



JURALCO SUNFOLD® OUTDOOR LIVING SYSTEMS

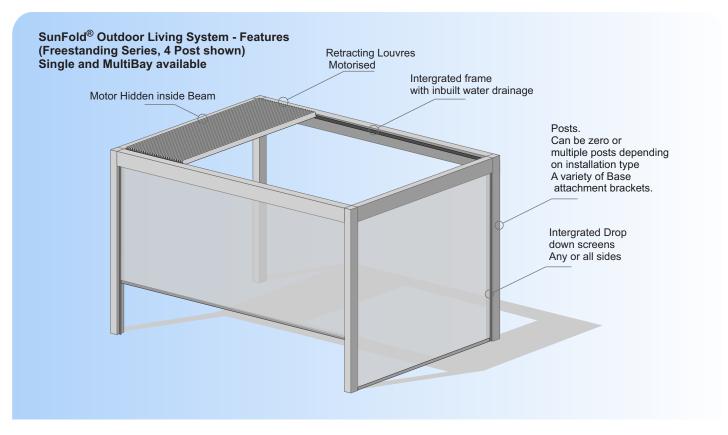
Juralco SunFold® Outdoor Living System

Juralco Aluminium Building Products Ltd designs and distributes specialist aluminium joinery systems through a national network of franchised fabricators and agents.

For more than 25 years we have been at the forefront of specialist aluminium door and window products suitable for New Zealand joinery and building methods. Our comprehensive product range includes security and insect screens, balustrades and gates, shutters and awnings, shower screens, wardrobe doors and organisers and internal doors.

The SunFold[®] Outdoor Living System is an ideal solution for extra outdoor shelter for you home. The high quality extruded aluminium structure and louvres can be custom powder coated in a colour of your choice. The motorised ceiling louvres when closed form a more weatherproof seal. They can also be retracted for you to enjoy the full sky.

The structure can be added to with drop down screens, on any or all sides.



The SunFold® Outdoor Living System is built from the following sub systems...

- Louvres. One type only. Pivot pin at one end; designed to provide a more weatherproof seal when closed. Motorised only Retracting to either end to open to the sky. Options to retract to LH or RH ends
- Posts. These are a two part post, with inner Stainless Steel angles top and bottom.
 - At ground level they can be connected to foundations in a variety of ways including a hidden base plate. Hidden drainage down pipe in one Post per Bay
- Beams. The Beams contain all the pivots for Louvre retraction and the Motor actuator
 - All these beams are of two types, depending on Wall attachments or corner Posts
 - All beams have a hidden drainage channels on all sides to catch rain.
- Drop down Screens. Screens from the SolarZip range can be completely hidden inside the Frames thus making this a very useable extra all weather space.
- Sliding Glass Doors. From the Glaslide range of 10, 12 or 15mm Glass panels. Refer to the 'Glaslide Sliding Glass Doors' Manual
- For larger installations MultiBay setout is possible.
- LED lighting can be incorporated in the Top Frame.

The Juralco SunFold® Outdoor Living System is wholly manufactured by Juralco and supplied as a kitset. All assembled on site - no need for heavy lifting.

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Juralco SunFold[®] Outdoor Living System

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Section 4522JB

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10	Lengths and Louvres	Shows SunFold Overall Lengths and No of Louvres for different End Beam combinations			
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Juralco SunFold® Outdoor Living System

Juralco Aluminium Building Products Ltd (JABP) Specifications for Juralco SunFold® Outdoor Living System

1.Scope

- This specification details the documents the Juralco SunFold® Outdoor Living System refers to in relation to the New Zealand Building Code, the manufacturer's documents, products used in the System, requirements in relation to fixing and surface finishes.

2. Manufacturer's Documents

- The Juralco SunFold® Outdoor Living System manual details all extrusions and components used for the fabrication and installation/fixing of the system.
- Manuals are available from Juralco Aluminium Building Products Ltd 48 Bruce McLaren Rd, Henderson, Auckland Phone 09 478 8018 Fax 09 478 7883 Email specify@juralco.co.nz

3. Products

- Only extrusions, components and hardware supplied by or specified by JABP may be used in the SunFold® Outdoor Living System
- Stainless Steel components, hardware, fixings all components to 316 grade or 304.

4. Surface Finishing

- Juralco Aluminium Building Products Ltd is a Dulux Registered Applicator site, registration number 2101. JABP uses only Dulux branded powder coating materials
- Dulux Duralloy® powder coating systems are suitable for properties greater than 100m from high tide level AAMA 2603 performance. Residential buildings, 3 levels max. Warranty 10 yrs
- Dulux Duralloy Plus® powder coating systems are suitable for properties greater than 10m from high tide level. AAMA 2603 performance. Residential and Light commercial buildings, 3 levels max Warranty 15 yrs
- Dulux Duratec® powder coating systems are suitable for properties greater than 10m from high tide level AAMA2603 and 2604 performance. All Residential and Commercial buildings. Warranty 25 yrs

5. Installation and Fixing

- The Juralco SunFold® Outdoor Living System must only be installed in accordance with the Juralco SunFold® Outdoor Living System manual
- The SunFold® system Structure and Footings are based on NZS 3604:2011 and NZS 1170 Appendix D, Wind Zone calculations.

Important information - Powder Coating systems

<u>Powdercoat Systems</u> The new standard Dulux powder coating system used by Juralco is Duralloy Plus[®]. Also Duralloy[®] and Duratec[®]. All as per specs above. Juralco Powder coated prices are for Duralloy Plus® and Duralloy® (same pricing). Duratec® prices on application.

Attachment to structures A PVC Tape or similar material spacer must be used to separate powder coated aluminium items from all concrete and steel structures. Failure to do so can lead to the chemicals in the structure affecting the powder coating, leading to corrosion

Swimming Pools The chlorinated water in swimming pools can cause the deterioration of powder coated surfaces, leading to corrosion of the underlying surface. It is recommended that Powder coated surfaces be 1200mm min from a pool.

Care The Dulux powder coating warranty period is conditional upon the surface being maintained in accordance with the Dulux 'Care and Maintenance Instructions'. Download from Dulux or refer to the back page of this manual.

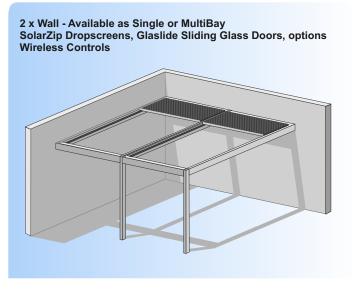


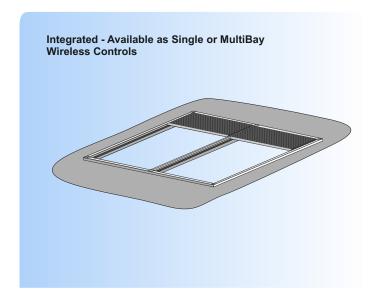
Note : These are some of our Standard Layouts - Many other configurations are possible.

See Following pages

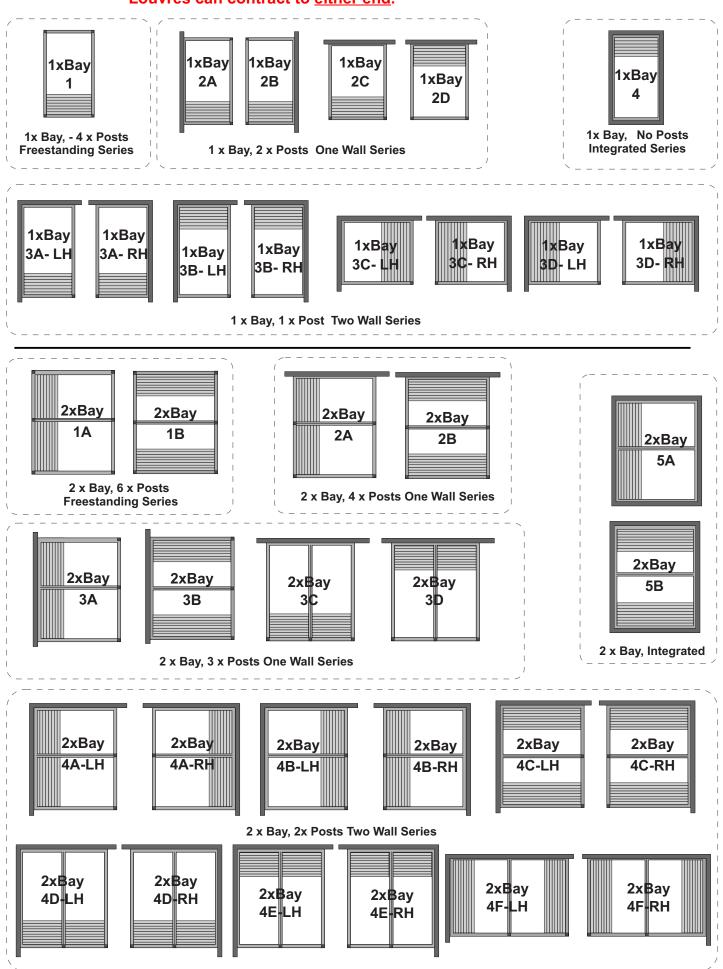






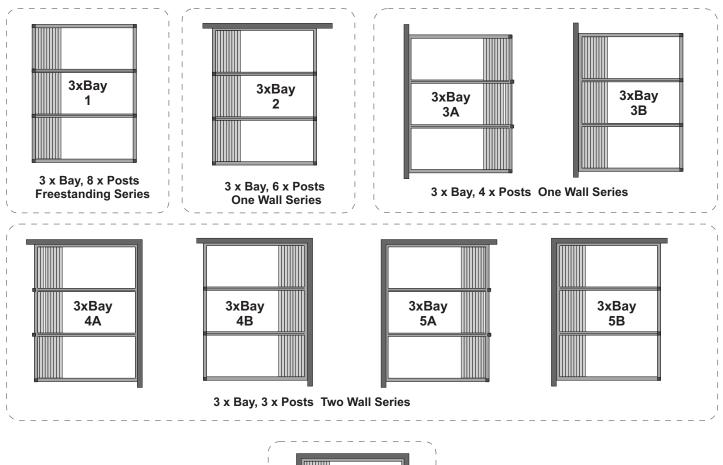


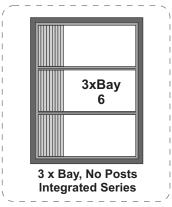
Juralco SunFold[®] Outdoor Living System - Standard Configurations These are our Standard Layouts - Many other configurations are possible. Please enquire Louvres can contract to either end.



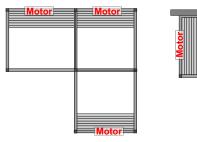
Juralco SunFold® Outdoor Living System - Standard Configurations

These are our Standard Layouts - Many other configurations are possible. Please enquire Louvres can contract to either end.

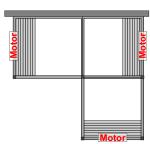




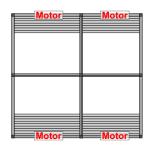
Some Possible Non Standard Layouts - Please enquire



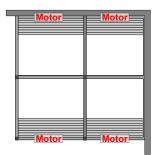
3xBay - Freestanding



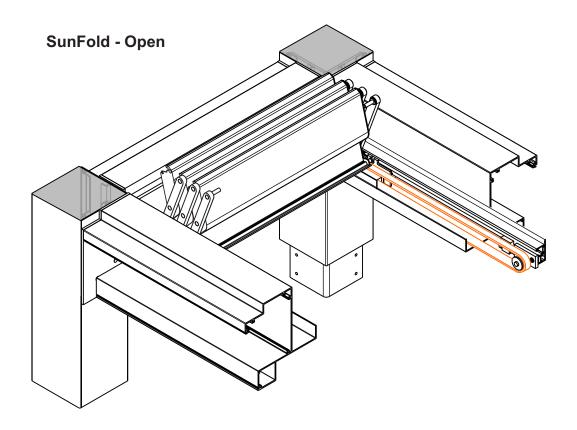
3xBay - One Wall

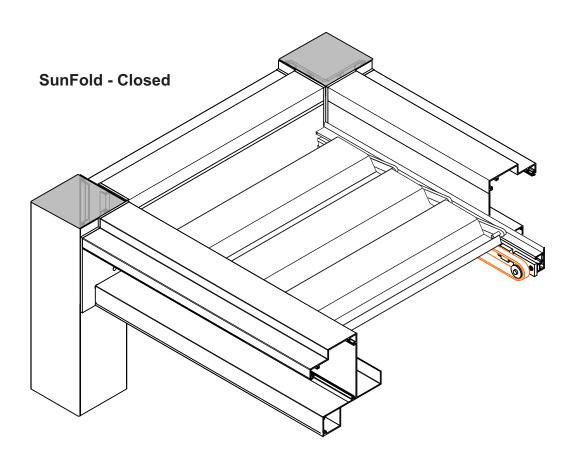


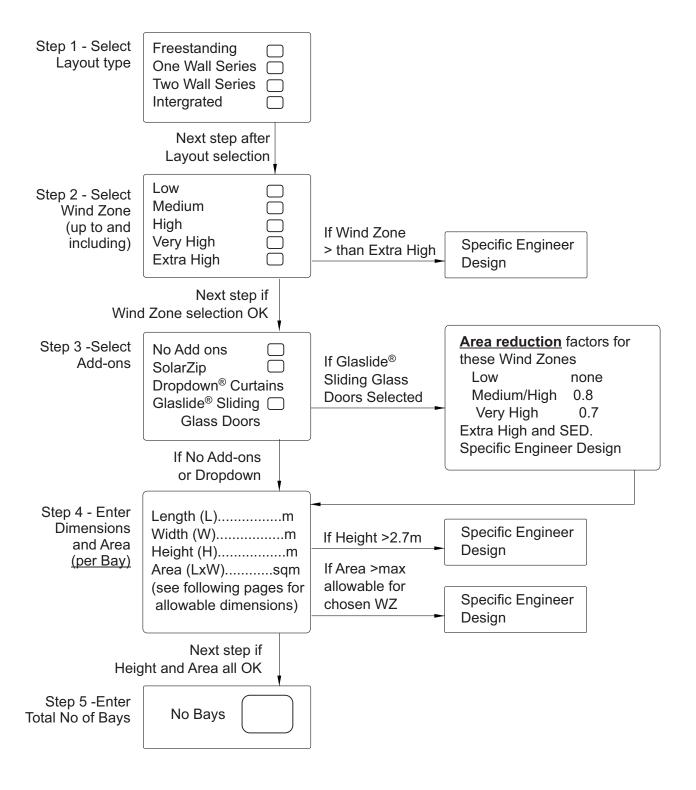
4xBay - Freestanding



4xBay - Two Wall







Notes:

- 1: The flow chart can be used to determine whether or not the design is acceptable under our Generic PS1. Where the design does not meet with the criteria laid out in the manual a Specific Engineered design must be used
- 2 : Only connections described in the manual can be used.
- 3: No substitute for products included in the manual can be used

SunFold, using JOR/818N louvres

SunFold system Whole Louvre calcs
Overall Lengths, Beam to Beam

815 to	815 to	
801	807	No louvres
OL	OL	louvies
1285	1210	5
1465	1390	6
1645	1570	7
1825	1750	8
2005	1930	9
2185	2110	10
2365	2290	11
2545	2470	12
2725	2650	13
2905	2830	14
3085	3010	15
3265	3190	16
3445	3370	17
3625	3550	18
3805	3730	19
3985	3910	20
4165	4090	21
4345	4270	22
4525	4450	23
4705	4630	24
4885	4810	25
5065	4990	26
5245	5170	27
5425	5350	28
5605	5530	29
5785	5710	30
5965	5890	31

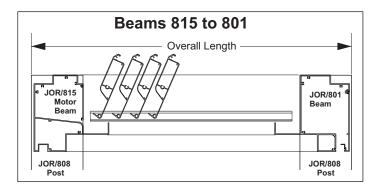
For the SunFold any OL length as per the Table up to -10mm, +10mm float range is permissible. OL outside this range is not allowed

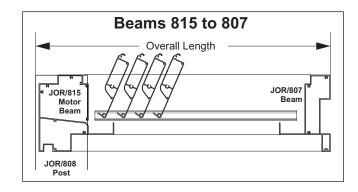
ie say for 815 to 807, an OL of 3500mm is wanted This is not possible.

