



PCF/33/5.5

Standard fasteners

Stainless steel self-drilling fasteners for roofing and cladding

PCF/33/5.5 Standard fasteners

Specification	
Material	1.4301 stainless steel (304M), with carbon steel case hardened welded point
Coating	Organic
Head Type	Hexagon 8mm
Drilling Capacity	1.2 – 3.0mm Steel

Installation and handling	
Installation tool	Variable speed electric screwdriver
Installation drive	8mm hex integral socket with retaining clip
Installation speed	1500rpm
Correct installation	Fasteners should be driven within three degrees of perpendicular to the surface of the fastened material. Use a depth-setting nosepiece to avoid over-driving, and do not over-tighten. Variants with bonded washers should not have the rubber compressed to less than two-thirds of its uncompressed height. Care should be taken when engaging and disengaging from the fastener head to avoid damage to the protective coating.
Handling	Fasteners may have sharp edges, and the use of power tools can be dangerous. Use personal protective equipment. Store fasteners in dry conditions. Inspect each fastener before use and do not use damaged fasteners. Replace any fasteners which appear to have been installed incorrectly.

Installation details		
Substrates	Thickness limits	Minimum penetration
Light steel purlins	1.2mm – 3.0mm thickness	19mm through underside

Dimensions		
Fastener	Nominal length	Nominal diameter
PCF/55/5.5 x 25	25mm	5.5mm
PCF/55/5.5 x 35	35mm	5.5mm
PCF/55/5.5 x 55	55mm	5.5mm

Build-ups

Fastener	No washer	A15 / A19 washer	A29 washer
PCF/55/5.5 x 25	0-3mm	0	0
PCF/55/5.5 x 35	0-13mm	0-10mm	0-9mm
PCF/55/5.5 x 55	0-33mm	0-30mm	0-29mm

Build-up figures are shown for installation into maximum 3.0mm thickness steel. Figures may be increased by the difference in substrate thickness for thinner materials. For assistance with selecting the correct fastener please contact Plastestrip.

Performance

Pull-out values (axial load resistance)			
Fastener	Substrate	Characteristic Value	Design Value
	1.2mm steel*	1.30 kN	0.98 kN
	2.0mm steel*	2.62 kN	1.96 kN
	3.0mm steel	4.76 kN	3.58 kN

Pull-through values (axial load resistance)		
	Characteristic Value	Design Value
0.5mm steel / A15 washer	3.33 kN	2.50 kN

Shear Values (lateral load resistance)			
No washer	Material (i)		
	Metal sheeting: 0.5mm		
Fastener	Material (ii)	Characteristic Value	Design Value
	1.2mm steel	1.95 kN	1.47 kN
Failure mode: hole elongation in sheeting material			

Steel S275 nominal, Metal sheeting 0.5mm.
 Independently tested to CUAP 06.02/07 and CUAP 06.02/12.
 Design values include safety factor $\gamma_m = 1.33$.
 * In-house tested to BS5427
 Other figures and specific testing are available on request.