-walled slab C16/20	Timber, grade C24
Effective embedment depth h_{ef}	[mm]	30.00	30.00	20.00	30.00
MEAN ULTIMATE LOAD					
POK-041 + WBT	[kN]	-	-	-	-
CHARACTERISTIC LOAD					
POK-041 + WBT	[kN]	3.84	3.84	1.85	1.59
DESIGN LOAD					
POK-041 + WBT	[kN]	1.92	1.92	0.76	0.80
RECOMMENDED LOAD					
POK-041 + WBT	[kN]	1.37	1.37	0.54	0.57

Design performance data

Size			Concrete C12/15	Concrete C20/25	Thin-walled slab C16/20	Timber, grade C24
Effective embedment depth	h_{ef}	[mm]	30	30	20	30
TENSION LOAD						
PULL-OUT FAILURE						
Characteristic resistance	$N_{Rk,p}$	[kN]	3.84	3.84	1.85	1.59
Design resistance $N_{M}^* = *$	$N_{Rd,p}$	[kN]	1.92	1.92	0.76	0.80

Product commercial data

Size	Product Code	Screw			Plastic sleeve		Length [mm]	Quantity [pcs]			Weight [kg]			Bar Codes	
		Length [mm]	Diameter [mm]	Length [mm]	Length [mm]	Box		Outer	Pallet	Box	Outer	Pallet			
Ø6.1	R-WBT-61050 ¹⁾	50						100	3200	76800	0.79	25.2	634.4	5906675101200	
	R-WBT-61075 ¹⁾	75						100	1600	38400	1.11	17.7	454.3	5906675101231	
	R-WBT-61090 ¹⁾	90						100	1600	38400	1.34	21.4	543.8	5906675101309	
	R-WBT-61100 ¹⁾	100						100	1600	38400	1.49	23.9	602.5	5906675101408	
	R-WBT-61120 ¹⁾	120						100	1200	28800	1.77	21.3	540.9	5906675101439	
	R-WBT-61140 ¹⁾	140						100	1200	28800	2.0	24.5	618.7	5906675101460	
	R-WBT-61160 ¹⁾	160						100	1200	28800	2.3	28.1	704.2	5906675101514	
	R-WBT-61180 ¹⁾	180						100	100	16800	2.7	2.7	477.9	5906675225173	
	R-WBT-61200 ¹⁾	200						100	100	16800	2.9	2.9	518.5	5906675101927	
	R-WBT-61220 ¹⁾	220						100	100	16800	3.2	3.2	568.4	5906675102214	
	R-WBT-61240 ¹⁾	240						100	100	16800	3.5	3.5	620.7	5906675102245	
	R-WBT-61260 ¹⁾	260						100	100	16800	3.8	3.8	661.7	5906675102269	
	R-WBT-61300 ¹⁾	300						100	100	7800	4.3	4.3	367.0	5906675102290	
	R-GOK-015		15.5	15				1100	1100	61600	6.6	6.6	400.8	5906675101033	
	R-GOK-035		15.5	35				600	600	33600	5.0	5.0	307.0	5906675101057	
	R-GOK-065		15.5	65				400	400	22400	4.3	4.3	268.1	5906675101170	
	R-GOK-075		15.5	75				300	300	16800	3.8	3.8	241.7	5906675106663	
	R-GOK-085		15.5	85				300	300	16800	3.8	3.8	244.2	5906675106687	
	R-GOK-095		15.5	95				250	250	14000	3.8	3.8	240.6	5906675106717	
	R-GOK-105		15.5	105				250	250	14000	3.7	3.7	236.1	5906675106748	
	R-GOK-125		15.5	125				200	200	11200	3.5	3.5	224.8	5906675106779	
	R-GOK-135		15.5	135				200	200	11200	3.5	3.5	224.1	5906675106830	
	R-GOK-165		15.5	165				150	150	8400	3.1	3.1	201.5	5906675106861	
	R-GOK-185		15.5	185				100	100	5600	2.3	2.3	158.9	5906675106885	
	R-GOK-225		15.5	225				100	100	5600	2.6	2.6	176.4	5906675107103	
	R-GOK-255		15.5	255				75	75	4200	2.3	2.3	158.1	5906675112855	
	R-GOK-285		15.5	285				75	75	4200	2.5	2.5	168.9	5906675107295	
	R-GOK-325		15.5	325				50	50	2800	2.0	2.0	139.2	5906675108056	
	R-GOK-385		15.5	385				50	50	2000	2.3	2.3	119.9	5906675108117	
	R-GOK-425		15.5	425				50	50	1600	2.4	2.4	106.4	5906675108629	
	R-GOK-525-N		15.5	525				50	50	600	4.2	4.2	80.0	5906675113883	
	R-GOK-625-N		15.5	625				50	50	600	4.7	4.7	86.2	5906675113890	
	R-GOK-725-N		15.5	725				50	50	600	5.2	5.2	92.4	5906675113906	
	GOK-PLUS-015		15.5	15					1100	1100	61600	7.7	7.7	460.2	5906675006086
	GOK-PLUS-035		15.5	35					600	600	33600	5.1	5.1	313.7	5906675006093
	GOK-PLUS-065		15.5	65					400	400	22400	4.6	4.6	285.2	5906675006109
	GOK-PLUS-075		15.5	75					300	300	16800	3.6	3.6	231.6	5906675006116
	GOK-PLUS-085		15.5	85					300	300	16800	3.9	3.9	248.6	5906675006123
	GOK-PLUS-095		15.5	95					250	250	14000	3.7	3.7	235.5	5906675006130
	GOK-PLUS-105		15.5	105					250	250	14000	3.9	3.9	247.8	5906675006147
	GOK-PLUS-125		15.5	125					200	200	11200	3.4	3.4	218.0	5906675006154
	GOK-PLUS-135		15.5	135					200	200	11200	3.6	3.6	233.8	5906675006161
	GOK-PLUS-165		15.5	165					150	150	8400	3.2	3.2	210.5	5906675006178
	GOK-PLUS-185		15.5	185					100	100	5600	2.5	2.5	172.0	5906675006185
	GOK-PLUS-225		15.5	225					100	100	5600	2.8	2.8	184.9	5906675006192
	GOK-PLUS-255		15.5	255					75	75	4200	2.4	2.4	164.3	5906675006208
GOK-PLUS-285		15.5	285					75	75	4200	2.6	2.6	173.6	5906675006215	
GOK-PLUS-325		15.5	325					50	50	2800	2.0	2.0	143.3	5906675006222	
GOK-PLUS-385		15.5	385					50	50	2400	2.4	2.4	142.8	5906675006239	
GOK-PLUS-425		15.5	425					50	50	2000	2.6	2.6	132.1	5906675006246	
RT-BIT-TORX25/100							100	12	480	960	0.37	14.9	59.8	5906675026022	
RT-BIT-TORX25/150							150	12	480	960	0.56	22.6	75.1	5906675026039	
RT-BIT-TORX25/200							200	12	240	960	0.74	14.9	89.5	5906675026046	

Product commercial data

Size	Product Code	Screw		Plastic sleeve		Length [mm]	Quantity [pcs]			Weight [kg]			Bar Codes
		Length [mm]	Diameter [mm]	Length [mm]	Box		Outer	Pallet	Box	Outer	Pallet		
	RT-BIT-TORX25/350					350	12	216	864	1.31	23.5	124.2	5906675026060
	RT-BIT-TORX25/450					460	12	144	864	1.66	19.9	149.2	5906675026077

1) ETA-09/0346