Nearest possibility is 3550-10 = 3540mm

(815 Motor Beam to 801 Perimeter Beam, 815 Motor Beam to 807 Narrow Beam)

Max Widths for Beam Combinations	Max Width
801 Beam to 801 Beam	4200
801 Beam to 807 Beam	4125
807 Beam to 807 Beam	4050





Notes: 1 - All Overall Dimensions are to Post outsides (ie each Post projects out 5mm past beam)

2 - Unlike the SunPivot the SunFold cannot use Part louvres. See above for allowable Overall Length range

Juralco SunFold[®] Outdoor Living System - General Structural Considerations

Point Loads - Can be installed to Walls or Soffits only if properly strengthened at attach points

Distributed Loads - Can be installed to normal Walls or to under Soffits

Attachment Types

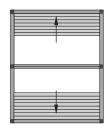
Point Loads + = Strengthened Wall or Soffit attachment only

Normal Wall or Soffit = Attach points over whole Width

Freestanding Series (2 x Bay example)

Total Uplift loads, according to the appropriate Wind Zone are resisted by the Foundations at each Post.

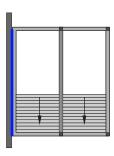
Post foundations can be Concrete masses in soil, a suitable continuous Concrete pad or connections to a Timber Deck.



Wall Series. Louvres Perpendicular to Wall (2 x Bay example)

Total Uplift loads, according to the appropriate Wind Zone are resisted by the Foundations/attachments. Post foundations can be Concrete masses in soil, a suitable continuous Concrete pad or connections to a Timber Deck. At the Wall/Soffit the load is equally distributed over the whole length. Multiple bracket attachments for Wall or Soffit are available.

The Project Engineer must ensure the structure can support the appropriate loads.

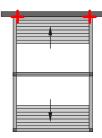


Wall Series. Louvres Parallel to Wall (2 x Bay example)

Total Uplift loads, according to the appropriate Wind Zone are resisted by the Foundations/attachments. Post foundations can be Concrete masses in soil, a suitable continuous Concrete pad or connections to a Timber Deck. At the Wall the load is concentrated.

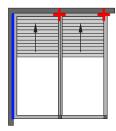
This type is **not suitable** for Wall or Soffit mounting unless strengthening work is undertaken.

The Project Engineer must ensure the structure can support the appropriate loads.



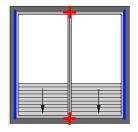
Two Wall Series. (2 x Bay example)

These are a combination of the two Wall types above. Distributed (Wall or Soffit) and Point (Wall only) loads.



Integrated Series. No Posts. (2 x Bay example)

As for Two Wall series above. Louvres Perpendicular to Wall - OK for direct Wall attachment. Louvres Parallel to Wall - See comments above





Available as Single or MultiBay

Electrically operated with Wireless Remotes

SolarZip® Dropscreens available for Shade protection

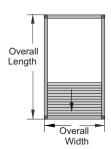
Glaslide[®] Sliding Glass doors available for Wind protection

Mounting to Timber or Concrete decks.

Refer to the Flow Chart to find allowable Design under the Generic PS1

Specific Engineers design available, see notes below

Single Bay Freestanding

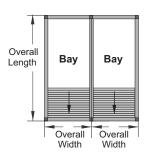


		Area and ions, per Bay		alues, r Post
Wind Zone	Area Max sqm	Approx Max Dimensions	Uplift kN	Concrete m ³
Low	22.8		4.18	0.18
Medium	22.8	Per Bay Overall Width	5.59	0.24
High	22.8	max 4.2m	7.90	0.34
Very High	17.6	Overall Length max 5.8m	7.92	0.34
Extra High	14.5	111dx 0.0111	7.03	0.31

Use this figure as a basis for strength calculations if attaching to other than Concrete

Use this figure if attaching Concrete

Multi Bay Freestanding (2 or more bays)



			All values, per Post				
		rea and ons, per Bay		es to Outer x Posts	Applies to Central 2 x Posts		
Wind Zone	Area Max sqm	Approx Max Dimensions	Uplift kN	Concrete m ³	Uplift kN	Concrete m ³	
Low	22.8	Overall Width 4.2m max	4.18	0.18	8.36	0.36	
Medium	22.8	Overall Length	5.59	0.24	11.18	0.49	
High	22.8	5.8m max (these will vary	7.90	0.34	15.89	0.69	
Very High	17.6	slightly with	7.92	0.34	15.84	0.69	
Extra High	14.5	combinations)	7.03	0.31	14.06	0.61	

Use these figures as a basis for strength calculations if attaching to other than Concrete

Use these figures if attaching Concrete

Notes

- 1 For Posts, for all configurations Max Height is 2.7m.
- 2 The Project engineer must ensure the structure can support the appropriate loads
- 3 If Glaslide Sliding Glass doors are attached to the structure max Areas for ea **Wind Zone are** reduced Low/Medium WZ- no reduction, High WZ 0.8, Very High WZ 0.7, Extra High and SED, Specific Design required

1 x Wall - Available as Single or MultiBay SolarZip Dropscreens, Glaslide Sliding Glass Doors, options Wireless Controls

Available as Single or MultiBay

Electrically operated with Wireless Remotes

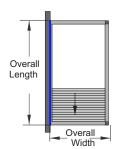
SolarZip® Dropscreens available for Shade protection

Glaslide® Sliding Glass doors available for Wind protection

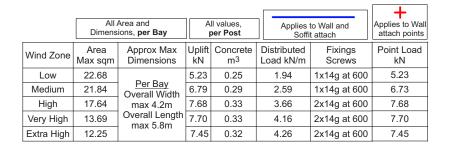
Mounting to Timber or Concrete decks.

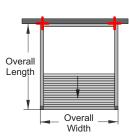
Refer to the Flow Chart to find allowable Design under the Generic PS1

Specific Engineers design available, see notes below



One Wall Series





Bay Bay Overall Length Overall Overall

Bay Bay Overall Length Overall Overall Width

Multi Bay One Wall Series (2 or more bays)

		rea and ons, per Bay	All values, per Post Applies to Outer 2 x Posts Applies to Centra 2 x Posts			to Central		to Wall and t attach	Applies to Outer Wall attach points	Applies to Central Wall attach point
Wind Zone	Area Max sqm	Approx Max Dimensions	Uplift kN	Concrete m ³	Uplift kN	Concrete m ³	Distributed Load kN/m	Fixing Screws	Point Load kN	Point Load kN
Low	22.68	Overall Width	5.23	0.23	10.45	0.45	1.94	1x14g @600	5.23	10.45
Medium	21.84	4.2m max Overall Length	6.73	0.29	13.45	0.58	2.59	1x14g @600	6.73	13.45
High	17.64	5.8m max (these will vary	7.68	0.33	15.37	0.67	3.66	2x14g @600	7.68	15.37
Very High	13.69	slightly with	7.70	0.33	15.40	0.67	4.16	2x14g @600	7.70	15.40
Extra High	12.25	combinations)	7.45	0.32	14.91	0.65	4.26	2x14g @600	7.45	14.91

- 1 For Posts, for all configurations Max Height is 2.7m.
- 2 The Project engineer must ensure the structure can support the appropriate loads
- 3 If Glaslide Sliding Glass doors are attached to the structure max Areas for ea Wind Zone are reduced Low/Medium WZ- no reduction, High WZ 0.8, Very High WZ 0.7, Extra High and SED, Specific Design required



Available as Single or MultiBay

Electrically operated with Wireless Remotes

SolarZip® Dropscreens available for Shade protection

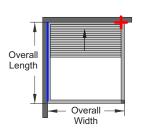
Glaslide[®] Sliding Glass doors available for Wind protection

Mounting to Timber or Concrete decks.

Refer to the Flow Chart to find allowable Design under the Generic PS1

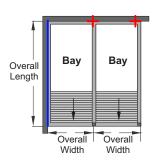
Specific Engineers design available, see notes below

Two Wall Series



		Area and ons, per Bay		l values, er Post		o Wall and attach	Applies to Wall attach point
Wind Zone	Area Max sqm	Approx Max Dimensions	Uplift kN	Concrete m ³	Distributed Load kN/m	9 .	Point Load kN
Low	22.68	1	5.23	0.23	1.94	1x14g @600	5.23
Medium	21.84	Per Bay Overall Width	6.73	0.29	2.59	1x14g @600	6.73
High	17.64	max 4.2m	7.68	0.33	3.66	2x14g @600	7.68
Very High	13.69	Overall Length max 5.8m	7.70	0.33	4.16	2x14g @600	7.70
Extra High	12.25	max 5.0m	7.45	0.32	4.26	2x14g @600	7.45

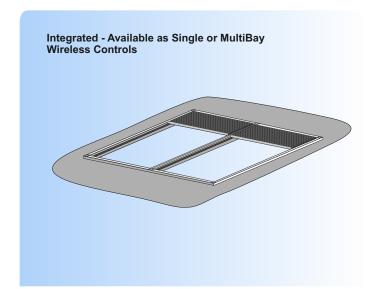
Multi Bay Two Wall Series (2 or more bays)



		[All values, per Post						Applies to	Applies to
		Area and ons, per Bay		es to Outer x Post		s to Centre x Post		o Wall and attach		Central Wall attach point
Wind Zone	Area Max sqm	Approx Max Dimensions	Uplift kN	Concrete m ³	Uplift kN	Concrete m ³	Distributed Load kN/m	Fixing Screws	Point Load kN	Point Load kN
Low	22.68	Overall Width	5.23	0.23	10.45	0.45	1.94	1x14g @600	5.23	10.45
Medium	21.84	4.2m max Overall Length	6.75	0.29	13.45	0.58	2.59	1x14g @600	6.73	13.45
High	17.64	5.8m max (these will vary	7.68	0.33	15.37	0.67	3.66	2x14g @600	7.68	15.37
Very High	13.69	slightly with	7.70	0.33	15.40	0.67	4.16	2x14g @600	7.70	15.400
Extra High	12.25	combinations)	7.45	0.32	14.91	0.65	4.26	2x14g @600	7.45	14.91

Notes:

- 1 For Posts, for all configurations Max Height is 2.7m.
- 2 The Project engineer must ensure the structure can support the appropriate loads
- 3 If Glaslide Sliding Glass doors are attached to the structure max Areas for ea **Wind Zone are** <u>reduced</u> Low/Medium WZ- no reduction, High WZ 0.8, Very High WZ 0.7, Extra High and SED, Specific Design required



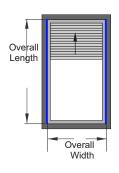
Available as Single or MultiBay

Electrically operated with Wireless Remotes

Refer to the Flow Chart to find allowable Design under the Generic PS1

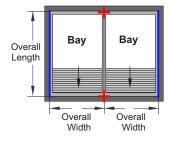
Specific Engineers design available, see notes below

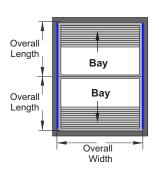
Single Bay Intergrated Series



		rea and ons, per Bay		
Wind Zone	Area Max sqm	Approx Max Dimensions	Distributed Load kN/m	Fixings Screws
Low	22.68	1	1.94	1x14g at 600
Medium	21.84	Per Bay Overall Width	2.59	1x14g at 600
High	17.64	max 4.2m	3.66	2x14g at 600
Very High	13.69	Overall Length max 5.8m	4.16	2x14g at 600
Extra High	12.25	111ax 5.0111	4.26	2x14g at 600

Multi Bay Intergrated Series (2 or more bays)



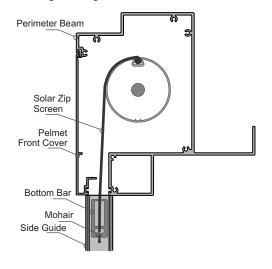


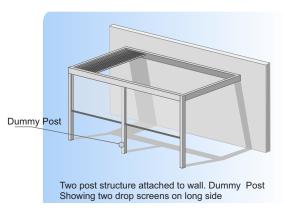
		area and ons, per Bay	Applies to	Wall attach	Applies to Inner Wall attach points
Wind Zone	Area Max sqm	Approx Max Dimensions	Distributed Load kN/m	Fixing Screws	Point Load kN
Low	22.68	Overall Width	1.94	1x14g @600	10.45
Medium	21.84	Overall Length	2.59	1x14g @600	13.45
High	17.64	5.8m max (these will vary	3.66	2x14g @600	15.37
Very High	13.69	slightly with	4.16	2x14g @600	15.40
Extra High	12.25	combinations)	4.26	2x14g @600	14.91



Juralco SolarZip Dropdown

- For afternoon sun shade protection
- When retracted hidden completely in the Perimeter beam (Note can't be used inside a Motor Beam)
- Curtain edges run inside guide rails.
- Motorised only.
- Wireless controls
- All units come with Wind Sensors to automatically retract if winds get too high





- For Side openings greater than 4m a Dummy Post can be used to give a 4m max opening
 - For more details please Refer to the Juralco Solar Zip Dropscreen manual



Juralco Glaslide System

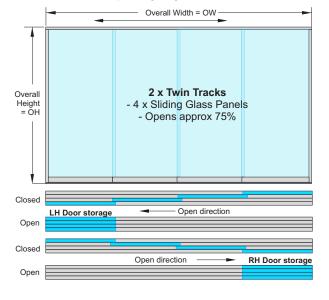
- For wind protection
- Can attach the Glaslide system to the SunFold framework
- Glass panels max 1.1m Wide ex 15mm Toughened Glass.
- Panels slide and stack to a max panel width of 1.1m
- Max Glass Panel Heights when installed in the Sunfold system

Wind Zone	Glass Height m
Low	2.7m
Medium	2.6m
High	2.4m
Very High	2.2m
Extra High	NA

- The incorporation of a Glaslide Sliding Door panel system as part of a Sunfold frame will cause a reduction of the max allowable Area for any given Wind Zone.

