Recommended Fixings Manual for

Matrix 70 Suite of Profiles

SPECIAL NOTES WITH REFERENCE TO DOOR HINGE FASTENERS

Due to the extensive range and specification of door hinge hardware, the recommendations within this manual are intended as a guide only. It is therefore essential that you contact Rapierstar Technical Department for advice on correct fastener selection for your individual requirements.

Matrix 70 Profile

The Correct Fastener

rapierstar® the market-leading supplier of screws to the PVC-U window industry, with its unrivalled technical expertise, has worked together with your systems company to produce this recommended fixings manual. The following pages contain advice on the correct fastener for each application.

Your orders are despatched direct from our purpose-built premises near Congleton in Cheshire.

Star Performance

rapierstar® StarPVCU window screws have conformed with all relevant industry standards, guidelines and recommendations for some time and are intended to be used where mechanical resistance, stability and safety of use in the sense of the 'essential requirements' of Annex I of the Construction Products Regulation 305/2011 are to be fulfilled.

Surpassing Standards

rapierstar® branded product ranges have been certified by European approved 'Notified Bodies', confirming initial type testing and assessment & verification of constancy of performance.

BS EN 14351-1:2006+A1:2010, Windows and doors product standard, performance characteristics.

CE ***rapierstar***® branded screws conform with the requirements of harmonised European standard BS EN 14351-1 and have been type tested to meet the standard of BS EN 14566:2008+A1:2009. By conforming with this standard, we are describing, with independent verification, that the head/thread/point maintain consistency of design. This also guarantees that the production of steel screws is to EU standards and that factory controls are in place during manufacture.

PAS 24:2012 Windows and doors fabricated with correct StarPVCU screws exceed PAS 24:2012 - enhanced security performance requirements for doorsets and windows in the UK. PAS 24:2012 supersedes PAS 24:2007 and BS 7950:1997, which are withdrawn.

BS EN 1670:2007 Electroplating coatings of ***rapierstar***® products comply with the provisions of ISO 2081:2008 and exceed corrosion resistance testing to BS EN 1670 grade 4 for Carbon Steel screws and BS EN 1670 grade 5 for Stainless Steel screws.

ISO 9000, is a family of standards relating to quality management and are designed to help organisations ensure they meet the needs of customers. ***rapierstar***® is an ISO 9001:2008 registered company and all our window screws are manufactured by ISO 9000 certificated companies. Full traceability is maintained so long as the screws remain in the box in which they were supplied.

Screw Tips - Best Practice

Perpendicular Insertion: Ensure that any fastener is applied at 90° to the material at all times.

Mechanical Damage: It is important to replace the screwdriver bit regularly. A worn screwdriver bit may not engage fully into the recess, causing damage to the plating of the screw with the resulting likelihood of corrosion.

Torque Setting: The use of excessive torque may lead to stripping and failure of the fastener. The torque setting on the screwdriver should be the minimum required to effect a complete fastening.

Screwdriver Speed: It is recommended by the Glass & Glazing Federation and the British Plastics Federation that driver speeds between 1500 rpm and 2000 rpm are used.

Avoid Corrosive Elements

Several factors can cause screws to rust, each of which can be accelerated depending on the situation of the application.

Silicone sealants - avoid acetic acid cured high and low modulus sealants. The vapour alone is sufficient to cause corrosion. Therefore a neutral curing sealant is recommended.

Acrylic fillers - contact with any carbon steel component will cause corrosion.

Cleaners - aggressive cleaning substances, especially those containing ammonia, chlorine etc. can reduce the effectiveness of the protective plating and should be avoided.

New-build - screws should not come into contact with wet plaster or cement, as the lime content will cause corrosion. Also, the acid wash that is often used to clean brickwork is highly corrosive and should be avoided completely. **Where any of the above conditions are likely to exist, the use of stainless steel is recommended.**

Matrix 70 Profile

100% Stainless
100% Solution

For coastal or heavily polluted regions of the country, when attaching stainless steel hardware, or where prolonged guarantees are being offered, we recommend that stainless steel screws should be used.

Identification of Stainless Window screws

Unique head design eliminates confusion between the grades of stainless steel used. Clear product marking on the head of ***rapierstar***® window screws allows immediate identification of the grade of stainless steel from which the screws are manufactured. This ensures that specifications are adhered to.

Austenitic Stainless Steel - 302

Because 302 grade Austenitic stainless steel is intrinsically soft, it is unsuitable for self-drilling applications. However, it is ideal for use in PVC-U only applications, giving excellent corrosion resistance.

Enhanced Martensitic Stainless Steel - 410

410 grade Martensitic stainless steel is a harder grade which is capable of self-drilling and tapping into steel reinforcement. Screws are independently tested by UKAS accredited test bodies to beyond 3000 hours salt spray test in accordance with BS EN ISO 9227.

Bi-Metallic

Austenitic stainless steel fastener with a carbon steel drill tip. Suitable for reinforced applications. Combination recess with square drive giving effective 'stick-fit' onto the driver bit for ease of insertion during fabrication and common Phillips no2 recess for on-site adjustment. Often accepted by Councils and Housing Associations for use in the manufacture of windows and doors.

In any application where fasteners are required to be guaranteed free from hydrogen embrittlement or any other form of hydrogen induced cracking (HIC), Rapierstar always recommend that fasteners manufactured from a grade of stainless steel considered suitable for the end application be specified and used.

Rapier® StarFix

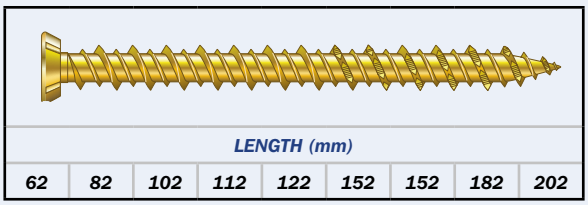
In choosing ***rapierstar***, you have used the industry's leading supplier of window screws to manufacture your windows and doors. To maintain your high standards, have your products installed using the best quality fixings. ***StarFix*** **is the most widely used plugless frame fixing available today. Recommend *StarFix* to your installer.**

Masonry Fixing

- **No Plug Required**
- **High Strength Fixing**
- **50% Quicker Assembly**
- **30% Less Drive-in Torque Required**

High Tech Fixing

The award winning ***StarFix*** is probably the most efficient direct masonry fixing available. The patented StarForm thread provides 30% lower drive-in torque and up to 50% quicker assembly. A cost effective and time saving installation with exceptional holding power.



LENGTH (mm)								
62	82	102	112	122	152	152	182	202

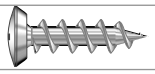
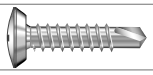
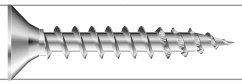
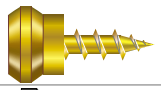
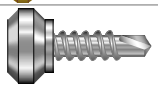
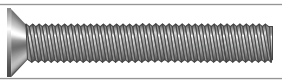
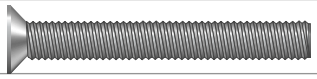
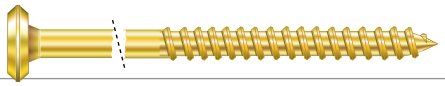
Yellow finish. 7.5mm Diameter.
6.0mm / 6.5mm pilot hole required
8.0mm clearance hole

In tests, ***StarFix*** has consistently out-performed other lower cost plugless fixings that are often claimed to be it's equal.

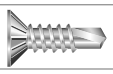
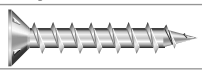
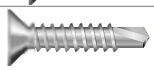
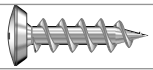
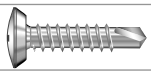
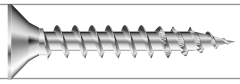
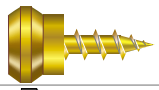
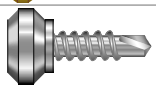
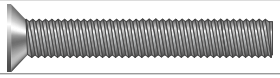
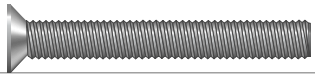
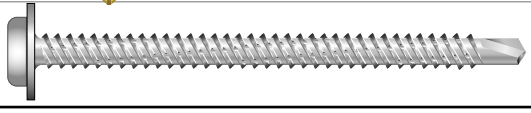
Faster, low torque insertion means battery life of power tools is extended during installation, a valuable cost and time-saving element.

StarFix provides high shear strength and in tests, pull-out values into London Brick, Concrete Block and Engineering Brick have proved exceptional. For details of these test results visit ***www.rapierstar.com***

Carbon Steel

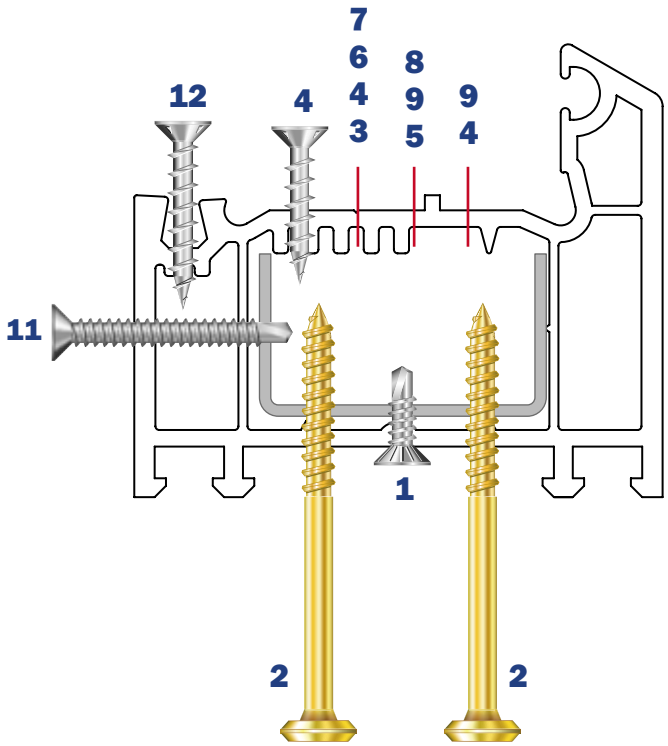
	Code	Typical Application
	RSR 3.9 x 13 Z	Reinforcement retention
	CFG 4.3 x 16 Z	Interlocking wedge, Excluder, Restrictor
	CFG 4.3 x 20 Z	Keep, Run-up block, Dummy sash lock
	CFG 4.3 x 25 Z	Tilt & Turn keep
	CFG 4.3 x 30 Z	Tilt & Turn top & bottom hinges
	CSR 3.9 x 16 Z	Interlocking wedge, Excluder, Restrictor
	CSR 3.9 x 19 Z	Keep, Run-up block, Dummy sash lock
	CSR 3.9 x 32 Z	T/T hinges, Flag/Butt hinges (standard)
	CSR 4.8 x 38 Z	Flag / Butt hinges (oversized)
	SFG 4.3 x 16 Z	Friction stay
	SFG 4.3 x 25 Z	Friction stay
	SSR 3.9 x 16 Z	Friction stay
	SSR 3.9 x 28 Z	Friction stay
	SFR 4.8 x 13 Z	Friction stay
	CPF 4.5 x 30 Z	Flag hinge (oversized hole)
	NFG 4.3 x 12 Y	Weatherbar
	NSR 4.0 x 13 Z	Weatherbar
	MS M5 x 35 Z	Handle retention - windows
	MS M5 x 40 Z	Handle retention - Tilt & Turn
	MJS 4.8 x 55 Y	Mechanical jointing
	MJS 4.8 x 65 Y	Mechanical jointing
	MJS 4.8 x 80 Y	Mechanical jointing
	WSR 4.8 x 65 Z	French coupling to sash

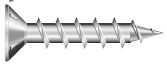
Stainless Steel

	Code	Typical Application
	RSR 3.9 x 13 S	Reinforcement retention
	CFG 4.3 x 16 S	Interlocking wedge, Excluder, Restrictor
	CFG 4.3 x 20 S	Keep, Run-up block, Dummy sash lock
	CFG 4.3 x 25 S	Tilt & Turn keep
	CFG 4.3 x 30 S	Tilt & Turn top & bottom hinges
	CSR 3.9 x 16 S	Interlocking wedge, Excluder, Restrictor
	CSR 3.9 x 19 S	Keep, Run-up block, Dummy sash lock
	CSR 3.9 x 32 S	T/T hinges, Flag/Butt hinges (standard)
	CSR 4.8 x 38 S	Flag / Butt hinges (oversized)
	SFG 4.3 x 16 S	Friction stay
	SFG 4.3 x 25 S	Friction stay
	SSR 3.9 x 16 S	Friction stay
	SSR 3.9 x 28 S	Friction stay
	SFR 4.8 x 13 S	Friction stay
	CPF 4.5 x 30 Z	Flag hinge (oversized hole)
	NFG 4.3 x 12 Y	Weatherbar
	NSR 4.0 x 13 Z	Weatherbar
	MS M5 x 35 Z	Handle retention - windows
	MS M5 x 40 Z	Handle retention - Tilt & Turn
	MJS 4.8 x 55 Y	Mechanical jointing
	MJS 4.8 x 65 Y	Mechanical jointing
	MJS 4.8 x 80 Y	Mechanical jointing
	WSR 4.8 x 65 Z	French coupling to sash

Matrix 70 Profile

60mm Outer Frame - 101144
with 113317 Reinforcement

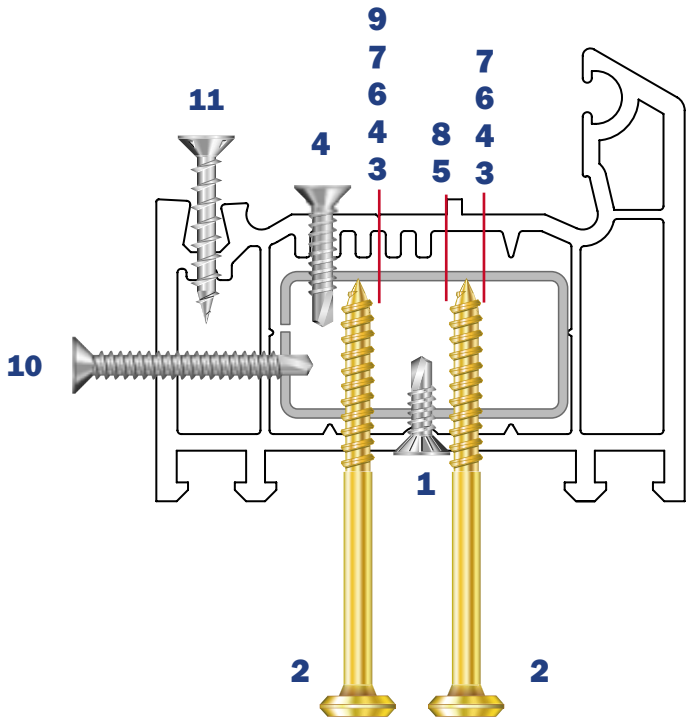


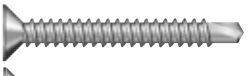
1		RSR 3.9 x 13 Z	Reinforcement retention
2		MJS 4.8 x 55 Y	Mechanical Jointing
3		SFG 4.3 x 16 Z	Friction Stay
4		CFG 4.3 x 20 Z	Keep
5		CFG 4.3 x 20 Z	Run-up Block
6		CFG 4.3 x 16 Z	Interlocking Wedge
7		CFG 4.3 x 16 Z	Excluder
8		CFG 4.3 x 16 Z	Restrictor
9		CFG 4.3 x 20 Z	Dummy Sash Lok
10		T. B.C	Glass Loc
11		CSR 3.9 x 32 Z	Tilt & Turn top & bottom hinge
12		CFG 4.3 x 25 Z	Tilt & Turn keep (Door)

