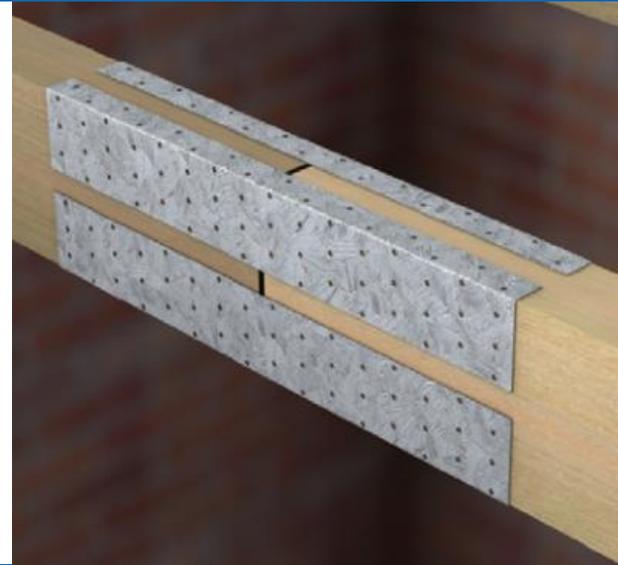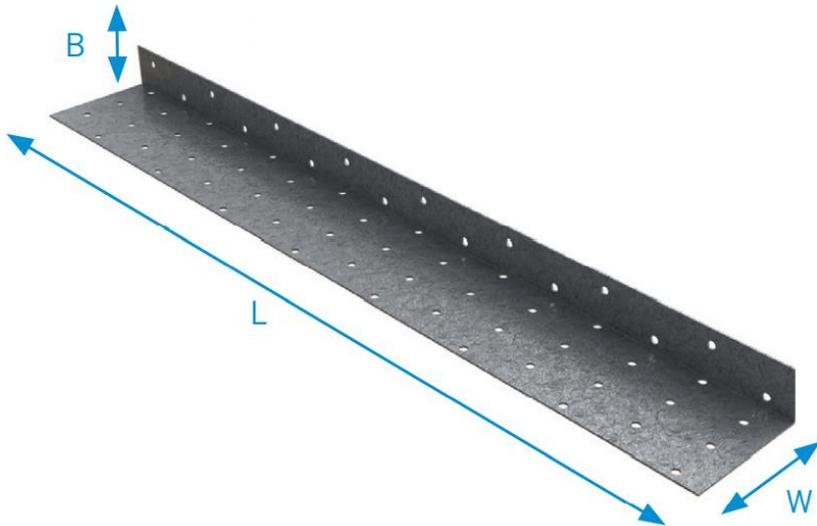# bpc® SP Splice Plate

CE

Timber Fixings

SP Splice Plate

An economical on-site method of butt jointing timbers of similar section. Suitable for use when replacing rotten floor joist ends, replacement of fire damaged timbers and repairing localised structural timber damage. Manufactured from 0.9mm thick steel. Must be fixed in sets of 4 per joint, minimum timber thickness 50mm. Fix using BPC Sheradised square twist nails in all available holes. Box includes required nails. **Box quantity 32 pieces + nails.**

Test Standard

Tested by BMTRADA to ETAG015

Verified by TZUS to EAD 130186-00-0603. – ETA 20/0915.

Declaration of Performance – Connector Plates and Anchors 19-0681-003

Dimensions & Load Data

These properties should be used for design in accordance with EN 1995-1-1:2004/A1 (Eurocode 5) or an appropriate national code. The load-carrying capacities have been derived by calculation or design assisted by testing or by testing.

Product code	Dimensions [mm]			Holes no. x Ø [mm]		Characteristic Capacity [kN]*
	L	W	B	in plate length	in plate bearing surface	$F_{x.K}$
SP/57x400	400	57	18	40 x 4.0	8 x 4.0	14
SP/82x550	550	82	18	88 x 4.0	11 x 4.0	19
SP/98x550	550	98	18	99 x 4.0	11 x 4.0	22
SP/100x350	350	100	15	63 x 4.0	7 x 4.0	19

bpc® Fixings
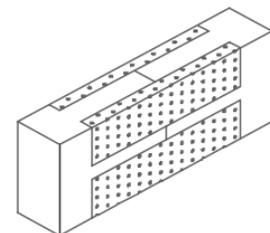
Fixings

Fix using either Type A, 30 x 3.75mm Sherardised Square Twist Nails OR Type B, 35 x 3.75mm. Sherardised Square Twist nails in all pre-punched holes.

Type	Description	d [1] (mm)	l (mm)	$f_{ax,k}$ [2] (N/mm²)	f_u (N/mm²)
A	Square twist nails Sherardized finish Normally supplied loose for manual fixing	3.4	30	4.78	600
B	Square twist nails Sherardized finish Normally supplied collated for a nail gun	3.4	35	4.3	700

[1] This diameter is the minimum cross-section dimension in accordance with EN 14592. Square twist nails are often described in the market by their largest cross-section dimension, so that a 3.4 mm diameter nail will be sold as being 3.75 mm diameter.

[2] In timber with a characteristic density ρ_k of 350 kg/m³, i.e. C24 timber. At other values of ρ_k the value is modified so $f_{ax,k} = f_{ax,k} \cdot \min\left(\frac{\rho_k}{350}, 1.1\right)$

Installation

BPC Connectors are deemed fit for their intended use provided:

- The joints are designed in accordance with Eurocode 5 or an appropriate National Code using the characteristic values given in the Annexes. Design and detailing of structures should be carried out by suitably experienced persons in accordance with the manufacturer's instructions.
- Sides of the hanger should be at least 60% of the timber height to prevent rotation.
- Joist ends to be cut square with no more than 6mm gap from the rear of the hanger.
- Verifiable calculation, notes and drawings are prepared taking account of the loads to be carried
- The widths of the joist narrower than the exact joist hanger width does not exceed the tolerance of +0/-4mm to the joist hanger width
- The header supporting the joist is adequately restrained against rotation.
- Specified fasteners are installed in all available holes of the same diameter.
- Timber should be free of wane in the connectors.
- The actual maximum bearing capacity of the joist itself is checked separately by the designer of the structure.
- The eccentricity of the acting forces relative to the axis of the connection is not excessive.
- The connectors have been installed correctly by appropriately qualified personnel using adequate tools, in accordance with the relevant building regulations, the manufacturer's specifications and the drawing prepared for that purpose.