

Maximum reliability. Minimum fuss.



Selector Guide

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# Kingspan QuadCore KS600- 1000 AWP System

**Kingspan**

Fastener Systems and Sealing Products

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## Introduction to Fixfast

Fixfast design, manufacture and supply specialist building fasteners and components for the walls and roofs of industrial, commercial and larger residential buildings. We collaborate with major building envelope system manufacturers, such as Kingspan, to provide them and their clients with engineered fastening and sealing solutions.

This selector guide has been created as an easy to use reference document, identifying the most common fasteners and components for use when installing the Kingspan QuadCore KS600-1000 AWP panel system.

Full technical data for these products along with application uses can be found on our website at [www.fixfast.com](http://www.fixfast.com) by searching for the product.

Our specification team can assist in providing NBS specifications for specific projects, whilst our customer services team can answer questions regarding the usage or ordering of Fixfast products.

If you have any queries regarding our products or services then please do contact our customer services team on 0800 304 7616 or by emailing [sales@fixfast.com](mailto:sales@fixfast.com).

## AWP primary fixing through tongue to cold rolled steel 1.2 - 3mm

### Use DrillFast® DF3-SS or DF3 fasteners

8mm hex head, use Fixfast GreenDrive for stainless fasteners and Fixfast YellowDrive for carbon fasteners.



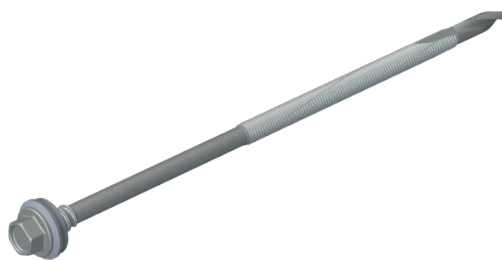
Panel Thickness	Fastener Code Stainless	Fastener Code Carbon
45mm	DF3-SS-A15-5.5 x 55	DF3-A15-5.5 x 45
54mm	DF3-SS-HT-A15-5.5 x 85	DF3-A15-5.5 x 55
60mm	DF3-SS-HT-A15-5.5 x 85	DF3-HT-A15-5.5 x 65
70mm	DF3-SS-HT-A15-5.5 x 85	DF3-HT-A15-5.5 x 85
74mm	DF3-SS-HT-A15-5.5 x 85	DF3-HT-A15-5.5 x 85
80mm	DF3-SS-HT-A15-5.5 x 85	DF3-HT-A15-5.5 x 85
88mm	DF3-SS-HT-A15-5.5 x 110	DF3-HT-A15-5.5 x 105
100mm	DF3-SS-HT-A15-5.5 x 110	DF3-HT-A15-5.5 x 105
120mm	DF3-SS-HT-A15-5.5 x 130	DF3-HT-A15-5.5 x 130
140mm	DF3-SS-HT-A15-5.5 x 150	DF3-HT-A15-5.5 x 150
150mm	DF3-SS-HT-A15-5.5 x 180	DF3-HT-A15-5.5 x 180

For fixing panels to timber, please contact Fixfast Customer Service team on **0800 304 7616**

## AWP primary fixing through tongue to hot rolled steel 4.0 - 12mm

### Use DrillFast® DF12-SS or DF12 fasteners

8mm hex head, use Fixfast GreenDrive for stainless fasteners and Fixfast YellowDrive for carbon fasteners.

