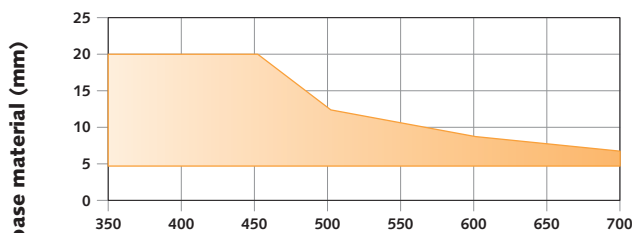


Code 032650

## APPLICATION LIMIT

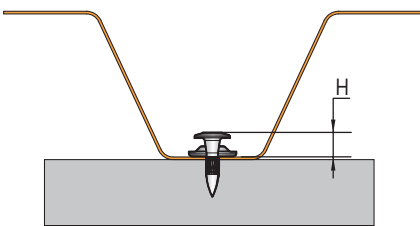


(1) E24	E28	E36	A60
(2) ST37	ST44	ST52	ST60
(3) S235	S275	S355	E335

(1) French designation - (2) German designation  
(3) Designation according to European standard NF EN 10027-1

**Ultimate tensile strength of base material (N/mm<sup>2</sup>)**

## CONTROL FIXING



- $H_{\text{mini}} = 5 \text{ mm}$  and  $H_{\text{maxi}} = 7 \text{ mm}$  for guaranteeing the recommended working loads within the application limits.
- Maximum sheet thickness: 2 sheets with max thickness of 1 mm.

## DESCRIPTION

Fix metal cladding sheets to steel framework.

## PROPERTIES MATERIAL

The SBR9 pin is composed of:

### - Shank in carbon steel

- Ultimate tensile strength: 2000 N/mm<sup>2</sup>
- Yield strength: 1600 N/mm<sup>2</sup>
- Hardness: 54-58 HRc
- Electrogalvanizing, Min zinc coating 7  $\mu\text{m}$

### - One steel washer

- Min zinc coating 8  $\mu\text{m}$
- The plate washer developed for a good clamping of the plates to avoid damages when firing.

## TOOL

P370

## RECOMMENDED LOAD

The recommended load given below, are suitable for a resistance of base material higher than 400 N/mm<sup>2</sup> and with a minimum thickness of 5 mm.

Sheet thickness <sup>(1)</sup> $F_{uk} > 390 \text{ N/mm}^2$ (S320GD)	Design resistance [kN]		Recommended load [kN]	
	Tensile	Shear	Tensile	Shear
	$N_{Rd}$	$V_{Rd}$	$N_{Rec}$	$V_{Rec}$
0.75 mm	2.5	2.2	1.7	1.4
1.00 mm	3.2	3.2	2.2	2.2
1.25 mm	4.0	4.7	2.6	3.1
1.50 mm	4.1	4.7	2.8	3.1
2.00 mm	4.3	4.7	2.9	3.1

**$F_{rec} = F_{Rk} / 2.5$** : the recommended load is calculated from the characteristic load and a global safety factor equal to 2.5.

Recommended load is calculated with a safety factor  $\gamma_F = 1.5$ .

<sup>(1)</sup> For a sheet thickness equal to 2 mm, it is possible to use 2 sheets of 1 mm.