ultraframe

Transforming light and space

Pergola

by ultraframe

Installation Guide

Version 1 | March 2014

Dear Customer

Thank you for choosing a Pergola. Please take a few minutes prior to installation to familiarise yourself with this guide.
For Technical Support please call 0843 208 6930 or email techsupport@ultraframe.co.uk

Overview

Easy to install with virtually no on-site cutting or wastage the PERGOLA is a complete solution. Designed as both a car port or patio cover the PERGOLA product is pre-fabricated in 9 size options to provide a perfect solution for every customer. The unique curved Pergola beam is constructed from powder coated aluminium and acts as an integral gutter and support beam. Aluminium posts are part of the structural support package – these also fulfil the function of a rain water pipe.

Specification

- Pergola supplied unglazed for use with 6mm toughened glass for 0.6 snow load areas - all other areas use 10mm.
- One combi post/rainwater pipe per Pergola - position is always from right hand corner viewed from outside. Posts sit 'inboard' of each end by 200mm.
- 7.5° pitch
- Support posts are 2,900mm long - see p3 to calculate how to set out posts.
- Two colours / finishes - White (RAL 9003 80% Gloss) and Grey (RAL 7016, textured)

CONTENTS

- Guidance for homeowners and fitters

TOOLS OVERVIEW

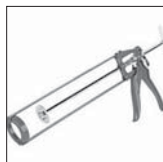|							
8, 10, 13mm+ 17mm Socket Spanner	Deadblow Hammer or White Rubber Mallet	No. 2 Pozi-drive Bit	Screwdriver	Hack Saw	Drill/Screwdriver	Long nose pliers	Gasket Shears/ Snips
4.5mm Drill Bit 10mm Drill Bit	Sealant Gun	17mm Open Ended Spanner - Tie Bars	Spirit Level	Tape Measure	Anglefinder	Plumb bob	Allen Keys

Pergola to host wall fixings not supplied.

General Points

Care should be taken when handling components that are seen by the homeowner, as surfaces may be scratched if not handled with care (see p10). Choose a suitable area for unpacking the components and always check them before fitting. Any claims for missing or damaged parts are only accepted in line with our standard terms and conditions of sale.

Health & safety

Site safety is particularly important. The installation company shall be responsible for the safety of all of the fitting team, the customer and members of the public. The Surveyor should have carried out a risk assessment to reduce risk on site and this should have been discussed with you prior to starting.

Please use safe working platforms and ladders that comply with BS EN 131. Always use equipment in line with manufacturers recommendations .Personal Protective Equipment - such as goggles, mask and ear defenders - should be used when, for example, grinding out for the flashing.

Careful consideration should be given to the safe disposal of all packaging – Pergola packaging is predominantly made from recycled materials and can be readily recycled.

Components

The kit is supplied with a quality control check list. Should you need to re-order a part the component identification chart on p9 will be helpful.

Sealing

It is important to use the correct sealant when sealing the roof use low modulus neutral cure brand of silicone.

The Superstructure

Before starting to install the Pergola, please check the condition of the host wall and whether it's plumb – depending upon what you find, these conditions can seriously affect the final integrity of the roof.

Technical Support

Tel: 0843 208 6953 or email techsupport@ultraframe.co.uk

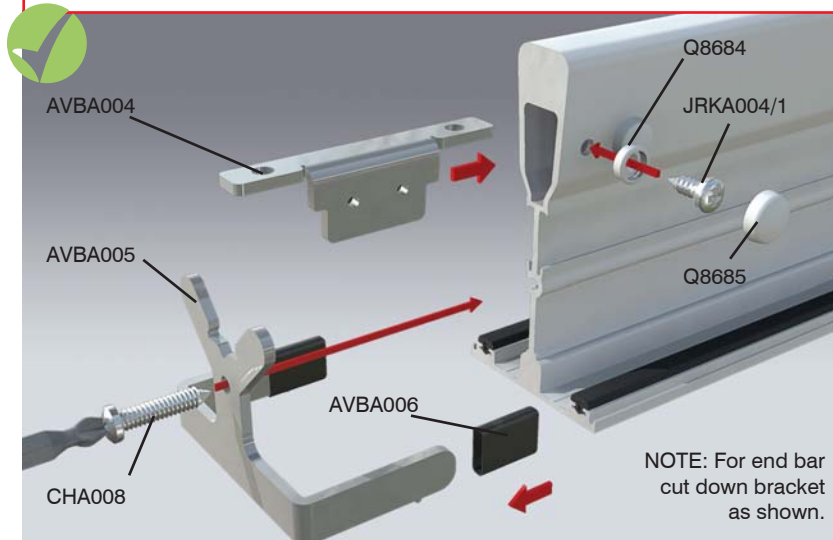**PAINTED ALUMINIUM PRODUCTS - PLEASE NOTE**

All paints will 'chalk' to some extent and there will be a reduction in gloss level over time. (See Cleaning and Maintenance guidelines p14)

Quality expectations on installation.
- **Appearance. This is assessed based on the selection of the 'significant' (primary) surface. From a distance of 3m, stand at an oblique angle of 60degree and then defects such as blisters, runs, pin holes etc should NOT be seen.**
- **Colour and gloss. Viewed from 5m, the coating must be of even colour and gloss with good coverage.**

PRE-INSTALLATION CHECKS

✓ **IMPORTANT: FIT GLAZING PANEL END STOPS ON THE GROUND BEFORE BARS ARE LIFTED INTO POSITION**

AVBA004

Q8684

JRKA004/1

Q8685

AVBA005

CHA008

AVBA006

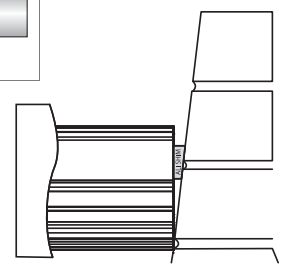NOTE: For end bar cut down bracket as shown.