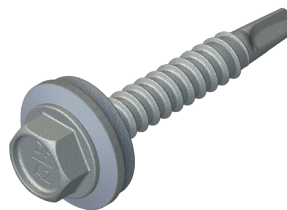


Panel Thickness	Fastener Code Stainless	Fastener Code Carbon
45mm	DF12-SS-A15-5.5 x 60	DF12-A15-5.5 x 60
54mm	please consult Technical	DF12-HT-A15-5.5 x 85
60mm	DF12-SS-HT-A15-5.5 x 95	DF12-HT-A15-5.5 x 85
70mm	DF12-SS-HT-A15-5.5 x 115	DF12-HT-A15-5.5 x 85
74mm	DF12-SS-HT-A15-5.5 x 115	DF12-HT-A15-5.5 x 105
80mm	DF12-SS-HT-A15-5.5 x 115	DF12-HT-A15-5.5 x 105
88mm	DF12-SS-HT-A15-5.5 x 115	DF12-HT-A15-5.5 x 125
100mm	DF12-SS-HT-A15-5.5 x 150	DF12-HT-A15-5.5 x 125
120mm	DF12-SS-HT-A15-5.5 x 150	DF12-HT-A15-5.5 x 145
140mm	DF12-SS-HT-A15-5.5 x 200	DF12-HT-A15-5.5 x 165
150mm	DF12-SS-HT-A15-5.5 x 200	DF12-HT-A15-5.5 x 165

## AWP fixing panel bearer to cold rolled steel 1.2 - 3mm

### Use DrillFast® DF3-SS or DF3 fasteners

8mm hex head, use Fixfast GreenDrive for stainless steel fasteners and Fixfast YellowDrive for carbon steel fasteners.

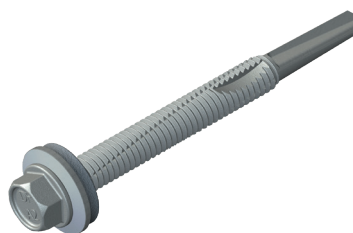
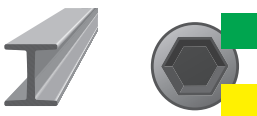


Fastener Code - Stainless	Fastener Code - Carbon
DF3-SS-A15-5.5 x 25	DF3-A15-5.5 x 25

## AWP fixing panel bearer to hot rolled steel 4.0 - 12mm

### Use DrillFast® DF12-SS or DF12 fasteners.

8mm hex head, use Fixfast GreenDrive for stainless steel fasteners and Fixfast YellowDrive for carbon steel fasteners.

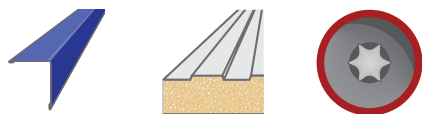


Fastener Code - Stainless	Fastener Code - Carbon
DF12-SS-A15-5.5 x 40	DF12-A15-5.5 x 38

## AWP fixing for metal flashing to panel

### Use DrillFast® lacquered fasteners

Pan lacquered head, use Fixfast RedDrive.



Fastener Code - Stainless	Fastener Code - Carbon
DF2-SSA4-PL-S15-6.3 x 25 + colour	DF3-DPL-A15-5.5 x 25 + colour

## AWP horizontally laid panel fixing through top hat section to cold rolled steel 1.2 - 3mm

### Use DrillFast® DF3-SS or DF3 fasteners.

8mm hex head, use Fixfast GreenDrive for stainless steel fasteners and Fixfast YellowDrive for carbon steel fasteners.

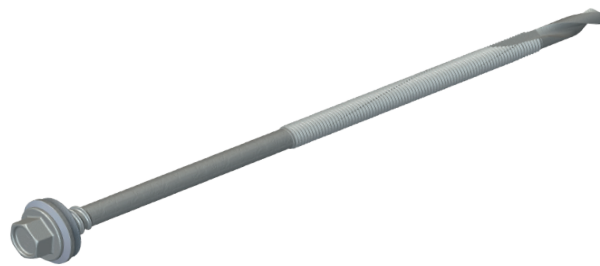


Panel Thickness	Fastener Code Stainless	Fastener Code Carbon
45mm	DF3-SS-A15-5.5 x 55	DF3-A15-5.5 x 45
60mm	DF3-SS-HT-A15-5.5 x 85	DF3-A15-5.5 x 55
70mm	DF3-SS-HT-A15-5.5 x 85	DF3-HT-A15-5.5 x 65
80mm	DF3-SS-HT-A15-5.5 x 85	DF3-HT-A15-5.5 x 85
100mm	DF3-SS-HT-A15-5.5 x 110	DF3-HT-A15-5.5 x 105
120mm	DF3-SS-HT-A15-5.5 x 130	DF3-HT-A15-5.5 x 130
140mm	DF3-SS-HT-A15-5.5 x 150	DF3-HT-A15-5.5 x 150