Low WZ - no reduction Medium/High WZ 0.8, Very High WZ 0.7 Extra High WZ and above - Specific Design only.

Available as Twin and Triple tracks incorporating Magnetic latches



- For more details please Refer to the Juralco Glaslide manual

Juralco SunFold® Living Systems - Lighting

Lighting.

The SunFold® system is designed to be installed outside, suitable lighting will extend its evening use for entertaining and relaxing. Many lighting solutions exist, depending on client requirements; the following are recommendations only.

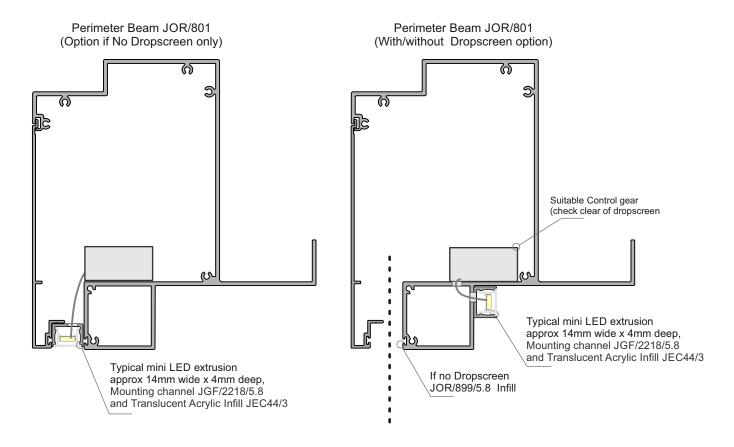
LED Striplights, enclosed on extrusions with diffuser covers are available in a variety of shapes from a variety of suppliers.

Most of these are quite small, about 20mm wide x 10mm deep, and usually up to 2m long.

Waterproof strips only 11mm wide x 3mm deep (IP 67) can be obtained up to 10m long.

Attachment with suitable double sided tape is satisfactory.

Control gear can be housed inside the JOR/801 extrusion. Dimming and colour changing are possible options.

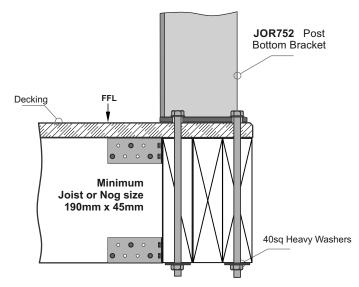


Mindy TT1L miniaturised receiver control units with pass-through installation, IP55 protection. With radio-controls 433.92 MHZ receiver with over 4.5 million billion combinations. Self-recognition of the transmitters of the NiceWay series with 2, 4 or 6 channels. TT1 L for Lighting control Ultra compact 96mm long x 26 x20mm

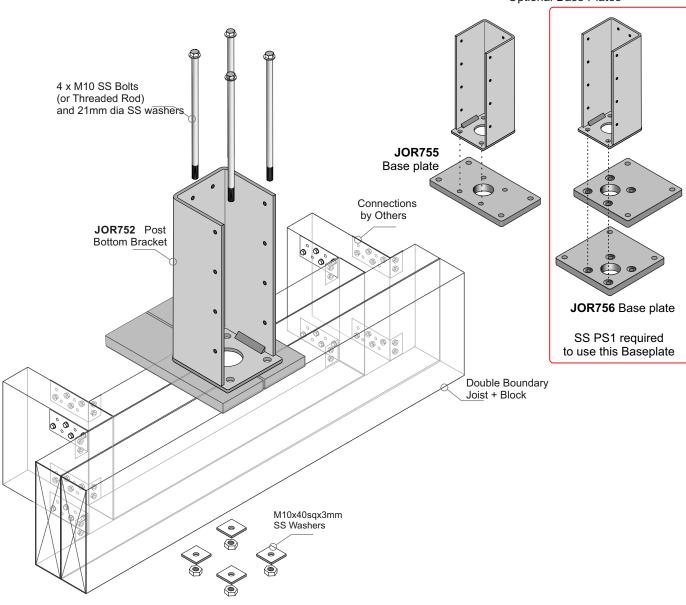
Juralco SunFold[®] Living Systems - Structural - Typical Post Fixings to Timber Decks <u>Complies with NZS3604:2011</u> - Double Boundary Joists

Typical Top Fix to Timber (Deck Outer edge) - Post Bottom Bracket JOR752 + M10SS Bolts

- 1 The Project Engineer must ensure the structure can support the appropriate loads
- 2 Substructure shown indicatively only.
- 3 Timber SG8 minimum strength
- 4 All Fixings must be Stainless steel



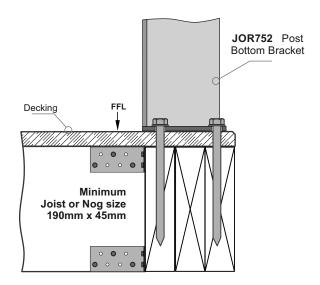
JOR752 Post Bottom Bracket + Optional Base Plates



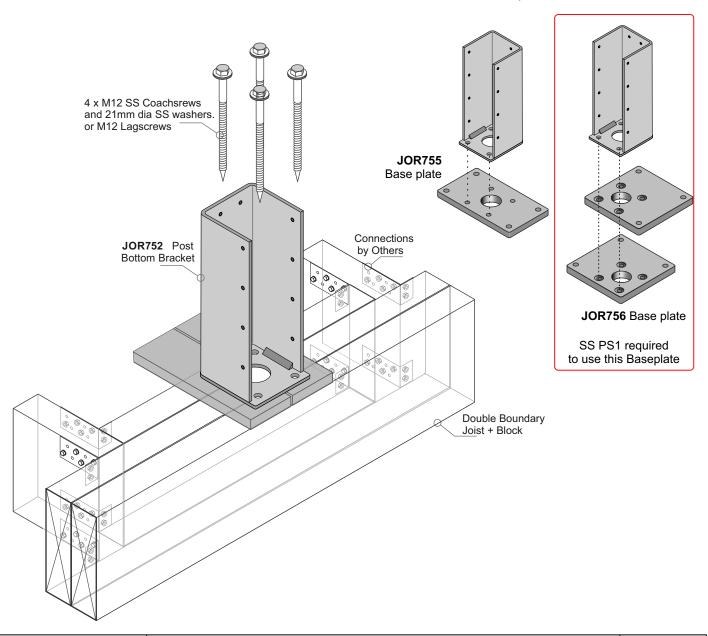
Juralco SunFold[®] Living Systems - Structural - Typical Post Fixings to Timber Decks <u>Complies with NZS3604:2011</u> - Double Boundary Joists

Typical Top Fix to Timber (Deck Outer edge) - Post Bottom Bracket JOR752 + M12SS Coachscrews, or Lagscrews

- 1 The Project Engineer must ensure the structure can support the appropriate loads
- 2 Substructure shown indicatively only.
- 3 Timber SG8 minimum strength
- 4 Coachscrews 150mm min engagement into joists. Predrill 6mm holes
- 5 Bond all Coachscrews with SIKA Supergrip30 to full depth
- 6 All Fixings must be Stainless steel



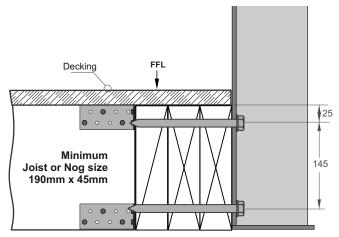
JOR752 Post Bottom Bracket + Optional Base Plates

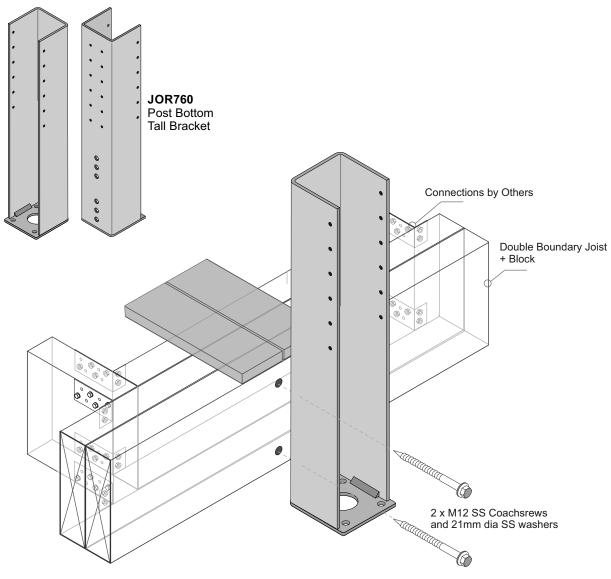


Juralco SunFold[®] Living Systems - Structural - Typical Post Fixings to Timber Decks <u>Complies with NZS3604:2011</u> - Double Boundary Joists

Typical FACE Fix to Timber (Deck Outer Edge) - Post Bottom Bracket JOR760 + M12 SS Coachscrews

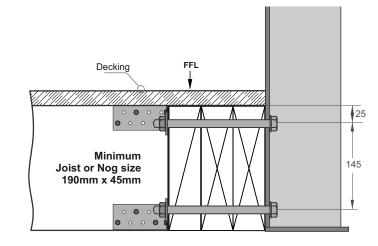
- 1 The Project Engineer must ensure the structure can support the appropriate loads
- 2 Substructure shown indicatively only.
- 3 Timber SG8 minimum strength
- 4 Coachscrews full engagement into joists.
 Predrill 6mm holes
- 5 Bond all Coachscrews with SIKA Supergrip30 to full depth
- 6 All Fixings must be Stainless steel

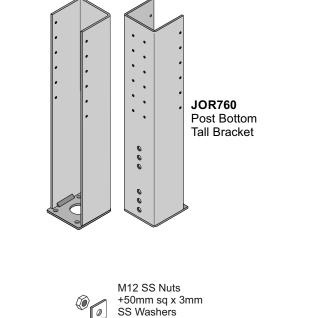


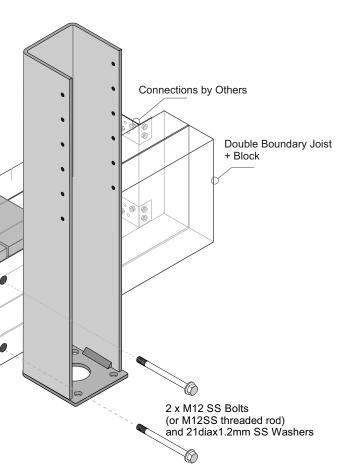


Typical FACE Fix to Timber (Deck Outer Edge) - Post Bottom Bracket JOR760 + M12 SS Bolts

- 1 The Project Engineer must ensure the structure can support the appropriate loads
- 2 Substructure shown indicatively only.
- 3 Timber SG8 minimum strength
- 4 All Fixings must be Stainless steel



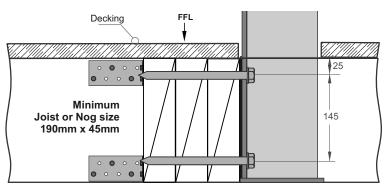


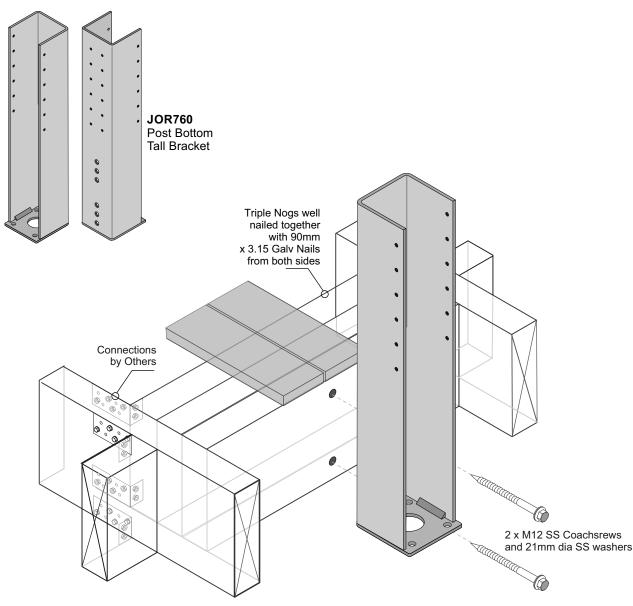


Juralco SunFold[®] Living Systems - Structural - Typical Post Fixings to Timber Decks Complies with NZS3604:2011 - Double Boundary Joists

Typical FACE Fix to Timber (Deck Inner Area) - Post Bottom Bracket JOR760 + M12 SS Coachscrews

- 1 The Project Engineer must ensure the structure can support the appropriate loads
- 2 Substructure shown indicatively only.
- 3 Timber SG8 minimum strength
- 4 Coachscrews full engagement into joists. Predrill 6mm holes
- 5 Bond all Coachscrews with SIKA Supergrip30 to full depth
- 6 All Fixings must be Stainless steel

