## **Recommended Fixings Manual**



















# All together better

Eurocell are one of the leading systems companies in the UK. We are at the forefront of development in technologically advanced profile extrustion. When we design our window & door systems we take advice from the leading hardware manufacturers and combine that knowledge with fastener expertise from Rapierstar. The humble screw forms a key role in the manufacture of windows & doors and that's why we talk to the experts in every field 77.

Carl Storer - Senior Testing & Research Support Technician - Eurocell







Eurocell plc is one of the UK's leading manufacturer and distributors of PVC-U window, door, conservatory and roofline systems, offering the widest product range of any single brand.

Eurocell Profiles Ltd supplies a national network of fabricators and installers with a comprehensive range of PVC-U systems including windows, entrance doors, inline patio doors, bi-fold doors, conservatories and cavity closers. Eurocell also operate a nationwide network of more than 190 branches, supplying a complete range of PVC-U roofline, conservatory roof, window trim and door products.

The range of PVC-U window, door and conservatory roof systems offered by Eurocell is constantly evolving to meet the aesthetic, security, energy-efficiency and value requirements of consumers, specifiers and fabricators.

Modus® is the latest development by Eurocell – a new aesthetic which offers a higher specification window and still delivers significant cost savings for fabricators. Modus® is a fully integrated system, which means it enables eight window and door types to be made from a single system – again helping fabricators achieve significant cost savings in terms of stockholding and production efficiencies.



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#### **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.

## StarPVCU.





#### **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.

#### **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, assessment and verification of constancy of performance.

**BS EN 14351-1:2006+A1:2010**, Windows and doors product standard, performance characteristics. *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 independently verifing, that the head/thread/point maintain consistency of design. This also guarantees that steel screws are produced to EU standards and that factory controls are in place during manufacture.

**PAS 24:2016** Windows and doors fabricated with correct **StarPVCU** screws exceed PAS 24:2016 - enhanced security performance requirements for doorsets and windows in the UK.

**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 9001**, is defined as the international standard that specifies requirements for a quality management system (QMS). Organizations use the standard to demonstrate the ability to consistently provide products and services that meet customer and regulatory requirements. **rapierstar**® is an ISO 9001:2015 registered company and all our window screws are manufactured by ISO 9000 certificated companies.

#### **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.

#### 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.

#### Austenitic Stainless Steel - 302

302 grade Austenitic stainless steel 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 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.

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.





Iten	n Screw	Code		tion de	Application
1		BSR 4.2 X 50	z	-	False mullion into sash reinforcement
2		CFG 4.3 X 16	Z	s	RCM Retention, cavity locking blocks EWS7201, (glazing clips for 36mm units only), Flag hinge into PVC, low threshold connector LSF1245
3		CFG 4.3 X 25	Z	s	Keep to Frame (RCM, Unreinforced), Cavity Locking Block, Shootbolt gearing, cover plate, MACO M Spag, Door lock to sash, T&T geaing to sash, rebated hinges, concealed hinges, letter plate
4		CFG 4.3 X 30	Z	s	Gearing sash, top glider, riser block, cavity locking blocks, espag gearbox, centre bracket, peg stays on flush casement, keep to frame, MACO M Spag
5		CFG 4.3 X 40	Z	s	Door lock to sash for PAS24
6		CFG 4.8 X 38	Z	-	Concealed gearing to outer frame, Pivot window hinges to outer frame
7		CFG 4.3 X 55	z	s	Straight frame coupling
8		CPF 5.0 X 60	Z	-	Door hinges to frame reinforced with RCM
9		CPF 5.0 X 70	Z	-	Door flag hinges to outer frame, Door hinges to frame reinforced with RCM
10		CSR 3.9 X 16	Z	-	Security glazing clips (for 36mm units only), Cavity locking blocks EWS 7201, Low threshold blocks to outer
11		CSR 3.9 X 25	Z	s	Keeps, Gearing to sash when reinforced, floating mullion end caps
12		CSR 4.8 X 25	Z	-	Butt hinges to reinforced door frame PAS24
13		CSR 3.9 X 38	Z	s	Door keeps to reinforced jamb
14		CSR 4.8 X 38	Z	s	Frames to variable bay pole small outer
15		CSR 4.8 X 45	Z	_	Flag hinges, Intermediate outer frame to ESW510A
16		MJS 4.8 X 80	Y	-	Mechanical joints, low threshold, floatin mullion (Modus)
17		MJS 4.8 X 95	Y	-	Mechanical joints, low threshold
18		MS M5 X 40	Z	_	Handle screw
19		MS M5 X 45	z	-	Handle screw





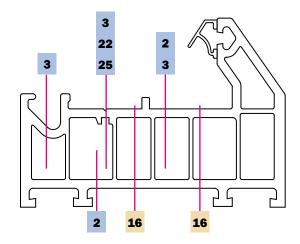
Ite	m Screw	Code	Opt Co		Application
20		MS M5 X 60	z	-	Handle screw
21		RSR 3.9 X 16	Z	s	Steel/ali Reinforcement Retention
22		SFG 4.3 X 16	z	s	Friction Stay to Frame (RCM/PVC)
23		SFG 4.3 X 25	z	s	Friction stay to sash, adaptor profile to floating mullion
24		SFG 4.8 X 20	z	s	GT Hinge Guards to slim transom/mullion
25		SFG 4.8 X 25	z	s	GT Hinge Guards to outer frames and intermediate transom/mullions
26		SSR 3.9 X 16	z	s	Friction stays to reinforced profile, GT Hinge Guards, door weather seal, Final fix variable bay pole
27		SSR 3.9 X 25	z	s	Friction stays to reinforced profile, GT Quad Guards
28		WSR 4.8 X 50	Z	-	Frames to connecting post ESW528A, Frames to variable bay pole intermediate outer
29		WSR 4.8 X 60	z	-	False mullion attachment to sash
30		FFT 7.5 X 82	Y	-	Frame fixings small outer frames
31		FFT 7.5 X 102	Y	-	Frame fixings intermediate outer frames
32		FFT 7.5 X 122	Y	-	Frame fixings large outer frames
33		CPP 6.0 X 60	Y		Dummy sashes fixings to transom/mullion
34		CPP 6.0 x 70	Y		Dummy sashes fixings to outer frames

## Colour Key:

Material Finish	Carbon Steel Zinc	Stainless Steel	Carbon Steel Yellow
Fastener Type	Drill Point	Gimlet Point	Machine Screw
	Multi-Purpose Screw	AB Point	Miscellaneous









