

DICHIARAZIONE DI PRESTAZIONE N. 0173/21

Secondo Allegato III del Regolamento UE 305/2011

Codice di identificazione unico del prodotto-tipo: 0173/21 - eTics Twister**Fabbricante:** Torggler S.r.l., Via Prati Nuovi 9 – 39020 Marlengo (BZ) ITALIA**Documento per la valutazione europea (EAD) e usi previsti:**

EAD 330196-01-0604, Edition 10/2017: Tasselli di plastica in materiale vergine o non vergine per il fissaggio di sistemi compositi di isolamento termico esterno con intonaco

Valutazione tecnica europea (ETA): ETA 21/0840 of 12.10.2021**Technical Assessment Body:** DIBt – Deutsches Institut für Bautechnik**Organismo notificato:** 2873 - Technische Universität Darmstadt Fachbereich Bau- und Umweltingenieurwissenschaften Institut für Stahlbau und Werkstoffmechanik**Prestazione dichiarata:**

Le seguenti prestazioni dichiarate si applicano a tutti i tipi di prodotto specificati sopra.

Caratteristiche essenziali	Prestazione	Sistema di AVCP	EAD
Capacità di carico caratteristica - Capacità di carico caratteristica sotto carico di trazione - Distanze minime dal centro e dal bordo	Appendice C1 Appendice B2	2+	EAD 330196-01-0604, Edition 10/2017
Movimenti	Appendice C2	2+	
Rigidità della piastra	NPD	2+	
Trasmittanza termica puntuale	Appendice C2	2+	

La prestazione del prodotto sopra identificato è conforme all'insieme delle prestazioni dichiarate. La presente dichiarazione di responsabilità viene emessa, in conformità al regolamento (UE) n. 305/2011, sotto la sola responsabilità del fabbricante sopra identificato.

Firmato a nome e per conto del fabbricante da



Patrick Ladurner
Compliance Manager TORGGLER SRL

Ai sensi dell'art. 6, paragrafo 5 del Regolamento UE 305/2011 si fornisce insieme a questa dichiarazione di prestazione una scheda dei dati di sicurezza secondo Allegato II del Regolamento UE 1907/2006 (REACH).

Appendice:

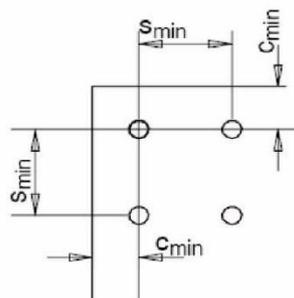
Table B2.1: Installation parameters				eTics Twister
Drill hole diameter	d_0	=	[mm]	8
Cutting diameter of drill bit	d_{cut}	≤		8,45
Depth of drill hole to deepest point	h_1	≥		55/75/105
Total bore hole depth at eTics Twister t_{tol} 0-10 mm				$h_D + 55$
Total bore hole depth at eTics Twister t_{tol} 0-30 mm	h_b	≥		$h_D + 75$
Total bore hole depth at eTics Twister t_{tol} 30-60 mm				$h_D + 105$
Overall plastic anchor embedment depth in the base material (see Annex A1) at eTics Twister t_{tol} 0-10 mm				45
Overall plastic anchor embedment depth in the base material (see Annex A1) at eTics Twister t_{tol} 0-30 mm	h_{nom}	=		65
Overall plastic anchor embedment depth in the base material (see Annex A1) at eTics Twister t_{tol} 30-60 mm				95

Table B2.2: Minimum distances and spacings

				eTics Twister
Minimum thickness of member	h_{min}			100 ¹⁾
Minimum spacing	s_{min}	=	[mm]	100
Minimum edge distance	c_{min}			100

1) For weather resistant external wall panels: $h_{min}=40$ mm

Scheme of distances and spacing

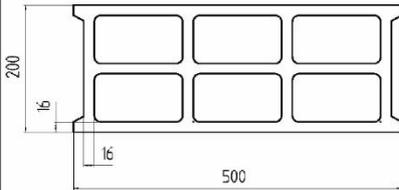


eTics Twister

Intended use
 Installation parameters
 Minimum thickness of member, distances and spacing