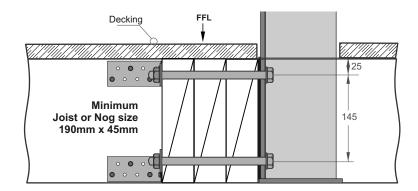


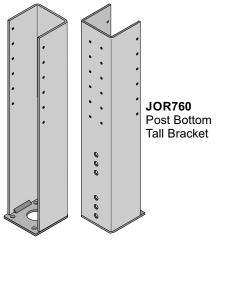


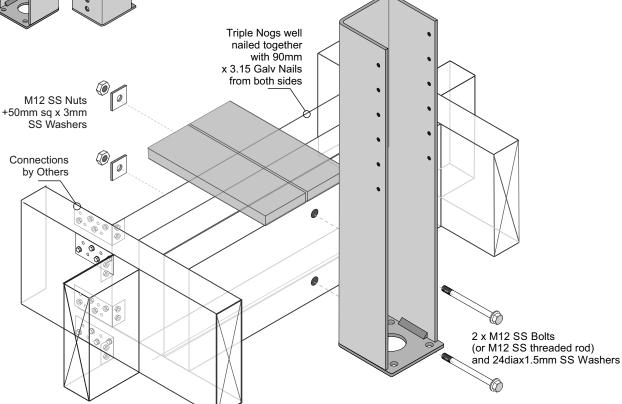
Juralco SunFold[®] Living Systems - Structural - Typical Post Fixings to Timber Decks Complies with NZS3604:2011 - Double Boundary Joists

Typical FACE Fix to Timber (Deck Inner Area) - Post Bottom Bracket JOR760 + M12 SS Bolts

- 1 The Project Engineer must ensure the structure can support the appropriate loads
- 2 Substructure shown indicatively only.
- 3 Timber SG8 minimum strength
- 4 All Fixings must be Stainless steel







Typical Top Fix to Concrete Footing - Post Bottom Bracket JOR752 or JOR760 + M12 SS Studs

Important Installation notes:

- 1 The Project Engineer must ensure the structure can support the appropriate loads
- 2 Substructure shown indicatively only
- 3 All fixings must engage into the structural slab
- 4 A PVC Tape layer must be installed between the Base plate and Concrete
- 5 All fixings must be Stainless steel



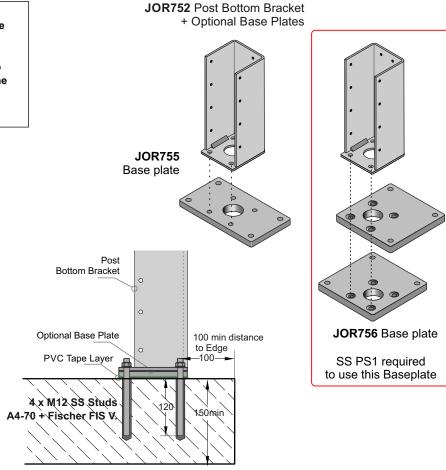
Drilling method

Drill hole cleaning

4 times blowing, 4 times brushing,

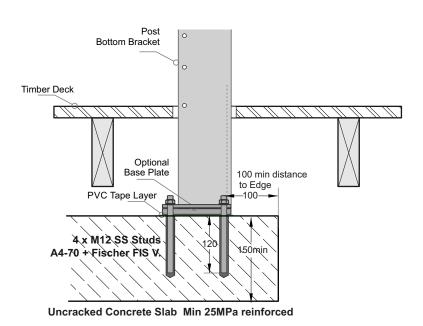
4 times blowing

No borehole cleaning required in case of using a hollow drill bit, e.g. fischer FHD.

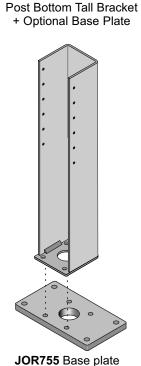


Uncracked Concrete Slab Min 25MPa reinforced

Typical Mounting to Concrete Footing



Typical Mounting to Concrete Footing through a Timber Deck, using extra long Corner Post Bracket



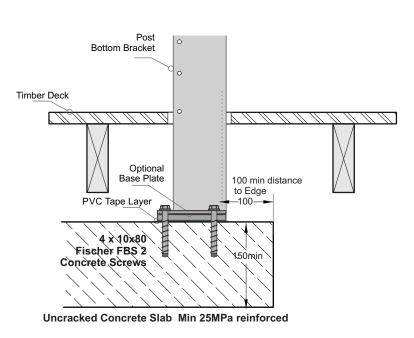
JOR760

Typical Top Fix to Concrete Slab - Post Bottom Brackets JOR752 or JOR760 + M10SS Fischer Screws

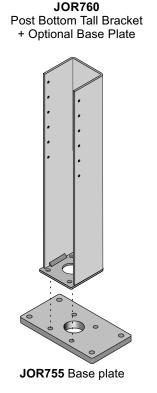
JOR752 Post Bottom Bracket + Optional Base Plates Important Installation notes: 1 - The Project Engineer must ensure the structure can support the appropriate loads 2 - Substructure shown indicatively only 3 - All fixings must engage into the structural slab 4 - A PVC Tape layer must be installed between the **Base plate and Concrete** 5 - All fixings must be Stainless steel JOR755 Base plate Installation details Fischer FBS 2 Concrete Screw 10x80 Thread diameter 12_{mm} Post Drill hole diameter = 10 mm Bottom Bracket Drill hole depth = 75 mm Anchorage depth = 65 mm Drilling method Hammer drilling JOR756 Base plate Optional Base Plate Drill hole cleaning 4 times blowing, 100 min distance 4 times brushing, to Edge **PVC Tape Layer** SS PS1 required 100-4 times blowing to use this Baseplate No borehole cleaning required in case 4 x 10x80 of using a hollow drill bit, e.g. fischer FHD. Fischer FBS 2 150min Concrete Screws

Typical Mounting to Concrete Slab

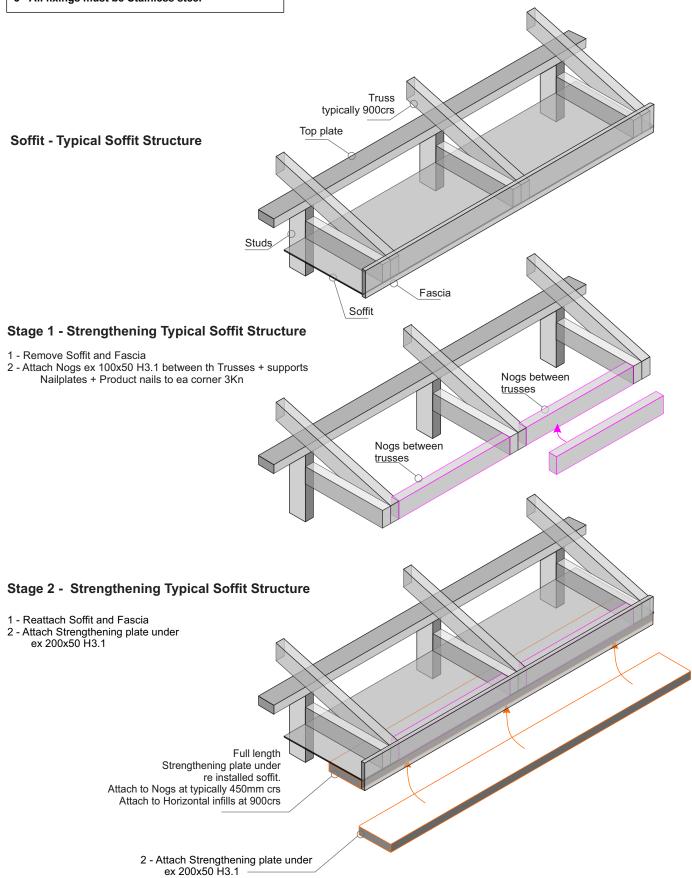
Uncracked Concrete Slab Min 25MPa reinforced



Typical Mounting to Concrete Slab through a Timber Deck, using Tall Post Bracket



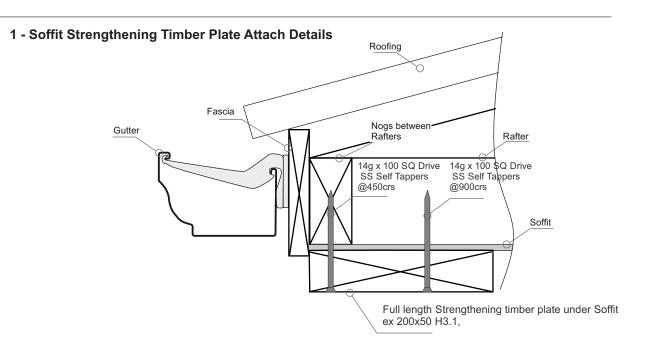
- 1 The Project Engineer must ensure the structure can support the appropriate loads
- 2 Substructure shown indicatively only
- 3 All fixings must be Stainless steel



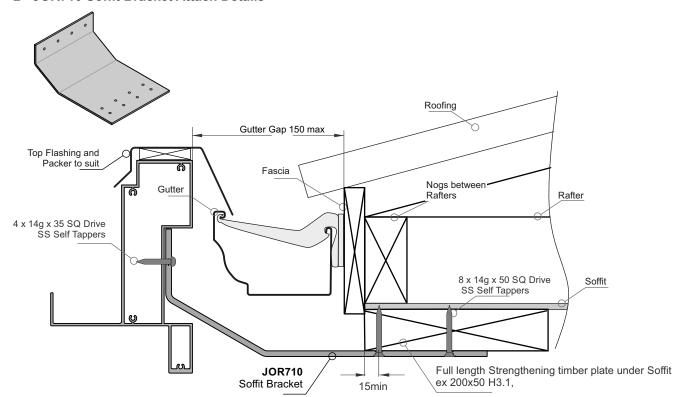
- 1 The Project Engineer must ensure the structure can support the appropriate loads
- 2 Substructure shown indicatively only
- 3 All fixings must be Stainless steel

Notes:

1 - Applies to Soffit overhangs of 400mm or less. You will need site specific Engineering if greater than 400mm



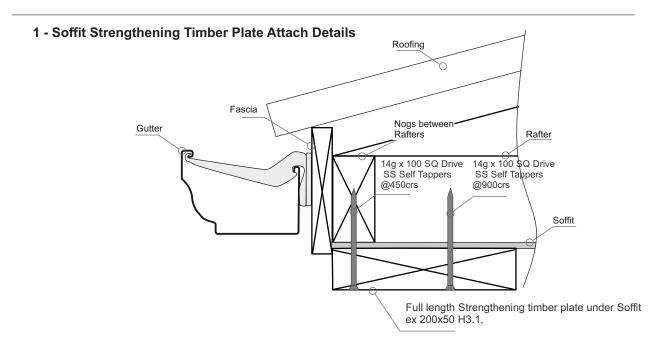
2 - JOR710 Soffit Bracket Attach Details

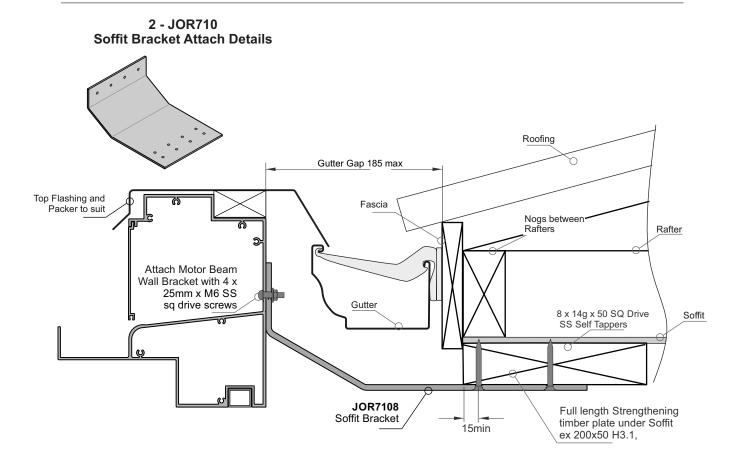


- 1 The Project Engineer must ensure the structure can support the appropriate loads
- 2 Substructure shown indicatively only
- 3 All fixings must be Stainless steel

Notes:

1 - Applies to Soffit overhangs of 400mm or less. You will need site specific Engineering if greater than 400mm



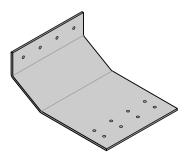


Juralco SunFold® Outdoor Living System - Soffit Steel Brackets

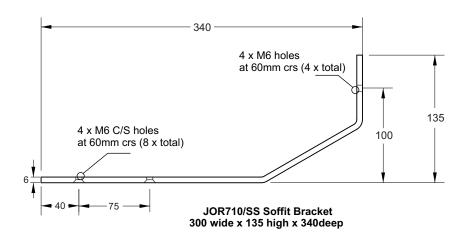
JOR710/SS Soffit Bracket. All ex 6mm Stainless Steel Attach the JOR710 with 4 x 14g x SQ Drive SS Self Tappers attached as per minimum spacings below to a full length strenghtening plate to Nogs and Rafters

For Distributed Loads only - Louvres perpendicular to Walls

SunFold Max Total allowable Dimensions 4.2m Width x 5.8m Length					
Wind Zone	Max Roof Width. m	Max Bracket Spacing m			
Low	4.2	0.8			
LOW	3.2	1.0			
Medium	4.2	0.6			
Medium	3.2	0.8			
Lliah	3.6	0.5			
High	2.6	8.0			
Von High	3.6	0.5			
Very High	2.4	0.8			
Evtro High	2.9	0.5			
Extra High	1.8	0.8			



JOR710/SS Soffit Bracket All ex 6mm SS 300 wide x 135 high x 340 deep

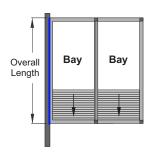


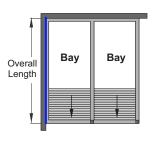
NOTE: Only applicable to Louvres perpendicular to Wall ie Distributed Load, Wall (or Soffit Attach)

Important Installation notes:

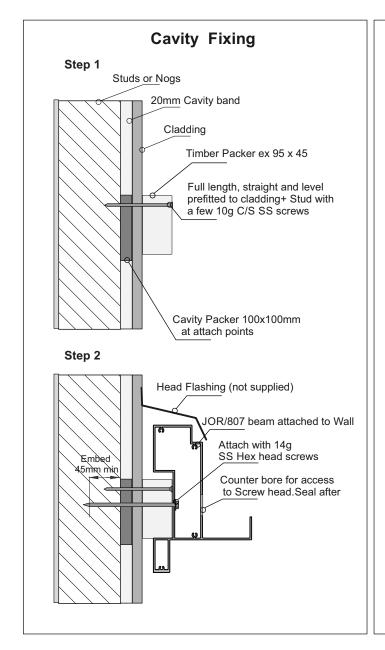
- 1 The Project Engineer must ensure the structure can support the appropriate loads
- 2 Substructure shown indicatively only
- 3 All fixings must be Stainless steel

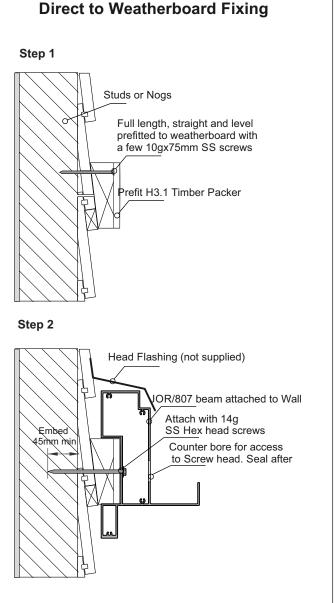
This for JOR/807 Narrow Beam Only attached to a Wall





Blue lines show Distributed load - Timber fixings -







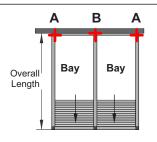
NOTE: Only applicable to Louvres aligned to Wall ie Point Load, Wall (or Soffit Attach)

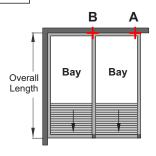


Important Installation notes:

- 1 The Project Engineer must ensure the structure can support the appropriate loads
- 2 Substructure shown indicatively only
- 3 All fixings must be Stainless steel

This for JOR/807 Narrow Beam Only. attached to a Wall





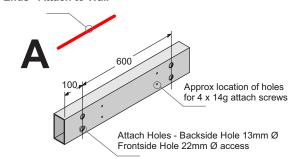


Red Cross show Point load - Steel fixings



Cavity Fixing Studs or Nogs 20mm Cavity band Cladding Head Flashing (Not supplied) M12 SS Attach JOR/87 to steel with Coachscrews 14g x 25mm Hex Washer face 90mm depth screws @600 crs into Studs Counter bore for access to 14g screw heads Counter bore for access to M12 screw heads Cavity Packer 100x100mm min at attach points

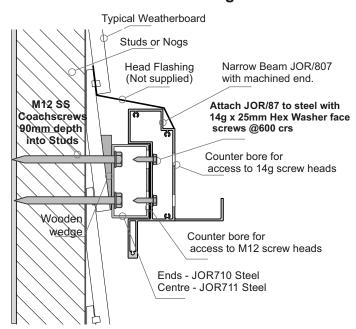
Ends - Attach to Wall

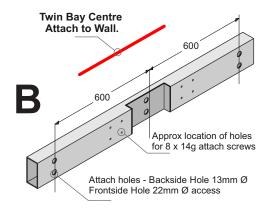


Steel RHS 100 x 50 x 3 x 0.8m. Duragalv securely screwed to studs or lintel with 4 x M12 SS Coachscrews.

Drill attach holes to line up with studs (if needed) or use existing holes into lintel Mount hard into JOR/807 beam corners

Direct to Weatherboard Fixing



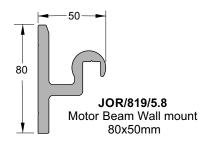


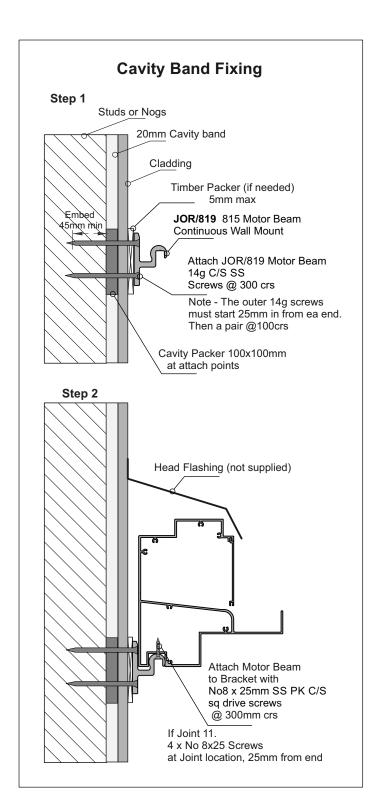
Steel RHS 100 x 50 x 3 x 1.4m. HD Galv securely screwed to studs or lintel with 6 x M12 SS Coachscrews.

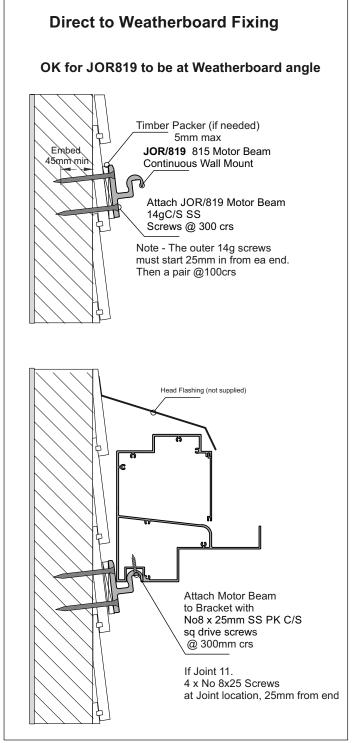
Drill attach holes to line up with studs (if needed) or use existing holes into lintel

- 1 The Project Engineer must ensure the structure can support the appropriate loads
- 2 Substructure shown indicatively only
- 3 All fixings must be Stainless steel

This for JOR/815 Motor Beam Only.







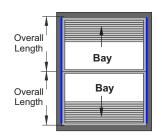
NOTE: Only applicable to Louvres perpendicular to Wall ie Distributed Load, Wall (or Soffit Attach)

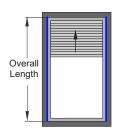
Important Installation notes:

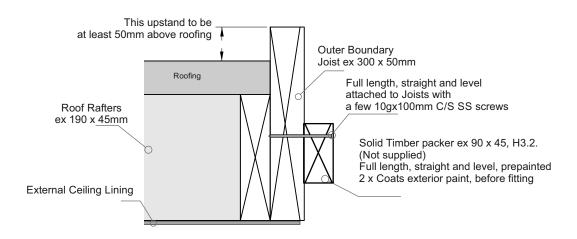
- 1 The Project Engineer must ensure the structure can support the appropriate loads
- 2 Substructure shown indicatively only
- 3 All fixings must be Stainless steel

This for JOR/807 Narrow Beam Only. as an Intergrated Structure

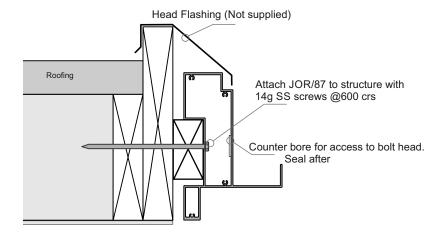
Blue lines show Distributed load - Timber fixings -







Typical Integrated Roof Construction. Boundary joists all very firmly attached to Roof rafters. Engineer to check structure



Recommenced Integrated Roof attachment to structure

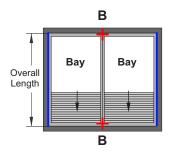
NOTE: Only applicable to Louvres aligned to Wall ie Point Load, Wall (or Soffit Attach)



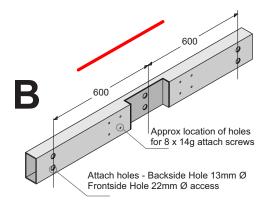
Important Installation notes:

- 1 The Project Engineer must ensure the structure can support the appropriate loads
- 2 Substructure shown indicatively only
- 3 All fixings must be Stainless steel

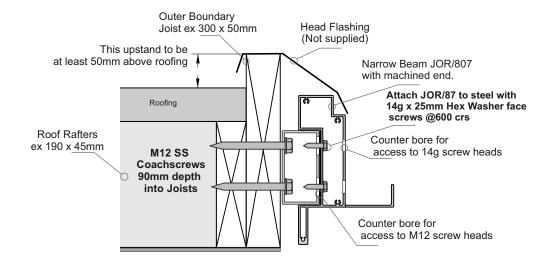
This for JOR/807 Narrow Beam Only. as Intergrated Structure



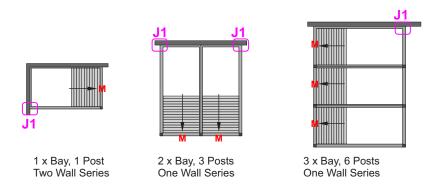
Red Cross show Point load - Steel fixings



Steel RHS 100 x 50 x 3 x 1.4m. HD Galv securely screwed to studs or lintel with 6 x M12 SS Coachscrews. Drill attach holes to line up with studs (if needed) or use existing holes into lintel



Juralco SunFold® Outdoor Living System - Joint Assemblies

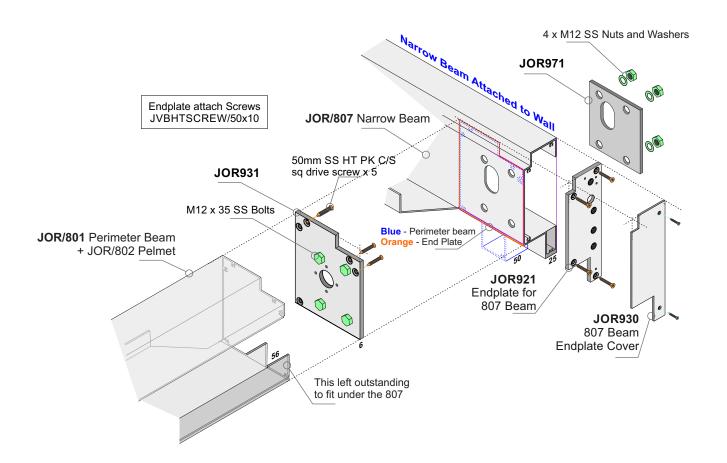


A Selection of some Layouts using Joint 1

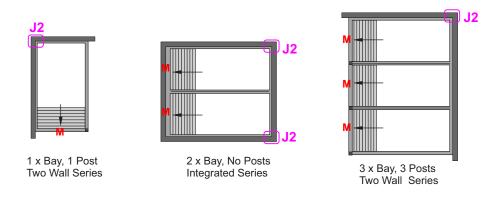
If Point load use Steel Bracket A **Inside the Narrow Beam**

JOINT

Perimeter Beam meets a Narrow beam at a Wall Can be RH or LH



Juralco SunFold® Outdoor Living System - Joint Assemblies

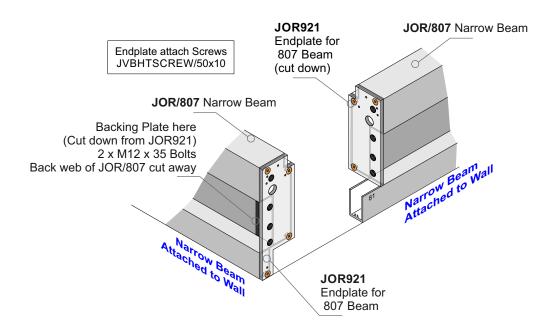


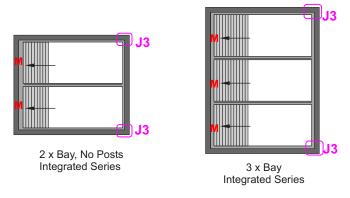
A Selection of some Layouts using Joint 2

If Point load use Steel Bracket A **Inside the Narrow Beam**

JOINT 2

Narrow Beam meets a Narrow beam on Walls. Can be RH or LH



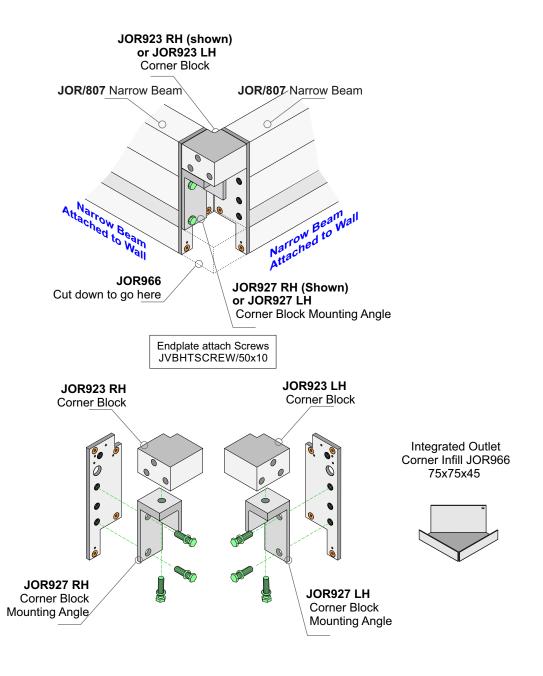


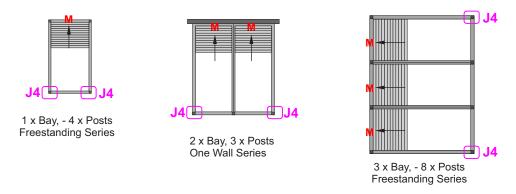
A Selection of some Layouts using Joint 3

If Point load use Steel Bracket A **Inside the Narrow Beam**

JOINT 3

Narrow Beam meets a Narrow beam on Walls (Integrated only. RH, LH identical))