EWS800P

#### EWS7001

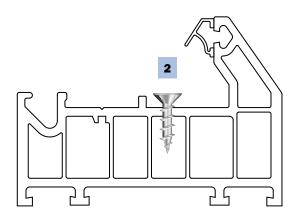
Chamfered Thermalogik Slim Outer Frame

#### EWS7701

Ovolo Thermalogik Slim Outer Frame

#### Note

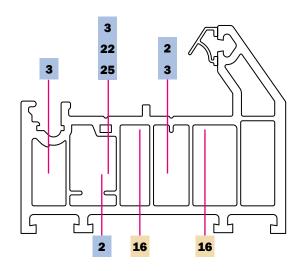
Security glazing clips for 36mm glazing are fitted using CFG 4.3 X 16, all other unit widths are push fit. This note applies throughout the system



2	CFG 4.3 X 16	RCM Retention, cavity locking blocks EWS7201, (glazing clips for 36mm units only)
3	CFG 4.3 X 25	Keep to Frame (RCM, Unreinforced), Cavity Locking Block
16	MJS 4.8 X 80	Mechanical joints
22	SFG 4.3 X 16	Friction Stay to Frame (RCM,Unreinforced)
25	SFG 4.8 X 25	GT Hinge guards









#### EWS7020

Chamfered Thermalogik Slim Outer Frame

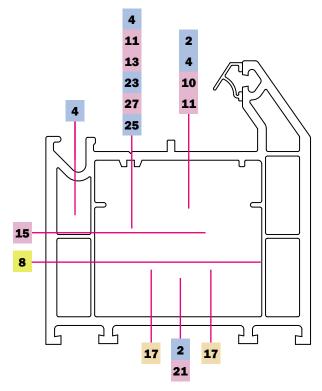
#### EWS7720

Ovolo Thermalogik Intermediate Outer Frame

2	CFG 4.3 X 16	RCM Retention, cavity locking blocks EWS7201, (glazing clips for 36mm units only)
3	CFG 4.3 X 25	Keep to Frame (RCM, Unreinforced), Cavity Locking Block
16	MJS 4.8 X 80	Mechanical joints
22	SFG 4.3 X 16	Friction Stay to Frame (RCM,Unreinforced)
25	SFG 4.8 X 25	GT Hinge guards





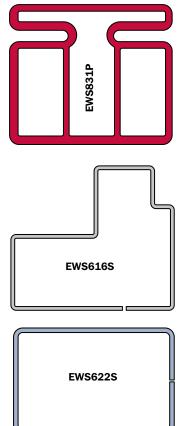


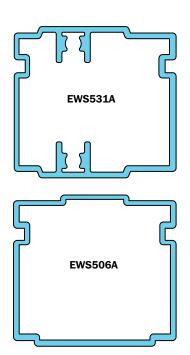


Chamferred Large Main Frame

#### EWS7706

Ovolo Large Main Frame



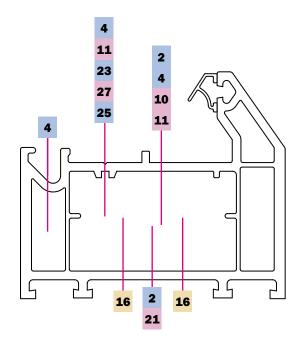




	Ovolo Large Main Frame		
2		CFG 4.3 X 16	RCM Retention, cavity locking blocks EWS7201, (glazing clips for 36mm units only)
4		CFG 4.3 X 30	Keep to Frame (RCM, Unreinforced)
8	M1111111111111111111111111111111111111	CPF 5.0 X 60	Door hinges to frame reinforced with RCM
10		CSR 3.9 X 16	Security glazing clips (glazing clips for 36mm Units only)
11		CSR 3.9 X 25	Casement window keeps
13		CSR 3.9 X 38	Door Keeps
15		CSR 4.8 X 45	Flag hinges to reinforced frame
17		MJS 4.8 X 95	Mechanical joints
21	EFFEFE	RSR 3.9 X 16	Steel/ali Reinforcement Retention
23		SFG 4.3 X 25	Friction Stay to Frame (RCM/Unreinforced)
25		SFG 4.8 X 25	Hinge GT Hinge guard
27		SSR 3.9 X 25	Friction Stay to Frame (Reinforced), GT hinge guard

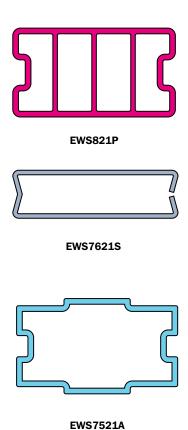






**EWS7021**Chamferred Intermediate Main Frame

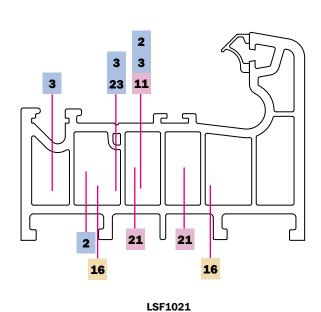
## **EWS7721** Ovolo Intermediate Main Frame



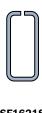
2	CFG 4.3 X 16	RCM Retention, cavity locking blocks EWS7201, (glazing clips for 36mm units only)
4	CFG 4.3 X 30	Keep to Frame (RCM, Unreinforced)
10	CSR 3.9 X 16	Security glazing clips (glazing clips for 36mm Units only)
11	CSR 3.9 X 25	Casement window keeps
16	MJS 4.8 X 80	Mechanical joints
21	RSR 3.9 X 16	Steel/ali Reinforcement Retention
23	SFG 4.3 X 25	Friction Stay to Frame (RCM/Unreinforced)
25	SFG 4.8 X 25	Hinge GT Hinge guard
27	SSR 3.9 X 25	Friction Stay to Frame (Reinforced), GT hinge guard







Modus Small Main Frame



LSF1621S



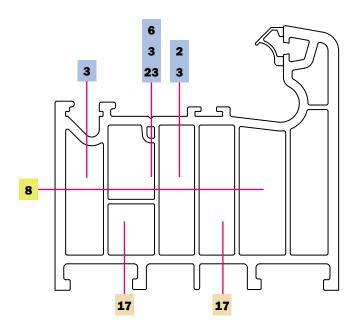
EWS800P

2	CFG 4.3 X 16	RCM Retention, cavity locking blocks EWS7201
3	CFG 4.3 X 25	Keep to Frame PVC/RCM
11	CSR 3.9 X 25	Keeps to reinforced frame