Annex B2

Table C1.1: Characteristic resistance under tension load N_{Rk}

Base material	Group ¹⁾	Bulk density ρ [kg/dm ³]	Minimum compress. strength f_b [N/mm ²]	Remarks	Drill method ²⁾	N_{Rk} [kN]
Weather resistant skin of external wall panels, concrete C20/25 – C50/60	-	-	-	Concrete without fibres C20/25 – C50/60 as per EN 206:2013 Thickness of concrete panels 40 mm \leq h < 100 mm	H	0,9
Weather resistant skin of external wall panels, concrete C20/25 – C50/60	-	-	-	Concrete without fibres C20/25 – C50/60 as per EN 206:2013 Thickness of concrete panels 40 mm \leq h < 100 mm	R	1,5
Concrete C12/15- C50/60	A	-	-	Concrete without fibres C12/15 - C50/60 as per EN 206:2013	H	1,5
Sand-lime solid bricks, KS as per EN 771-2:2011	B	$\geq 2,0$	20	Vertically perforation ³⁾ $\leq 15\%$	H	1,5
			12			1,2
Clay bricks, Mz as per EN 771-1:2011	B	$\geq 1,8$	12	Vertically perforation ³⁾ $\leq 15\%$	H	1,2
Solid concrete block, Vbn as per EN 771-3:2011	B	$\geq 2,0$	20	Vertically perforation ³⁾ $\leq 10\%$	H	1,5
			12			1,2
Lightweight concrete solid blocks, Vbl as per EN 771-3:2011	B	$\geq 1,4$	8	Vertically perforation ³⁾ $\leq 15\%$, exterior web thickness ≥ 35 mm	H	0,6
Vertically perforated sand-lime bricks, KSL as per EN 771-2:2011	C	$\geq 1,4$	20	Vertically perforation ³⁾ $> 15\%$, Exterior web thickness ≥ 23 mm	H	1,2
			12			0,75
Vertically perforated clay bricks, Hlz as per EN 771-1:2011	C	$\geq 1,0$	12	Vertically perforation ³⁾ $> 15\%$ and $\leq 50\%$, Exterior web ≥ 12 mm	R	0,75
Lightweight concrete hollow blocks, Hbl as per EN 771-3:2011	C	$\geq 1,2$	10	Vertically perforation ³⁾ $> 15\%$ and $\leq 50\%$, Exterior web ≥ 38 mm	H	1,2
			8			0,9
			6			0,75
			4			0,6
Lightweight concrete hollow blocks, Hbl4 as per EN 771-3:2011	C	$\geq 0,9$	4		H	0,5
Lightweight aggregate concrete, LAC as per EN 1520:2011 / EN 771-3:2011	D	$\geq 0,9$	6	-	H	0,75
Autoclaved aerated concrete blocks, AAC as per EN 771-4:2011	E	$\geq 0,5$	4	-	R	0,4

¹⁾ Base material group, see Annex B1

²⁾ R = Rotary drilling | H = Hammer drilling

³⁾ Cross section reduced by perforation vertically to the resting area

Figures not to scale.

eTics Twister

Performance
Characteristic resistance

Annex C1

Table C2.1: Point thermal transmittance acc. to EOTA Technical TR 025: 2016-05

Anchor type	Thickness of insulation material h_D [mm]	Point thermal transmittance χ [W/K]
eTics Twister EPS-plug and air void $t_{tol} = 0 - 10$ mm	100 - 240	0,001
	> 240	0
eTics Twister PU-foam filled hole $t_{tol} = 0 - 10$ mm	100 - 150	0,001
	> 150	0
eTics Twister EPS-plug and air void $t_{tol} = 0 - 30$ mm	100 - 240	0,001
	> 240	0
eTics Twister PU-foam filled hole $t_{tol} = 0 - 30$ mm	100 - 150	0,001
	> 150	0
eTics Twister EPS-plug and air void $t_{tol} = 30 - 60$ mm	100	0,002
	120 - 240	0,001
	> 240	0
eTics Twister PU-foam filled hole $t_{tol} = 30 - 60$ mm	100	0,002
	120 - 150	0,001
	> 150	0

Table C2.2: Displacements

Base material	Minimum compressive strength f_b [N/mm ²]	Tension load N [kN]	Displacements $\Delta\delta_N$ [mm]
Concrete thin members \geq C20/25 as per EN 206:2013 (hammer drilling)	-	0,3	< 0,3
Concrete thin members \geq C20/25 as per EN 206:2013 (rotary drilling)	-	0,5	< 0,3
Concrete C16/20 - C50/60 as per EN 206:2013	-	0,5	< 0,3
Sand-lime solid bricks, KS as per EN 771-2:2011	20	0,5	< 0,3
	12	0,4	
Clay bricks, Mz as per EN 771-1:2011	12	0,4	< 0,3
Solid concrete block, Vbn as per EN 771-3:2011	20	0,5	< 0,3
	12	0,4	
Lightweight concrete solid blocks, Vbl as per EN 771-3:2011	8	0,2	< 0,2
Vertically perforated sand-lime bricks, KSL as per EN 771-2:2011	20	0,4	< 0,2
	12	0,25	
Vertically perforated clay bricks, Hlz as per EN 771-1:2011	12	0,25	< 0,3
Lightweight concrete hollow blocks, Hbl as per EN 771-3:2011	10	0,4	< 0,3
	8	0,3	
	6	0,25	
	4	0,2	
Lightweight concrete hollow blocks, Hbl4 as per EN 771-3:2011	4	0,15	< 0,4
Lightweight aggregate concrete, LAC as per EN 1520:2011 / EN 771-3:2011	6	0,25	< 0,2
Autoclaved aerated concrete blocks, AAC as per EN 771-4:2011	4	0,15	< 0,1

eTics Twister

Performance

Point thermal transmittance, displacements

Annex C2