## AWP horizontally laid panel fixing through top hat section to hot rolled steel 4.0 - 12mm

### Use DrillFast® DF12-SS or DF12 fasteners

8mm hex head, use Fixfast GreenDrive for stainless steel fasteners and Fixfast YellowDrive for carbon steel fasteners.

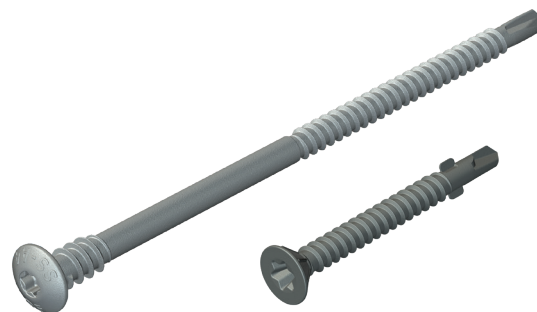
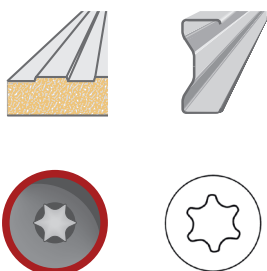


Panel Thickness	Fastener Code Stainless	Fastener Code Carbon
45mm	DF12-SS-A15-5.5 x 60	DF12-A15-5.5 x 60
60mm	DF12-SS-HT-A15-5.5 x 95	DF12-HT-A15-5.5 x 85
70mm	DF12-SS-HT-A15-5.5 x 95	DF12-HT-A15-5.5 x 85
80mm	DF12-SS-HT-A15-5.5 x 95	DF12-HT-A15-5.5 x 105
100mm	DF12-SS-HT-A15-5.5 x 150	DF12-HT-A15-5.5 x 125
120mm	DF12-SS-HT-A15-5.5 x 200	DF12-HT-A15-5.5 x 145
140mm	DF12-SS-HT-A15-5.5 x 200	DF12-HT-A15-5.5 x 165

## AWP face fixing vertically laid panels under flashing into cold rolled steel 1.2 - 3mm

### Use DrillFast® low profile fasteners or countersunk head wing screws.

Use Fixfast RedDrive when fixing low profile headed fasteners  
For wing screw fasteners use a TX30 drive bit and bit holder.



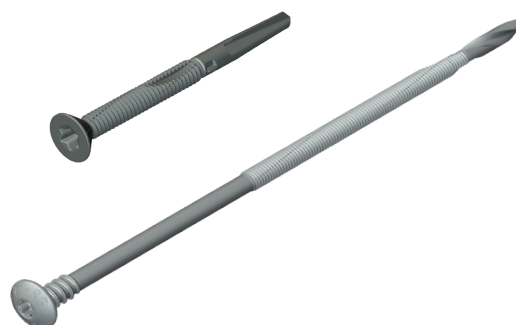
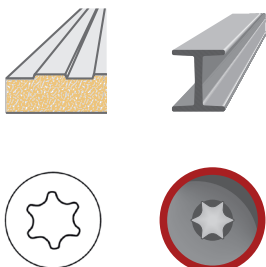
Panel Thickness	Fastener Code Stainless	Fastener Code Carbon
45mm	DF3-SSA4-P-5.5 x 75	DF3-W-5.5 x 80
60mm	DF3-SSA4-P-HT-5.5 x 115	DF3-W-5.5 x 100
70mm	DF3-SSA4-P-HT-5.5 x 115	DF3-W-5.5 x 100
100mm	DF3-SSA4-P-HT-5.5 x 155	<i>please enquire for details</i>
120mm	DF3-SSA4-P-HT-5.5 x 155	<i>please enquire for details</i>
140mm	DF3-SSA4-P-HT-5.5 x 240	<i>please enquire for details</i>