✓ **Low modulus neutral cure**

Use the correct sealant

✓

Check the condition of the host wall as this may affect the quality of the final installation. Check the host wall is plumb. If not, the wallplate may require packing out with aluminium shims.

Correct alignment in this area is critical to a successful installation. - Plumb posts, wallplate and curved beam level. Only use the specified fixings - never be tempted to substitute alternative sizes/gauges.

Q8221 (10mm)

Q8211 (6mm)

Cut supplied gasket to length and fit to glazing bars. Depending on glazing thickness use the appropriate gasket. The 6mm gasket will require sliding into the bar.

Q8221 (10mm)

WALLPLATE ASSEMBLY

Q8211 (6mm)

Fit the supplied gasket to the wallplate as shown. Use the appropriate gasket for the glazing thickness as per the bars. The 6mm gasket will require sliding into the wallplate.
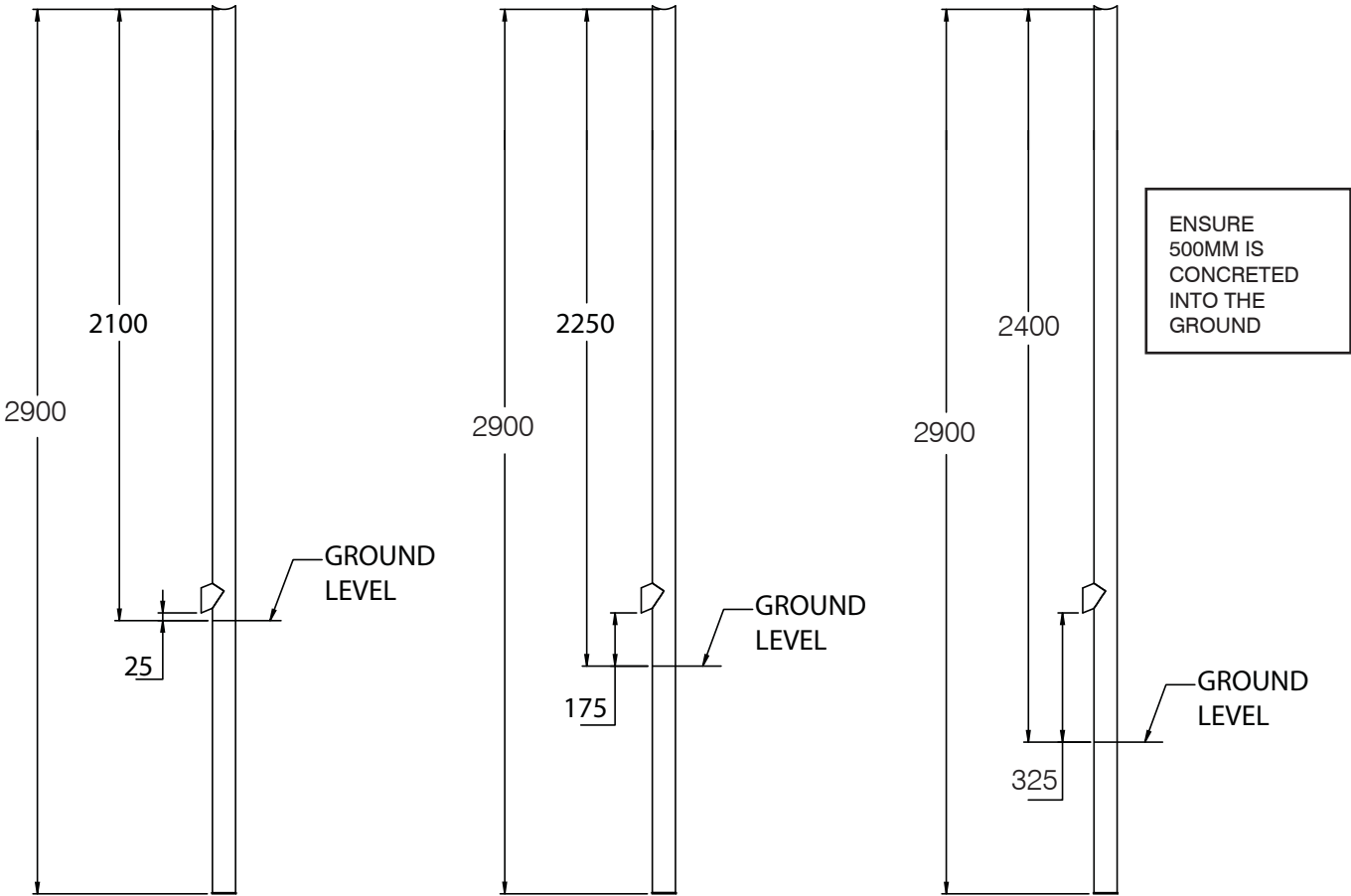
RIGHT HAND BAR ILLUSTRATED

On the two bars that fit either end, cut away the return leg on the glass support bracket on the outer side of the bar to allow the side trim to be fitted. (AVBA005)

M5 bolts are supplied as twin bolts. Before fitting to wallplate and curved beam, cut these bolts into 2 separate bolts as shown." (Q8077)