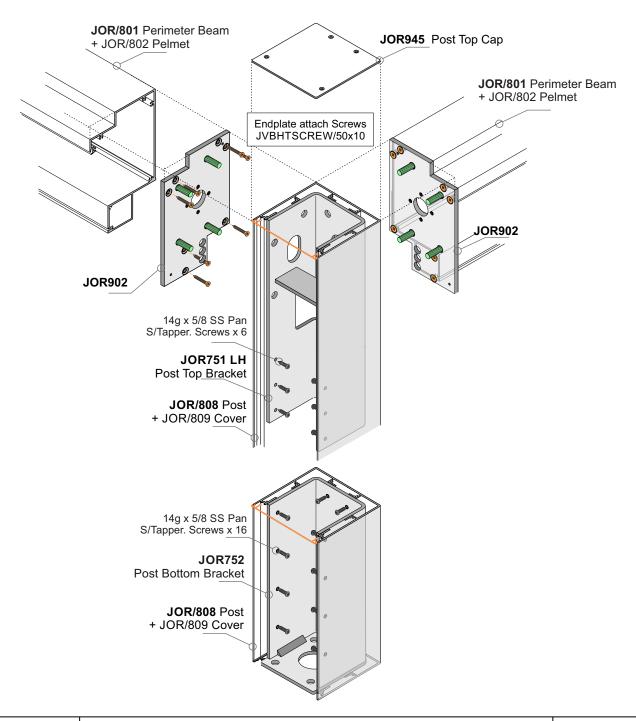


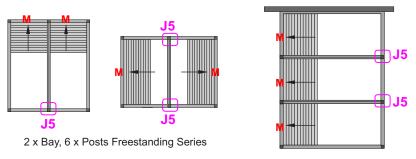


A Selection of some Layouts using Joint 4

JOINT 4

Perimeter Beam to Perimeter Beam at a Corner, using a Post Can be RH or LH



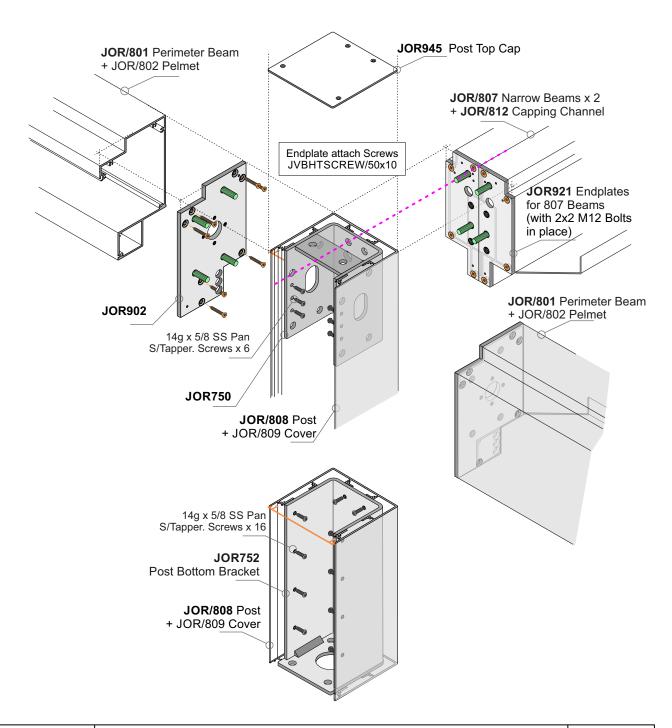


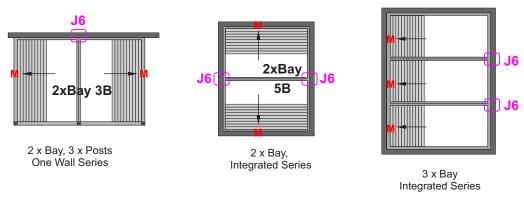
3 x Bay, 6 x Posts , One Wall Series

A Selection of some Layouts using Joint 5

JOINT 5

Perimeter Beams x 2 to Twin Narrow Beams (using a Post) RH, LH Identical



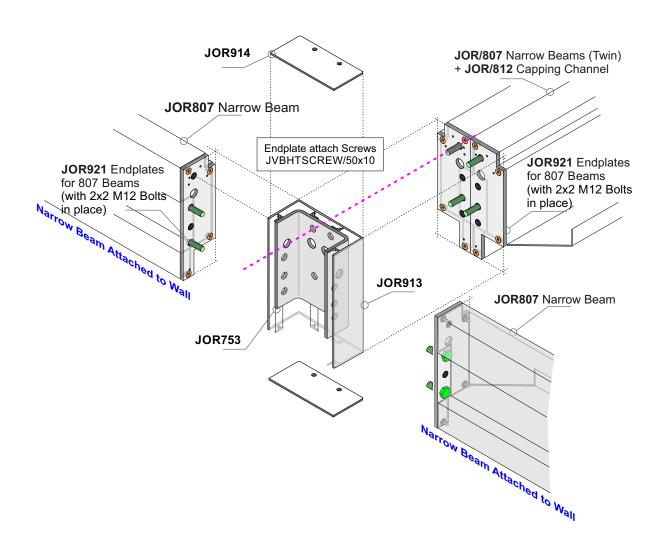


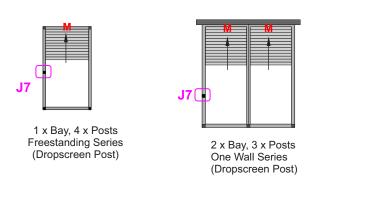
A Selection of some Layouts using Joint 6

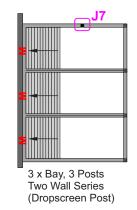
If Point load use Steel Bracket B **Inside both Narrow Beams**

JOINT 6

Narrow Beams x 2 (Wall mounted) to Twin Narrow Beams (No Post) RH, LH Joints identical



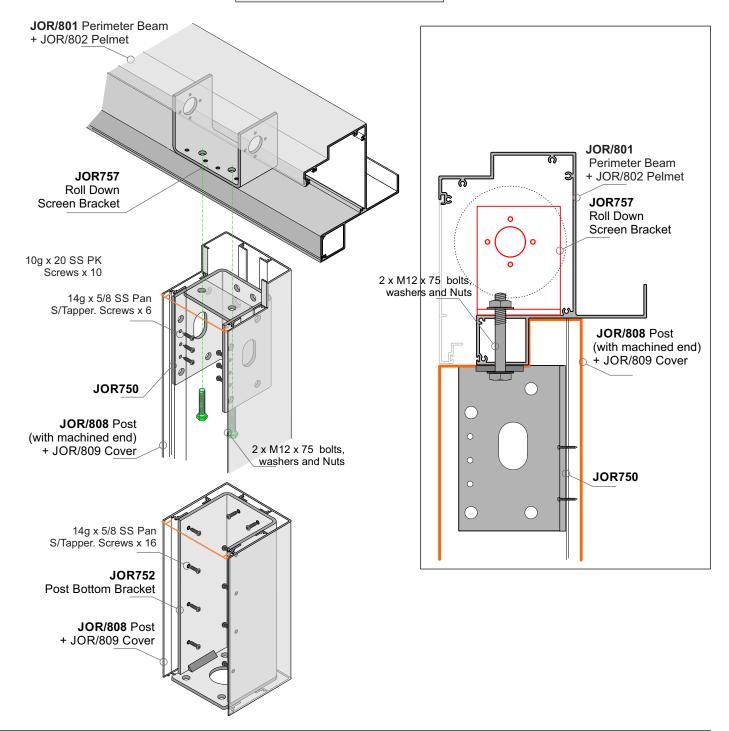


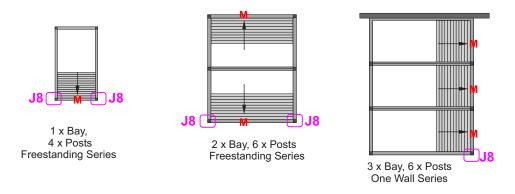


A Selection of some Layouts using Joint 7

JOINT 7

Intermediate Post to a Perimeter Beam as a Dropscreen Guide RH, LH Joints identical

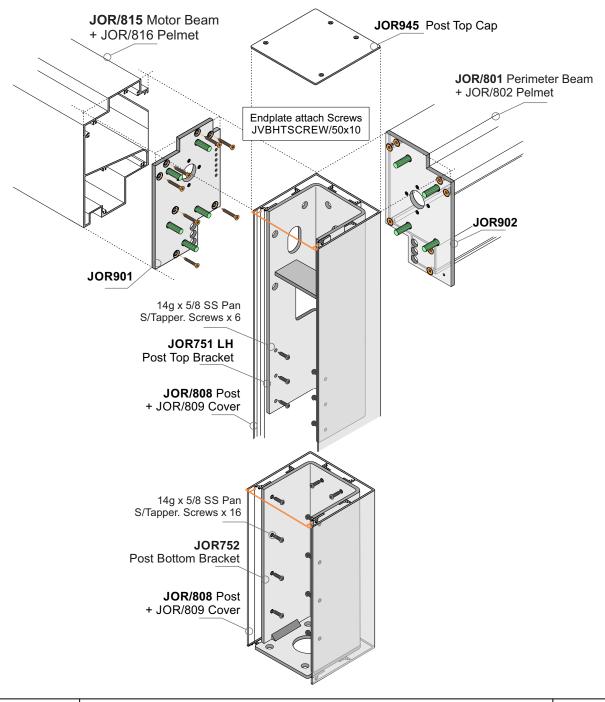


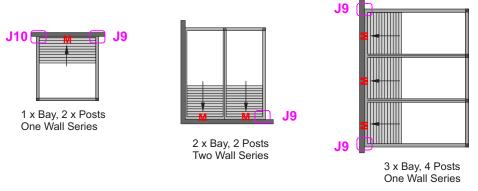


A Selection of some Layouts using Joint 8

JOINT 8

Motor Beam to Perimeter Beam at a Corner (using a Post)
Can be RH or LH

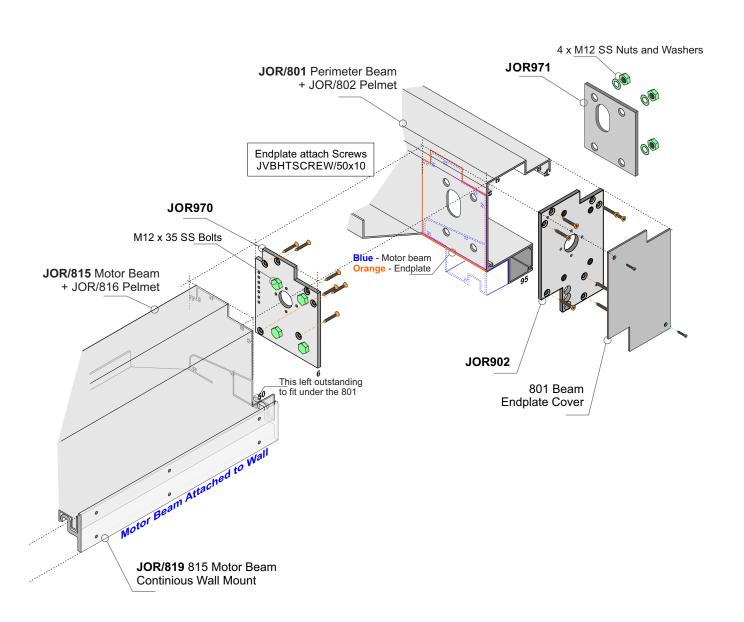


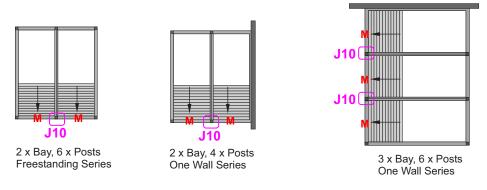


A Selection of some Layouts using Joint 9

JOINT 9

Motor Beam (Wall attached) to Perimeter Beam at a Corner (No Post) Can be RH or LH