16	MJS 4.8 X 80	Mechanical joints
21	RSR 3.9 X 16	Steel/ali Reinforcement Retention
23	SFG 4.3 X 25	Friction Stay to Frame (RCM/PVC)



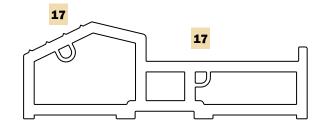






EWS800P

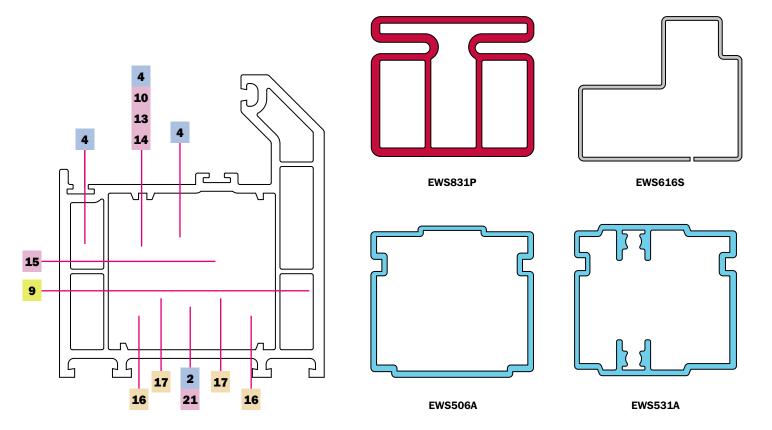
**LSF1006**Modus Large Main Frame



2	CFG 4.3 X 16	Cavity locking blocks EWS7201, end caps for low threshold connector LSF1245
3	CFG 4.3 X 25	Keep to Frame PVC/RCM
6	CFG 4.8 X 38	Pivot window hinges to outer frame
9	CPF 5.0 X 70	Door flag hinges to outer frame
17	MJS 4.8 X 95	Mechanical joints/Low threshold
23	SFG 4.3 X 25	Friction Stay to Frame (RCM/PVC)





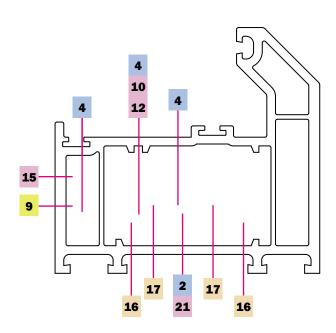


**EWS031**Large Composite Door Main Frame

2		CFG 4.3 X 16	RCM Retention
4		CFG 4.3 X 30	Keep to Frame (RCM, Unreinforced)
9		CPF 5.0 X 70	Door hinges to frame reinforced with RCM
10		CSR 3.9 X 16	Low threshold blocks to outer frame reinforced
13		CSR 3.9 X 38	Door Keeps
14		CSR 4.8 X 38	Butt hinges to reinforced door frame PAS24
15		CSR 4.8 X 45	Flag hinges to reinforced frame
16		MJS 4.8 X 80	Low threshold to mechanical joint blocks in jambs
17		MJS 4.8 X 95	Mechanical joints
21	THE PARTY OF THE P	RSR 3.9 X 16	Steel/ali Reinforcement Retention

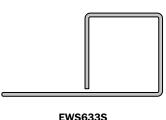


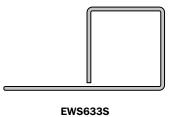




EWS032 Small Composite Door Main Frame

EWS533A





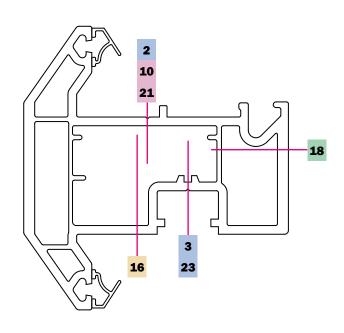


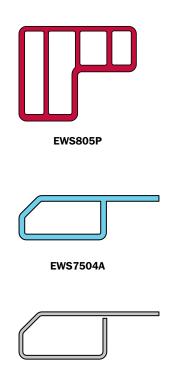
EWS832P

2	CFG 4.3 X 16	RCM Retention
4	CFG 4.3 X 30	Keep to Frame (RCM, Unreinforced), door keeps
9	CPF 5.0 X 70	Door hinges to frame reinforced with RCM
10	CSR 3.9 X 16	Low threshold blocks to outer frame reinforced
12	CSR 4.8 X 25	Butt hinges to reinforced door frame PAS24
15	CSR 4.8 X 45	Flag hinges to reinforced frame
16	MJS 4.8 X 80	Low threshold to mechanical joint blocks in jambs
17	MJS 4.8 X 95	Mechanical joints
21	RSR 3.9 X 16	Steel/ali Reinforcement Retention









EWS7604S

#### EWS7005

Chamferred Casement T Sash

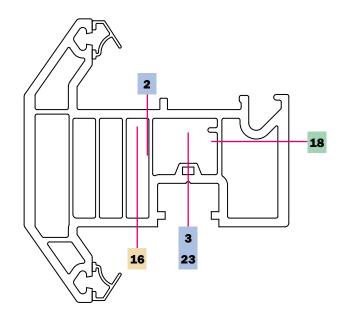
#### EWS7705

Ovolo Casement T Sash

2		CFG 4.3 X 16	RCM Retention, Security glazing clips (for 36mm units only
3		CFG 4.3 X 25	Shootbolt gearing, cover plate, MACO M Spag
10		CSR 3.9 X 16	Security glazing clips (for 36mm units only)
16		MJS 4.8 X 80	Mechanical joints
18		MS M5 X 40	Handle screw
21	THERE !	RSR 3.9 X 16	Steel Reinforcement Retention
23		SFG 4.3 X 25	Friction stay to sash (RCM)