OVERVIEW

Wall plate assembly

Wall plate

Glazing bar

Gasket

Glazing support

OVERVIEW

PITCH 7½°

HOST WALL

A

B

C D
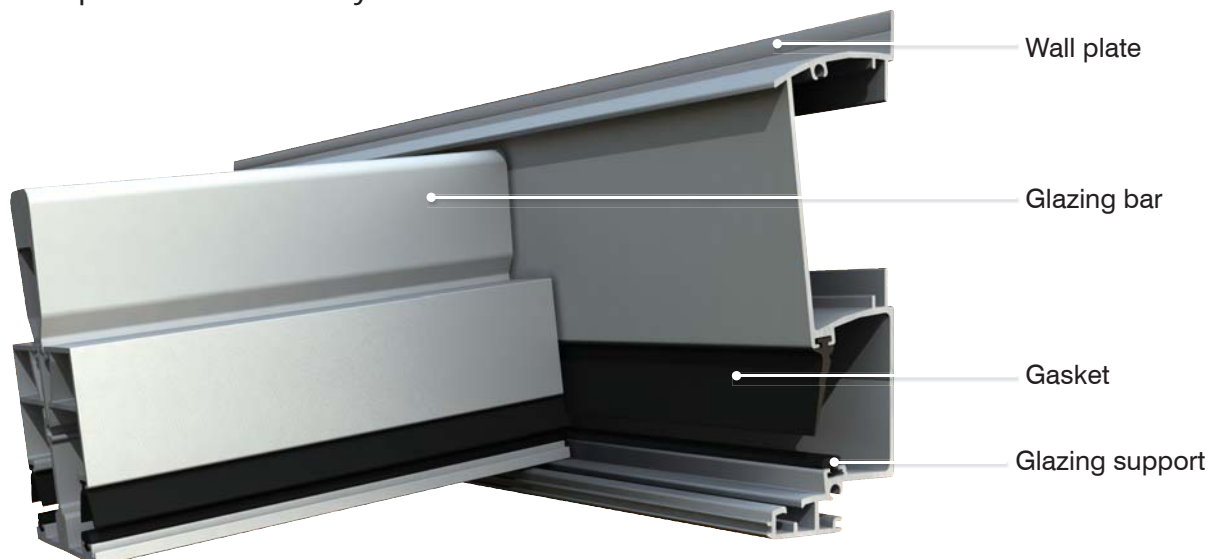
Support post ground level - & rainwater pipe positions

2100

2900

25

GROUND LEVEL

2250

2900

175

GROUND LEVEL

2400

2900

325

GROUND LEVEL

ENSURE 500MM IS CONCRETED INTO THE GROUND

B	C	D
Projection	Height Underside*	Height Top plus flashing
2500	2499	2635
3000	2565	2700
3500	2631	2766

B	C	D
Projection	Height Underside*	Height Top plus flashing
2500	2649	2785
3000	2715	2850
3500	2781	2916

B	C	D
Projection	Height Underside*	Height Top plus flashing
2500	2799	2935
3000	2865	3000
3500	2931	3066

PERGOLA INSTALLATION
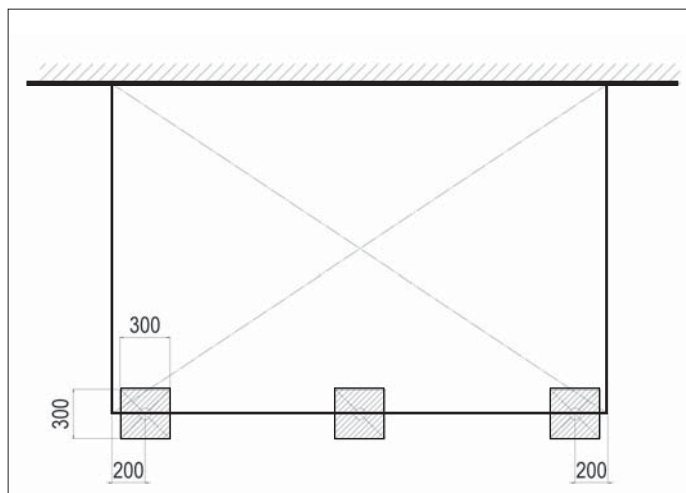
Accurately mark out base plan checking diagonals. Mark centres of posts which will be 200mm in from the end of the Veranda beam. If central post required, this will sit central to the other 2 posts. Dig holes approximately 300mm x 300mm around the mark for the post centre to a depth of at least 500mm.
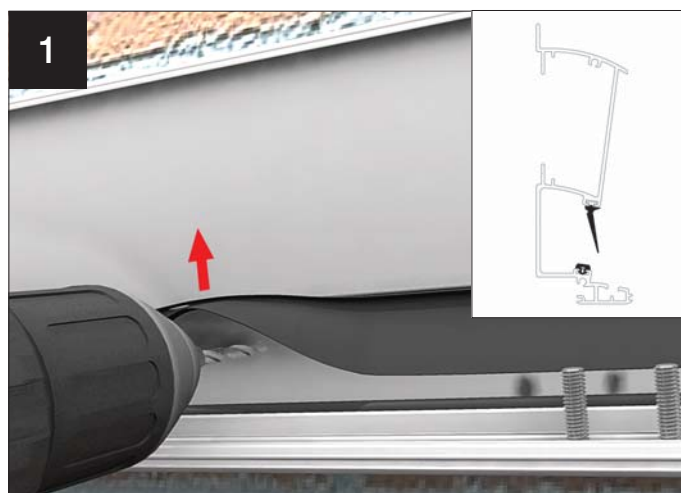
1