Yellow, Zinc and Stainless Steel range available

Matrix 70 Profile

60mm Outer Frame - 101144
with 113245 Reinforcement

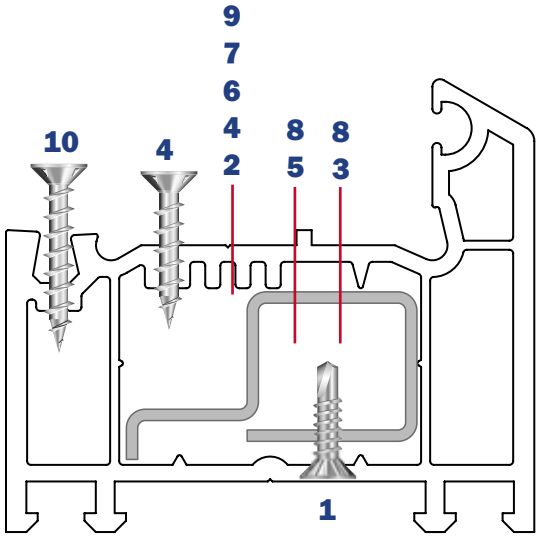


1		RSR 3.9 x 13 Z	Reinforcement retention
2		MJS 4.8 x 55 Y	Mechanical Jointing
3		SSR 3.9 x 16 Z	Friction Stay
4		CSR 3.9 x 19 Z	Keep (Door)
5		CSR 3.9 x 19 Z	Run-up Block
6		CSR 3.9 x 16 Z	Interlocking Wedge
7		CSR 3.9 x 16 Z	Excluder
8		CSR 3.9 x 19 Z	Dummy Sash Lock
9		CSR 3.9 x 16 Z	Restrictor
10		CSR 3.9 x 32 Z	Top and Bottom Tilt & Turn Hinge
11		CFG 4.3 x 25 Z	Tilt & Turn Keep (Door)

Yellow, Zinc and Stainless Steel range available

Matrix 70 Profile

60mm Outer Frame - 101144
with 113316 Reinforcement

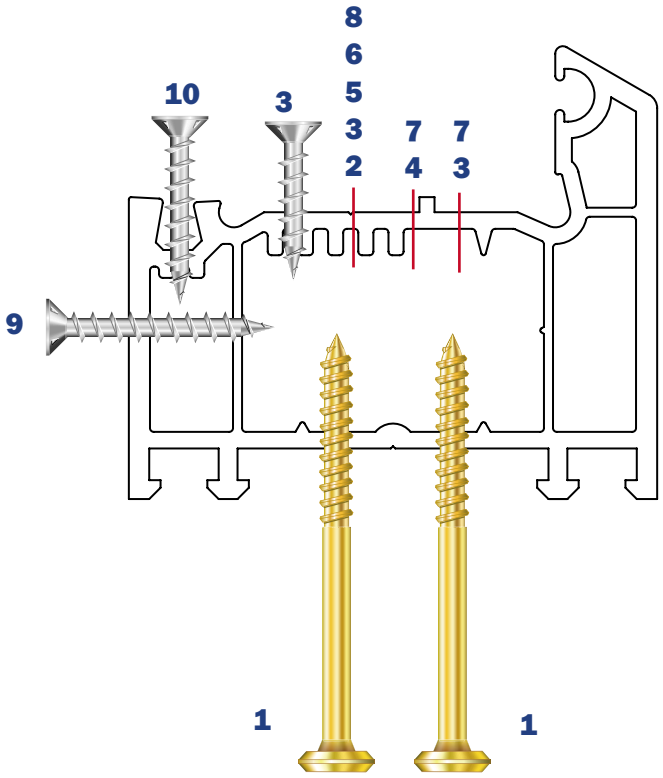


1		RSR 3.9 x 16 Z	Reinforcement retention
2		SFG 4.3 x 16 Z	Friction Stay
3		CSR 3.9 x 19 Z	Keep (Door)
4		CFG 4.3 x 20 Z	Keep
5		CSR 3.9 x 19 Z	Run-up Block
6		CFG 4.3 x 16 Z	Interlocking Wedge
7		CFG 4.3 x 16 Z	Excluder
8		CSR 3.9 x 19 Z	Dummy Sash Lock
9		CFG 4.3 x 16 Z	Restrictor
10		CFG 4.3 x 25 Z	Tilt & Turn Keep (Door)

Yellow, Zinc and Stainless Steel range available

Matrix 70 Profile

60mm Outer Frame - 101144

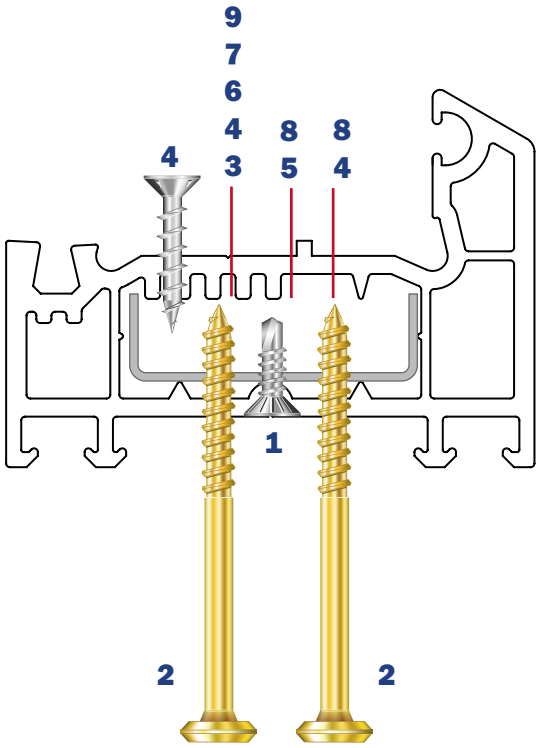


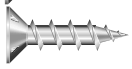
1		MJS 4.8 x 55 Y	Mechanical Jointing
2		SFG 4.3 x 16 Z	Friction Stay
3		CFG 4.3 x 20 Z	Keep (Door)
4		CFG 4.3 x 20 Z	Run-up Block Keep
5		CFG 4.3 x 16 Z	Interlocking Wedge
6		CFG 4.3 x 16 Z	Excluder
7		CFG 4.3 x 20 Z	Dummy Sash Lock
8		CFG 4.3 x 16 Z	Restrictor
9		CFG 4.3 x 30 Z	Top and Bottom Tilt & Turn Hinge
10		CFG 4.3 x 25 Z	Tilt & Turn Keep (Door)

Yellow, Zinc and Stainless Steel range available

Matrix 70 Profile

50mm Outer Frame - 101146
with 113321 Reinforcement

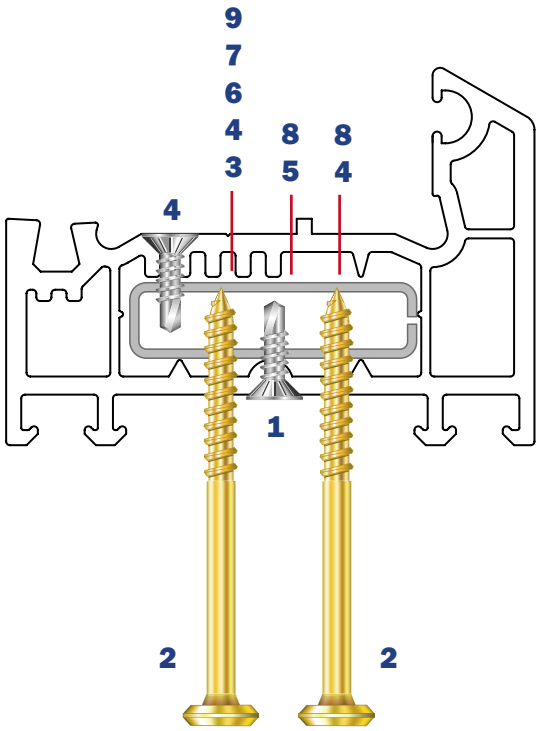


1		RSR 3.9 x 13 Z	Reinforcement Retention
2		MJS 4.8 x 55 Y	Mechanical Jointing
3		SFG 4.3 x 16 Z	Friction Stay
4		CFG 4.3 x 20 Z	Keep
5		CFG 4.3 x 20 Z	Run-up Block
6		CFG 4.3 x 16 Z	Interlocking Wedge
7		CFG 4.3 x 16 Z	Excluder
8		CFG 4.3 x 20 Z	Dummy Sash Lock
9		CFG 4.3 x 16 Z	Restrictor

Yellow, Zinc and Stainless Steel range available

Matrix 70 Profile

50mm Outer Frame - 101146
with 113041 Reinforcement

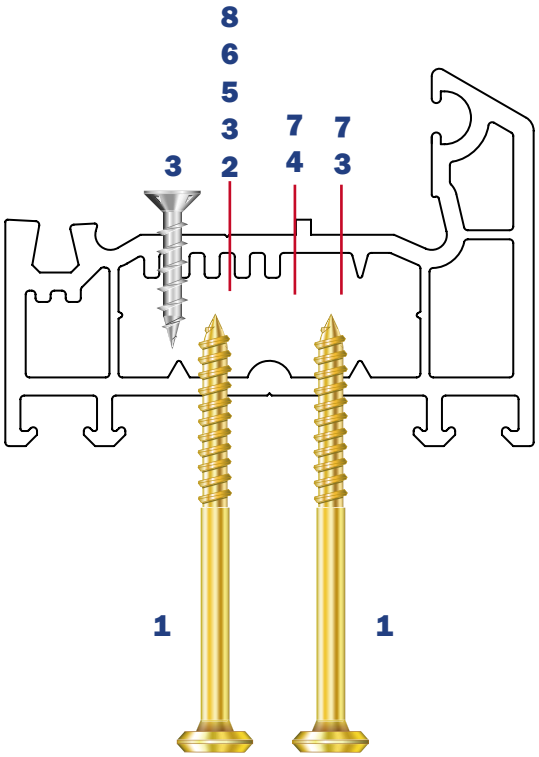


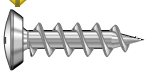
1		RSR 3.9 x 13 Z	Reinforcement Retention
2		MJS 4.8 x 55 Y	Mechanical Jointing
3		SSR 3.9 x 16 Z	Friction Stay
4		CSR 3.9 x 19 Z	Keep
5		CSR 3.9 x 19 Z	Run-up Block
6		CSR 3.9 x 16 Z	Interlocking Wedge
7		CSR 3.9 x 16 Z	Excluder
8		CSR 3.9 x 19 Z	Dummy Sash Lock
9		CSR 3.9 x 16 Z	Restrictor

Yellow, Zinc and Stainless Steel range available

Matrix 70 Profile

50mm Outer Frame - 101146

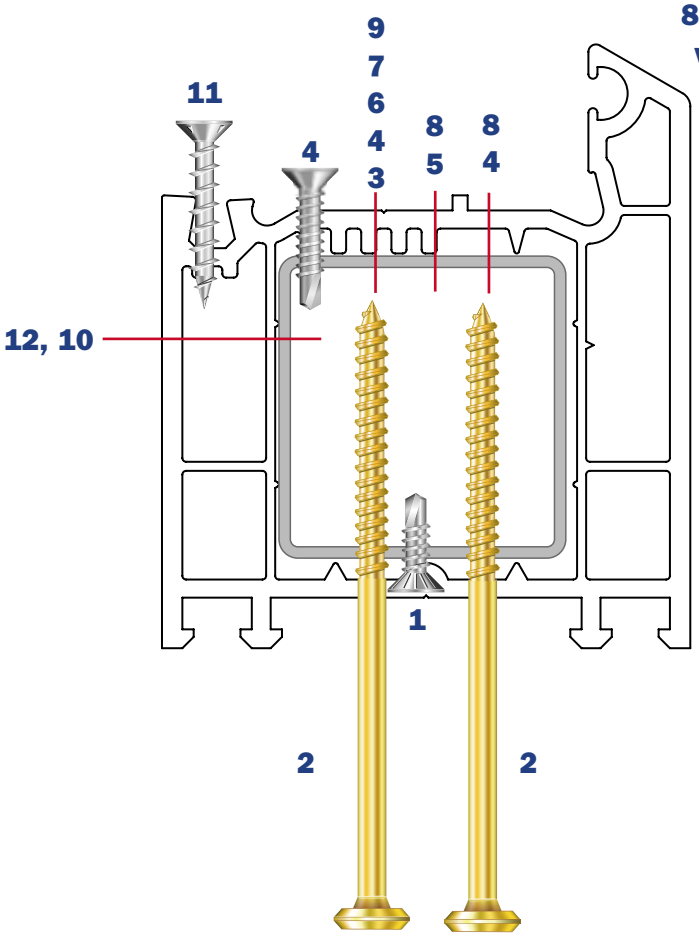


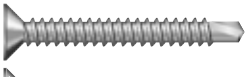
1		MJS 4.8 x 55 Y	Mechanical Jointing
2		SFG 4.3 x 16 Z	Friction Stay
3		CFG 4.3 x 20 Z	Keep
4		CFG 4.3 x 20 Z	Run-up Block
5		CFG 4.3 x 16 Z	Interlocking Wedge
6		CFG 4.3 x 16 Z	Excluder
7		CFG 4.3 x 20 Z	Dummy Sash Lock
8		CFG 4.3 x 16 Z	Restrictor

Yellow, Zinc and Stainless Steel range available

Matrix 70 Profile

80mm Outer Frame - 101147
with 113088 Reinforcement

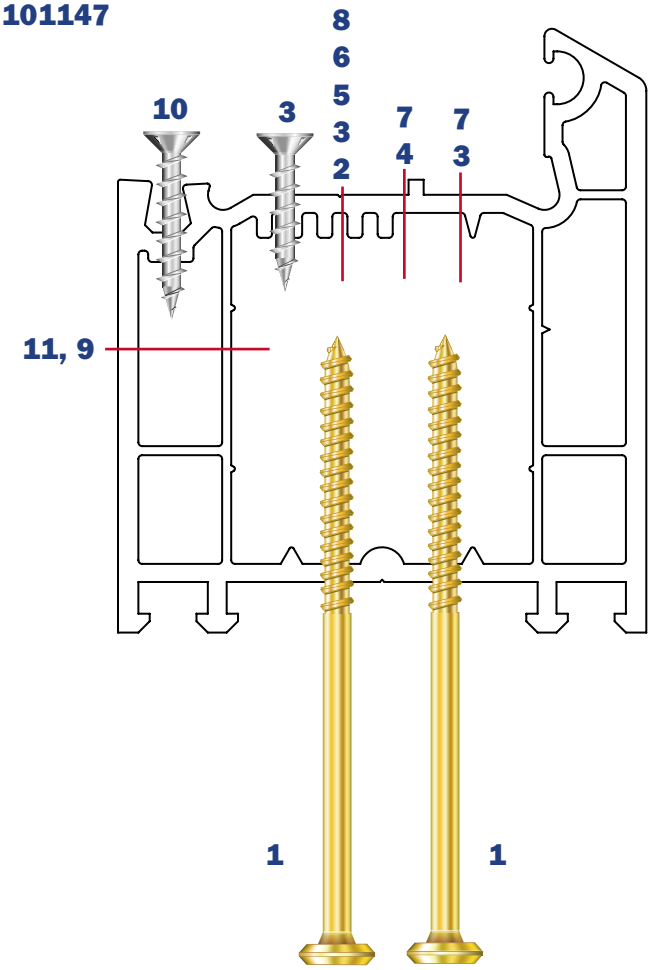


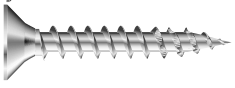
1		RSR 3.9 x 13 Z	Reinforcement retention
2		MJS 4.8 x 80 Y	Mechanical Jointing
3		SSR 3.9 x 16 Z	Friction Stay
4		CSR 3.9 x 19 Z	Keep (Door)
5		CSR 3.9 x 19 Z	Run-up Block
6		CSR 3.9 x 16 Z	Interlocking Wedge
7		CSR 3.9 x 16 Z	Excluder
8		CSR 3.9 x 19 Z	Dummy Sash Lok
9		CSR 3.9 x 16 Z	Restrictor
10		CSR 3.9 x 32 Z	Tilt & Turn top & bottom hinge
11		CFG 4.3 x 25 Z	Tilt & Turn keep
12		CSR 3.9 x 32 Z	Flag / Butt Hinge (Standad Hole)
12		CSR 4.8 x 38 Z	Flag / Butt Hinnge (Oversized)