EWS800P

#### EWS7008

Chamferred Thermalogic Casement T Sash

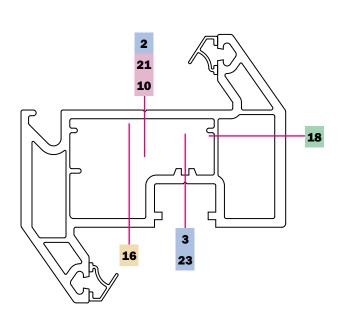
#### EWS7708

Ovolo Thermalogic Casement T Sash

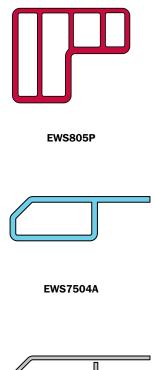
2	CFG 4.3 X 16	RCM Retention, Security glazing clips (for 36mm units only
3	CFG 4.3 X 25	Shootbolt gearing, cover plate, MACO M Spag
16	MJS 4.8 X 80	Mechanical joints
18	MS M5 X 40	Handle screw
23	SFG 4.3 X 25	Friction stay to sash (RCM)







EWS7004 Chamfered Z Sash

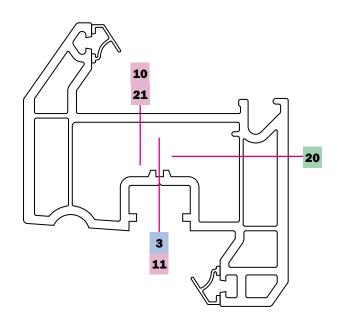


EWS7604S

2		CFG 4.3 X 16	RCM Retention, Security glazing clips (for 36mm units only
3		CFG 4.3 X 25	Shootbolt gearing, cover plate, MACO M Spag
10		CSR 3.9 X 16	Security glazing clips (for 36mm units only)
16		MJS 4.8 X 80	Mechanical joints
18		MS M5 X 40	Handle screw
21	THE PARTY OF THE P	RSR 3.9 X 16	Steel Reinforcement Retention
23		SFG 4.3 X 25	Friction stay to sash (RCM)





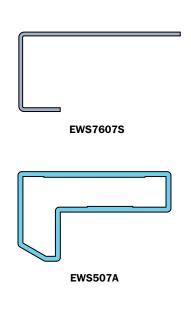


EWS7007

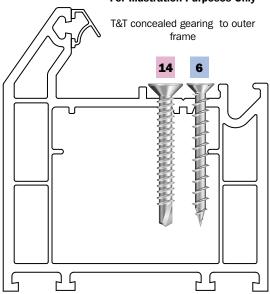
Tilt & Turn Sash

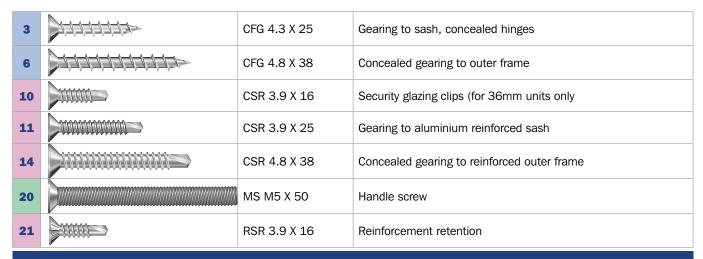
#### EWS7707

Ovolo Tilt & Turn Sash



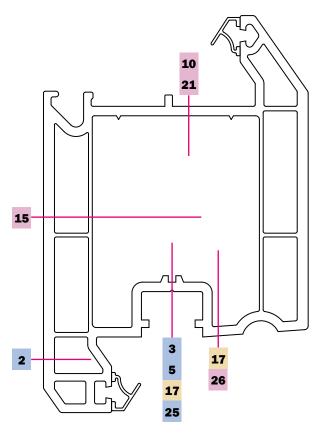
#### For Illustration Purposes Only





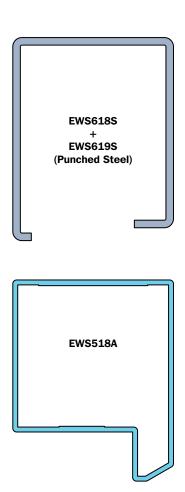






**EWS7018** Z Door Sash (Open In) **EWS7019** T Door Sash (open Out)

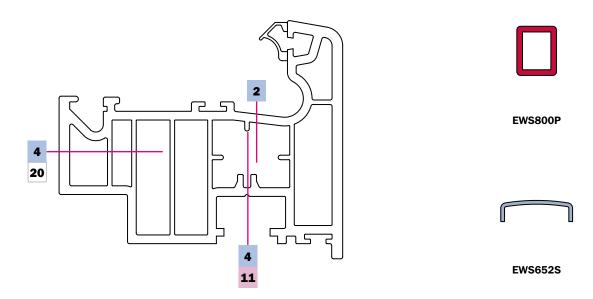
**EWS7718** Ovolo Z Door Sash (Open In) **EWS7719** Ovolo T Door Sash (Open Out)



2	CFG 4.3 X 16	Flag hinge into PVC
3	CFG 4.3 X 25	Door lock to sash
5	CFG 4.3 X 40	Door lock to sash for PAS24
10	CSR 3.9 X 16	Security glazing clips (36mm units only)
15	CSR 4.8 X 45	Flag hinges
17	MJS 4.8 X 95	Mechanical jointing
21	RSR 3.9 X 16	Reinforcement retention
25	SFG 4.8 X 25	GT Hinge guards hinge protector
26	SSR 3.9 X 16	Low threshold sash seal





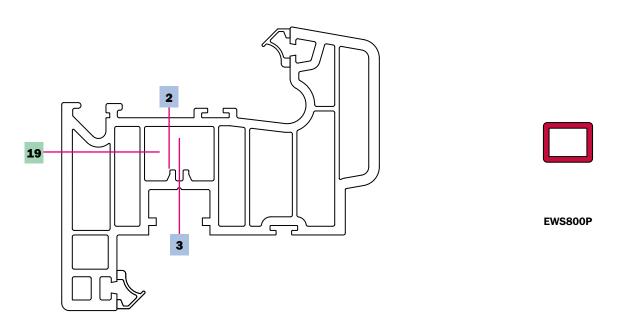


**LSF1008**Modus Reversible/Flush Sash

2	CFG 4.3 X 16	Reinforcement retention
4	CFG 4.3 X 30	Gearing to sash, top glider, riser block to sash, cavity locking blocks, espag centre gearbox, centre bracket, dummy peg stays on flush casement window
11	CSR 3.9 X 25	Gearing to sash when reinforced
20	MS M5 X 60	Handle Screw