Accurately mark wallplate height on wall. Ensure level and central. To prevent damage to long glazing gasket either remove prior to drilling or lift out of the way. If removed, refit as shown. Secure to wall using suitable masonry anchors (not supplied) at 500mm centres.
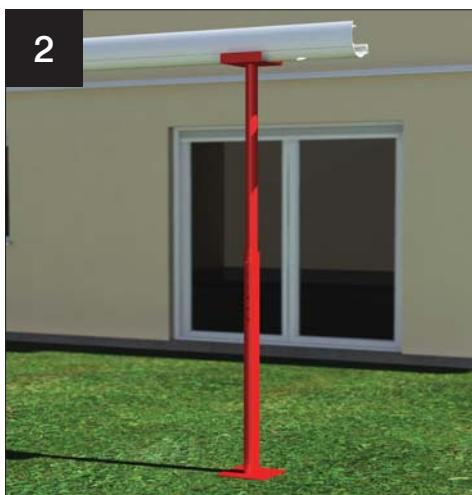
2

Lift and support assembled Veranda beam into position using a minimum of 2 props. Centralise and measure distance from house wall. We recommend using a timber packer to prevent damage to the powder coated aluminium.

3

The posts are supplied 2900mm long. If required cut post to length and fit endcaps (ensure a minimum of 500mm is submerged below ground). Fit end caps to lower open end of all posts.
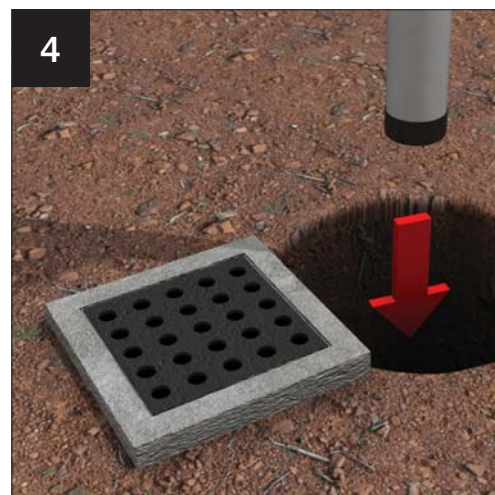
4

Insert posts into pre dug holes. Backfill around posts with gravel to offer support. The outlet post is always positioned on the right hand side looking from outside back towards the house.
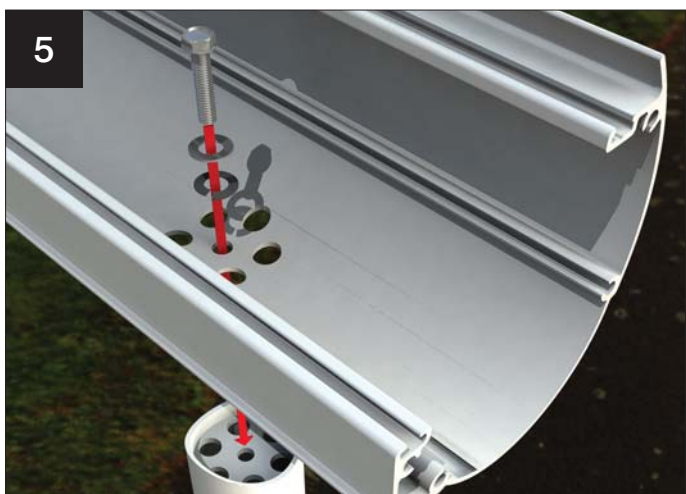
5

Assemble posts to Veranda beam as shown using M10 screw (AVBA017) and washers provided (AVBA018, AVBA019). Drain post should sit in line with circular hole pattern in the Veranda beam. Drain outlet always faces outwards.

6

INTERMEDIATE BAR

END BAR RIGHT HAND
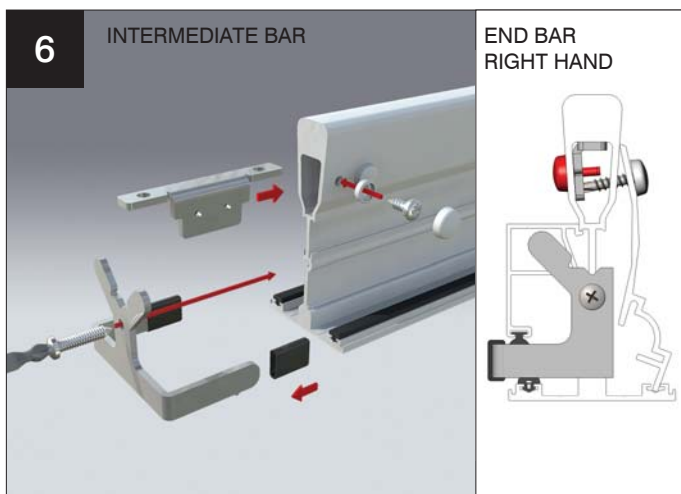
If not fitted earlier, ensure the glazing end stops are in place before fitting glazing bars at eaves.

Cut down glazing end stop. Fixing screws should be to inside face of glazing bar.

PERGOLA INSTALLATION

7

Fit outer bars first and then remaining bars. Locate over bolts (Q8077, split) and secure using the M5 nuts (Q8400/2) provided.

8

Repeat at bottom of bars, locating over bolts (Q8077, split) and securing using the M5 nuts (Q8400/2) provided. Ensure that structure is square and at correct pitch (adjust props to suit) and fix into Veranda beam using screws (CHA008) provided.

