

PAROC Fire protection fasteners

PAROC Fire spring (XFS 001)

PAROC Fire protection dowel concrete (XFS 003)

PAROC Fire protection washer (XFW 009)

PAROC Head Pin (ZFP 101 UNIN GAL/CU 2,7)

PAROC Pin Welding Device



PAROC Fire spring (XFS 001) is used to connect two stone-wool insulation boards together, e.g., PAROC FPS 17 board in the installation of the fire protection of concrete and steel beams/columns. The Fire spring is made of galvanized steel. More information about the application, correct screw lengths and installation instructions can be found from the PAROC Fire Protection Guides 1 (Steel) and 2 (Concrete).

PAROC Fire protection dowel (XFS 003) is used for fixing PAROC FPS 17 fire protection insulation on a concrete base. The bracket is used together with the **PAROC Fire protection washer** (XFW 009).

PAROC Head Pin (ZFP 101 UNIN GAL/CU 2.7) fasteners enable non-aluminum-covered PAROC FPS 17 -fire protection boards to be attached to metal surfaces with one push directly through the insulation board. Cup (diameter 30 mm) is galvanized, pin (diameter 2.7 mm) is standard – coppered (galvanized, stainless steel).

PAROC Pin Welding Device is a capacitor discharge welding device (PPWD) and it is used to install the PAROC Head Pin.

APPROVALS:	N/A
APPLICATION:	Buildings, fire protection
PACKAGE / STORING:	Carton, Plastic bucket

DIMENSIONS

Product code	diameter	length	packing	insulation thickness	EAN 64380
PAROC Fire spring (XFS 001)		40 mm	500 pcs / carton	20 mm	8556204
		60 mm		30 mm	8556205
		80 mm		40 mm	8556206
		100 mm		50 mm	8556203
		120 mm		60 mm	8556200
		140 mm		70 mm	8528154
PAROC Fire protection dowel concrete (XFS 003)	35 mm / 8 mm	80 mm	250 pcs / carton	8 x 80 mm:	8563119
		110 mm		20 – 30 mm insulation board	8563121
				8 x 110 mm: 40 – 60 mm insulation board	
PAROC Fire protection washer (XFW 009)	80 mm / 8 mm		250 pcs / carton		8563102
PAROC Head Pin (ZFP 101 UNIN GAL/CU 2,7)	30 mm / 2.7 mm	23 mm	1000 pcs / bucket	20 mm	8587639
		28.5 mm		25 mm	8565790
		33 mm		30 mm	8587632
		43 mm		40 mm	8587633
		53 mm		50mm	8587634
		63 mm		60 mm	8587635
PAROC Pin Welding Device	430 x 165 x 180 mm		1 pc		8565787



PAROC Pin Welding Device

	Capacitors' capacitance	66,000 MF
	Power supply	230 V, cut out 10 A
	Charging current	1.8 A
	Quiescent current	0.1 A
	Noise level during work	< 79 dB
	Welding time	from 2 to 5 ms
	Weight	12.5 kg
	Dimensions	165 x 250 x 380 mm
Warranty	12 months	

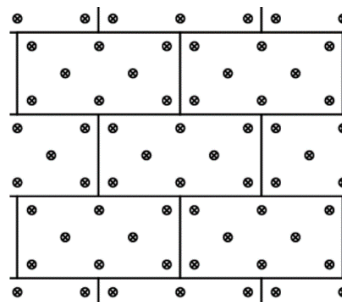
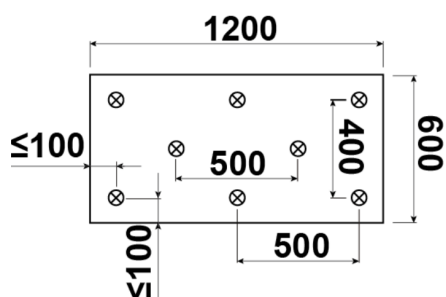
INSTALLATION

Installation of dowel

Install the fire protection boards on the concrete base so the seams of the boards are not aligned. Push the seams tightly together so there are no gaps in the insulation layer.

Drill a \varnothing 8 mm hole in the concrete through the insulation. The installation depth of the dowel is always at least 50 mm. The hole to be drilled must be 10 mm deeper than dowel depth. For example, a 60-mm-thick PAROC FPS 17 fire protection board is fixed with the 110-mm-long dowel. The depth of the hole is 50 mm + 10 mm = 60 mm.

Fasten the fire protection boards by using at least 8 fasteners/board (600 x 1200 mm). Place the dowel with washer in the drill hole and fasten by hammering.

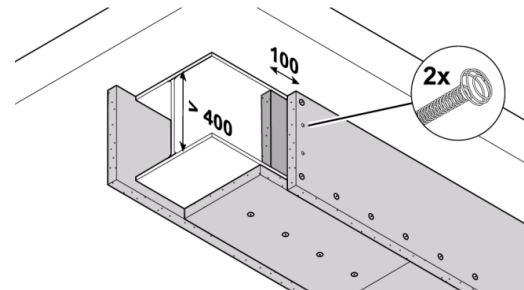
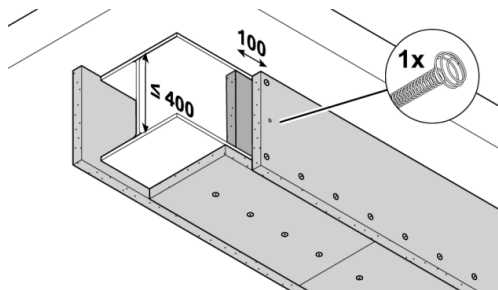


Installation of fire spring

The stone wool boards placed on top of each other are connected to each other by twisting a screw-like fire spring through the wool layers. During installation, care must be taken that there are no gaps between the wool boards. Some examples of applications are as follows:

Steel profiles with a height of <400 mm: the backing boards in fire protection board seams are attached to the fire protection boards with fire springs - one in the middle of the profile. A fire spring is installed on each side of the insulation board joint at a distance of 25 mm from the edge of the joint (a total of 2 spring screws/joint).

Steel profiles with a height of >400 mm: Two spring screws are used for fastening the backing boards in fire protection board seams, the first of which is installed $1/3$ from the upper and the second $1/3$ from the lower flange. Fire springs are installed on each side of the insulation board joint at a distance of 25 mm from the edge of the joint (total of 4 spring screws/joint).



Installation of head pins

Make sure that the surfaces to be welded are clean, dry, dust-free, and grease-free. The surface must be free of oil, grease, dust, and solvents before installing the head pin.

During installation, follow the device manufacturer's instructions and Paroc's fire protection instructions.