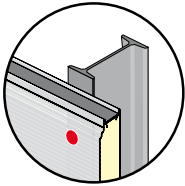


EJOT® SUPER-SAPHIR self-drilling screw JT3-D-12H-5.5/6.3xL

The EJOT® Super-Saphir self-drilling screws are particularly suited for fixing sandwich elements to steel substructure, as often found in the area of facades.



Application range:

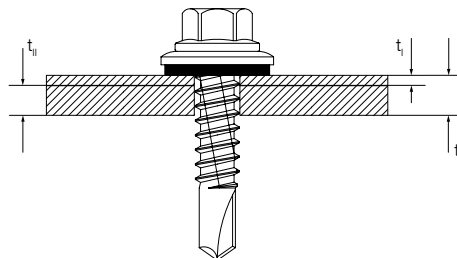
- Fixing sandwich elements to 3 - 10 mm steel substructure.

Features

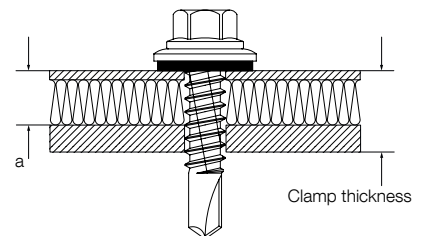
- A2 stainless steel with hardened drill point
- Stainless steel sealing washer
- Pre-assembled sealing washer
- With free spin zone under the screw head
- High thread

Technical data:

Approval Z-14.4-407
 Drive hexagon A/F 8



Drilling capacity
 Drilling capacity $t = \text{component } t_1 + \text{component } t_2$



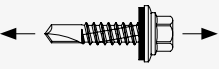
Clamp thickness
 $a + 6 \text{ mm} \leq \text{clamp thickness (for components } > 6 \text{ mm)}$
 $a + \text{component } t_1 = \text{clamp thickness}$

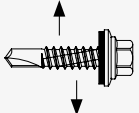
Practical advice:

When fastening sandwich panels without profile (facades) dents may occur. This might be tolerable under certain conditions, but is nevertheless a visual quality defect. With the EJOT SUPER-SAPHIR self-drilling screw JT3-D-12H-5.5/6.3xL dents cannot be completely avoided but they can be mitigated. As common for self-drilling screws, the drilling performance and clamp thickness have to be observed, as they need to be adapted to the application.

Ø mm	Ø high thread mm	Length mm	For sandwich panels mm
self-drilling screw JT3-D-12H-5.5/6.3			
5.5	6.3	75	36.0 - 40.0
5.5	6.3	95	48.0 - 60.0
5.5	6.3	115	58.0 - 80.0
5.5	6.3	135	72.0 - 100.0
5.5	6.3	155	92.0 - 120.0
5.5	6.3	175	110.0 - 140.0
5.5	6.3	195	130.0 - 160.0
5.5	6.3	245	170.0 - 210.0
5.5	6.3	275	200.0 - 240.0
5.5	6.3	300	225.0 - 265.0

EJOT® SUPER-SAPHIR self-drilling screw JT3-D-12H-5.5/6.3xL

Minimum tensile strength of the screw	
	
Ø mm	kN
5.5	11.5

Minimum shear strength of the screw	
	
Ø mm	kN
5.5	7.5

Component $t_{N,II}$ [mm]	3.00	4.00	5.00	6.00	8.00	10.0	12.0
Characteristic transverse tensile strength $V_{R,k}$ [kN] for component $t_{N,I}$ [mm]	0.40	0.90	0.90	0.90	0.90	0.90	0.90
	0.50	0.90	0.90	0.90	0.90	0.90	0.90
	0.55	0.90	0.90	0.90	0.90	0.90	0.90
	0.63	1.10	1.10	1.10	1.10	1.10	1.10
	0.75	1.60	1.60	1.60	1.60	1.60	1.60
	0.88	2.20	2.20	2.20	2.20	2.20	2.20
	1.00	2.90	2.90	2.90	2.90	2.90	2.90
Characteristic pull-out strength $N_{R,k}$ [kN] for component $t_{N,I}$ [mm]	0.40	1.54	1.54	1.54	1.54	1.54	1.54
	0.50	1.60	1.60	1.60	1.60	1.60	1.60
	0.55	1.90	1.90	1.90	1.90	1.90	1.90
	0.63	2.20	2.00	2.00	2.00	2.00	2.00
	0.75	2.80	2.80	2.80	2.80	2.80	2.80
	0.88	3.00	3.50	3.50	3.50	3.50	3.50
	1.00	3.00	4.20	4.20	4.20	4.20	4.20
Head displacement (due to temperature change) according to the thickness D [mm]	40	14.0	7.0	6.0	5.0	5.0	5.0
	50	16.0	8.5	7.5	6.5	6.5	6.5
	60	18.5	10.0	9.0	8.0	8.0	8.0
	70	20.0	12.5	11.0	10.0	10.0	10.0
	80	22.0	15.0	13.5	12.0	12.0	12.0
	100	26.0	19.0	18.0	15.0	15.0	15.0
	120	29.0	22.5	20.0	18.0	18.0	18.0
	>140	33.0	26.0	23.5	21.0	21.0	21.0

For further information and additional data please see the respective approvals at www.ejot.com

Z-14.4-407, appendix 2.10a

Component I: S280GD – EN 10346
 Component II: S235 – EN 10025-1; S280GD, S320GD – EN 10346