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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 AWP panel system.

Full technical data for these products along with application uses can be found on our website at 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.

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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 80mm | DF12-SS-HT-A15-5.5 x 115 | 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 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

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 | DF3-W-5.5 x 120 |
| 120mm | DF3-SSA4-P-HT-5.5 x 155 | please enquire for details |
| 140mm | DF3-SSA4-P-HT-5.5 x 240 | please enquire for details |

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 | please enquire for details |
| 140mm | DF12-SSA4-P-HT-5.5 x 230 | please enquire for details |

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.



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EPDM KINGSPAN AWP

Accessories

GreenDrive

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







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





TorxDrive

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**, or ask the Fixfast customer service team.

| 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 |

Technical Notes

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.

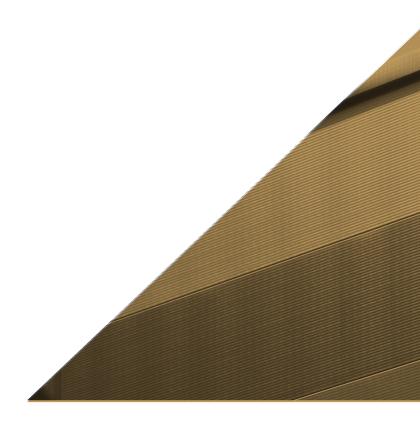
Fastener Selection

- + 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
- + 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 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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