## AWP face fixing vertically laid panels under flashing into hot rolled steel 4.0 - 12mm

### Use DrillFast® countersunk head wing screws, or low profile fasteners

Use Fixfast RedDrive when fixing low profile headed fasteners

For wingscrew fasteners use a TX30 drive bit and bit holder

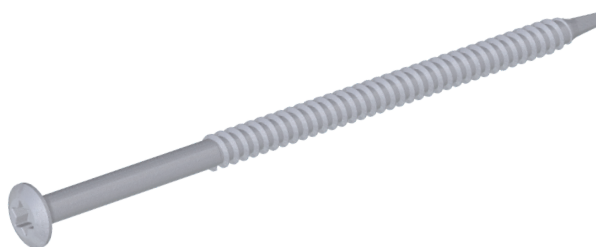


Panel Thickness	Fastener Code Stainless	Fastener Code Carbon
45mm	DF12-SSA4-W-5.5 x 95	DF12-W-5.5 x 60
60mm	DF12-SSA4-P-HT-5.5 x 165	DF12-W-5.5 x 109
70mm	DF12-SSA4-P-HT-5.5 x 165	DF12-W-5.5 x 109
80mm	DF12-SSA4-P-HT-5.5 x 165	DF12-W-5.5 x 135
100mm	DF12-SSA4-P-HT-5.5 x 165	DF12-W-5.5 x 135
120mm	DF12-SSA4-P-HT-5.5 x 165	<i>please enquire for details</i>
140mm	DF12-SSA4-P-HT-5.5 x 230	<i>please enquire for details</i>

## AWP stitching panels in firewall applications - LPCB Grade EXT-A15

### Use SureFast SF-RS-SSA4 or SF-RS fasteners

Use M490-2 bit holder and TX25 bit.



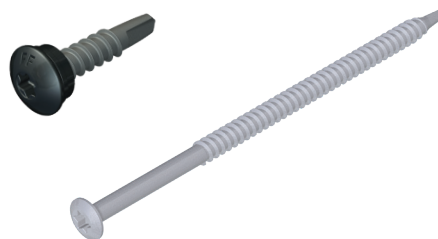
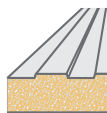
Panel Thickness	Fastener Code Stainless	Fastener Code Carbon
70mm	SF-RS-SSA4-4.8 x 60	SF-RS-5.8 x 65
80mm	SF-RS-SSA4-4.8 x 60	SF-RS-5.8 x 75
100mm	SF-RS-SSA4-4.8 x 80	SF-RS-5.8 x 95
120mm	SF-RS-SSA4-4.8 x 100	SF-RS-5.8 x 115
140mm	SF-RS-SSA4-4.8 x 120	SF-RS-5.8 x 125

*These fasteners can be lacquered to match internal panel colours. Please contact Fixfast customer service for further details.*

## AWP stitching panels in firewall applications - LPCB Grade EXT-A30

### Use SureFast or DrillFast® lacquered fasteners

Use TX25 bit and bit holder for SureFast screws.  
Use FixFast RedDrive for pan lacquered head screws.