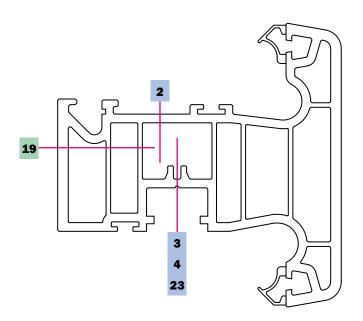


**LSF1007** T&T Flush Sash

2	CFG 4.3 X 16	Reinforcement retention
3	CFG 4.3 X 25	Gearing to sash, rebated hinges, concealed hinges
19	MS M5 X 45	Handle screw









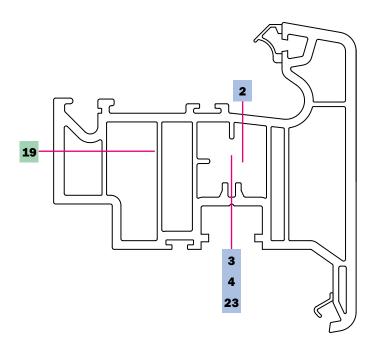
EWS800P

#### **LSF1005** Modus Casement T Sash

2	CFG 4.3 X 16	Reinforcement retention
3	CFG 4.3 X 25	Gearing to sash
4	CFG 4.3 X 30	Maco M spag centre gearbox
19	MS M5 X 45	Handle screw
23	SFG 4.3 X 25	Friction stay to sash









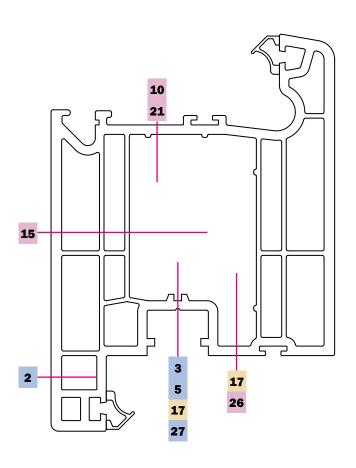
EWS800P

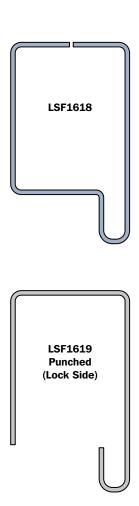
**LSF1004**Modus Slim Rebate Casement Sash

2	CFG 4.3 X 16	Reinforcement retention
3	CFG 4.3 X 25	Gearing to sash
4	CFG 4.3 X 30	Maco M spag centre gearbox
19	MS M5 X 45	Handle screw
23	SFG 4.3 X 25	Friction stay to sash







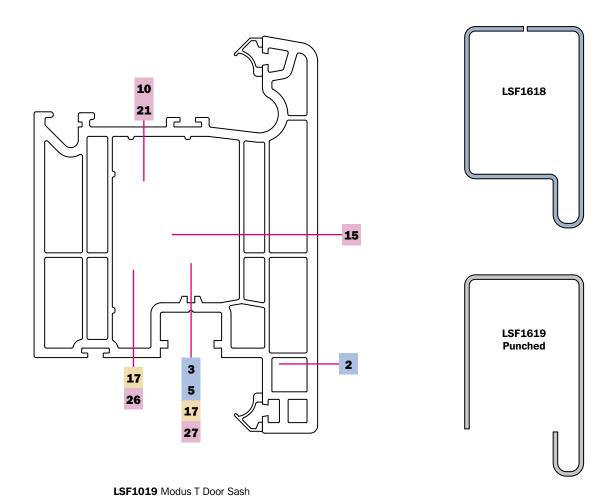


LSF1018 Modus Z Door Sash

2	CFG 4.3 X 16	Flag hinge into PVC
3	CFG 4.3 X 25	Door lock to sash
5	CFG 4.3 X 40	Door lock to sash for PAS24
10	CSR 3.9 X 16	Security glazing clips (36mm units only)
15	CSR 4.8 X 45	Flag hinges
17	MJS 4.8 X 95	Mechanical jointing
21	RSR 3.9 X 16	Reinforcement retention
26	SSR 3.9 X 16	Low threshold sash seal
27	SSR 3.9 X 25	GT Quad Guard Hinge protector



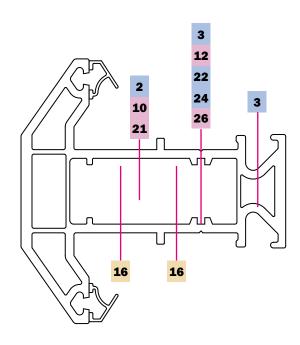




CFG 4.3 X 16 Flag hinge into PVC CFG 4.3 X 25 Door lock to sash 3 CFG 4.3 X 40 Door lock to sash for PAS24 5 CSR 3.9 X 16 Security glazing clips (36mm units only) 10 15 CSR 4.8 X 45 Flag hinges 17 MJS 4.8 X 95 Mechanical jointing 21 RSR 3.9 X 16 Reinforcement retention SSR 3.9 X 16 Low threshold sash seal 26 27 SSR 3.9 X 25 GT Quad Guard Hinge protector

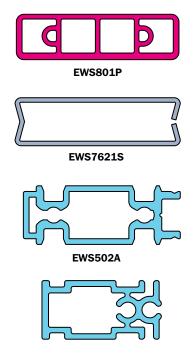


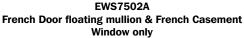


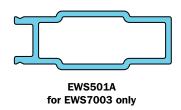


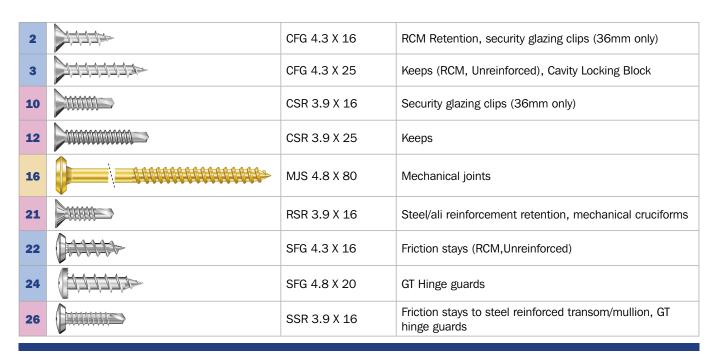
EWS7002 T Transom/Mullion EWS7003 Z Transom/Mullion

