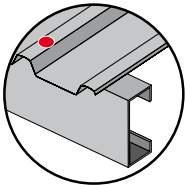
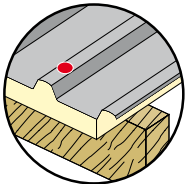
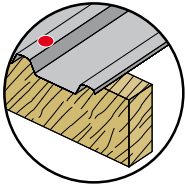


# EJOT® self-tapping screw JA3-6.5

The EJOT® self-tapping screws are particularly suited for fixing profiled metal sheet or sandwich elements to timber substructure or to fasten thin sheets together.



**Application range:**

- For fixing profiled steel sheet to timber substructure
- For fixing sandwich panels to timber substructure
- For fixing profiled steel / aluminium sheet to ≤ 2 mm steel substructure
- Side lap stitching of profiled steel / aluminium sheet

**Characteristics:**

- A2 stainless steel
- Stainless steel sealing washer
- Pre-assembled sealing washer

**Technical data:**

Approval ..... Z-14.4-407  
 Approval ..... Z-14.1-537  
 Approval ..... ETA-10/0200  
 Drive ..... hexagon A/F 3/8"



**Practical advice:**

In the general building authorities approval Z-14.1-4 dimensioning in timber is summarised in form of a diagram and provides the same results as the carrying capacity verification from a) to c).

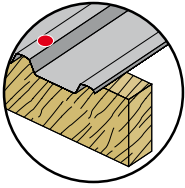
Diagram 1 of the general building authorities approval Z-14.1-4 for screws, according to ETA 10/0200, can be used under the following conditions:

- Single-shear timber joint with a minimum density of 350 kg/dm³
- $K_{mod} = 0.9$  (e.g. wind load) for tensile force
- $K_{mod} = 0.6$  (e.g. dead load) on shear force
- The wood is not exposed to the elements.

**Diagram 1 from Z-14.1-4 on 18.01.2011**

d [kN]	$N_{R,k}$ [kN]	max $N_{R,k}$ [kN]	$V_{R,k}$ [kN]	max $V_{R,k}$ [kN]
5.5	$0.0424 \cdot l_{ef} \leq$	2.80	$0.0356 \cdot l_{ef} \leq$	1.94
6.0	$0.0463 \cdot l_{ef} \leq$	3.33	$0,0382 \cdot l_{ef} \leq$	2.27
6.3	$0.0486 \cdot l_{ef} \leq$	3.68	$0.0394 \cdot l_{ef} \leq$	2.49
6.5	$0.0502 \cdot l_{ef} \leq$	3.91	$0.0409 \cdot l_{ef} \leq$	2.64

EJOT® self-tapping screw JA3-6.5xL



**Minimum tensile strength of the screw**

Ø mm	kN
6.5	13.0

**Minimum shear strength of the screw**

Ø mm	kN
6.5	10.0

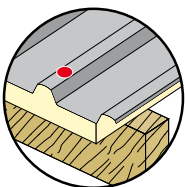
Component $t_{N,II}$ [mm]	0.63	0.75	0.88	1.00	1.13	1.25	1.50	2.00	
Pre-drilling diameter $d_{pd}$ [mm]	Ø 3,50	Ø 4,00	Ø 4,50			Ø 5,00		Ø 5,30	-
Tightening torque $M_{t,nom}$	3 Nm					5 Nm			
Characteristic transverse tensile strength $V_{R,k}$ [kN] for component $t_{N,I}$ [mm]	0.50	-	-	-	-	-	-	-	Embedment strengths component I
	0.55	-	-	-	-	-	-	-	
	0.63	1.30	1.50	1.80	2.00	2.30	2.50	2.90	
	0.75	1.40	1.60	1.90	2.20	2.50	2.70	3.10	
	0.88	1.50	1.70	2.00	2.30	2.60	2.80	3.20	
	1.00	1.50	1.80	2.10	2.50	2.80	3.10	3.60	
	1.13	1.60	1.80	2.20	2.60	2.90	3.20	3.80	
	1.25	1.60	1.90	2.30	2.70	3.00	3.30	4.00	
	1.50	1.60	1.90	2.40	2.80	3.20	3.50	4.00	
	1.75	1.60	1.90	2.40	2.80	3.20	3.50	4.00	
2.00	1.60	1.90	2.40	2.80	3.20	3.50	4.00		
Characteristic pull-out strength $N_{R,k}$ [kN] for component $t_{N,I}$ [mm]	0.50	0.49	0.59	0.70	0.76	0.86	0.97	1.13	Pullover load component I
	0.55	0.61	0.75	0.89	0.95	1.09	1.23	1.43	
	0.63	0.90	1.10	1.30	1.40	1.60	1.80	2.10	
	0.75	0.90	1.10	1.30	1.40	1.60	1.80	2.10	
	0.88	0.90	1.10	1.30	1.40	1.60	1.80	2.10	
	1.00	0.90	1.10	1.30	1.40	1.60	1.80	2.20	
	1.13	1.00	1.20	1.40	1.50	1.70	1.80	2.30	
	1.25	1.00	1.20	1.40	1.50	1.70	1.90	2.30	
	1.50	1.00	1.20	1.40	1.50	1.70	1.90	2.30	
	1.75	1.00	1.20	1.40	1.50	1.70	1.90	2.30	
2.00	1.00	1.20	1.40	1.50	1.70	1.90	2.30		

ETA-10/0200, appendix 40

Component I: S280GD, S320GD or S350GD – EN 10346

Component II: S235 – EN 10025-1; S280GD, S320GD or S350GD – EN 10346

For further information and additional data please see the respective approvals at [www.ejot.com](http://www.ejot.com)



Installation depth $l_{ef} \geq 50$ mm	Component $t_{N,II}$	sandwich element thickness D [mm]								
		30	40	50	60	70	80	100	120	≥140
Characteristic transverse tensile strength $V_{R,k}$ [kN] for component $t_{N,I}$ [mm]	0.40	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
	0.50	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
	0.55	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
	0.63	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30
	0.75	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30
	0.88	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30
	1.00	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30
	1.13	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30
Characteristic pull-out strength $N_{R,k}$ [kN] for component $t_{N,I}$ [mm]	0.40	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.24
	0.50	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90
	0.55	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30
	0.63	2.80	2.80	2.80	2.80	2.80	2.80	2.80	2.80	2.80
	0.75	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
	0.88	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
1.00	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	
Head displacement (due to temperature change) according to the thickness D [mm]		4.00	6.00	8.00	10.0	12.5	15.0	20.0	20.0	20.0

Z-14.4-407, appendix 5.2

Component I: S280GD – EN 10346

Component II: softwood strength category C24 acc. to DIN 1052 (S10 acc. to DIN 4074-1)