9
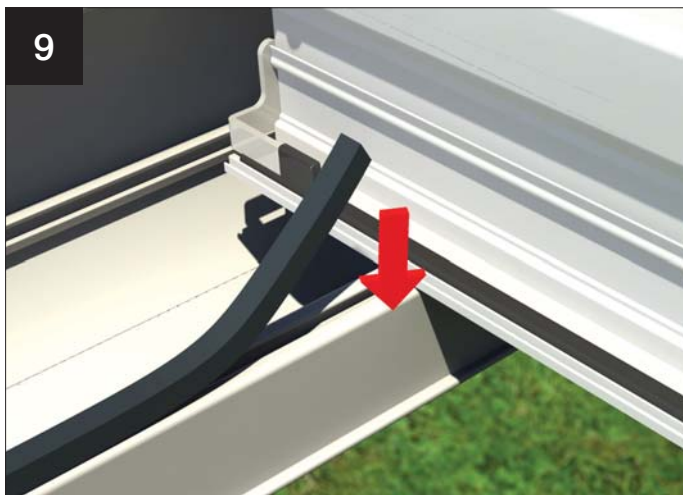
From roll of glazing tape (AVA003) provided, cut lengths to fit between glazing bars along curved beam.

10
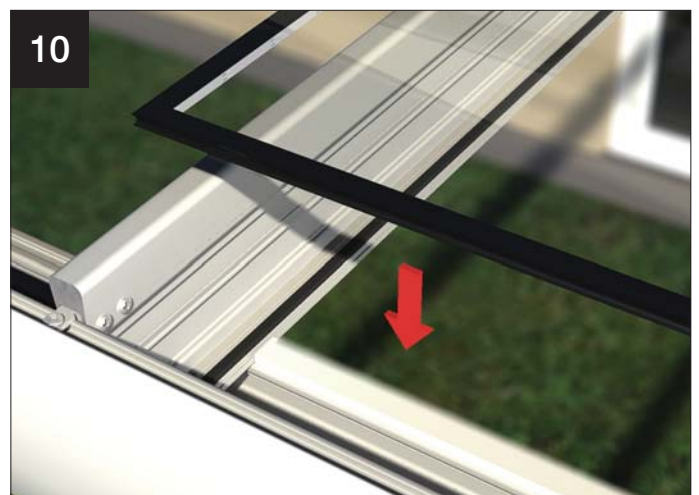
Lift 6mm or 10mm toughened pieces of safety glass into place. Centralise glazing between bars and place against supports at bottom of bars.

11

Fit glazing beads to each bar securing glazing. Push bead up against wallplate. Engage lower leg into groove and work from one end to the other using thumb pressure to compress the gasket and engage the top clip of the bead. Constant pressure needs to be applied along the bead as you work along so it will require 2 people. NOTE: If beading becomes difficult, it is advisable to use warm soapy water on the bead gasket.

12

On the outer bars, secure cloaking trim using the 3 screws (CHA007) and caps (Q8084, Q8685) provided (outer legs of glazing end stop bracket should have been cut back to allow trim to fit).

PERGOLA INSTALLATION

13

End bar cover shown in position.

14

Fit the profiled rubber gasket and end plate to the curved beam using 4 x M8 button head hex screws (AVBA014)provided. Repeat on the opposite side.

15
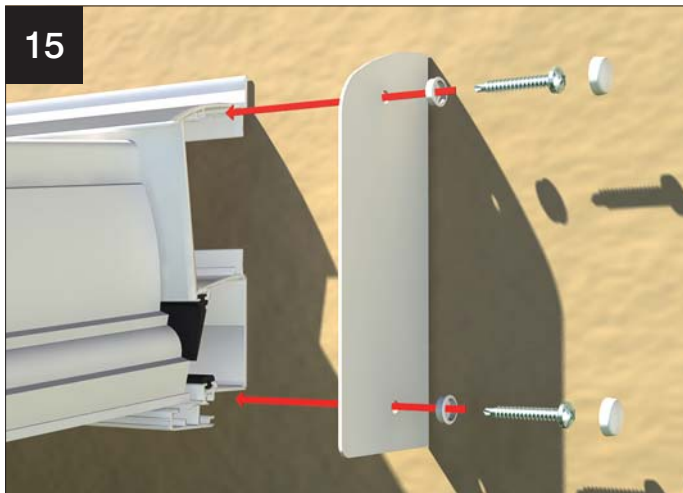
Apply silicone to end faces of the wallplate and fix using screws (Q8686) and snap caps (Q8684, Q8685) provided through holes.

16

Ensure pitch is correct and structure is square. Fill holes around posts with appropriate concrete mix.

17
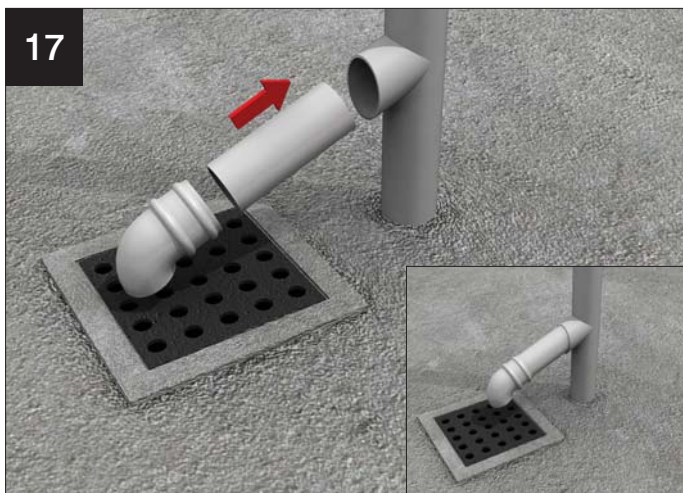
If required, cut supplied rainwater downpipe to length and attach downpipe shoe.

18

Once concrete has set, remove props and finish floor as required.