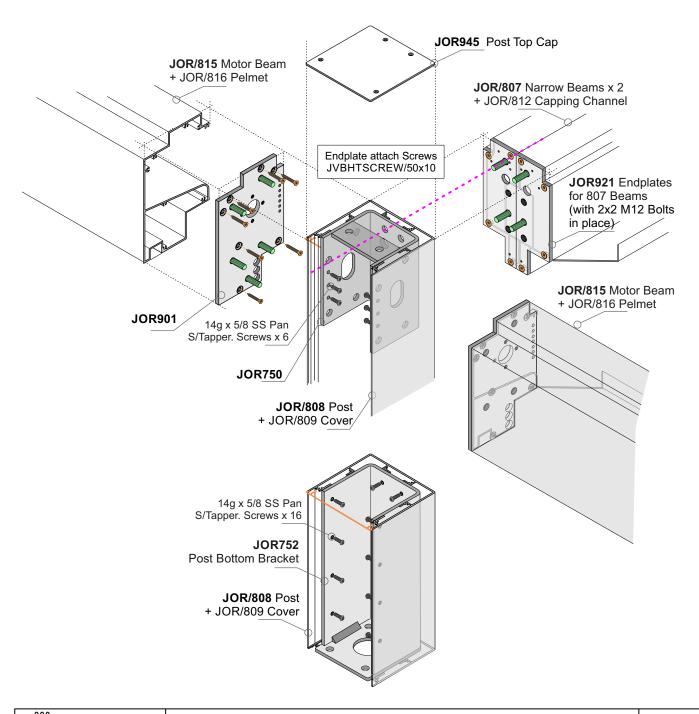


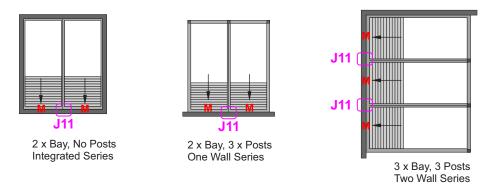


A Selection of some Layouts using Joint 10

JOINT 10

2 x Motor Beams to Twin Narrow Beams (using a Post) RH, LH identical

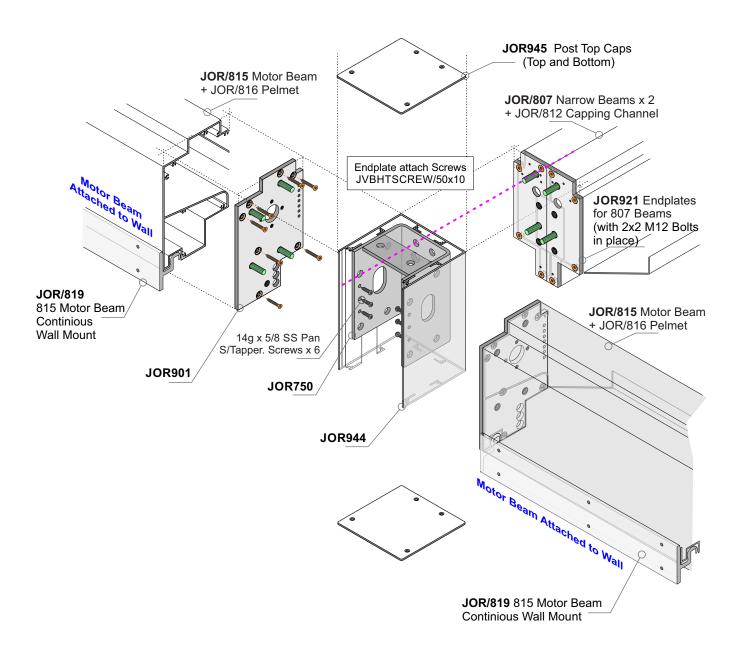


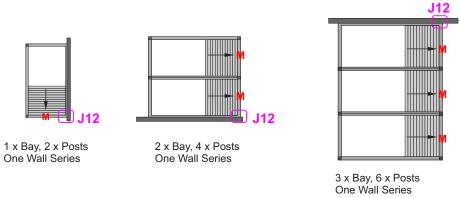


A Selection of some Layouts using Joint 11

JOINT 11

Motor Beams (Wall mounted) x 2 to Twin Narrow Beams (No Post) RH, LH identical

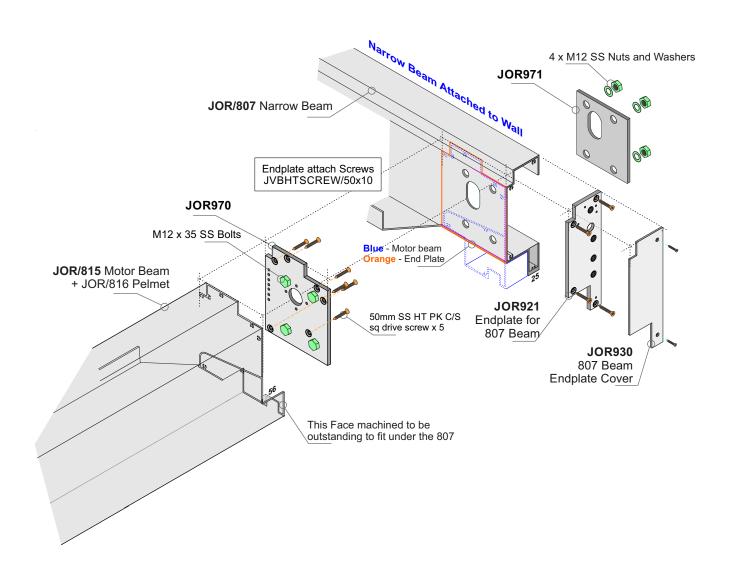


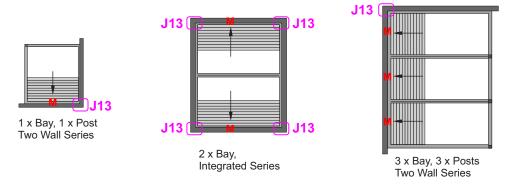


A Selection of some Layouts using Joint 12

JOINT 12

Motor Beam to Narrow Beam (Wall mounted, No Post) Can be RH or LH

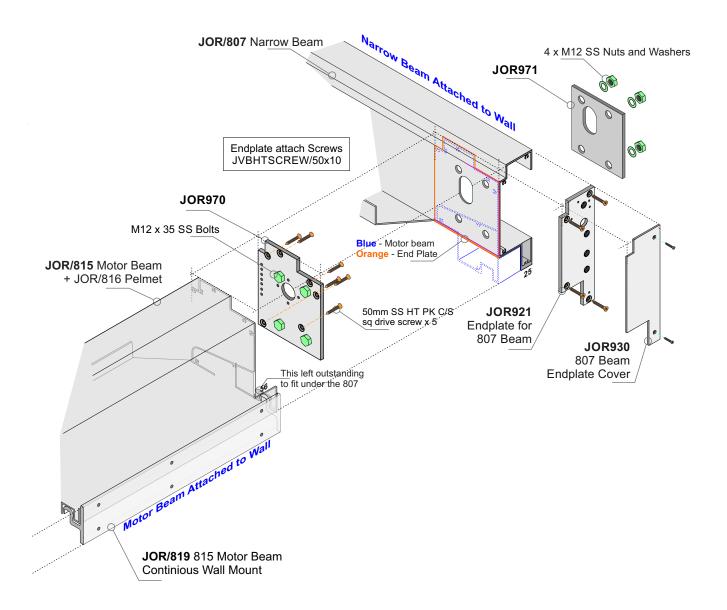




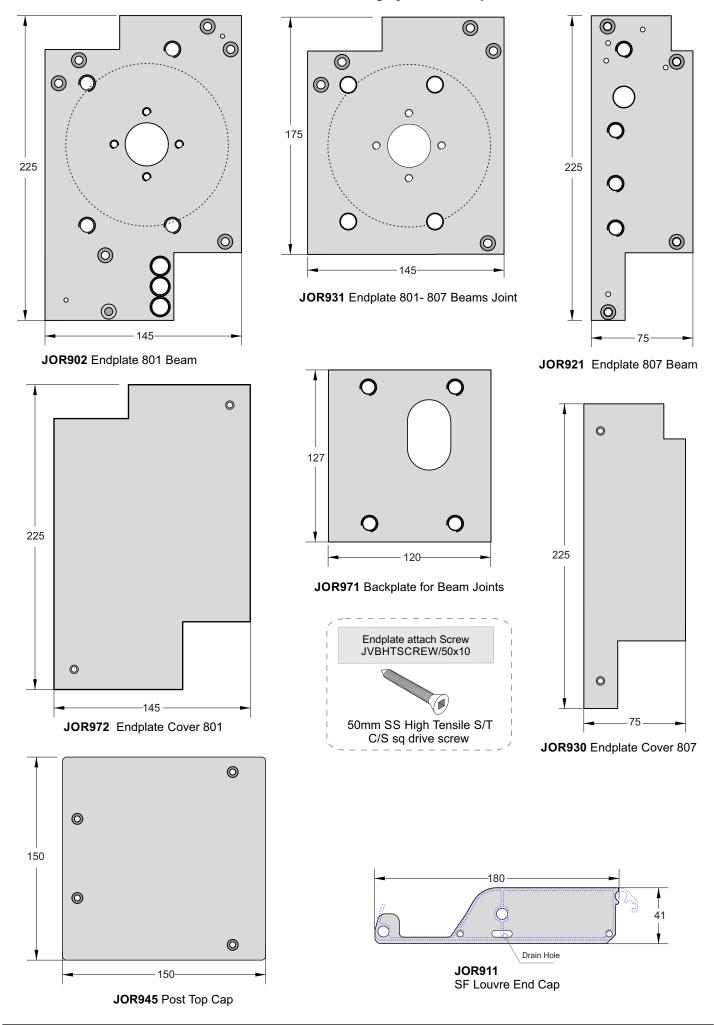
A Selection of some Layouts using Joint 13

JOINT 13

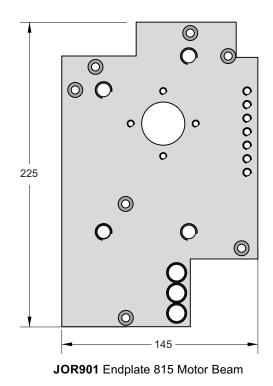
Motor Beam (Wall mounted) to Narrow Beam (Wall mounted) at a Corner (No Post). Can be RH or LH

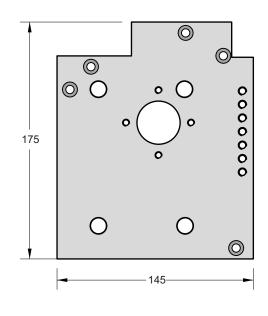


Juralco SunFold® Outdoor Living System - Components



Juralco SunFold® Outdoor Living System - Components





JOR970 Endplate 815 to Beams

For use with all Multiple Bays joining Wall Narrow Beams 807+807 to Twin 807 Beams @ 90 deg



JOR753 Half Wall Joiner Bracket



JOR913 Half Wall Bracket Cover



JOR914 Half End Caps

This Hole layout for use with some Multiple Bays.

- Joining Motor Beams 815+815 to Twin 807 Beams @90deg (cut down 808 as shown or a Post)
- Joining Beams 801+801 as an Intermediate Post (front holes not needed) Joining Beams 801+801 to Twin 807 Beams @90deg (as a Post)



JOR750 MB Post Top Bracket

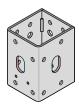


JOR944 MB Post Top Bracket Cover

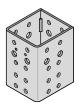


JOR945 Post Top Cap

For use with Custom Multiple Bays 3 and 4 Bay layouts



JOR758 Post Jointer Brkt 3 x Bay



JOR759 Post Jointer Brkt 4 x Bay



JOR945 Post Top Cap



JOR751 LH Corner Post Top Bracket

JOR750

MB Post

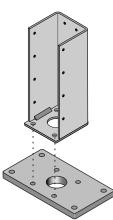
Top Bracket



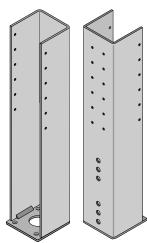
JOR751 RH Corner Post Top Bracket



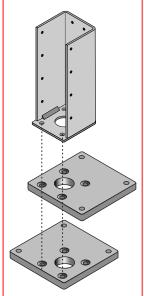
JOR752 Post Bottom Bracket



JOR755 Base plate For JOR752 or 760 Post 150x272x12mm

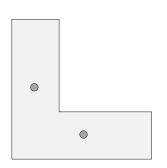


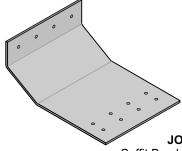
JOR760 Post Bottom Bracket Tall, Wide Base



JOR756 Base plate For JOR752 or 760 Post 211sqx12mm (Flip base plate for alterative fastening)

SS PS1 required to use this Baseplate





JOR710 Soffit Bracket. (New style)

JOR708 Soffit Bracket. (Old style)



JOR925 Intergrated Corner Block





Construction Silicone



JOR923 RH Corner Block

JOR927 RH Corner Block Mounting Angle

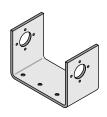


JOR923 LH

Corner Block

JOR927 LH Corner Block

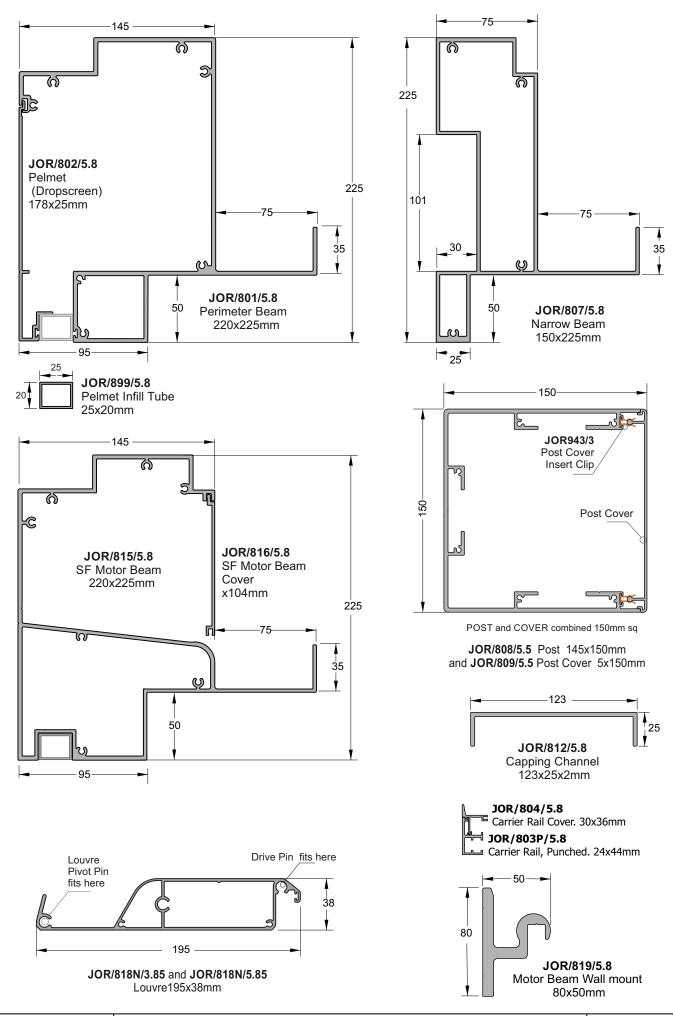
Mounting Angle



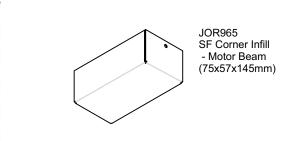
JOR757 Roll Down Screen Bracket



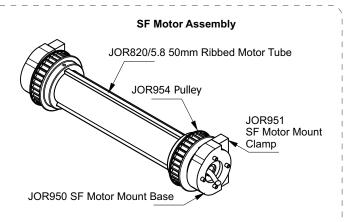
Juralco SunFold® Outdoor Living System - Extrusions

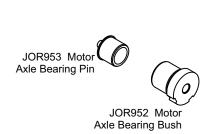


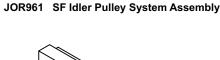
Juralco SunFold® Outdoor Living System - Components

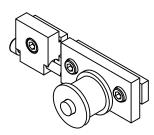


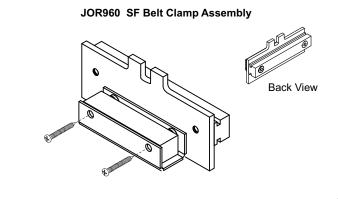
Motor Axle Bearing Pin, Bush

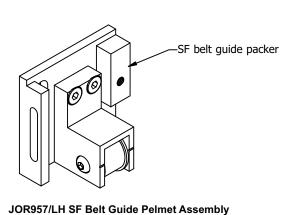


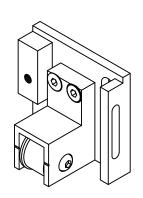








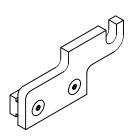


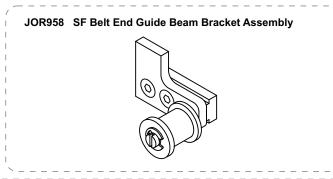


JOR957/RH SF Belt Guide Pelmet Assembly

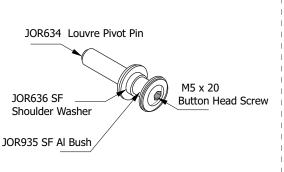
Juralco SunFold® Outdoor Living System - Extrusions, Components

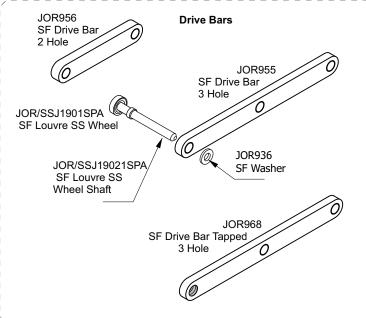
JOR959 SF Louvre Setout End Bracket Assembly





Louvre Drive Pin









Juralco SunFold® Outdoor Living System - Drive Train

Motor Beam Endplate

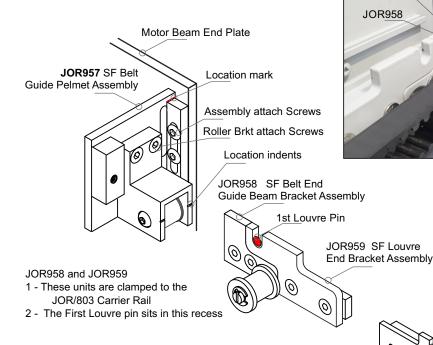
Location mark

Location indents

To install the JOR957 unit correctly.