Panel Thickness	Fastener Code Stainless	Fastener Code Carbon
100mm	SF-RS-SSA4-4.8 x 80	SF-RS-5.8 x 95
120mm	SF-RS-SSA4-4.8 x 100	SF-RS-5.8 x 115
140mm	SF-RS-SSA4-4.8 x 120	SF-RS-5.8 x 125
Stitching 100mm wide internal cover flashing to panel	DF2-SSA4-PL-6.3 x 25 + colour	DF3-DPL-A10-5.5 x 25 + colour

## AWP air seal on vertical rails for horizontally laid panels

### Use EPDM bubble gasket



Sealant Code	Thickness x width (mm)	Roll length (m)
EPDM-BG-95 x 10 x 40	10 x 95	40

## AWP air seal on horizontal rails for horizontally laid panels

### Use A Class butyl strip sealant



Sealant Code	Dimensions (mm)	Roll Length (m)
A-6 dia x 8	6mm bead	8



## AWP top-hat sealant for horizontally laid panels

Use A Class butyl strip sealant



Sealant Code	Dimensions (mm)	Roll Length
A-4 dia x 12	4mm bead	12

## AWP sealant for joints

Use Seelex BR gun grade butyl rubber sealant



Sealant Code	Cartridge Size (ml)	Colour
SEELEX-BR	380	Grey or White

## AWP fire resistant foam for filling corner junctions and joints

Use Firefoam B1



Sealant Code	Cartridge Size (ml)	Fitting
FIREFOAM-B1-GUN	750	Screwtop
FIREFOAM-B1-HAND	750	Manual

## AWP filler seal and panel end seal for horizontally laid panels

Use Seelex LM clear silicone



Sealant Code	Cartridge Size (ml)	Colour
SEELEX-LM CLEAR	310	Clear

## AWP airseal on rails for vertically laid panels

Use A Class butyl strip sealant



Sealant Code	Dimensions (mm)	Roll length
A-6 dia x 8	6mm bead	8

## AWP corner flashing seal for vertically laid panels

Use A Class butyl strip sealant



Sealant Code	Thickness x Width (mm)	Roll Length (m)
A-4 dia x 12	4mm bead	12

## AWP verge flashing seal for horizontally laid panels

Use A Class butyl strip sealant



	Sealant Code	Thickness x width (mm)	Roll length (mm)
At roof level	A-3 x 19 x 15	3 x 19	15
At wall level	A-4 dia x 12	4mm bead	12

## AWP bedding sealant for filler blocks and internal air sealing

Use Seelex BR gun grade butyl rubber sealant



Sealant Code	Cartridge Size (ml)	Colour
SEELEX-BR	380	Grey or White

## AWP EPDM foam filler blocks for ridges and hips

Use EPDM foam fillers

Also available in fire resistant material  
Please enquire for details.



### Code

EPDM KINGSPAN AWP

### GreenDrive

One-piece drive socket for DrillFast® stainless fasteners, supports the head for easy accurate driving.

**Product Code:** GREENDRIVE



### YellowDrive

One-piece drive socket for DrillFast® carbon fasteners, supports the head for easy accurate driving.

**Product Code:** YELLOWDRIVE



### RedDrive

One-piece drive socket for DrillFast® low profile fasteners, supports the head for easy accurate driving.

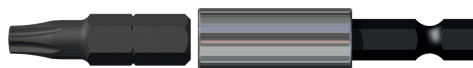
**Product Code:** REDDRIVE



### TorxDriver

Two-piece drive socket and bit for DrillFast® low profile fasteners.

**Product Code:** M490/2 + TX25



Many other tools and accessories are available.

Please see the current Fixfast Product Directory, go to **[www.fixfast.com](http://www.fixfast.com)**, or ask the Fixfast customer service team.

## Installation and handling

- **Installation tool**

Variable speed electric screwdriver

- **Installation drive**

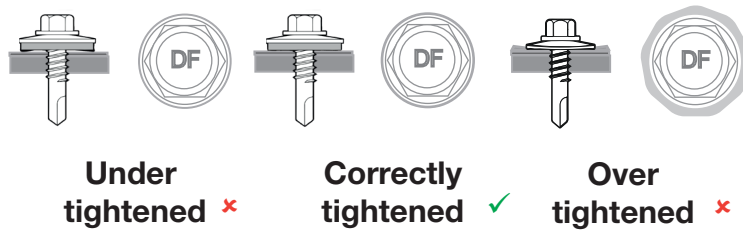
Fixfast GreenDrive, YellowDrive, RedDrive or TorxDrive, depending on the fastener being used

- **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 and 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.