**EWS7702** Ovolo T Transom/Mullion **EWS7703** Ovolo Z Transom/Mullion



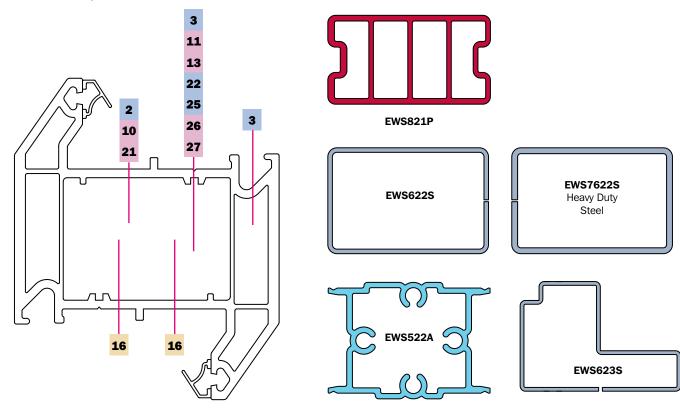












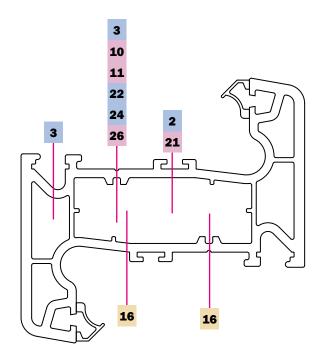
**EWS7022** T Transom/Mullion **EWS7023** Z Transom/Mullion

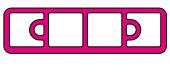
**EWS7722** Ovolo T Transom/Mullion **EWS7723** Ovolo Z Transom/Mullion

2	CFG 4.3 X 16	RCM Retention, security glazing clips (36mm only)
3	CFG 4.3 X 25	Keeps (RCM, Unreinforced), Cavity Locking Block
10	CSR 3.9 X 16	Security glazing clips (36mm only)
11	CSR 3.9 X 25	Keeps
13	CSR 3.9 X 38	Door keeps to reinforced jamb
16	MJS 4.8 X 80	Mechanical joints
21	RSR 3.9 X 16	Steel/ali reinforcement retention, mechanical cruciforms
22	SFG 4.3 X 16	Friction stays (RCM,Unreinforced)
25	SFG 4.8 X 25	GT Hinge guards
26	SSR 3.9 X 16	Friction stays to steel reinforced transom/mullion
27	SSR 3.9 X 25	GT Hinge guards









EWS801P



EWS7621S

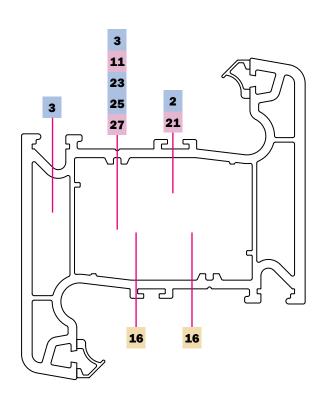
LSF1002 Modus T Transom/Mullion

LSF1003 Modus Z Transom/Mullion

2	Dialata -	CFG 4.3 X 16	RCM Retention, cavity locking blocks EWS7201
3		CFG 4.3 X 25	Keep to Frame PVC
10		CSR 3.9 X 16	Cavity locking blocks EWS 7201
11		CSR 3.9 X 25	Keeps to reinforced profile
16		MJS 4.8 X 80	Mechanical joints
21	THE	RSR 3.9 X 16	Steel/ali Reinforcement Retention
22		SFG 4.3 X 16	Friction Stay to Frame (RCM/PVC)
24		SFG 4.8 X 20	GT Hinge Guards
26		SSR 3.9 X 16	Friction stays to steel/ali reinforced frame, GT hinge guards

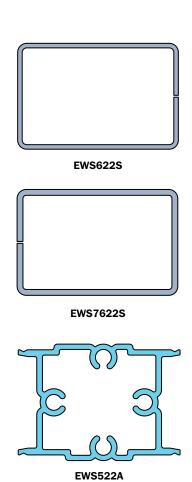








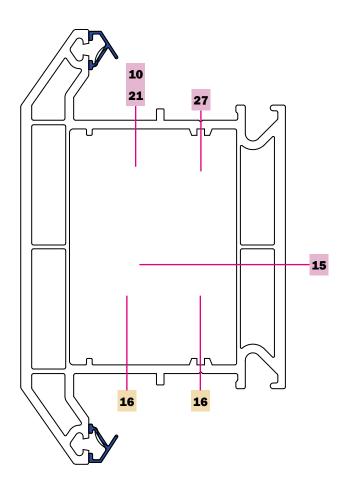
LSF1023 Modus Intermediate Z Transom/Mullion

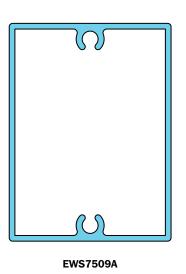


2	CFG 4.3 X 16	RCM Retention, cavity locking blocks EWS7201
3	CFG 4.3 X 25	Keeps (Unreinforced)
11	CSR 3.9 X 25	Keeps
16	MJS 4.8 X 80	Mechanical joints
21	RSR 3.9 X 16	Steel/ali reinforcement retention, mechanical cruciforms
23	SFG 4.3 X 25	Friction stays (RCM,Unreinforced)
27	SSR 3.9 X 25	Friction stays to steel reinforced transom/mullion, GT hinge guards
25	SFG 4.8 X 25	GT Hinge guards









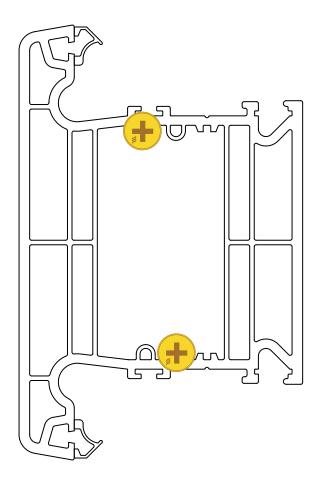
EWS7009 Door Midrail

EWS7709 Ovolo Door Midrail

10		CSR 3.9 X 16	Security glazing clips (36mm DGU only)
15		CSR 4.8 X 45	Flag hinges to mullion profile
16		MJS 4.8 X 80	Mechanical joints (open up the PVC/reinforcing & plug)
21	THE PARTY OF THE P	RSR 3.9 X 16	Steel Reinforcement Retention, mechanical cruciforms
27		SSR 3.9 X 25	GT Quad Guard







LSF1009 Modus Door Midrail

Please note that this profile is only ever used as a midrail and therefore has no screws associated with it. Letter plate screws are usually supplied with the product but if not then CFG 4.3 X 25 should be used