- 1 Present the whole unit to the correct position more or less as per the photo
- 2 Line up the Location Indents to the top of the JOR958
- 3 Make a location mark on the Beam Endplate at this height
- 4 Remove the Roller Brkt attach screws, and the Roller Brkt
- 5 Now Insert the Assembly attach screws, and tighten up.







1 - These units slides on the JOR/803 Carrier Rail

Belt Clamp

- 2 The Third from end Louvre pin sits in this recess
- 3 The Belt Clamp sits down and clamps on the bottom run of the Aramid Belt



Belt pulled out of the way, to show Clamp



- 1 These units Clamps on to the JOR/803 Carrier Rail
- 2 Place in position, hand tensioning the Belt

Idler Pulley

Tension screw

Clamp Screw Pulley clamp Screws

3rd from end Louvre Pin

JOR960 SF Belt Clamp Assembly

JOR961 SF Idler

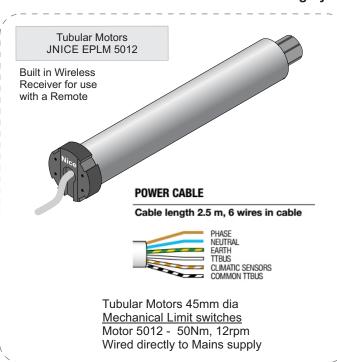
Pulley System Assembly

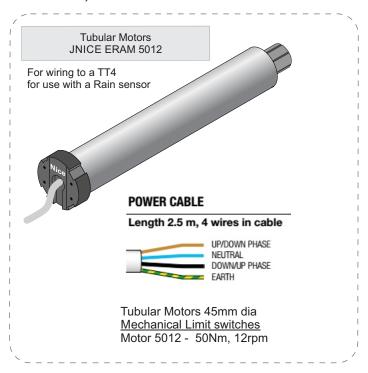
- 3 Tighten clamp screw
- 4 Actuate the Idler Tension Screw to Tension the Belt
- 5 When satisfactory, tighten the Pulley Clamp Screws



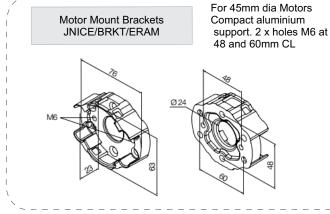
Belt pulled out of the way, to show Idler Pulley Assembly

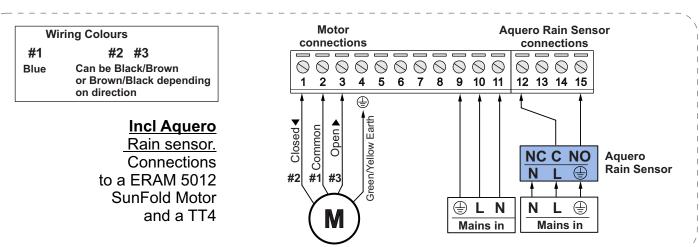
Juralco SunFold[®] Living Systems - Electrical, Motor Actuator









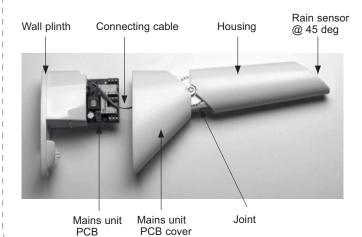


Aquero Rain Sensor

- For automatically closing Louvres at start of Rain
- For Hard wiring only to JNICE/TT4

Notes: Mount the Aquero close to the system to be protected. Make sure that the sensor surface is completely open to rain from above.

The Housing should be set so the Rain sensor surface will be at the correct angle of approx 45°



Installation Notes.

The Rain sensor must be mounted on a Vertical wall

- 1. Pull the mains unit PCB cover off the Wall plinth.
- 2. Pull the mains unit PCB carefully out of the Wall plinth.
- 3. Fix the Wall plinth in the desired mounting position using the screws and dowels provided.
- 4. Switch off the mains voltage
- 5. Connect the Aquero, observing the correct wiring colours. (See previous page)
- 6. Push the mains unit PCB carefully back into the Wall plinth. Make sure that the PCB is located in the guide rail.
- 7. Push the mains unit PCB cover back onto the Wall plinth and screw it tight.
- Switch on the mains voltage again.
 After 2 minutes, the Aquero is ready for operation.

Nice Wireless control Centre JNICE/TT4



TT4, with built-in receiver, for 1 motor up to 1000 W.

Wired and radio connection to climatic sensors.

Protection class IP44.

Possibility of defining the direction of movement (opening and closing) of the application when the Rain sensor is activated.

Separate terminals for Open and Closed or Step-By-Step commands.

Enabling/disabling of Stop function during the manoeuver.

Nice Wireless Controllers.

Can be set up to control Rain Climatic Sensors, Louvre opening and DropScreen operations



BiDi Awning controller for Wireless operations



P1 P6 P18 Portable transmitters

P1 Controls 1 system or automation group

P6 Controls 6 automation groups for activation in single or multigroup mode

P18 Controls 18 automation groups for activation in single or multigroup mode



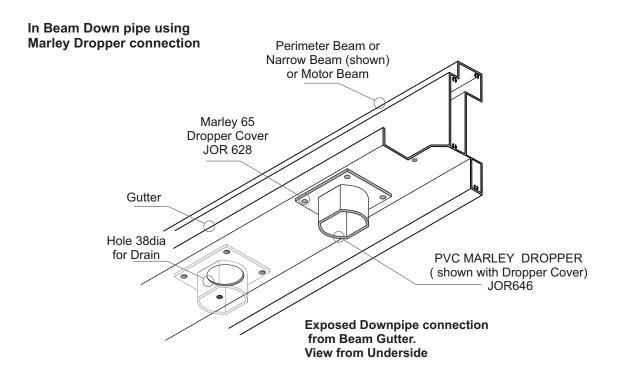
Wind Sensor for use with Dropscreens.
Threshold has 3 wind speed settings15, 30, 45 Kph

Juralco SunFold® Living Systems - Structural - Drainage options

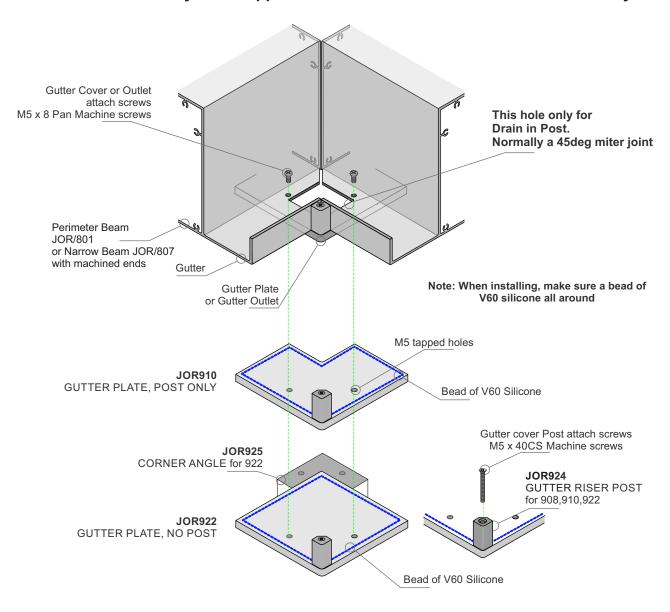
- The SunFold® System is designed to capture rainfall and drain it away in a clean and controlled manner. Louvre drainage must slope one way @ 1.0+ deg towards the drainage point
- If using Posts there is a design feature to have completely hidden downpipes installed inside the post.
- Another option is to have the down pipe installed as part of a beam. The downpipe will then be visible.

Hidden Down pipe JOR608 Gutter Box

- For posts only Perimeter Beam JOR/801 or Motor Beam JOR/815 **Gutter Cover or Outlet** This hole only for attach screws Gutter Box drain in Post only M5 x 8 Pan Machine screws Gutter Gutter outlet JOR908 Gutter cover Post attach screws M5 x 40 CS Machine screws Bead of V60 Silicone Gutter Outlet box JOR608 and foam gasket For use with Post only, hidden down pipe



Gutter Bracket System - Applies to 801/801 or 801/807 Beam Junctions only

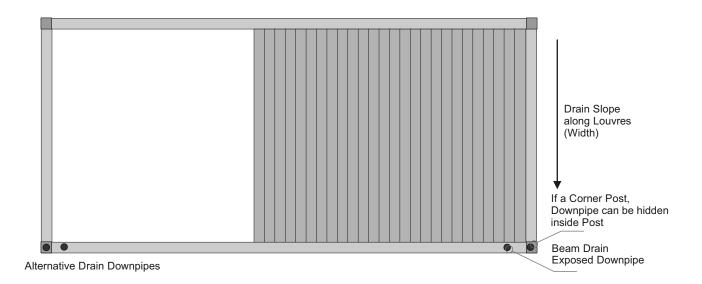


Juralco SunFold® Living Systems - Structural - Drainage Setouts

As the SunFold® system is designed to drain rainfall away in a controlled manner. It is essential to pre plan drainage options. The Frame is installed with slight slopes, the louvres are also sloped to channel rain into the side Gutters.

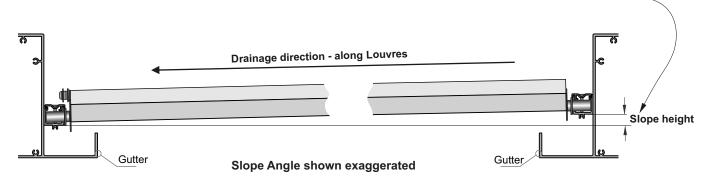
The generally accepted figure for a drainage slope for this system is a minimum of 1 deg. However on the longer dimensions this will give unacceptable height variations: reduce slope to 0.75 deg. To keep a side level, especially against a house, provide extra drains It is very important that the client is reminded to keep the gutter clear of debris and leaves.

Keep the louvres closed at all times when not in use.



Slope Heights

For Louvres up to 1m, use 5mm fall. Then +1mm for every +200mm width up to 4m = 20mm fall For all Louvres over 4m use 20mm fall as a maximum



Juralco SunFold® Outdoor Living System - Powder Coating Care and Maintenance

Powder Coating Installation Care

Warning re use of solvents:

- In some cases strong solvents are recommended for thinning various types of paints and also for cleaning up mastics and sealants.
- These can be harmful to the extended life of the powder coated surface, and must not be used for cleaning purposes.
- It is important to note that the damage will not be visible immediately and may take up to I2 months to develop.

If paint splashes or sealants and mastics need to be removed then the following may be safely used: Methylated Spirits, Ethyl Alcohol, Isopropanol or preferably a mild detergent in warm water.

Joinery Protection during Installation:

All the activity on a construction site means that your powder coated items may get knocked or scratched, splattered with mortar, plaster, textured coating or paint during the later stages of construction.

Please ensure that all powder coated articles are <u>masked or covered</u> at this time. It is far easier to prevent accidents than to try and correct them. Should your joinery receive mortar or paint splashes see that these are removed before cure and follow the instructions contained in this brochure.

Typical sticker used to warn other trades of the need to protect and mask off powder coated joinery (applies to anodised joinery also)

"IMPORTANT ALL TRADES"

This valuable aluminium joinery will suffer permanent damage from: plaster, mortar and paint splashes - Protect if splashes occur - Immediately wash down joinery with water or meths - Do not allow splashes to harden! ~ Do not use solvents! - Do not remove this label until final clean completed.

This photograph display damage that has occurred on site, post installation. The photo of the masked joinery displays clear signs of damage that could have occurred were it not masked. Please ensure that your joinery is protected right through the entire construction process.



Powder Coating Maintenance

External - Maintenance Program:

To extend the life of external powder coated articles and to comply with warranty requirements for powder coated aluminium joinery, a <u>simple, regular</u> maintenance program must be implemented.

The effects of ultra violet light, atmospheric pollution, dirt, grime and airborne salt deposits will all accumulate over time and must be removed or surface staining and weathering will occur, leading to an unsightly appearance.

For external coatings, cleaning should take place every six months. In areas where pollutants are more prevalent, such as beachfront houses and industrial or geothermal areas, then a cleaning program should be carried out on a more frequent basis ie. every one to three months.

Cleaning your powder coating:

- 1. Carefully remove any loose surface deposits with a wet sponge.
- 2. Use a soft brush (non abrasive) and a mild household detergent (do not use solvents) in warm water, remove dust, salt and other deposits.
- 3. Rinse off with clean fresh water.

Restoring weathered or scratched surfaces:

Repair of Scuffed or Scratched surfaces
Dulux Spray Cans are available in all colour card colours.

Repair of Small Scratches or Chips.

Dulux Dabsticks are ideally suited for the repair of small scratches. Dabsticks may not be available in all colour card colours.

Repair of Weathered areas .

Dulux Gloss Up is a light to medium cutting cream ideally suited for gloss restoration and has been specifically designed for this purpose. Gloss Up contains no waxes or silicone and is a one step system.







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