Yellow, Zinc and Stainless Steel range available

Matrix 70 Profile

80mm Outer Frame - 101147

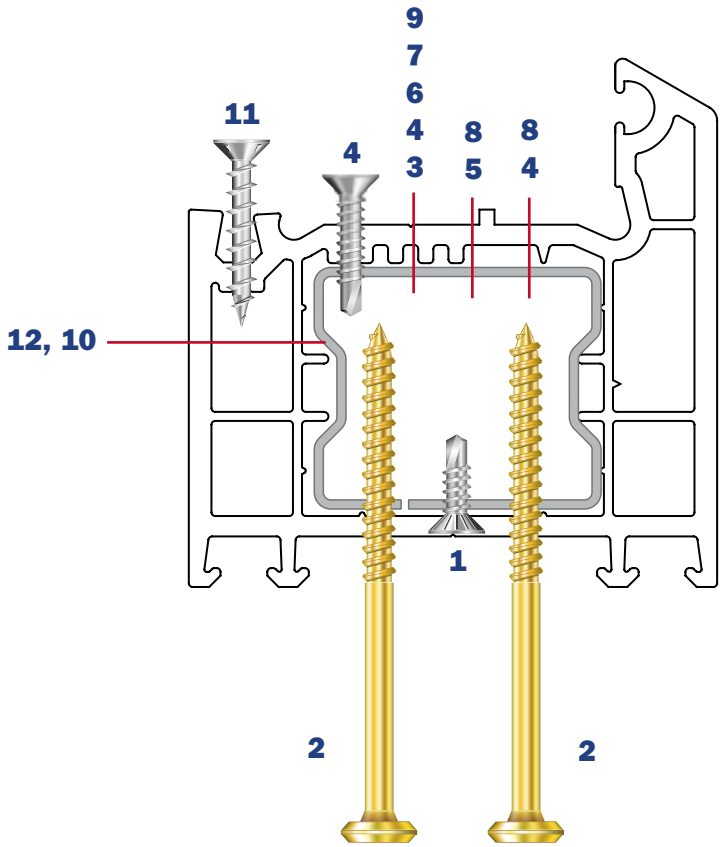


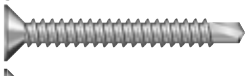
1		MJS 4.8 x 80 Y	Mechanical Jointing
2		SFG 4.3 x 16 Z	Friction Stay
3		CFG 4.3 x 20 Z	Keep (Door)
4		CFG 4.3 x 20 Z	Run-up Block
5		CFG 4.3 x 16 Z	Interlocking Wedge
6		CFG 4.3 x 16 Z	Excluder
7		CFG 4.3 x 20 Z	Dummy Sash Lok
8		CFG 4.3 x 16 Z	Restrictor
9		CFG 4.3 x 30 Z	Tilt & Turn top & bottom hinge
10		CFG 4.3 X 25 Z	Tilt & Turn keep (Door)
11		CFG 4.3 X 30 Z	Flag / Butt Hinge Standard Hole
11		CPF 4.5 x 30 Z	Flag / Butt Hinge (Oversized)

Yellow, Zinc and Stainless Steel range available

Matrix 70 Profile

70mm Outer Frame - 101163
with 113378 Reinforcement

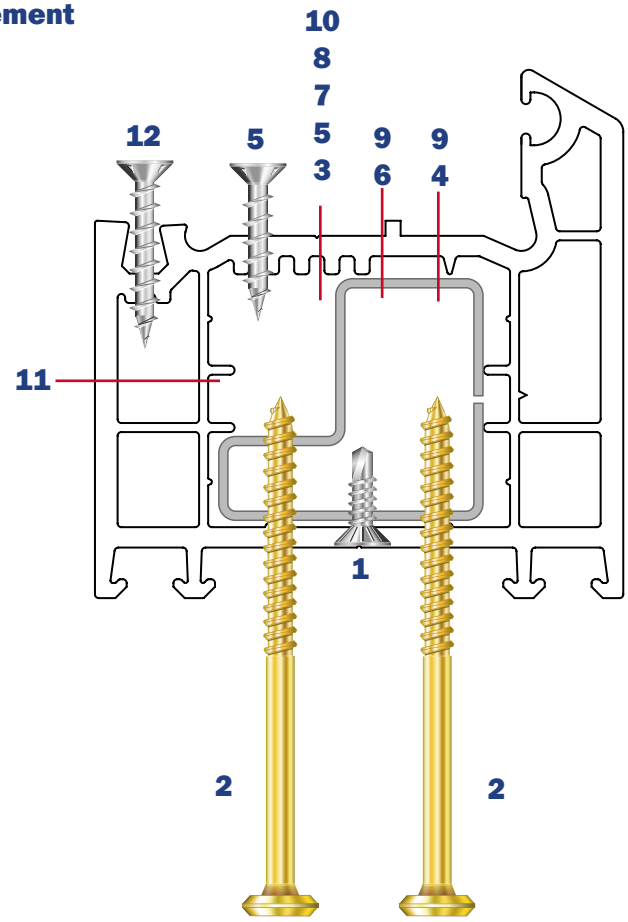


1		RSR 3.9 x 13 Z	Reinforcement retention
2		MJS 4.8 x 65 Y	Mechanical Jointing
3		SSR 3.9 x 16 Z	Friction Stay
4		CSR 3.9 x 19 Z	Keep (Door)
5		CSR 3.9 x 19 Z	Run-up Block
6		CSR 3.9 x 16 Z	Interlocking Wedge
7		CSR 3.9 x 16 Z	Excluder
8		CSR 3.9 x 19 Z	Dummy Sash Lok
9		CSR 3.9 x 16 Z	Restrictor
10		CSR 3.9 x 32 Z	Tilt & Turn top & bottom hinge
11		CFG 4.3 x 25 Z	Tilt & Turn keep
12		CSR 3.9 x 32 Z	Flag / Butt Hinge (Standad Hole)
12		CSR 4.8 x 38 Z	Flag / Butt Hinnge (Oversized)

Yellow, Zinc and Stainless Steel range available

Matrix 70 Profile

70mm Outer Frame - 101163
with 113371 Reinforcement

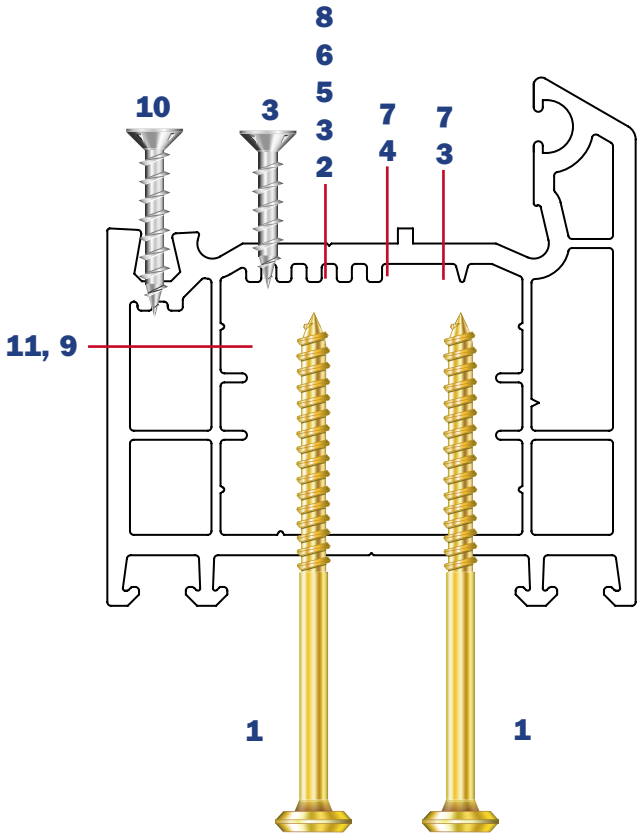


1		RSR 3.9 x 13 Z	Reinforcement retention
2		MJS 4.8 x 65 Y	Mechanical Jointing
3		SFG 4.3 x 16 Z	Friction Stay
4		CSR 3.9 x 19 Z	Keep (Door)
5		CFG 4.3 x 20 Z	Keep
6		CSR 3.9 x 19 Z	Run-up Block
7		CFG 4.3 x 16 Z	Interlocking Wedge
8		CFG 4.3 x 16 Z	Excluder
9		CSR 3.9 x 19 Z	Dummy Sash Lok
10		CFG 4.3 x 16 Z	Restrictor
11		CFG 4.3 x 30 Z	Tilt & Turn top & bottom hinge
12		CFG 4.3 x 25 Z	Tilt & Turn Keep

Yellow, Zinc and Stainless Steel range available

Matrix 70 Profile

70mm Outer Frame - 101163

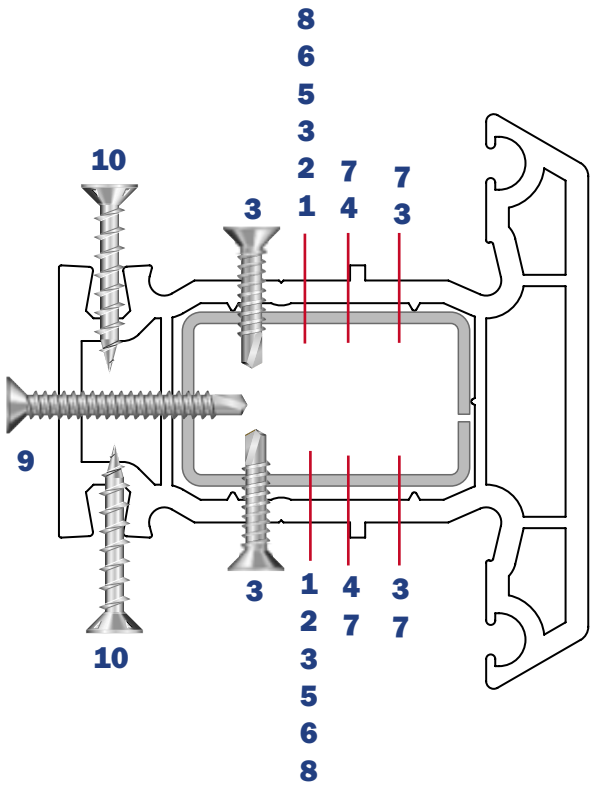


1		MJS 4.8 x 65 Y	Mechanical Jointing
2		SFG 4.3 x 16 Z	Friction Stay
3		CFG 4.3 x 20 Z	Keep (Door)
4		CFG 4.3 x 20 Z	Run-up Block
5		CFG 4.3 x 16 Z	Interlocking Wedge
6		CFG 4.3 x 16 Z	Excluder
7		CFG 4.3 x 20 Z	Dummy Sash Lok
8		CFG 4.3 x 16 Z	Restrictor
9		CFG 4.3 x 30 Z	Tilt & Turn top & bottom hinge
10		CFG 4.3 X 25 Z	Tilt & Turn keep (Door)
11		CFG 4.3 X 30 Z	Flag / Butt Hinge Standard Hole
11		CPF 4.5 x 30 Z	Flag / Butt Hinge (Oversized)

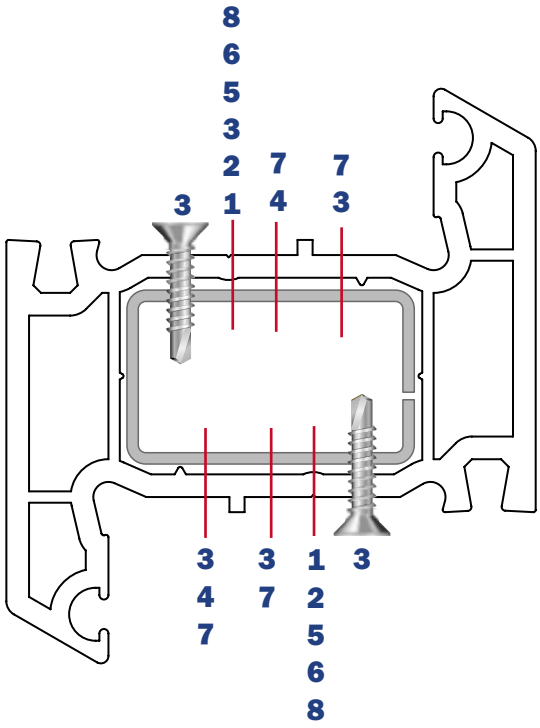
Yellow, Zinc and Stainless Steel range available

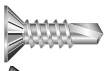
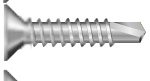
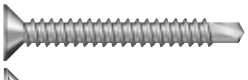
Matrix 70 Profile

76mm Mullion - 102124 with 113164 Reinforcement



76mm Combi-Mullion - 102125 with 113164 Reinforcement

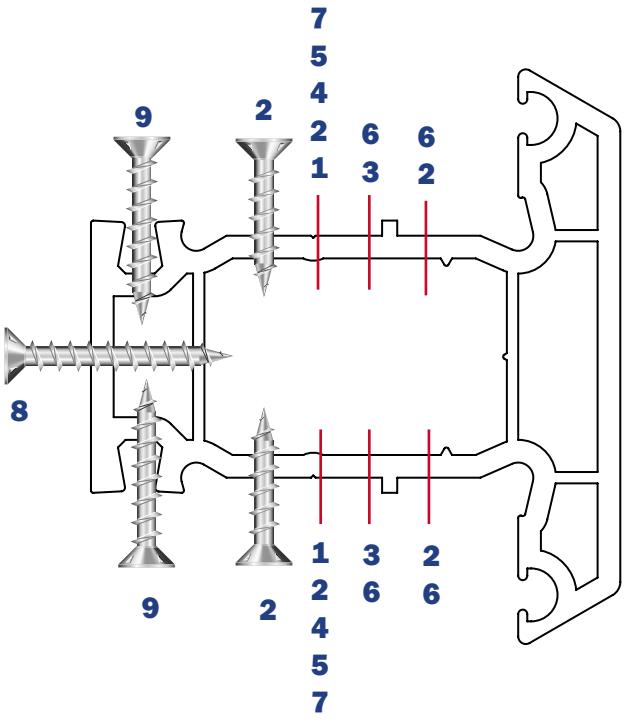


1		RSR 3.9 x 13 Z	Reinforcement retention
2		SSR 3.9 x 16 Z	Friction Stay
3		CSR 3.9 x 19 Z	Keep
4		CSR 3.9 x 19 Z	Run-up Block
5		CSR 3.9 x 16 Z	Interlocking Wedge
6		CSR 3.9 x 16 Z	Excluder
7		CSR 3.9 x 19 Z	Dummy Sash Lok
8		CSR 3.9 x 16 Z	Restrictor
9		CSR 3.9 x 32 Z	Tilt & Turn top & bottom hinge
10		CFG 4.3 x 25 Z	Tilt & Turn Keep

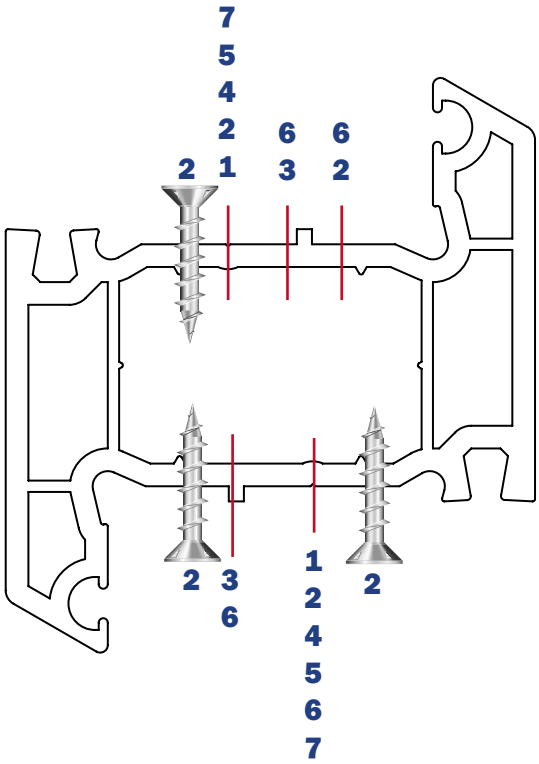
Yellow, Zinc and Stainless Steel range available