### DF3-SSA4-P-HT-5.5 Range

Material	1.4401 stainless steel (316M), with steel case hardened welded point
Coating	Organic
Drilling Capacity	1.2mm - 3.0mm steel
Pull-out Values (axial load resistance)	
Substrate	Characteristic value
1.2mm Steel	1.43kN
2.0mm Steel	2.75kN
3.0mm Steel	4.90kN
Softwood 35mm Embedment	2.11kN

### DF12-SSA4-P-HT-5.5 range

Material	1.4401 stainless steel (316M), with carbon steel case hardened welded point
Coating	Organic
Head Type	Low profile
Drilling Capacity	4.0 – 12.0mm Steel
Pull-out values (axial load resistance)	
Substrate	Characteristic Value
4.0mm steel	4.02 kN
6.0mm steel	5.44 kN
8.0mm steel	5.59 kN
12.0mm steel	5.59 kN

### DF3-SSA4-P range

Material	1.4401 stainless steel (316M), with carbon steel case hardened welded point
Coating	Organic
Head Type	Low profile pan, TX25 recess
Drilling Capacity	1.2 – 3.0mm Steel
Pull-out values (axial load resistance)	
Substrate	Characteristic Value
1.2mm steel	1.30 kN
2.0mm steel	2.62 kN
3.0mm steel	4.76 kN

DF3-SS/DF3-SS-HT-5.5 Range	
Material	1.4301 stainless steel (304M), with steel case hardened welded point
Coating	Organic
Drilling Capacity	1.2mm - 3.0mm steel
Pull-out Values (axial load resistance)	
Substrate	Characteristic value
1.2mm Steel	1.30kN
2.0mm Steel	2.62kN
3.0mm Steel	4.76kN
Softwood 35mm Embedment	3.57kN

DF3/DF3-HT-5.5 Range	
Material	Steel SAE1022 case hardened welded point
Coating	Organic
Drilling Capacity	1.2mm - 3.0mm steel
Pull-out Values (axial load resistance)	
Substrate	Characteristic value
1.2mm Steel	1.52kN
2.0mm Steel	3.01kN
3.0mm Steel	5.42kN
Softwood 35mm Embedment	3.57kN

DF12-SS-HT-5.5 Range	
Material	1.4301 Stainless steel (304M), with steel case hardened welded point
Coating	Organic
Drilling Capacity	4.0mm - 12.0mm steel
Pull-out Values (axial load resistance)	
Substrate	Characteristic value
4.0mm Steel	2.80kN
6.0mm Steel	3.09kN
8.0mm Steel	6.89kN
12.0mm Steel	6.89kN

DF12-HT-5.5 Range	
Material	SAE1022 steel case hardened welded point
Coating	Organic
Drilling Capacity	4.0mm - 12.0mm steel
Pull-out Values (axial load resistance)	
Substrate	Characteristic value
4.0mm Steel	5.44kN
6.0mm Steel	12.75kN
8.0mm Steel	13.92kN
12.0mm Steel	13.92kN

DF12-SSA4-W Range	
Material	1.4401 stainless steel (316M), with carbon steel case hardened welded point
Coating	Organic
Head Type	Countersunk
Drilling Capacity	4.0 – 12.0mm Steel
Pull-out values (axial load resistance)	
Substrate	Characteristic Value
4.0mm steel	2.80 kN
6.0mm steel	3.09 kN
8.0mm steel	6.89 kN
12.0mm steel	6.89 kN

