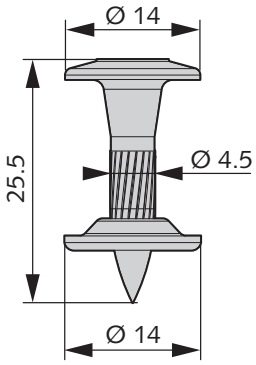
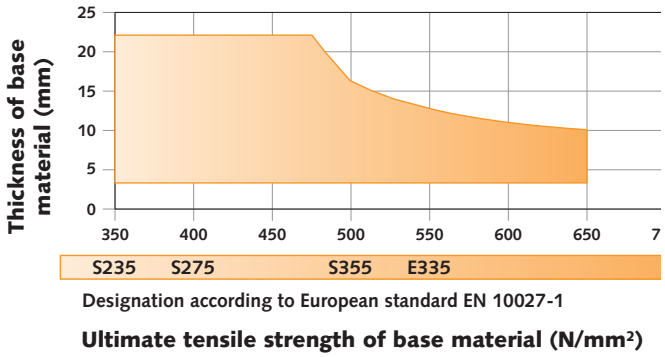


Eurocode 030750 (single shot) - P560 & P230
Eurocode 053952 (collated) - P560
Eurocode 030760 (in tube) - P525L

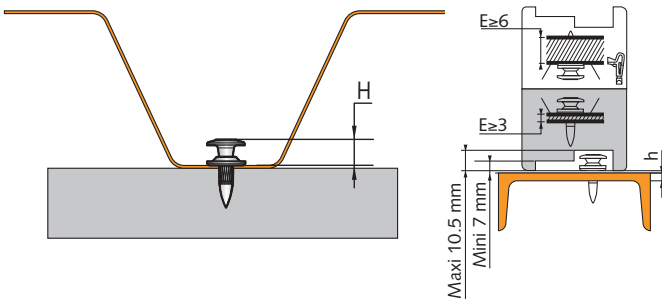
Application limit



Designation according to European standard EN 10027-1

Ultimate tensile strength of base material (N/mm²)

Fixing control



A control card

Thickness of base material	H_{min} (1) (mm)	H_{max} (1) (mm)
3 ≤ h < 6 mm (2)	7	10.5
h ≥ 6 mm	5	10.5

(1) Values obtained with 0.75 mm steel sheet
(2) French rules AT CSTB

Description

Cladding panels / roofing

Material properties

The SBR 14 nails are composed of :

¬ Carbon steel shank

- Ultimate tensile strength : 2300 N/mm²
- Yield strength : 1600 N/mm²
- Electrogalvanised, min zinc coating 7 µm

¬ Steel washer

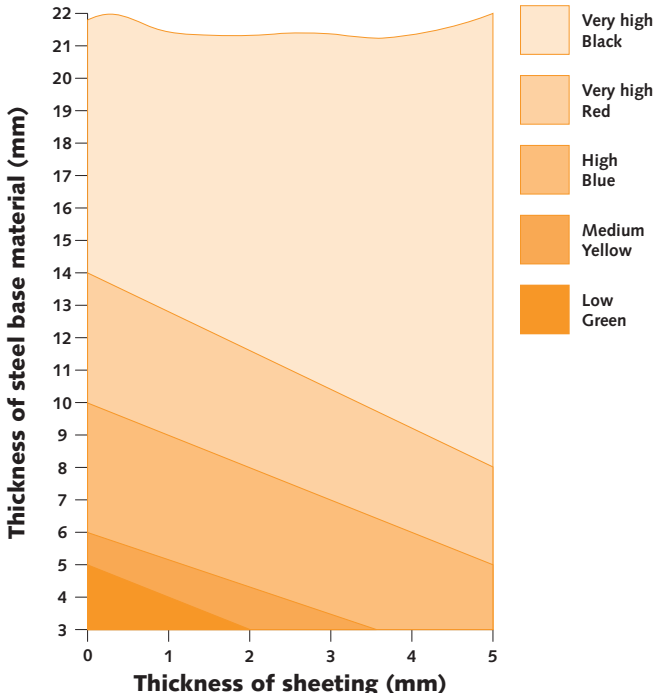
- Min zinc coating 8 µm
- Electrogalvanised
- The washer is designed to give effective clamping force

¬ Kesternitch test, 2 cycles exposure

Tools

P560 - P230 - P525L

Power setting



According to French Rules (Technical Approval Issue from CSTB, n° 5/04-1775)

Thickness of base material S235 quality	Characteristic load (kN), for connection of one sheet with thickness 0,75mm fuk > 400 N/mm² (S280GD) N_{rk}
3 ≤ h < 6 mm	3
h ≥ 6 mm	6

According to DIBT German Approval n° z-14.1-4

¬ Base material :

Resistance of base material S235 and with a thickness higher than 6mm.

¬ Steel sheets and style of anchoring :

1 Sheet

2 Sheets

2 Sheets

4 Sheets

Sheeting thickness (mm)	Characteristic loads [kN]		Design loads [kN]		Recommended loads [kN]		Style of anchoring
	Shear	Tensile	Shear	Tensile	Shear	Tensile	
	V_{Rk}	N_{Rk}	V_{Rd}	N_{Rd}	V_{Rec}	N_{Rec}	
0.63	3.4	2.4	2.5	1.8	1.7	1.2	A B C D
0.75	4.4	4.0	3.3	3.0	2.2	2.0	A B C D
0.88	5.6	5.2	4.2	3.9	2.8	2.6	A B C D
1.00	6.8	6.4	5.1	4.8	3.4	3.2	A B C D
1.13	8.2	7.8	6.1	5.9	4.1	3.9	A
1.25	9.4	9.4	7.1	7.1	4.7	4.7	A
1.50	9.4	9.4	7.1	7.1	4.7	4.7	A
1.75	9.4	9.4	7.1	7.1	4.7	4.7	A
2.00	9.4	9.4	7.1	7.1	4.7	4.7	A
2.50	9.4	9.4	7.1	7.1	4.7	4.7	A

$V_{Rd} = V_{Rk} / \gamma_M$: the design load is calculated from the characteristic load and a partial safety factor **$\gamma_M = 1.33$.**

$N_{Rd} = \alpha_{cycl} \times N_{Rk} / \gamma_M$: the design load is calculated from the characteristic load and a partial safety factor **$\gamma_M = 1.33$** and **$\alpha_{cycl} = 1$.**

For the calculation of the recommended load, we applied the partial safety factor **$\gamma_F = 1.5$.**