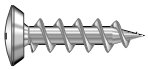
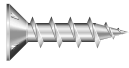
Matrix 70 Profile

76mm Mullion - 102124



76mm Combi Mullion - 102125

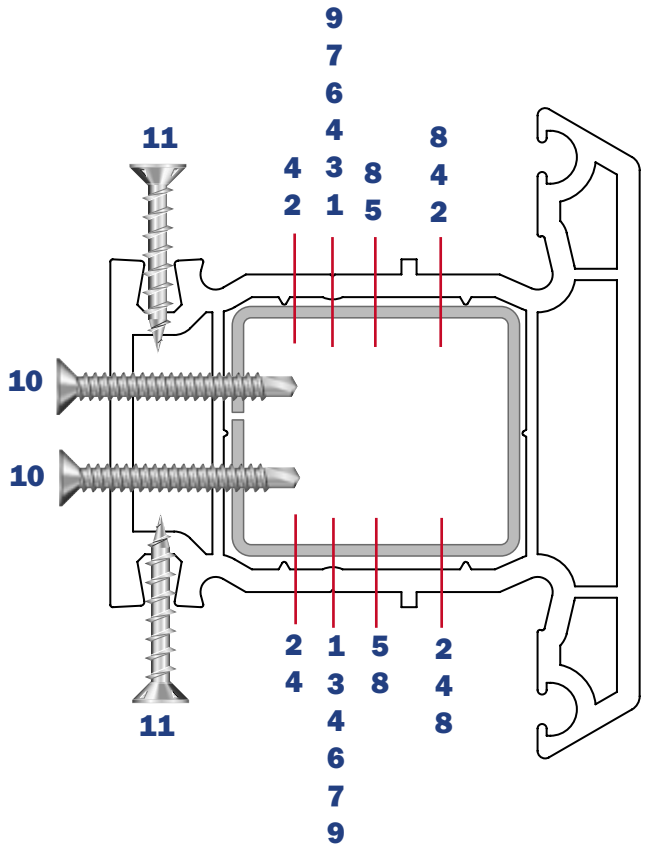


1		SFG 4.3 x 16 Z	Friction Stay
2		CFG 4.3 x 20 Z	Keep
3		CFG 4.3 x 20 Z	Run-up Block
4		CFG 4.3 x 16 Z	Interlocking Wedge
5		CFG 4.3 x 16 Z	Excluder
6		CFG 4.3 x 20 Z	Dummy Sash Lok
7		CFG 4.3 x 16 Z	Restrictor
8		CFG 4.3 x 30 Z	Tilt & Turn top & bottom hinge
9		CFG 4.3 X 25 Z	Tilt & Turn keep

Yellow, Zinc and Stainless Steel range available

Matrix 70 Profile

86mm Mullion - 102143
with 113231 Reinforcement



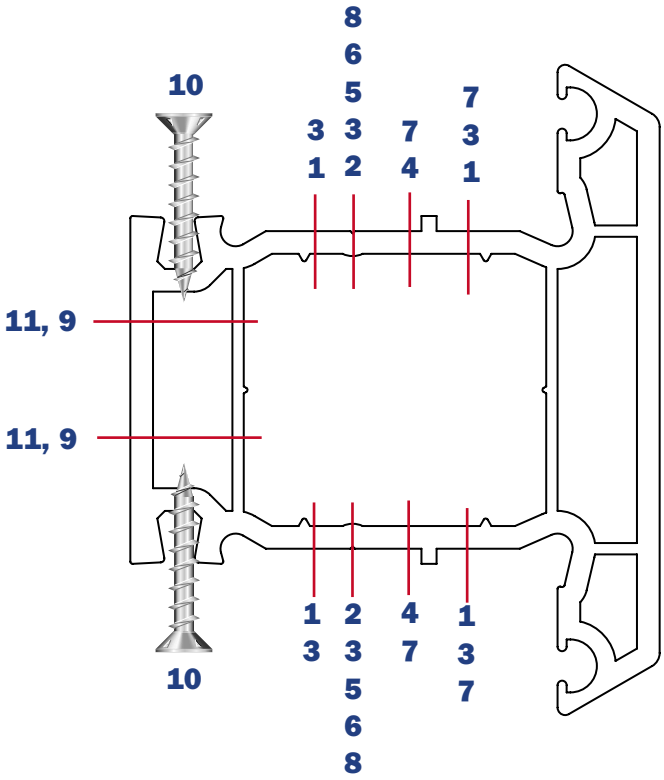
1		RSR 3.9 x 13 Z	Reinforcement retention
2		MJS 4.8 x 65 Y	Mechanical Jointing
3		SSR 3.9 x 16 Z	Friction Stay
4		CSR 3.9 x 19 Z	Keep (Door)
5		CSR 3.9 x 19 Z	Run-up Block
6		CSR 3.9 x 16 Z	Interlocking Wedge
7		CSR 3.9 x 16 Z	Excluder
8		CSR 3.9 x 19 Z	Dummy Sash Lok
9		CSR 3.9 x 16 Z	Restrictor
10		CSR 3.9 x 32 Z	Tilt & Turn top & bottom hinge
11		CFG 4.3 x 25 Z	Tilt & Turn Keep (Door)

Yellow, Zinc and Stainless Steel range available

Matrix 70 Profile

StarPVCU®

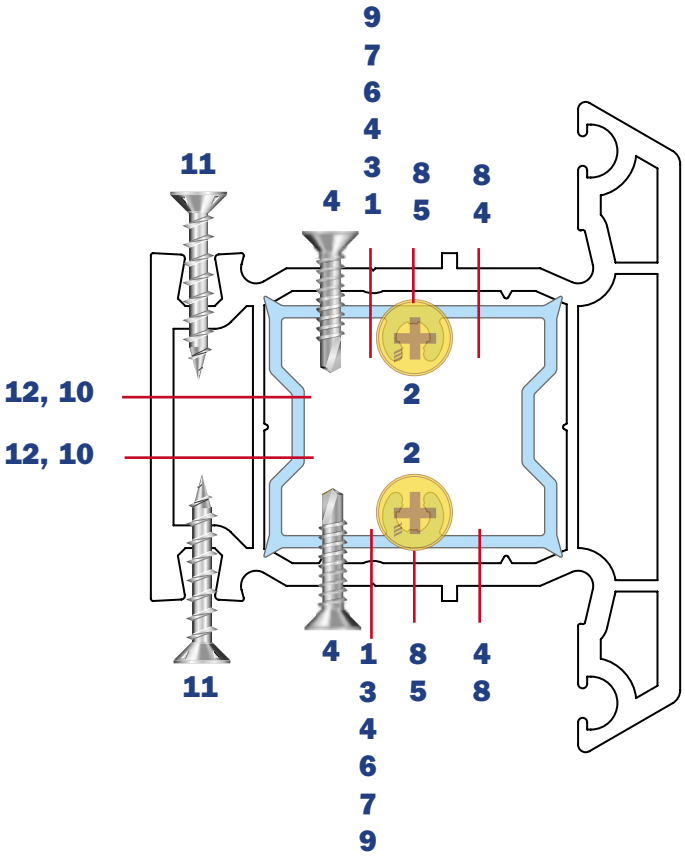
86mm Mullion - 102143



1		MJS 4.8 x 65 Y	Mechanical Jointing
2		SFG 4.3 x 16 Z	Friction Stay
3		CFG 4.3 x 20 Z	Keep (Door)
4		CFG 4.3 x 20 Z	Run-up Block
5		CFG 4.3 x 16 Z	Interlocking Wedge
6		CFG 4.3 x 16 Z	Excluder
7		CFG 4.3 x 20 Z	Dummy Sash Lok
8		CFG 4.3 x 16 Z	Restrictor
9		CFG 4.3 x 30 Z	Tilt & Turn top & bottom hinge
10		CFG 4.3 X 25 Z	Tilt & Turn keep (Door)
11		CFG 4.3 X 30 Z	Flag / Butt Hinge Standard Hole
11		CPF 4.5 x 30 Z	Flag / Butt Hinge (Oversized)

Yellow, Zinc and Stainless Steel range available

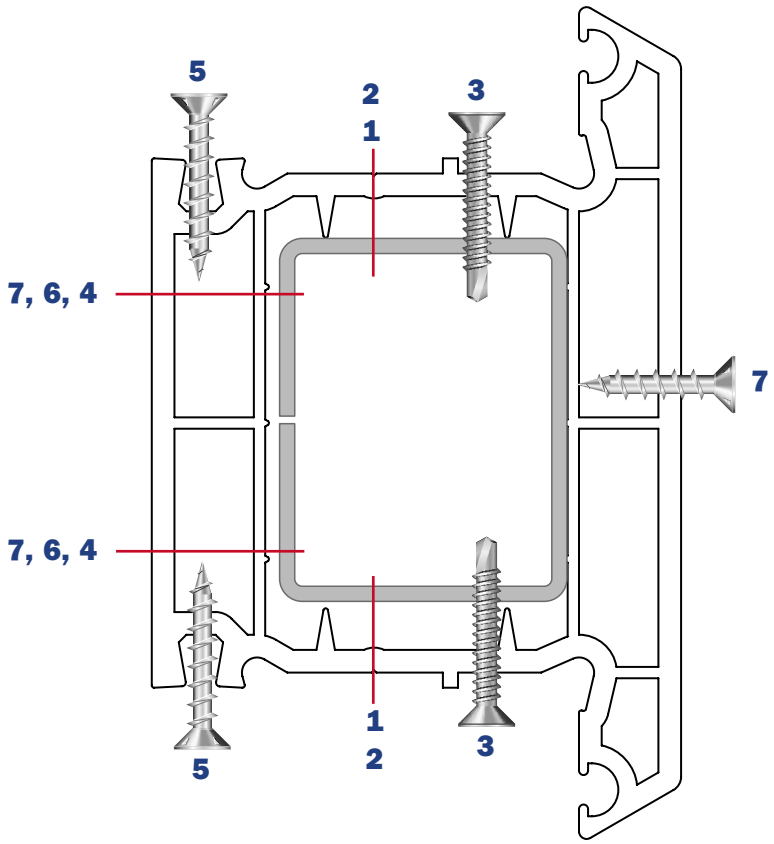
86mm Mullion - 102143
with 115108 Aluminium Reinforcement

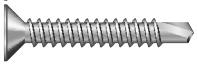


1		RSR 3.9 x 16 Z	Reinforcement retention
2		MJS 4.8	Mechanical Jointing
3		SSR 3.9 x 16 Z	Friction Stay
4		CSR 3.9 x 19 Z	Keep (Door)
5		CSR 3.9 x 19 Z	Run-up Block Keep
6		CSR 3.9 x 16 Z	Interlocking Wedge
7		CSR 3.9 x 16 Z	Excluder
8		CSR 3.9 x 19 Z	Dummy Sash Lok
9		CSR 3.9 x 16 Z	Restrictor
10		CSR 3.9 x 32 Z	Tilt & Turn top & bottom hinge
11		CFG 4.3 x 25 Z	Tilt & Turn Keep (Door)
12		CSR 3.9 x 32 Z	Flag / Butt Hinge (Standard)
12		CSR 4.8 x 38 Z	Flag / Butt Hinge (Oversized)

Yellow, Zinc and Stainless Steel range available

110mm Mullion - 102146
with 113228 Reinforcement

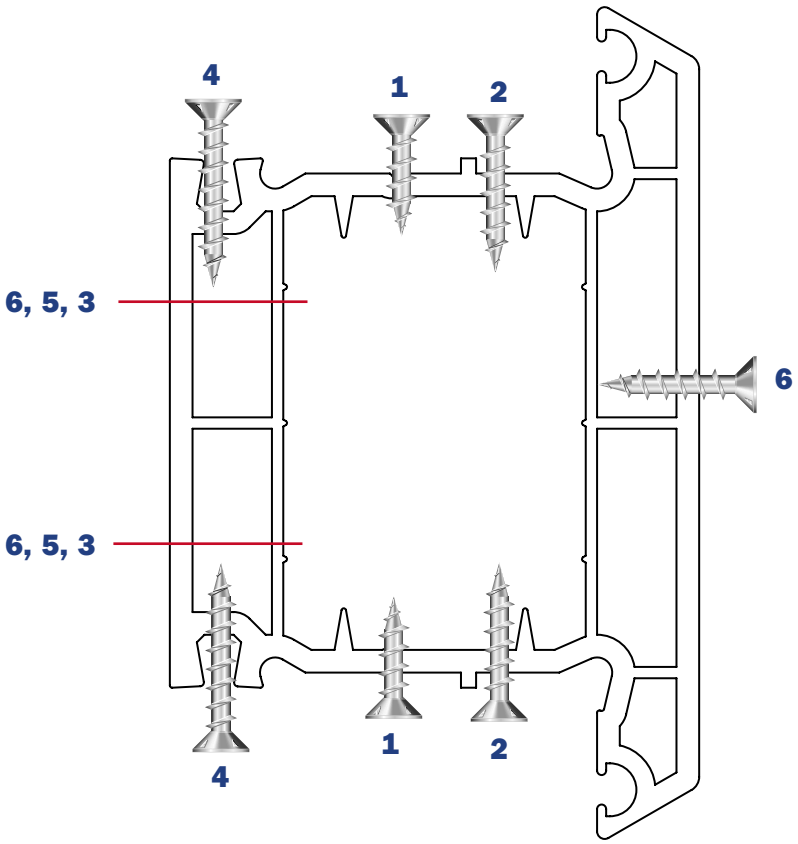


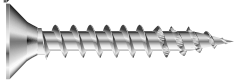
1		RSR 3.9 x 16 Z	Reinforcement retention
2		CSR 3.9 x 19 Z	Interlocking Wedge
3		CSR 3.9 x 25 Z	Dummy Sash Lok (Door Keep)
4		CSR 3.9 x 32 Z	Tilt & Turn Top and Bottom Hinge
5		CFG 4.3 x 25 Z	Tilt & Turn Keep (Door)
6		CSR 3.9 x 32 Z	Flag / Butt Hinge (Standard)
6		CSR 4.8 x 38 Z	Flag / Butt Hinge (Oversized)
7		CFG 4.3 x 20 Z	Letter Flap