LSF1009 Modus Door Midrail

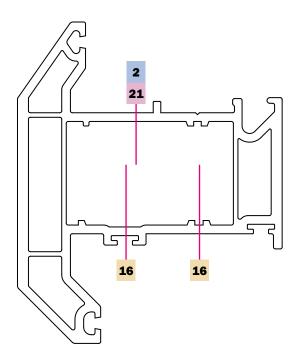


MJS 4.8 X 95

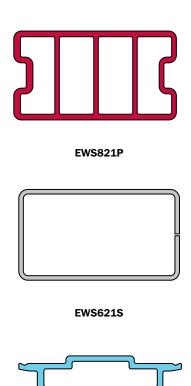
Mechanical joint







EWS033 Composite Door T Transom



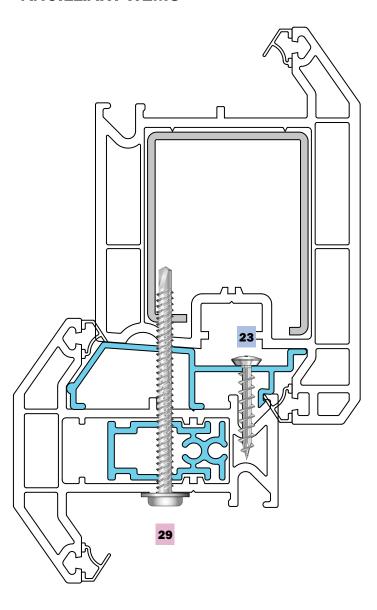
EWS533A

2	CFG 4.3 X 16	Reinforcement retention RCM
16	MJS 4.8 X 80	Mechanical joint
21	RSR 3.9 X 16	Reinforcement retention steel/aluminium



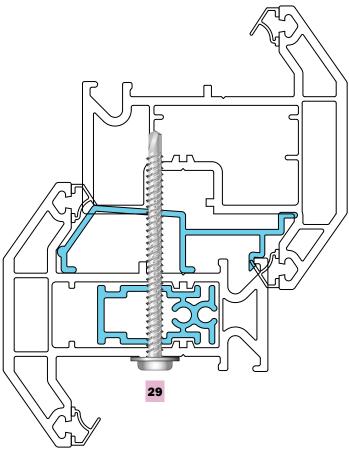


## **ANCILLIARY ITEMS**



French Door Open Out Floating Mullion Attachment

EWS7502A used at either end of the floating mullion so that end caps can be fitted. Use screw CSR 3.9 X 25 to attach

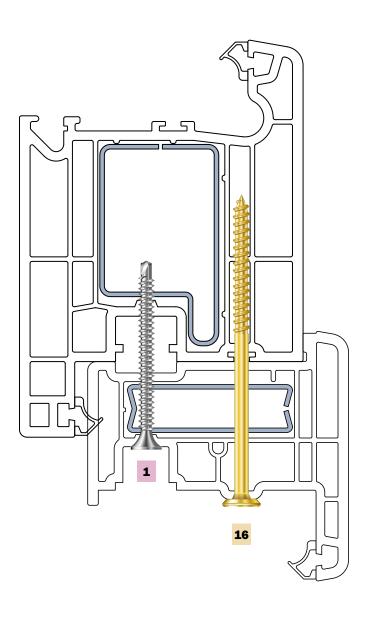


23	SFG 4.3 X 25	Adaptor to false mullion profile
29	WSR 4.8 X 60	False mullion attachment to sash





## **ANCILLIARY ITEMS**

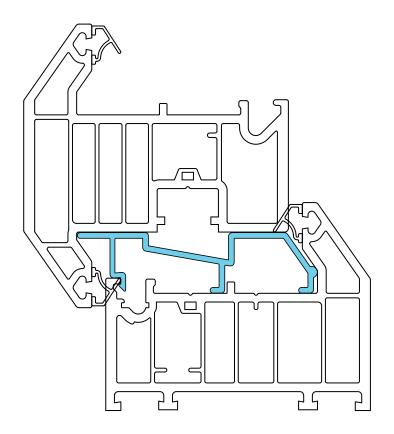


Modus French Door Open In Floating Mullion Attachment

1	BSR 4.2 X 50	False mullion into sash reinforcement
16	MJS 4.8 X 80	False mullion attachment to PVC







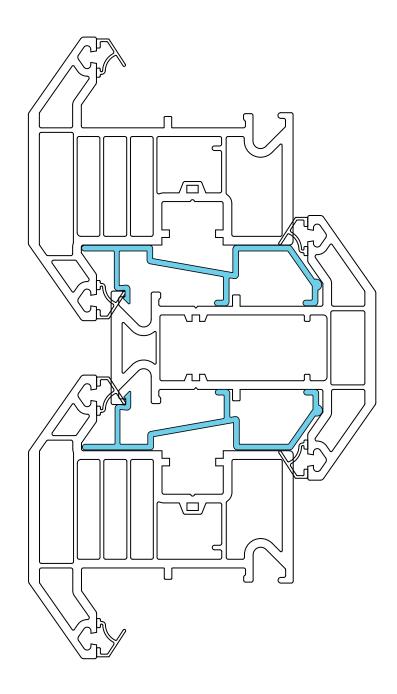
34

CPP 6.0 X 70

Dummy sash to outer frame





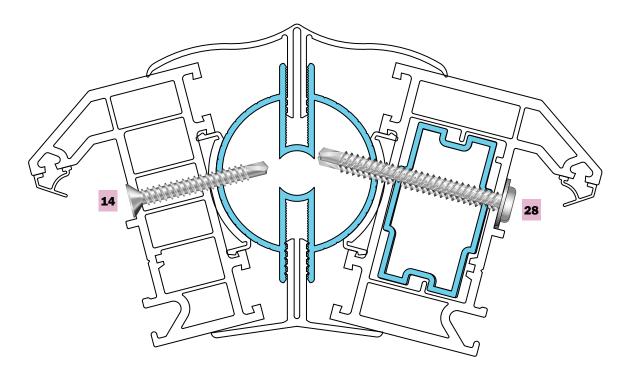


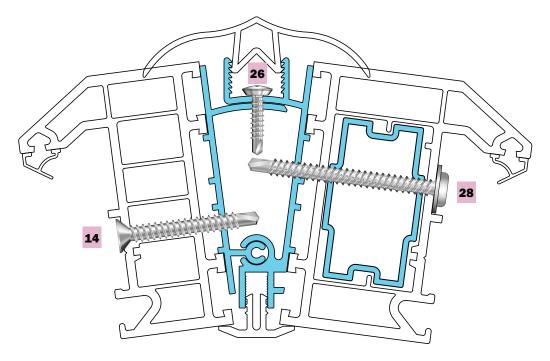
33		CPP 6.0 X 60	Dummy sash to outer frame
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## **ANCILLIARY ITEMS**