PERGOLA COMPONENTS
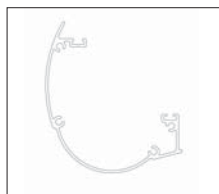
AVBA500W/1
AVBA500TGR/1
Aluminium Veranda Beam
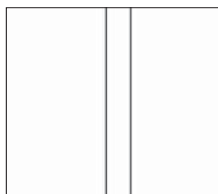
*AVPA290W/1
AVPA290TGR/1
Post No Outlet
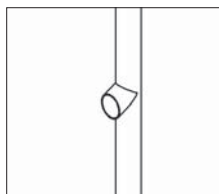
*AVPA290W/2
AVPA290TGR/2
Post With Outlet
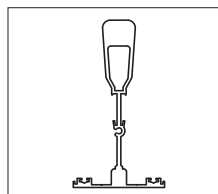
QW8005/2.6
QYT8005/2.6 Widespan Glazing Bar
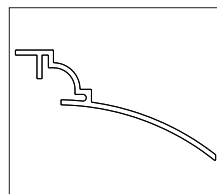
QW8086/6
QYT8086/6
Lean - To Flashing
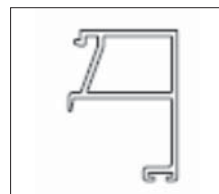
QBES60010W
QBES60010TGR
10mm Square Bead
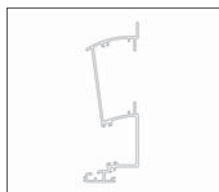
QW8057/5.1
QYT8057/5.1
24mm Uni Wallplate

AVBA001 Veranda Beam Gasket
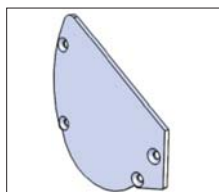
AVSE005W
AVSE005TGR Veranda Stop End Plate
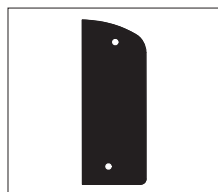
QW8321
QYT8321
Uni Wallplate End Cap
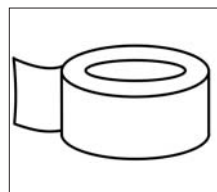
AVBA003
Adhesive Tape 10mm X 12mm x 5m
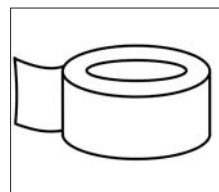
AVBA007
3mm X 10mm X 25m PVC Foam Sealant
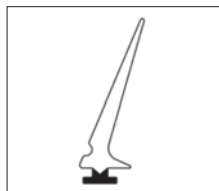
AVBA009
Pergolia Weathering Gasket

AVBA010
Post Vinyl PVC End Cap

Q8221
Pad Gasket (Push In) (10mm glazing)
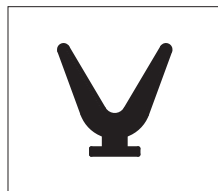
Q8201
Retain Bead Gasket
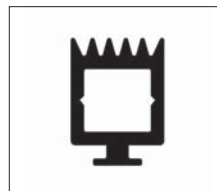
Q8211
Gasket (6mm glazing)
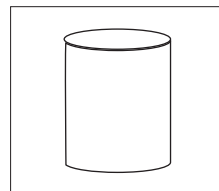
UZRW250W
UZRW250BL
Rainwater Down Pipe

UZRW002W
UZRW002BL Round Downpipe Shoe White

CHA008 4.8 x 32 Self Drill Phillips Pan Head Use with:
1 pre AVBA005
1 per AVBA004
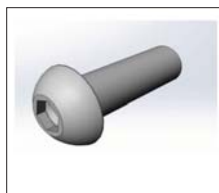
AVBA014
M8x25 SKT HD BUTTON HEAD
Use 4 per: AVSE005(_) Veranda Stop End Plate

JRKA004/1
M4 X 12 Pz Pan Tri-Lobal Z&C
Use 2 per:
AVBA005

CHA007
4.2 x 19 Self Drill Phillips Head Screw
Use:
3 per Q8086/6

AVBA017
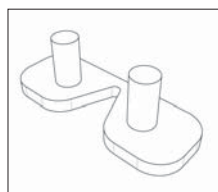M10 X 35mm Hex Hd
Use 1 per:-
AVPA290(_)/1
AVPA290(_)/2

AVBA018
M10 Fm A Plain Washer
Use 1 per:-
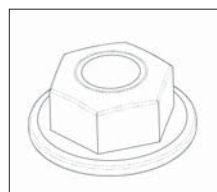AVPA290(_)/1
AVPA290(_)/2

AVBA019
M10 Rect Single Coiled Spring Washer
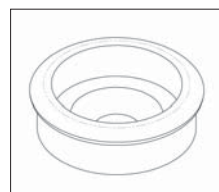Use 1 per:-
AVPA290(_)/1
AVPA290(_)/2

Q8686
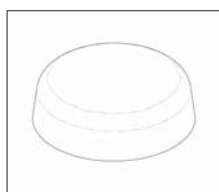Dia4.2X25Mm P/P/S/ Drill Screw
Use 2 per:-
Q(_)8321

Q8077
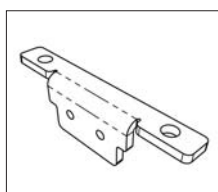12Mm Twin Fast Screw Silver
Use 2 per:-
Q(_)8005/__