Yellow, Zinc and Stainless Steel range available

Matrix 70 Profile

86mm Mullion - 102146

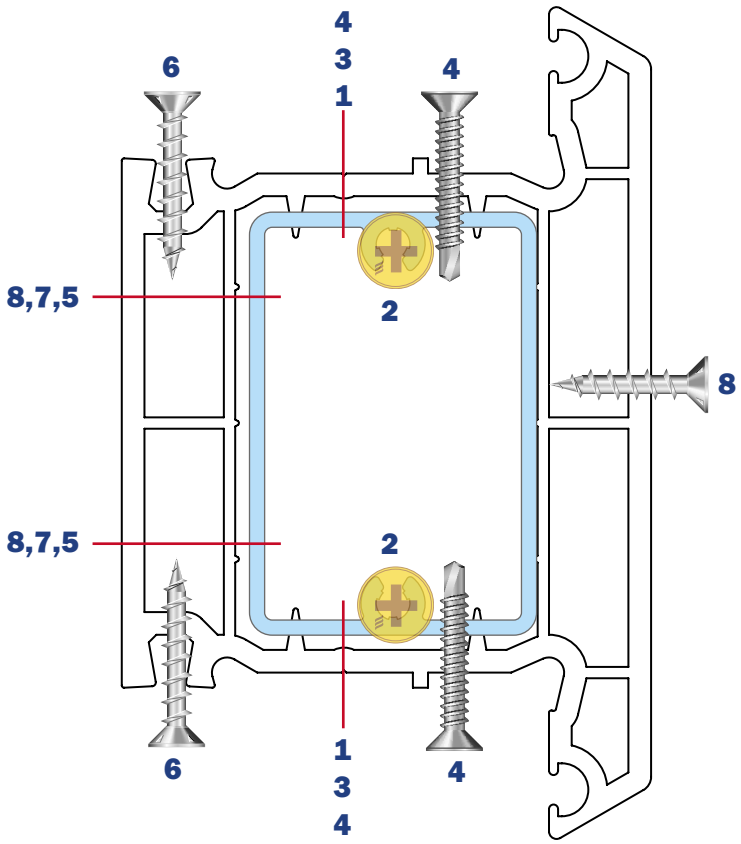


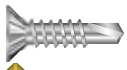
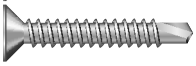
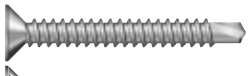
1		CFG 4.3 x 16 Z	Interlocking Wedge
2		CFG 4.3 x 20 Z	Dummy Sash Lok (Door Keep)
3		CFG 4.3 x 30 Z	Tilt & Turn Top and Bottom Hinge
4		CFG 4.3 x 25 Z	Tilt & Turn Keep (Door)
5		CFG 4.3 x 30 Z	Flag / Butt Hinge (Standard)
5		CPF 4.5 x 30 Z	Flag / Butt Hinge (Oversized)
6		CFG 4.3 x 20 Z	Letter Flap

Yellow, Zinc and Stainless Steel range available

Matrix 70 Profile

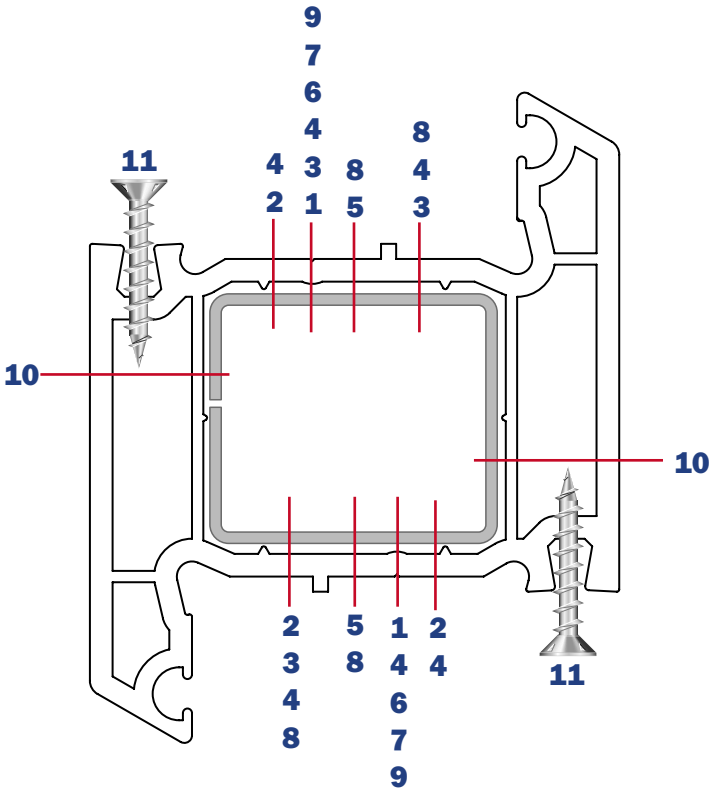
110mm Mullion -102146
with 115286 Aluminium Reinforcement



1		RSR 3.9 x 16 Z	Reinforcement retention
2		MJS 4.8	Mechanical Jointing
3		CSR 3.9 x 19 Z	Interlocking Wedge
4		CSR 3.9 x 25 Z	Dummy Sash Lok (Door Keep)
5		CSR 3.9 x 32 Z	Tilt & Turn Top and Bottom Hinge
6		CFG 4.3 x 25 Z	Tilt & Turn Keep (Door)
7		CSR 3.9 x 32 Z	Flag / Butt Hinge (Standard)
7		CSR 4.8 x 38 Z	Flag / Butt Hinge (Oversized)
8		CFG 4.3 x 20 Z	Letter Flap

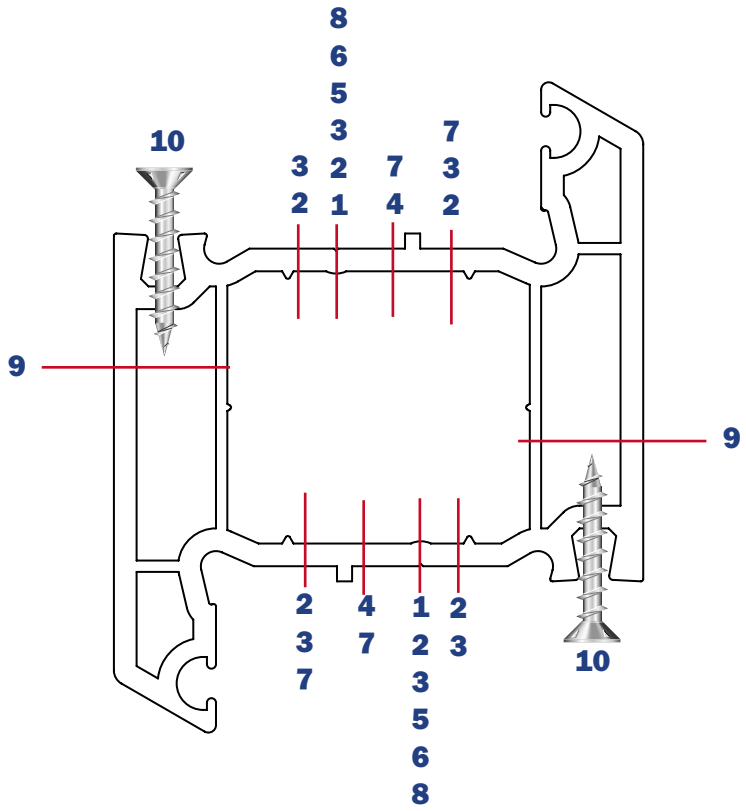
Yellow, Zinc and Stainless Steel range available

86mm Combi-Mullion - 102148
with 113231 Reinforcement



1		RSR 3.9 x 13 Z	Reinforcement retention
2		MJS 4.8 x 65 Y	Mechanical Jointing
3		SSR 3.9 x 16 Z	Friction Stay
4		CSR 3.9 x 19 Z	Keep (Door)
5		CSR 3.9 x 19 Z	Run-up Block (Door Keep)
6		CSR 3.9 x 16 Z	Interlocking Wedge
7		CSR 3.9 x 16 Z	Excluder
8		CSR 3.9 x 19 Z	Dummy Sash Lok (Door Keep)
9		CSR 3.9 x 16 Z	Restrictor
10		CSR 3.9 x 32 Z	Flag / Butt Hinge (Standard)
10		CSR 4.8 x 38 Z	Flag / Butt Hinge (Oversized)
11		CFG 4.3 x 25 Z	Door Keep

Yellow, Zinc and Stainless Steel range available

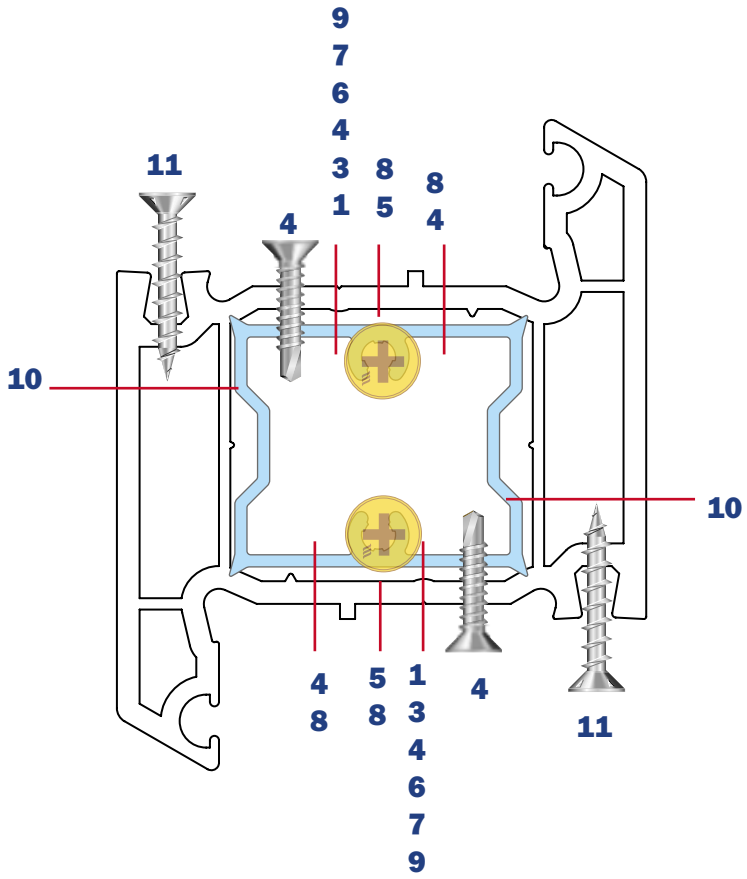


1		SFG 4.3 x 16 Z	Friction Stay
2		CFG 4.3 x 20 Z	Keep (Door)
3		CFG 4.3 x 20 Z	Keep (Door)
4		CFG 4.3 x 20 Z	Run-up Block (Door Keep)
5		CFG 4.3 x 16 Z	Interlocking Wedge
6		CFG 4.3 x 16 Z	Excluder
7		CFG 4.3 x 20 Z	Dummy Sash Lok Door Keep)
8		CFG 4.3 x 16 Z	Restrictor
9		CFG 4.3 x 30 Z	Flag / Butt Hinge (Standard)
9		CPF 4.5 x 30 Z	Flag / Butt Hinge (Oversized)
10		CFG 4.3 X 25 Z	Door Keep

Yellow, Zinc and Stainless Steel range available

Matrix 70 Profile

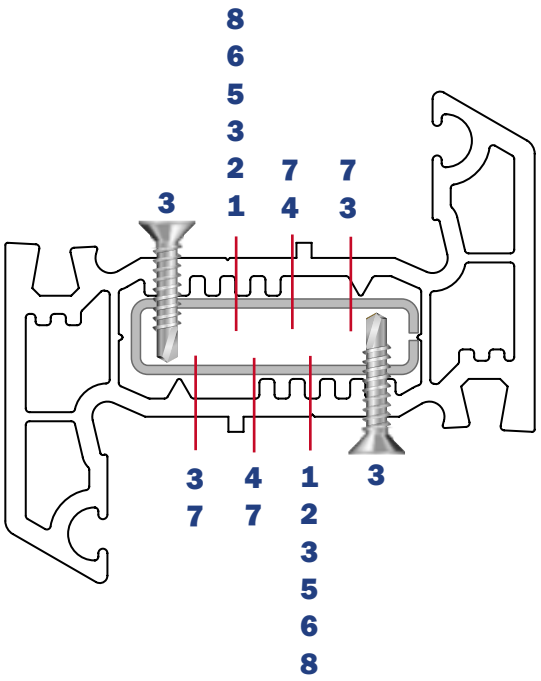
86mm Combi-Mullion - 102148
with 113231 Aluminium Reinforcement

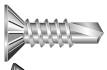


1	RSR 3.9 x 16 Z	Reinforcement retention
2	MJS 4.8	Mechanical Jointing
3	SSR 3.9 x 16 Z	Friction Stay
4	CSR 3.9 x 19 Z	Keep (Door)
5	CSR 3.9 x 19 Z	Run-up Block (Door Keep)
6	CSR 3.9 x 19 Z	Interlocking Wedge (Door Keep)
7	CSR 3.9 x 19 Z	Excluder
8	CSR 3.9 x 25 Z	Dummy Sash Lok
9	CSR 3.9 x 16 Z	Restrictor
10	CSR 3.9 x 32 Z	Flag / Butt Hinge (Standard)
10	CSR 4.8 x 38 Z	Flag / Butt Hinge (Oversizeed)
11	CFG 4.3 x 25 Z	Door Keep

Yellow, Zinc and Stainless Steel range available

65mm Combi-Mullion - 102176
with 113041 Reinforcement

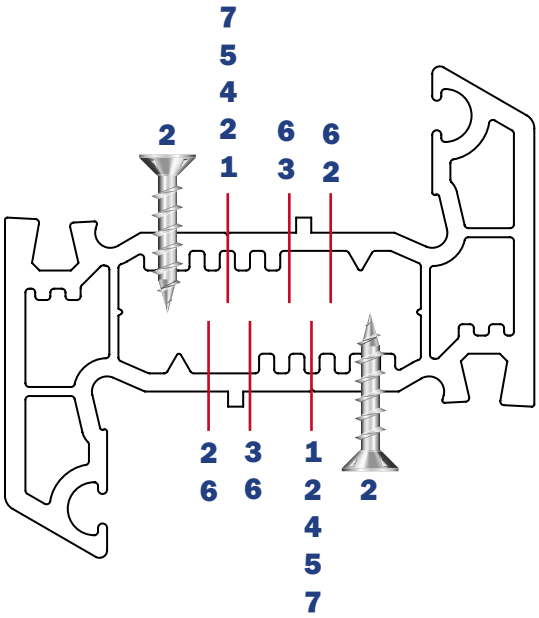


1		RSR 3.9 x 13 Z	Reinforcement retention
2		SFR 4.8 x 13 Z	Friction Stay
3		CSR 3.9 x 19 Z	Keep
4		CSR 3.9 x 19 Z	Run-Up Block
5		CSR 3.9 x 19 Z	Interlocking Wedge
6		CSR 3.9 x 19 Z	Excluder
7		CSR 3.9 x 19 Z	Dummy Sash Lok
8		CSR 3.9 x 16 Z	Restrictor

Yellow, Zinc and Stainless Steel range available

Matrix 70 Profile

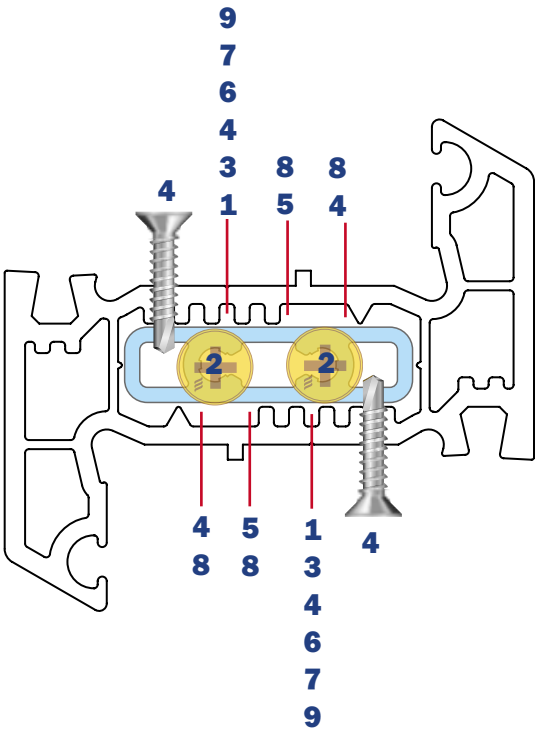
65mm Combi-Mullion - 102176

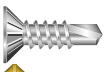


1		SFG 4.3 x 16 Z	Friction Stay
2		CFG 4.3 x 20 Z	Keep
3		CFG 4.3 x 20 Z	Run-Up Block
4		CFG 4.3 x 16 Z	Interlocking Wedge
5		CFG 4.3 x 16 Z	Excluder
6		CFG 4.3 x 20 Z	Dummy Sash Lok
7		CFG 4.3 x 16 Z	Restrictor

