

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

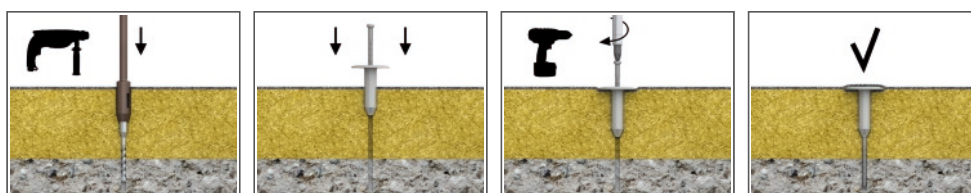
- Insulation materials in flat roof applications in conjunction with telescopic connector and steel washer

Base materials

Approved for use in:

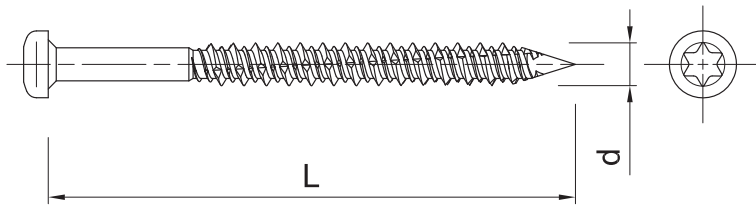
- Concrete
- Concrete Slab
- Timber

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}		
			[mm]	[mm]	[mm]	[mm]	[mm]		
GOK-015		GOK-PLUS-015	15.515.5	1515	5050	3030	270270		
GOK-035		GOK-PLUS-035	15.515.5	3535	5050	5050	290290		
GOK-065		GOK-PLUS-065	15.515.5	6565	5050	8080	320320		
GOK-075		GOK-PLUS-075	15.515.5	7575	5050	9090	330330		
GOK-085		GOK-PLUS-085	15.515.5	8585	5050	100100	340340		
GOK-095		GOK-PLUS-095	15.515.5	9595	5050	110110	350350		
GOK-105		GOK-PLUS-105	15.515.5	105105	5050	120120	360360		
GOK-125		GOK-PLUS-125	15.515.5	125125	5050	140140	380380		
GOK-135		GOK-PLUS-135	15.515.5	135135	5050	150150	390390		
GOK-165		GOK-PLUS-165	15.515.5	165165	5050	180180	420420		
GOK-185		GOK-PLUS-185	15.515.5	185185	5050	200200	440440		
GOK-225		GOK-PLUS-225	15.515.5	225225	5050	240240	480480		
GOK-255		GOK-PLUS-255	15.515.5	255255	5050	270270	510510		
GOK-285		GOK-PLUS-285	15.515.5	285285	5050	300300	540540		
GOK-325		GOK-PLUS-325	15.515.5	325325	5050	340340	580580		
GOK-385		GOK-PLUS-385	15.515.5	385385	5050	400400	640640		
GOK-425		GOK-PLUS-425	15.515.5	425425	5050	440440	680680		
	GOK-525-N		15.5	525	50	540	780		
	GOK-625-N		15.5	625	50	640	880		
	GOK-725-N		15.5	725	50	740	980		
								10010010 0100100	
			TORX-025/100					TORX-0 25	

Installation data

Substrate			Concrete C20/25	Thin-walled slab C16/20	Timber
Screw diameter	d	[mm]	6.1	6.1	6.1
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

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 $\gamma_M^* = *$	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	0.94	30.1	752.4	5906675101200	
	R-WBT-61075 ¹⁾	75						100	1600	38400	1.13	18.0	462.8	5906675101231	
	R-WBT-61090 ¹⁾	90						100	1600	38400	1.36	21.8	552.2	5906675101309	
	R-WBT-61100 ¹⁾	100						100	1600	38400	1.50	24.0	605.3	5906675101408	
	R-WBT-61120 ¹⁾	120						100	1200	28800	1.81	21.7	550.2	5906675101439	
	R-WBT-61140 ¹⁾	140						100	1200	28800	2.1	25.0	628.8	5906675101460	
	R-WBT-61160 ¹⁾	160						100	1200	28800	2.4	28.5	712.9	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	9100	4.3	4.3	423.2	5906675102290	
	R-GOK-015		15.5	15				1100	1100	26400	6.6	6.6	188.9	5906675101033	
	R-GOK-035		15.5	35				600	600	14400	4.6	4.6	140.5	5906675101057	
	R-GOK-065		15.5	65				400	400	9600	4.3	4.3	132.3	5906675101170	
	R-GOK-075		15.5	75				300	300	7200	3.4	3.4	111.3	5906675106663	
	R-GOK-085		15.5	85				300	300	7200	3.8	3.8	122.0	5906675106687	
	R-GOK-095		15.5	95				250	250	6000	3.3	3.3	109.3	5906675106717	
	R-GOK-105		15.5	105				250	250	6000	3.7	3.7	119.1	5906675106748	
	R-GOK-125		15.5	125				200	200	4800	3.3	3.3	109.4	5906675106779	
	R-GOK-135		15.5	135				200	200	4800	3.4	3.4	112.6	5906675106830	
	R-GOK-165		15.5	165				150	150	3600	3.1	3.1	105.0	5906675106861	
	R-GOK-185		15.5	185				100	100	2400	2.4	2.4	87.1	5906675106885	
	R-GOK-225		15.5	225				100	100	2400	2.7	2.7	94.2	5906675107103	
	R-GOK-255		15.5	255				75	75	1800	2.4	2.4	88.0	5906675112855	
	R-GOK-285		15.5	285				75	75	1800	2.5	2.5	89.5	5906675107295	
	R-GOK-325		15.5	325				50	50	1200	2.0	2.0	76.8	5906675108056	
	R-GOK-385		15.5	385				50	50	800	2.1	2.1	62.8	5906675108117	
	R-GOK-425		15.5	425				50	50	800	2.4	2.4	68.2	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	26400	7.2	7.2	203.4	5906675006086
	GOK-PLUS-035		15.5	35					600	600	14400	4.9	4.9	147.8	5906675006093
	GOK-PLUS-065		15.5	65					400	400	9600	4.4	4.4	135.3	5906675006109
	GOK-PLUS-075		15.5	75					300	300	7200	3.6	3.6	116.4	5906675006116
	GOK-PLUS-085		15.5	85					300	300	7200	3.9	3.9	124.6	5906675006123
	GOK-PLUS-095		15.5	95					250	250	6000	7.2	7.2	203.1	5906675006130
	GOK-PLUS-105		15.5	105					250	250	6000	3.7	3.7	118.8	5906675006147
	GOK-PLUS-125		15.5	125					200	200	4800	3.4	3.4	110.6	5906675006154
	GOK-PLUS-135		15.5	135					200	200	4800	3.6	3.6	115.4	5906675006161
	GOK-PLUS-165		15.5	165					150	150	3600	3.2	3.2	107.0	5906675006178
	GOK-PLUS-185		15.5	185					100	100	2400	2.4	2.4	88.0	5906675006185
	GOK-PLUS-225		15.5	225					100	100	2400	2.8	2.8	96.0	5906675006192
	GOK-PLUS-255		15.5	255					75	75	1800	2.3	2.3	85.9	5906675006208
GOK-PLUS-285		15.5	285					75	75	1800	2.6	2.6	91.2	5906675006215	
GOK-PLUS-325		15.5	325					50	50	1200	2.0	2.0	76.9	5906675006222	
GOK-PLUS-385		15.5	385					50	50	800	2.4	2.4	67.7	5906675006239	
GOK-PLUS-425		15.5	425					50	50	800	2.5	2.5	69.8	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