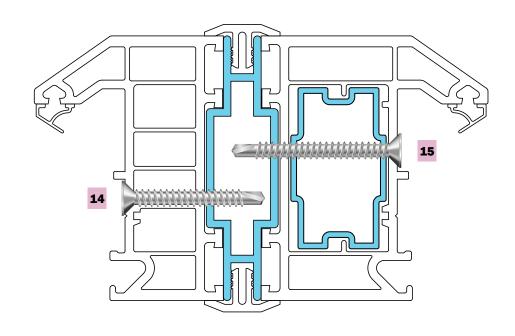


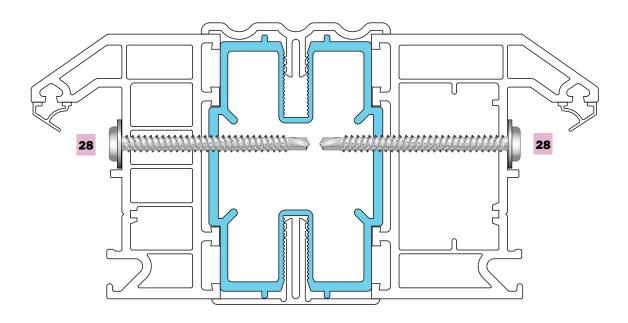
14	CSR 4.8 X 38	Frames to variable bay pole small outer
26	SSR 3.9 X 16	Final fix of variable bay pole
28	WSR 4.8 X 50	Frames to variable bay pole intermediate outer





## **ANCILLIARY ITEMS**



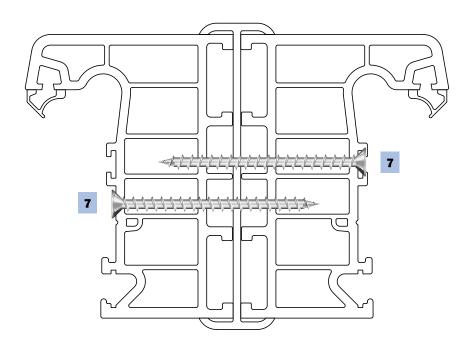


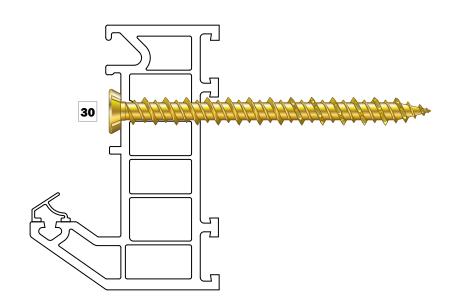
14	CSR 4.8 X 38	Frames to variable bay pole small outer
15	CSR 4.8 X 45	Intermediate outer frame to ESW510A
28	WSR 4.8 X 50	Frames to connecting post ESW528A





## **ANCILLIARY ITEMS/INSTALLATION FIXINGS**



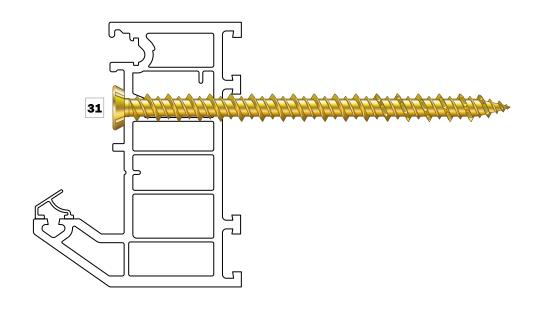


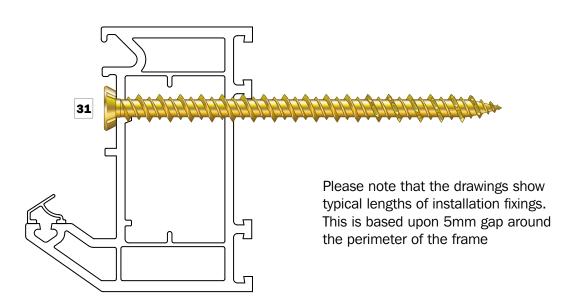
7	CFG 4.3 X 55	Straight frame coupling (stagger screws)
30	FFT 7.5 X 82	Masonry fixing into brickwork





## **INSTALLATION FIXINGS**



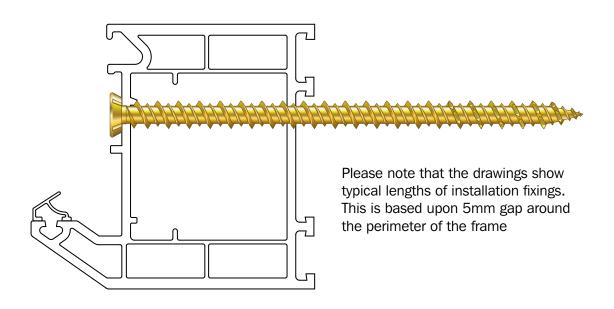


31 FFT 7.5 X 102 Masonry fixing into brickwork

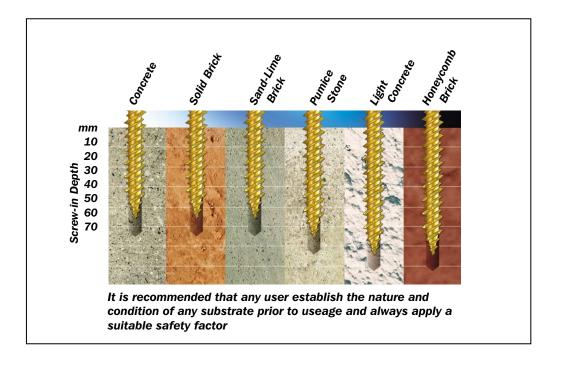




## **INSTALLATION FIXINGS**



Suggested minimum screw-in depths for plugless frame fixings in example substrates



32 FFT 7.5 X 122 Masonry fixing into brickwork





NOTES	





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