Yellow, Zinc and Stainless Steel range available

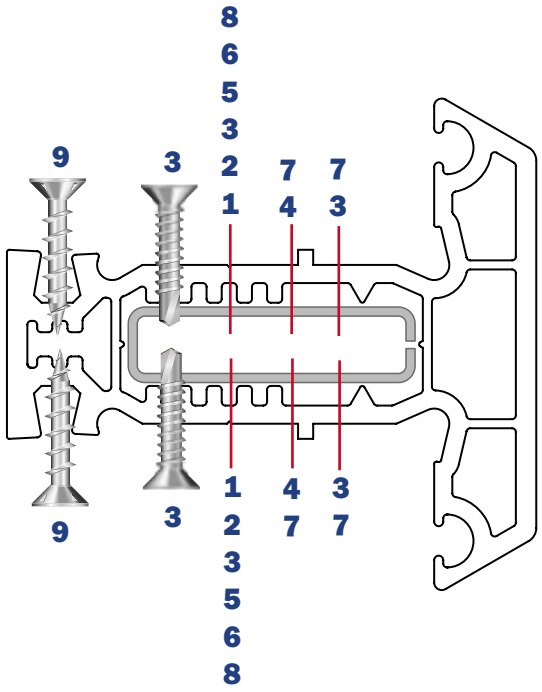
65mm Combi-Mullion - 102176
with 115284 Aluminium Reinforcement



1		RSR 3.9 x 13 Z	Reinforcement retention
2		MJS 4.8	Mechanical Jointing
3		SFR 4.8 x 13 Z	Friction Stay
4		CSR 3.9 x 19 Z	Keep
5		CSR 3.9 x 19 Z	Run-Up Block
6		CSR 3.9 x 16 Z	Interlocking Wedge
7		CSR 3.9 x 16 Z	Excluder
8		CSR 3.9 x 19 Z	Dummy Sash Lok
9		CSR 3.9 x 16 Z	Restrictor

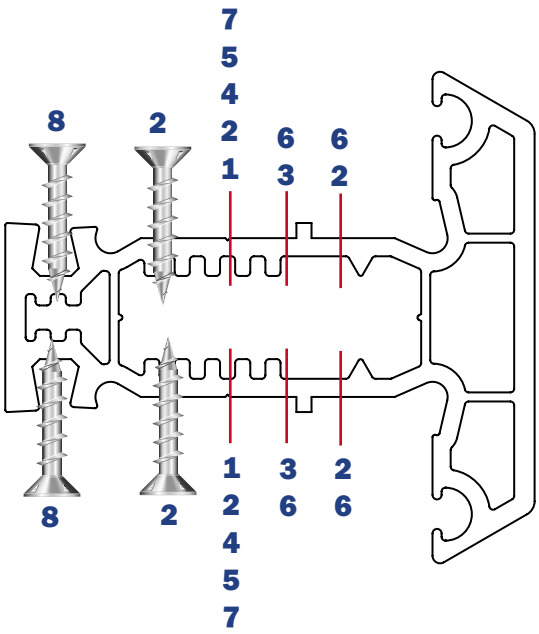
Yellow, Zinc and Stainless Steel range available

65mm Mullion - 102177
with 113041 Reinforcement



1		RSR 3.9 x 13 Z	Reinforcement retention
2		SFR 4.8 x 13 Z	Friction Stay
3		CSR 3.9 x 19 Z	Keep (Door)
4		CSR 3.9 x 19 Z	Run-up Block (Door Keep)
5		CSR 3.9 x 16 Z	Interlocking Wedge
6		CSR 3.9 x 16 Z	Excluder
7		CSR 3.9 x 19 Z	Dummy Sash Lok
8		CSR 3.9 x 16 Z	Restrictor
9		CFG 4.3 x 20 Z	Door Keep

Yellow, Zinc and Stainless Steel range available

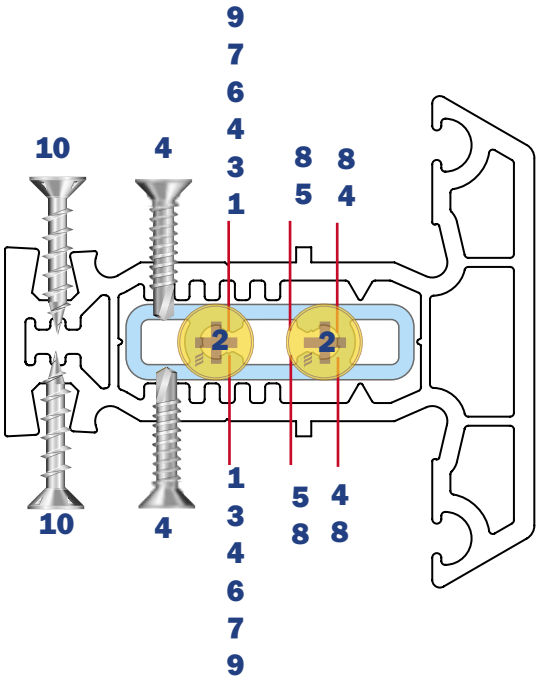


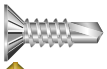
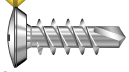
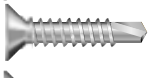
1		SFG 4.3 x 16 Z	Friction Stay
2		CFG 4.3 x 20 Z	Keep
3		CFG 4.3 x 20 Z	Run-Up Block
4		CFG 4.3 x 16 Z	Interlocking Wedge
5		CFG 4.3 x 16 Z	Excluder
6		CFG 4.3 x 20 Z	Dummy Sash Lok
7		CFG 4.3 x 16 Z	Restrictor
8		CFG 4.3 x 20 Z	Door Keep

Yellow, Zinc and Stainless Steel range available

Matrix 70 Profile

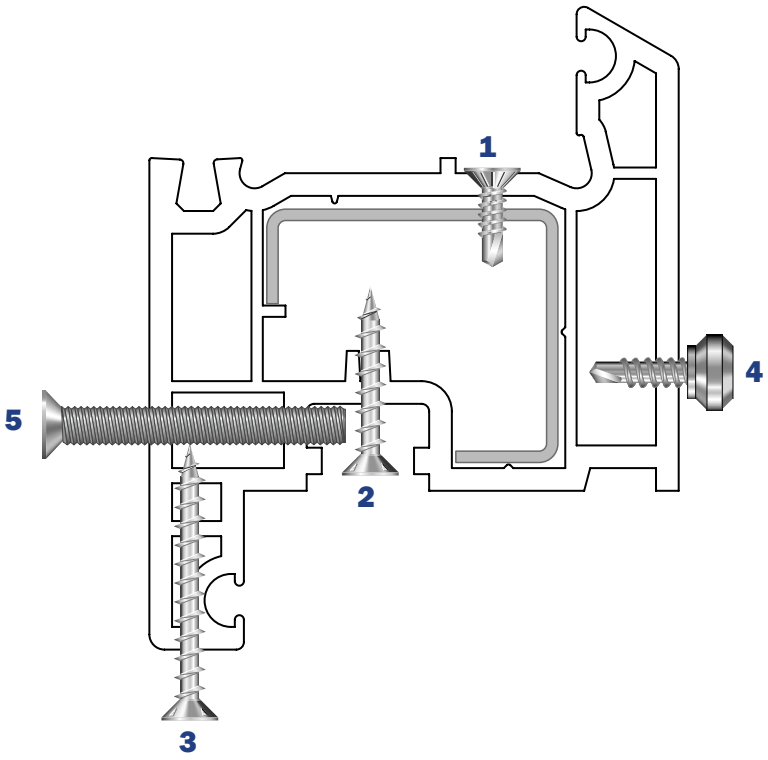
65mm Mullion - 102177
with 115284 Aluminium Reinforcement

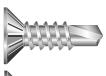
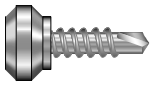
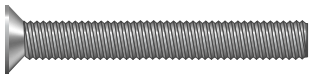


1		RSR 3.9 x 13 Z	Reinforcement retention
2		MJS 4.8	Mechanical Jointing
3		SFR 4.8 x 13 Z	Friction Stay
4		CSR 3.9 x 19 Z	Keep
5		CSR 3.9 x 19 Z	Run-Up Block (Door Keep)
6		CSR 3.9 x 16 Z	Interlocking Wedge
7		CSR 3.9 x 16 Z	Excluder
8		CSR 3.9 x 19 Z	Dummy Sash Lok
9		CSR 3.9 x 16 Z	Restrictor
10		CFG 4.3 x 20 Z	Door Keep

Yellow, Zinc and Stainless Steel range available

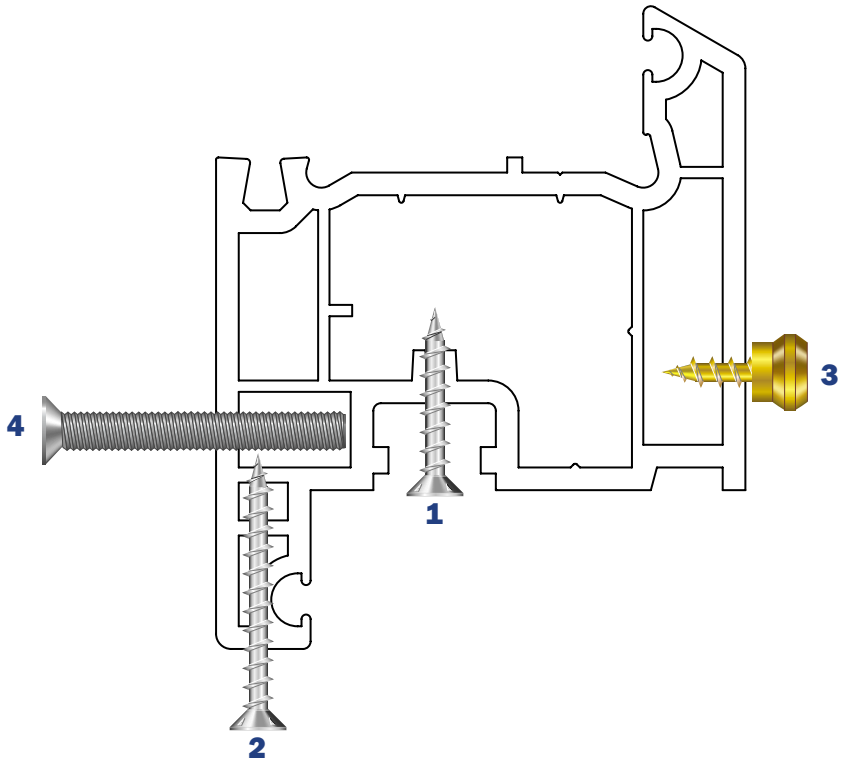
85mm Tilt & Turn Sash - 103134
with 113230 Reinforcement

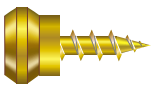
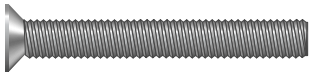


1		RSR 3.9 x 13 Z	Reinforcement Retention
2		CFG 4.3 x 25 Z	Gearing
3		CFG 4.3 x 35 Z	Bottom Hinge
4		NSR 4.0 x 13 Z	Weatherbar
5		MS M5 x 40 Z	Handle

Yellow, Zinc and Stainless Steel range available

85mm Tilt & Turn Sash - 103134

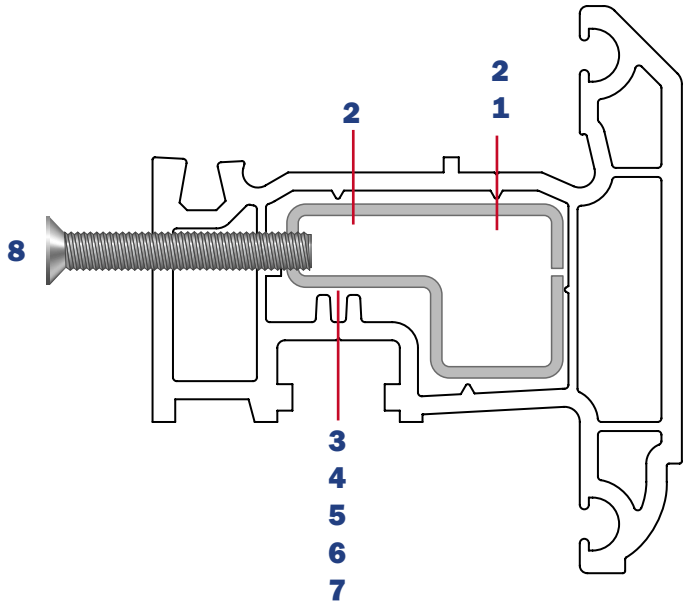


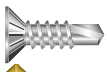
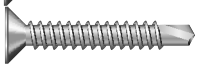
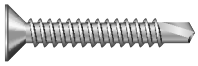
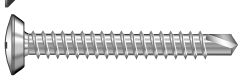
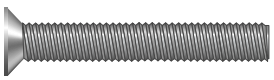
1		CFG 4.3 x 25 Z	Gearing
2		CFG 4.3 x 35 Z	Bottom Hinge
3		NFG 4.2 x 12 Y	Weatherbar
4		MS M5 x 40 Z	Handle

Yellow, Zinc and Stainless Steel range available

Matrix 70 Profile

75mm Espagnolette Sash - 103149
with 113345 Reinforcement
Prep Reinforcement - 113168

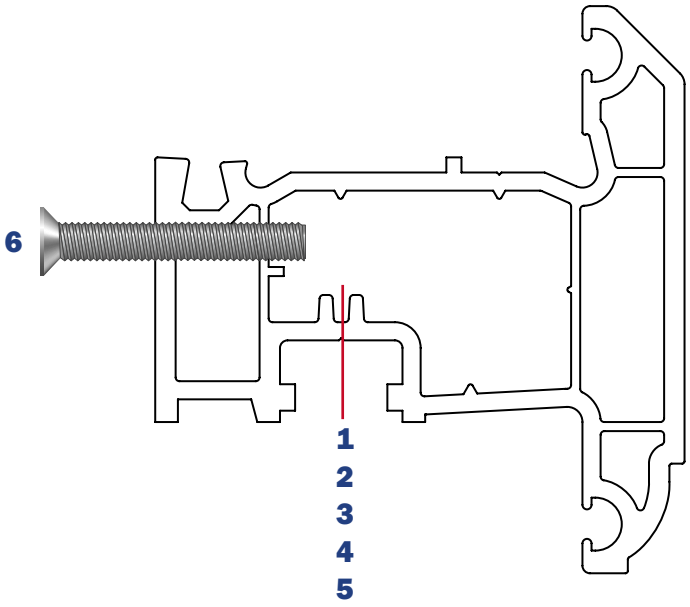


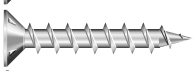
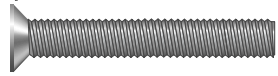
1		RSR 3.9 x 13 Z	Reinforcement retention
2		MJS 4.8 x 65 Y	Mechanical Jointing
3		CSR 3.9 x 25 Z	Interlocking Wedge
4		CSR 3.9 x 25 Z	Excluder
5		CSR 3.9 x 25 Z	Restrictor
6		CSR 3.9 x 25 Z	Gearing
7		SSR 3.9 x 28 Z	Friction Stay
8		MS M5 x 35 Z	Handle