Q8400/2
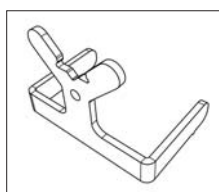M5 Nut
Use 2 per:-
Q8077

Q8684
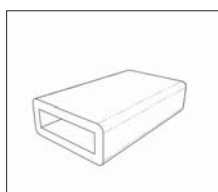Flat Bottom Snap Cap Washer

Q8685
QY8685
Snap Cap

AVBA004
Veranda Beam - Bar to Beam Bracket
Use 1 per:-
Q(_)8005/__

AVBA005
Veranda Beam Glass Clip Bracket
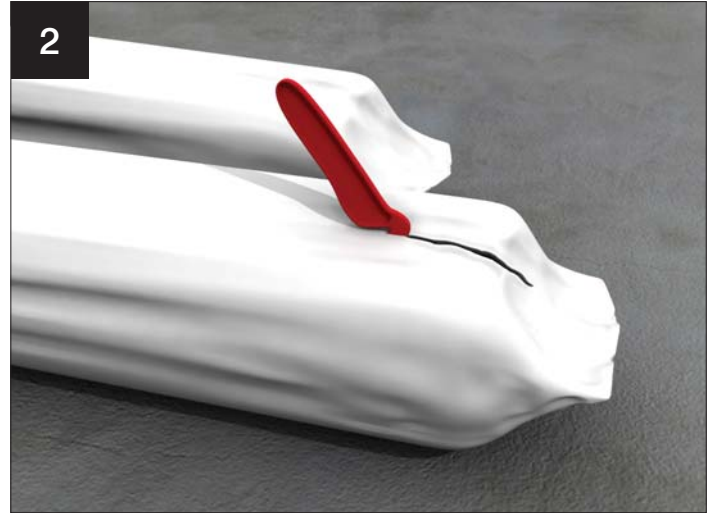Use 1 per:-
Q(_)8005/__

AVBA006
Glass bracket end stop
Use 2 per:-
AVBA005
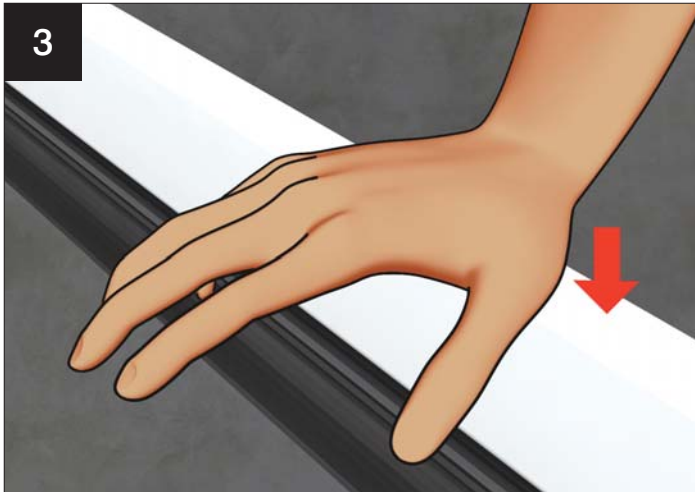
*CE marked under EN1090-1: 2008 execution class 2
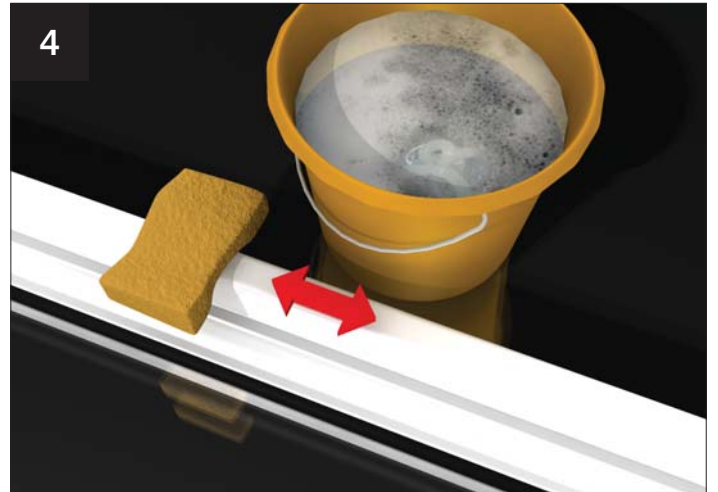
HANDLING ALUMINIUM PRODUCTS

If storing in warehouse racking or on frails/roof racks, take care to support the products and do not over tension straps and ropes.
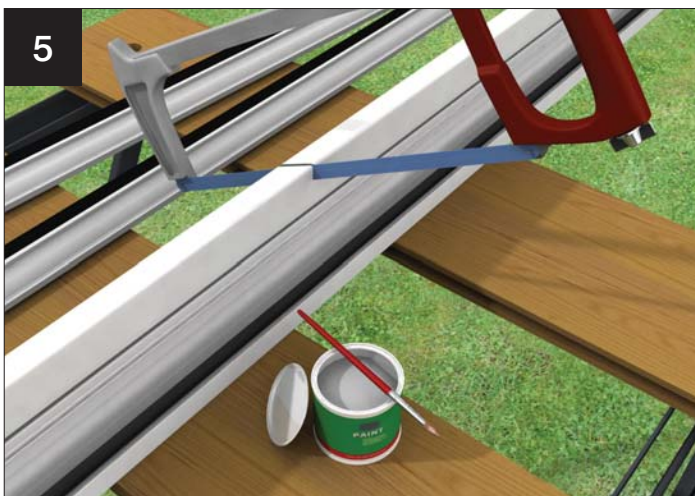

When opening sealed packs, use a special box knife opener.

Take care when fitting aluminium products to not use excessive force.

Grease marks, dirt and mastic spillage may be removed using warm soapy water.


