

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



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

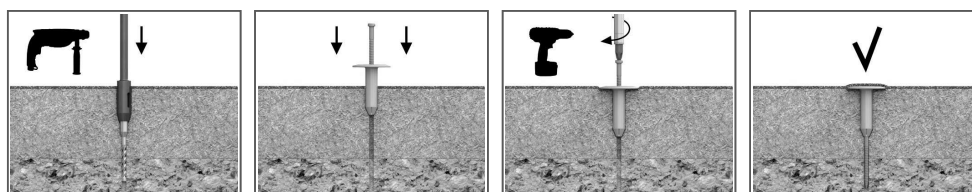
- Insulation materials in flat roof applications in conjunction with telescopic connector and steel washer

Base materials

Approved for use in:

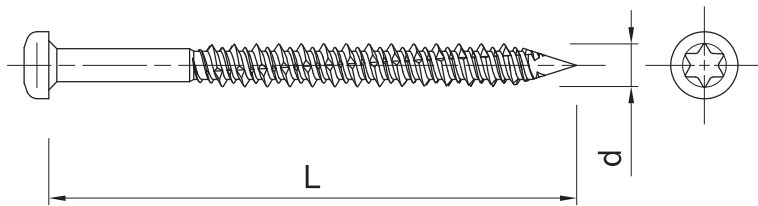
- Concrete
- Concrete Slab
- Timber

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}			L
			[mm]	[mm]	[mm]	[mm]	[mm]			[m]
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-02 5TORX-0 25TORX- 025TORX -025TOR X-025		

TORX-025/100

10010010
0100100

Installation data

Substrate			Concrete C20/25	Thin-walled slab C16/20	Timber
Hole diameter in substrate	d_0	[mm]	5	5	-
Min. hole depth in substrate	h_0	[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 $V_M^* = *$	$N_{Rd,p}$	[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]		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]	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