Yellow, Zinc and Stainless Steel range available

Matrix 70 Profile

75mm Espagnolette Sash - 103149

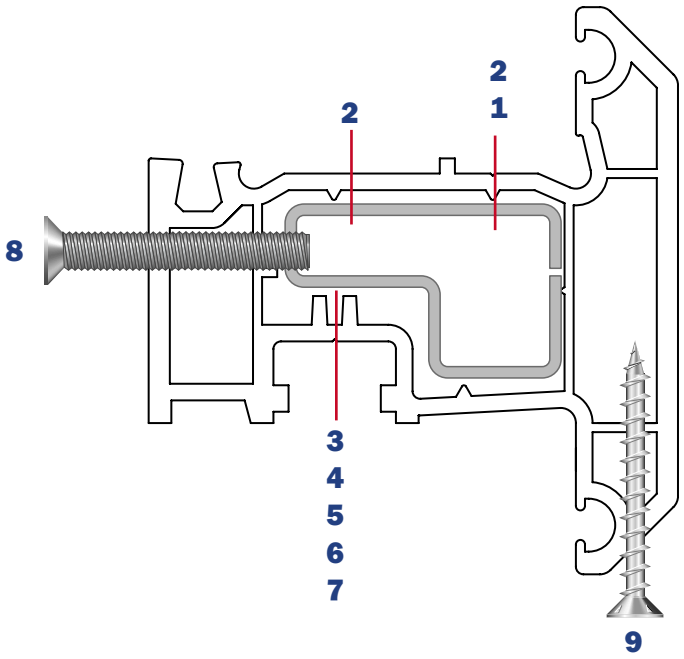


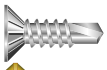
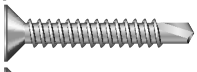
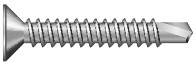
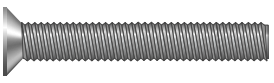
1		CFG 4.3 x 25 Z	Interlocking Wedge
2		CFG 4.3 x 25 Z	Excluder
3		CFG 4.3 x 25 Z	Restrictor
4		CFG 4.3 x 25 Z	Gearing
5		SFG 4.3 x 25 Z	Friction Stay
6		MS M5 x 35 Z	Handle

Yellow, Zinc and Stainless Steel range available

Matrix 70 Profile

75mm Espagnolette Sash - 103150
with 113345 Reinforcement
Prep Reinforcement - 113168

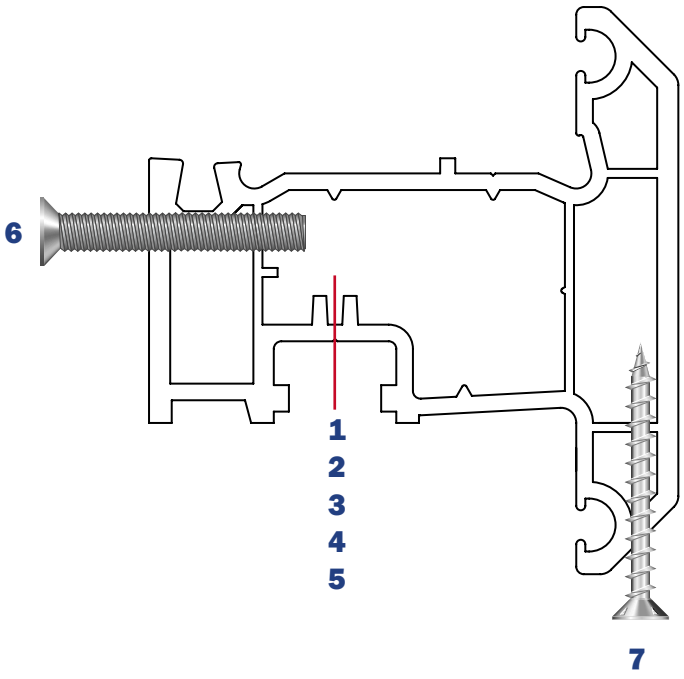


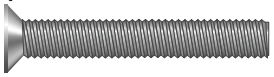
1		RSR 3.9 x 13 Z	Reinforcement retention
2		MJS 4.8 x 65 Y	Mechanical Jointing
3		CSR 3.9 x 25 Z	Interlocking Wedge
4		CSR 3.9 x 25 Z	Excluder
5		CSR 3.9 x 25 Z	Restrictor
6		CSR 3.9 x 25 Z	Gearing
7		SSR 3.9 x 28 Z	Friction Stay
8		MS M5 x 35 Z	Handle
9		CFG 4.3 x 35 Z	Sash Horn

Yellow, Zinc and Stainless Steel range available

Matrix 70 Profile

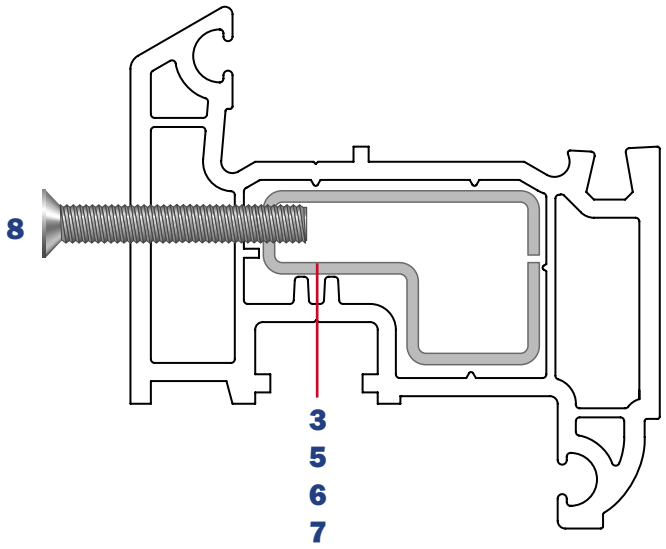
75mm Espagnolette Sash - 103150

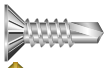
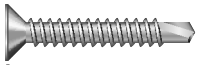
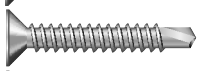
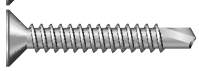
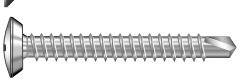
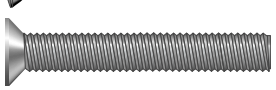


1		CFG 4.3 x 25 Z	Interlocking Wedge
2		CFG 4.3 x 25 Z	Excluder
3		CFG 4.3 x 25 Z	Restrictor
4		CFG 4.3 x 25 Z	Gearing
5		SFG 4.3 x 25 Z	Friction Stay
6		MS M5 x 35 Z	Handle
7		CFG 4.3 x 35 Z	Sash Horn

Yellow, Zinc and Stainless Steel range available

69mm Espagnolette Sash - 103257
with 113345 Reinforcement
Prep Reinforcement - 113168

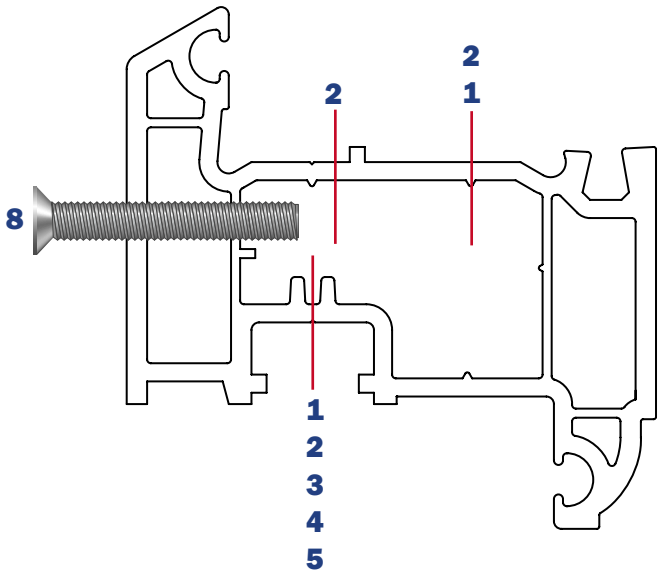


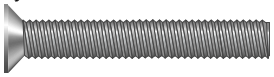
1		RSR 3.9 x 13 Z	Reinforcement retention
2		MJS 4.8 x 65 Y	Mechanical Jointing
3		CSR 3.9 x 25 Z	Interlocking Wedge
4		CSR 3.9 x 25 Z	Excluder
5		CSR 3.9 x 25 Z	Restrictor
6		CSR 3.9 x 25 Z	Gearing
7		SSR 3.9 x 28 Z	Friction Stay
8		MS M5 x 35 Z	Handle

Yellow, Zinc and Stainless Steel range available

Matrix 70 Profile

69mm Espagnolette Sash - 103257

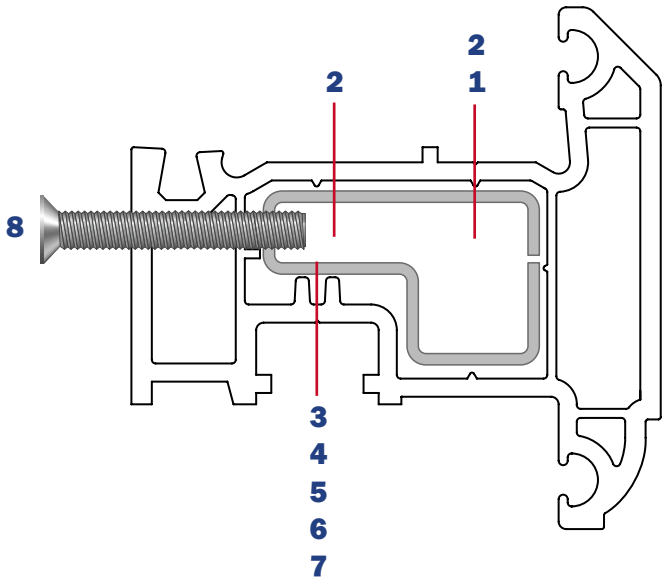


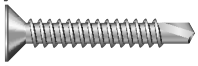
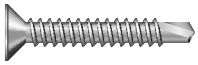
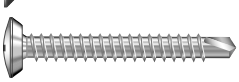
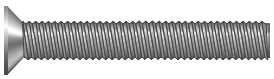
1		CFG 4.3 x 25 Z	Interlocking Wedge
2		CFG 4.3 x 25 Z	Excluder
3		CFG 4.3 x 25 Z	Restrictor
4		CFG 4.3 x 25 Z	Gearing
5		SFG 4.3 x 25 Z	Friction Stay
6		MS M5 x 35 Z	Handle

Yellow, Zinc and Stainless Steel range available

Matrix 70 Profile

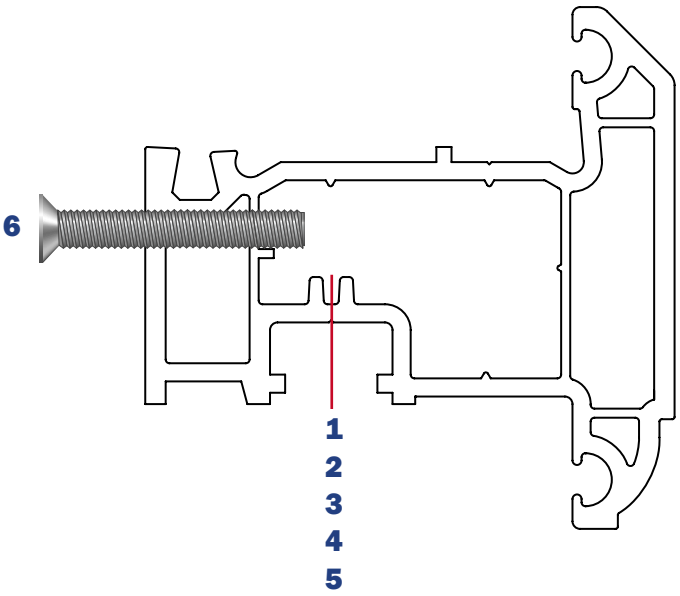
69mm Espagnolette Sash - 103258
with 113345 Reinforcement
Prep Reinforcement - 113168

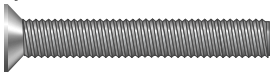


1		RSR 3.9 x 13 Z	Reinforcement retention
2		MJS 4.8 x 65 Y	Mechanical Jointing
3		CSR 3.9 x 25 Z	Interlocking Wedge
4		CSR 3.9 x 25 Z	Excluder
5		CSR 3.9 x 25 Z	Restrictor
6		CSR 3.9 x 25 Z	Gearing
7		SSR 3.9 x 28 Z	Friction Stay
8		MS M5 x 35 Z	Handle

Yellow, Zinc and Stainless Steel range available

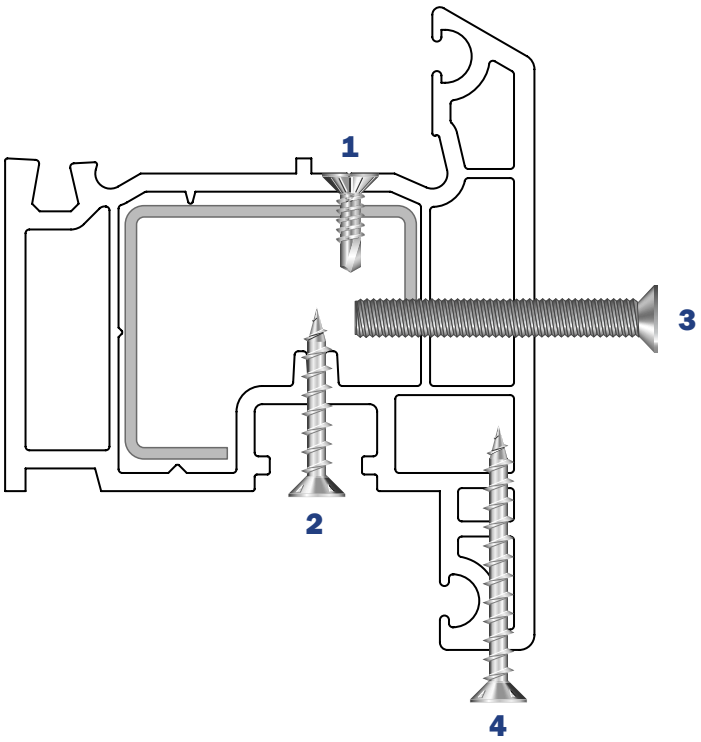
69mm Espagnolette Sash - 103258

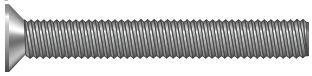


1		CFG 4.3 x 25 Z	Interlocking Wedge
2		CFG 4.3 x 25 Z	Excluder
3		CFG 4.3 x 25 Z	Restrictor
4		CFG 4.3 x 25 Z	Gearing
5		SFG 4.3 x 25 Z	Friction Stay
6		MS M5 x 35 Z	Handle

Yellow, Zinc and Stainless Steel range available

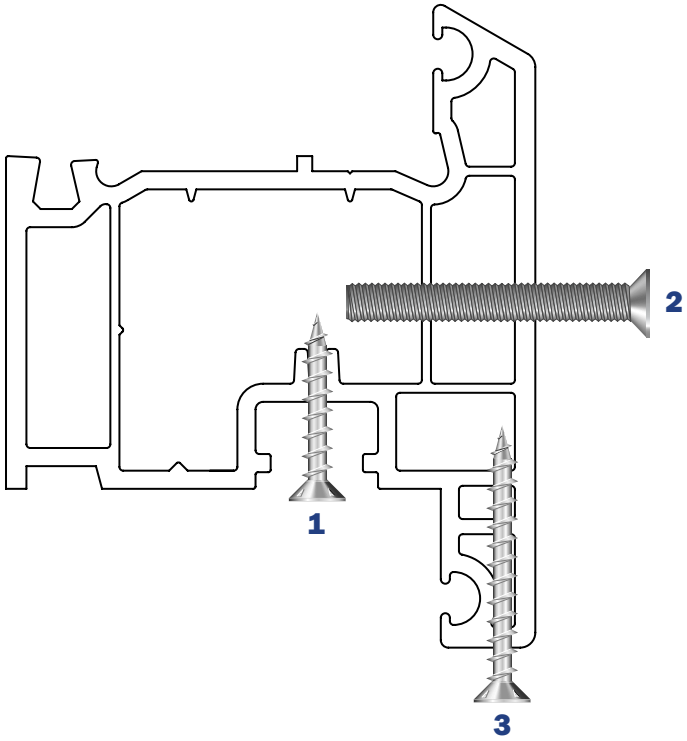
85mm Tilt & Turn Sash 103259 with 113230 Reinforcement