If site cutting is necessary (drainage slots need inserting or a down pipe hole has to be cut) ensure all swarf is kept away from the painted surface and then; seal with a primer/corrosion inhibitor and then top coat. Alternatively, use a suitable gap sealant to prevent the onset of corrosion. These steps are critical in marine environments.
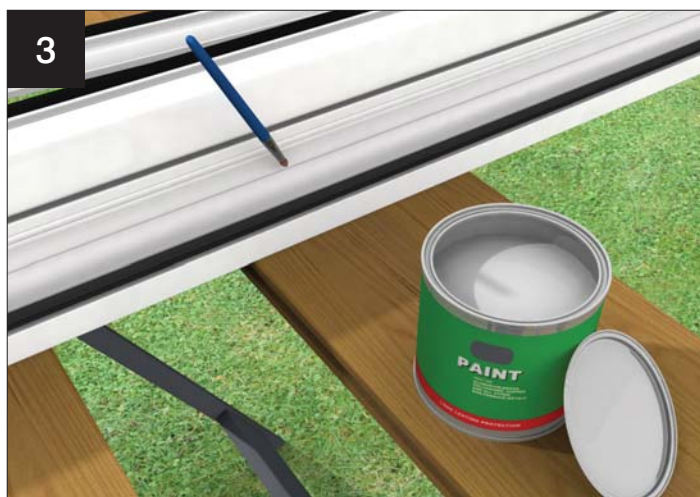
CLEANING AND MAINTENANCE

1
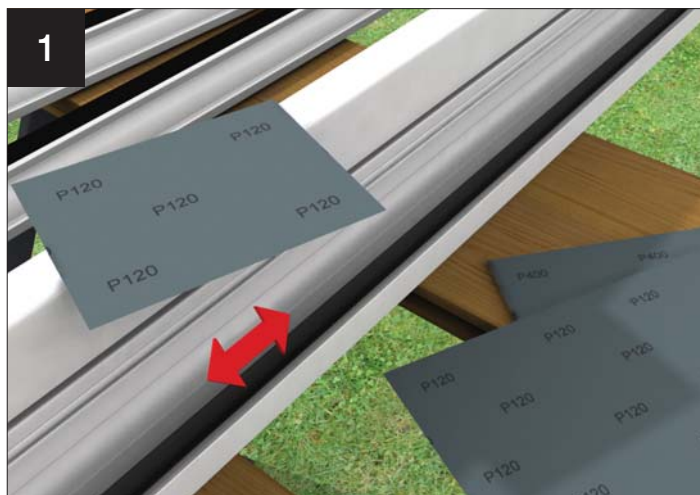
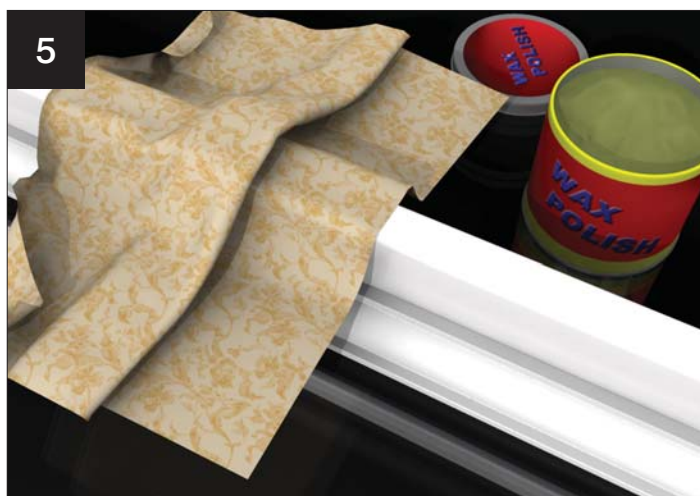If surface damage is encountered, use 120-360 grit paper to prepare the surface. Wipe clean with white spirit.

2
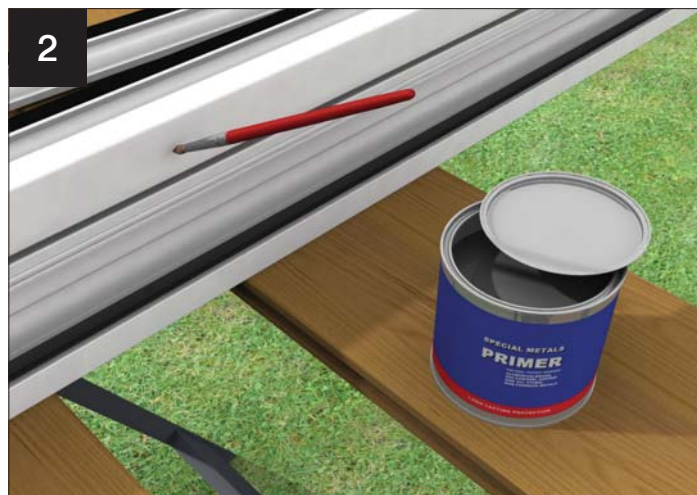
Ensure the surface is dry – apply a thin primer coat using a fine brush.

3

Finally, apply an air drying top coat with a fine brush.

4

General cleaning can be undertaken by a wash with warm soapy water.

5

For added protection, on the white Pergola, a wax polish can be applied up to twice per year – follow the polish manufacturer's instructions carefully.

PLEASE PASS TO HOMEOWNER

It should be noted that polyester powder coatings are not maintenance free – the extent of cleaning depends upon the local environment and on the attitude of the building owner. Think cars here...if the building owner wants a finish like that, more regular cleaning is needed. All paints will 'chalk' to some extent and there will be a reduction in gloss level over time – this can be restored.

FROM TIME TO TIME, CLEAN INSIDE THE CURVED VERANDA BEAM TO PREVENT BLOCKAGE FROM LEAF DEBRIS

Loggia Prestige

Loggia Premium

Loggia Ultimate

QUANTAL

ultraframe
Transforming light and space

www.quantal.co.uk

www.ultraframe.co.uk