DF3-W Range	
Material	Steel SAE1022 case hardened
Coating	Organic
Drilling Capacity	1.5mm - 3.0mm steel
Pull-out Values (axial load resistance)	
Substrate	Characteristic value
1.2mm Steel	2.27kN
2.0mm Steel	3.28kN
3.0mm Steel	6.53kN



DF12-W Range	
Material	SAE1022 steel case hardened
Coating	Organic
Drilling Capacity	4.0mm - 12.0mm steel
Pull-out Values (axial load resistance)	
Substrate	Characteristic value
4.0mm Steel	7.94kN
6.0mm Steel	9.84kN

DF2-SSA4-PL-6.3 x 25	
Material	1.4401 stainless steel (316M) with steel case hardened welded point
Coating	Organic
Drilling Capacity	Max 2 x 1.0mm S275 steel
Pull-out Values (axial load resistance)	
Substrate	Characteristic value
0.5mm Steel	0.60kN
1.0mm Steel	1.23kN

DF3-DPL-5.5 x 25	
Material	SAE 1022 steel case hardened
Coating	Organic
Drilling Capacity	0.5mm - 3.0mm steel
Pull-out Values (axial load resistance)	
Substrate	Characteristic value
0.5mm Steel	0.68kN
1.2mm Steel	1.52kN
2.0mm Steel	3.01kN
3.0mm Steel	5.42kN

SF-RS-SSA4 - fasteners	
Material	1.4401 stainless steel (316M) with carbon steel case hardened welded point
Coating	Organic
Head Type	Oval, TX25 recess
Drilling Capacity	Max 2 x 1.0mm S275 steel sheet
Pull-out values (axial load resistance)	
Substrate	Characteristic value
0.7mm steel	1.08 kN
0.9mm steel	1.45 kN
1.2mm steel	2.24 kN
18mm plywood	1.77 kN
18mm OSB	1.37 kN
Softwood	3.89 kN

SF-RS-5.8 fasteners	
Material	Steel SAE1022 case hardened
Coating	Multiple layer organic
Head Type	Low profile oval style, TX25 recess
Drilling Capacity	2 x 1.0mm S275 steel sheet
Pull-out values (axial load resistance)	
Substrate	Characteristic value
0.5mm steel	0.84 kN
0.7mm steel	1.43 kN
0.9mm steel	1.93 kN
1.2mm steel	2.87 kN
18mm plywood	2.10 kN
18mm OSB	1.58 kN
Softwood	4.06 kN

### Fastener Data

- + All dimensions are subject to manufacturing tolerances.
- + Performance values are tested and calculated according to Eurocode procedures and appropriate safety factors should be applied in any calculations using these values.

### Fastener Selection

- + Recommended fastener lengths are calculated using standard tolerances for the fasteners and the combination of materials in the build-up.
- + If there is distortion in the supporting construction, or other non-standard application detail, longer fasteners may be necessary than those shown. Always check the actual circumstances before deciding on a particular length.

### Further Assistance

- + For any enquiry, or to discuss your requirements with someone knowledgeable, call the Fixfast customer service team on **0800 304 7616**.
- + Full literature is available for the Fixfast range, or visit **[www.fixfast.com](http://www.fixfast.com)**
- + Other performance data may be available on request. For more unusual applications, tests can be carried out in our in-house technical centre to provide the necessary data.
- + Site visits are also possible, particularly for pull-out performance into concrete, masonry or other variable substrates. Please ask for a Site Visit Request form if you think this service would be useful.
- + CAD files of fasteners are available on request for inclusion in drawings.

The information contained in this document is based on the specification of the Kingspan QuadCore KS600-1000 AWP system and Fixfast's product data. It is provided in good faith but Fixfast cannot be held liable for any errors. Performance is dependent on adherence to the conditions and instructions contained in Fixfast's Technical Data Sheets for the products shown. Performance values should be approved by a qualified engineer, and Fixfast recommend preliminary tests for any application where variation is possible in the materials or substrates involved.



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Certificate number 10905  
ISO 9001, ISO 14001  
ISO 45001