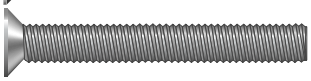


1		RSR 3.9 x 13 Z	Reinforcement Retention
2		CFG 4.3 x 25 Z	Gearing
3		MS M5 x 40 Z	Handle
4		CFG 4.3 x 35 Z	Bottom Hinge

Yellow, Zinc and Stainless Steel range available

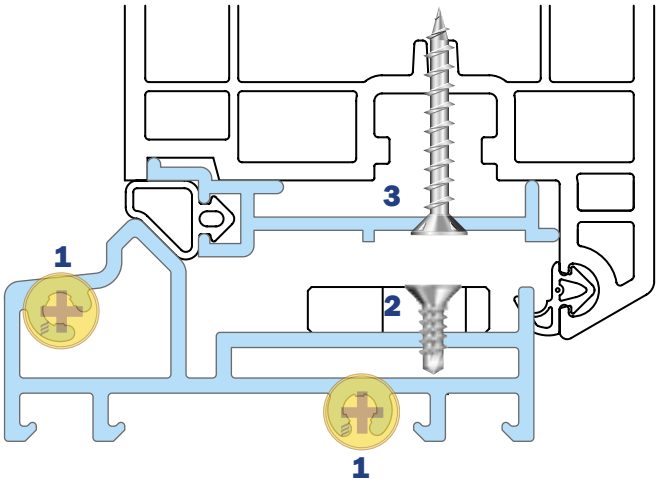
85mm Tilt & Turn Sash 103259



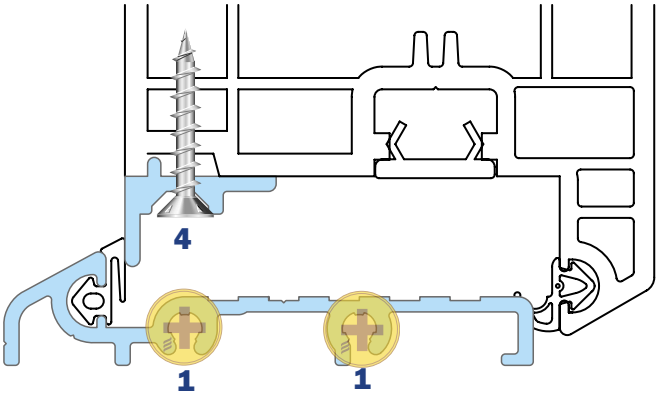
1		CFG 4.3 x 25 Z	Gearing
2		MS M5 x 40 Z	Handle
3		CFG 4.3 x 35 Z	Bottom Hinge

Yellow, Zinc and Stainless Steel range available

29mm Aluminium Low Threshold - 104187
Gasket Carrier - 104188
Gasket - 102112
Universal Shootbolt Keep - 141126



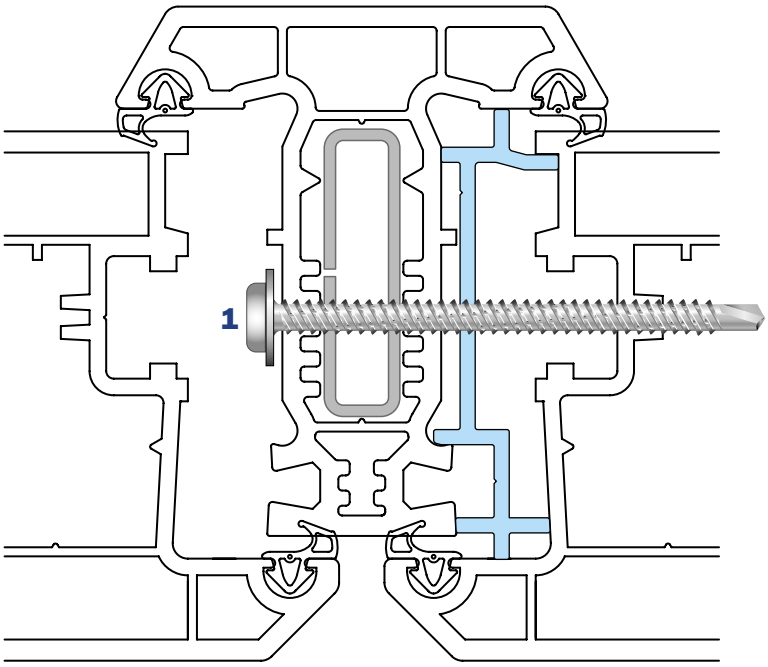
15mm Aluminium Low Threshold - 104216
Sealing Strip - 104214
Fold Gasket - 102135



1		MJS	Mechanical Jointing
2		CSR 3.9 x 12 Z	French Door Keep
3		CFG 4.3 x 30 Z	Gasket Carrier to Sash
4		CFG 4.3 x 25 Z	Sealing Strip to Sash

Yellow, Zinc and Stainless Steel range available

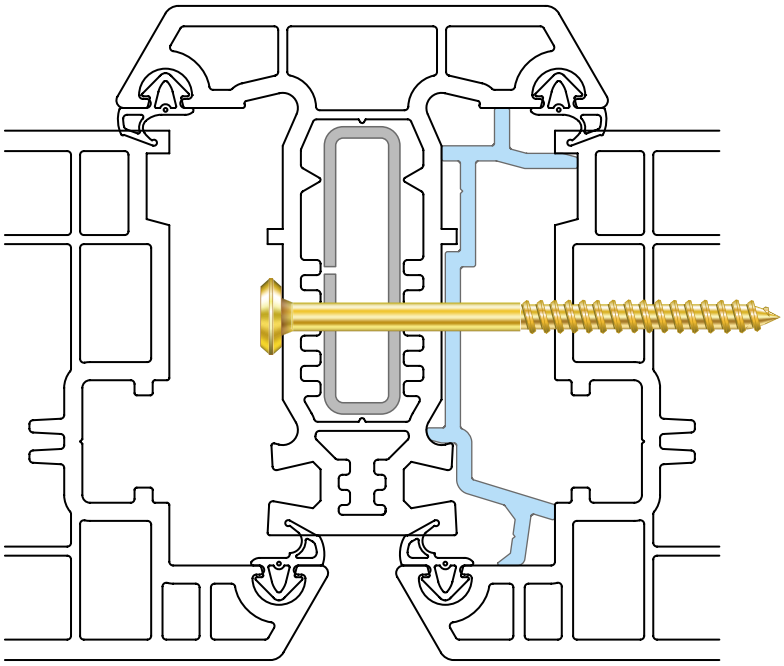
Aluminium French Casement Coupling - 104243
False Mullion End Cap - 109568



1		WSR 4.8 x 65 Z	Casement French Coupling to Sash

Yellow, Zinc and Stainless Steel range available

Aluminium French Door Coupling - 104245
False Mullion End Cap - 109568

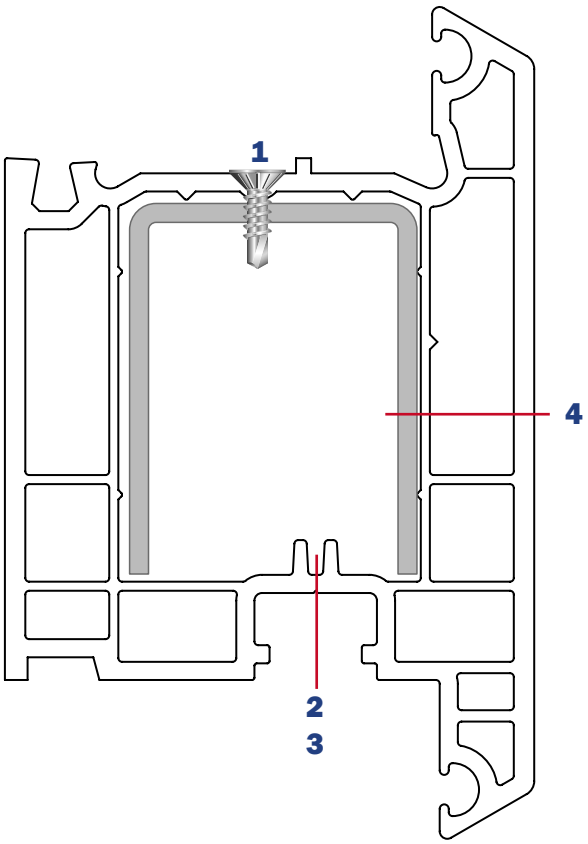


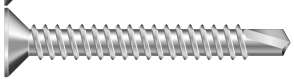
1		MJS 4.8 x 65 Y	French Door Coupling

Yellow, Zinc and Stainless Steel range available

Matrix 70 Profile

110mm Door Sash - 105126
with Reinforcement - 113320
Prep Reinforcement - 113318

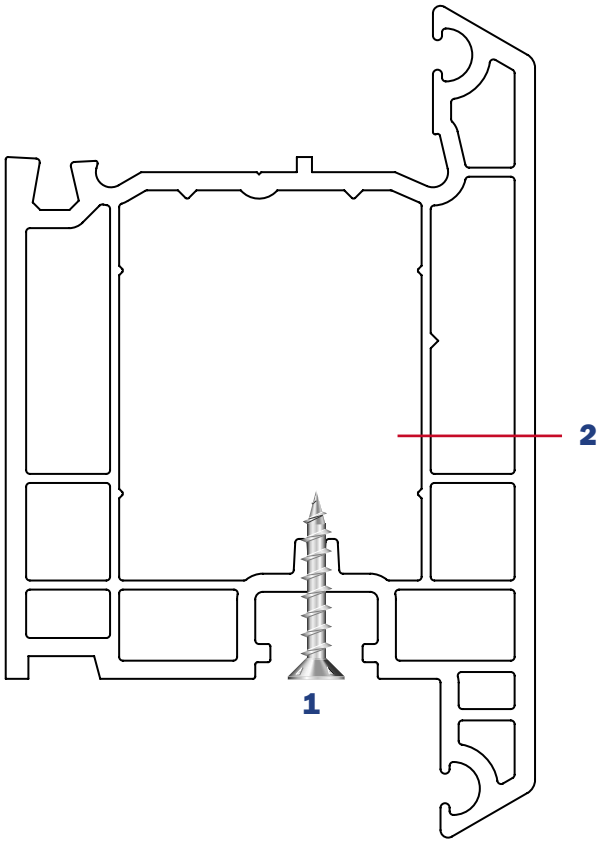


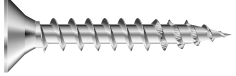
1		RSR 3.9 x 13 Z	Reinforcement retention
2		MJS 4.8 x 80 Y	Mechanical Jointing
3		CFG 4.3 x 25 Z	Gearing
4		CSR 3.9 x 32 Z	Flag Hinge (Standard Hole)
4		CSR 4.8 x 38 Z	Flag Hinge (Oversize Hole)

Butt Hinges - Screws supplied with hinge

Yellow, Zinc and Stainless Steel range available

110mm Door Sash - 105126

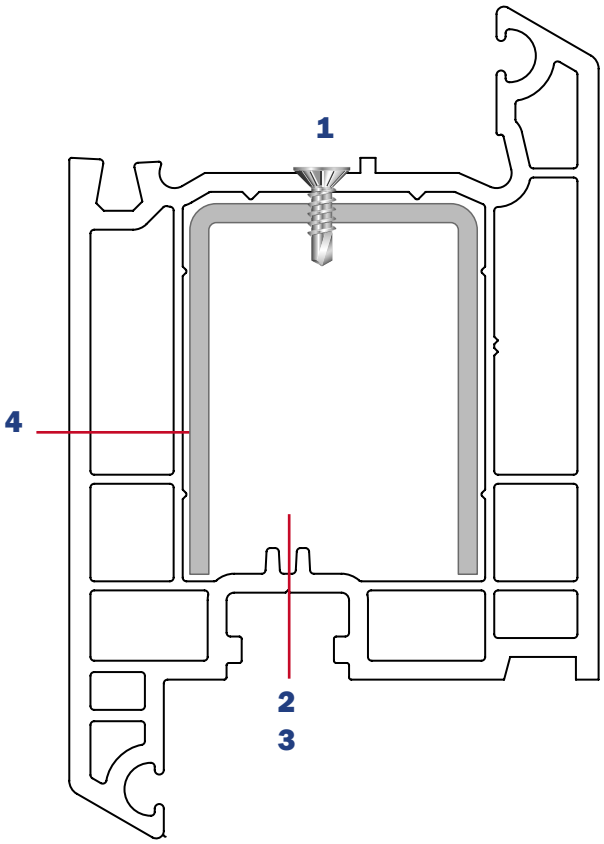


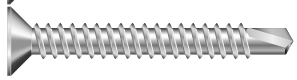
1		CFG 4.3 x 25 Z	Gearing
2		CFG 4.3 x 30 Z	Flag Hinge (Standard Hole)
2		CPF 4.5 x 30 Z	Flag Hinge (Oversize Hole)

Yellow, Zinc and Stainless Steel range available

Matrix 70 Profile

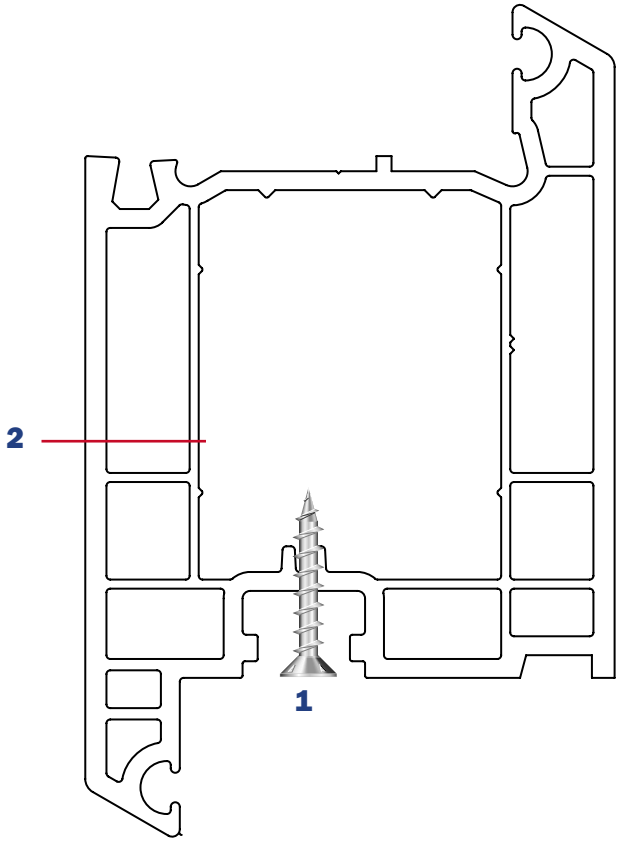
110mm Door Sash - 105170
with Reinforcement - 113320
Prep Reinforcement - 113318

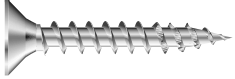


1		RSR 3.9 x 13 Z	Reinforcement retention
2		MJS 4.8 x 80 Y	Mechanical Jointing
3		CFG 4.3 x 25 Z	Gearing
4		CSR 3.9 x 32 Z	Flag Hinge (Standard Hole)
4		CSR 4.8 x 38 Z	Flag Hinge (Oversize Hole)

Yellow, Zinc and Stainless Steel range available

110mm Door Sash - 105170



1		CFG 4.3 x 25 Z	Gearing
2		CFG 4.3 x 30 Z	Flag Hinge (Standard Hole)
2		CPF 4.5 x 30 Z	Flag Hinge (Oversize Hole)

Yellow, Zinc and Stainless Steel range available

Notes

Notes

For direct access to the Rapierstar website, scan the QR code with your smartphone.

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www.rapierstar.com

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