



# INSTALLATION GUIDE



**SOL Conservatory Roofs is your trade supplier for all things roofing and glazing.**

















As a market leader in conservatory roof manufacturing, our team of experts is on hand to support you with the initial set-up as well as answering any technical or installation queries.



**VIEW OUR SOLid ROOF INSTALLATION VIDEO HERE**



# CONTENTS

	<b>PAGE 3</b>	<b>HEALTH &amp; SAFETY NOTES</b>
	<b>PAGE 5</b>	<b>PRE-INSTALLATION CHECKS</b>
	<b>PAGE 5</b>	<b>PREPARING THE RING BEAM</b>
	<b>PAGE 6</b>	<b>INSTALLING THE WINDOWS</b>
	<b>PAGE 10</b>	<b>INSTALLING THE FRAMEWORK</b>
	<b>PAGE 13</b>	<b>INSULATING AND WATERPROOFING</b>
	<b>PAGE 16</b>	<b>SOLSIRIUS GLAZING PANEL INSTALLATION</b>
	<b>PAGE 19</b>	<b>LEAN-TO ROOF INSTALLATION</b>
	<b>PAGE 22</b>	<b>ROOF LIGHT INSTALLATION</b>
	<b>PAGE 25</b>	<b>SOLAPEX POD INSTALLATION</b>
	<b>PAGE 31</b>	<b>TILE APPLICATION &amp; VALLEY PREP - SOLID SLATE</b>
	<b>PAGE 35</b>	<b>TILE APPLICATION &amp; NON STANDARD CROWN - SOLID SHINGLE</b>
	<b>PAGE 39</b>	<b>FINISHING AND INTERNAL INSULATION</b>
	<b>PAGE 41</b>	<b>SOFFIT ASSEMBLY</b>
	<b>PAGE 42</b>	<b>GLAZING THE CONSERVATORY</b>
	<b>PAGE 43</b>	<b>0.12 U-VALUE ROOFS - SCOTTISH &amp; WELSH BUILDING REGULATIONS</b>

## HEALTH & SAFETY NOTES

For any installation we recommend that a competent person carries out the installation process and we also strongly advise that Personal Protective Equipment (PPE) is used throughout the installation process to ensure protection from any potential health and safety risks.

Before starting installation please read full Health & Safety guidance at [www.solroofs.co.uk/health-and-safety](http://www.solroofs.co.uk/health-and-safety)

## PPE REQUIRED



Safety boots



Gloves



Protective glasses or goggles



Hard hat and safety mask

## WASTE DISPOSAL

Please dispose of all waste items during or after the installation in line with current legislation and guidelines.

# IMPORTANT NOTES PRIOR TO INSTALLATION PROCESS

## IMPORTANT NOTES PRIOR TO INSTALLATION PROCESS

**Note 1 - We strongly advise that the installation should take place in dry conditions for the best results and time-scales of installation**

**Note 2 - All component lifting should be done in pairs as a minimum**

**Note 3 - Please follow all health and safety notes to ensure safe use of all materials and parts provided**

**Note 4 - Please check your parts list for all items prior to starting this installation process.**

## SUGGESTED TIMELINE FOR INSTALLATION PROCESS

**We recommend the below timeline for installation; this would be subject to weather conditions on any given day and the speed of the installation team. No roof should be erected in heavy rain fall or below freezing conditions.**

**Day one - Floor**

**Day two - Walls and roof (roof covering in full subject to weather conditions)**

**Day three - Complete roof covering if required, roof trims, fascias, soffits & guttering, windows and doors**

**Day four - External wall trims and beadings etc and internal items as necessary**

**Day five - Any works that lapse during days 1- 4**

# PRE-INSTALLATION CHECKS



1

AFTER UNPACKING, CHECK ALL COMPONENTS AGAINST THE ORDER ACKNOWLEDGEMENT FROM SOL AND ENSURE ALL PARTS ARE ACCOUNTED FOR.



2

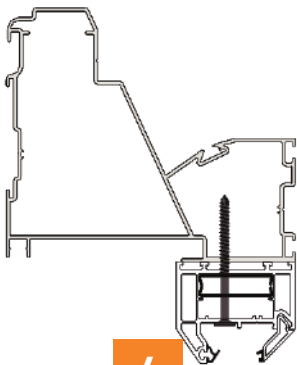
PRIOR TO COMMENCING ANY INSTALLATION WORK, THE SIZE, TYPE AND CONDITION OF ALL COMPONENTS SHOULD BE CHECKED AGAINST THE SURVEY DOCUMENT.



3

**IF RETRO-FITTING**  
ENSURE THE EXISTING CONSERVATORY IS STRUCTURALLY SOUND BEFORE CONDUCTING ANY INSTALLATION WORK.

# PREPARING THE RING BEAM



4

FIRST ASSESS NEW RING BEAM FIXING POINTS AND HOW THIS CAN BE ACHIEVED, AS ALL BUILDS CAN DIFFER.



5

ALL M6 X 30MM FLAT PLATE STUDS SHOULD ALREADY BE SET IN POSITION ON THE RING BEAM. CHECK THE POSITION OF THE STUDS AND SLIDE IN ANY ADDITIONAL STUDS IF REQUIRED.



6

**WHERE BOX GUTTER IS REQUIRED**  
FIX THE PRE-CUT BOX GUTTER TO THE PROPERTY WITH APPROPRIATE FIXINGS AT 400MM CENTRES. INSTALL THE RING BEAM CLEATS BEFORE FIXING THE RING BEAM TO THE BOX GUTTER USING 4.2 X 38LG SCREWS.

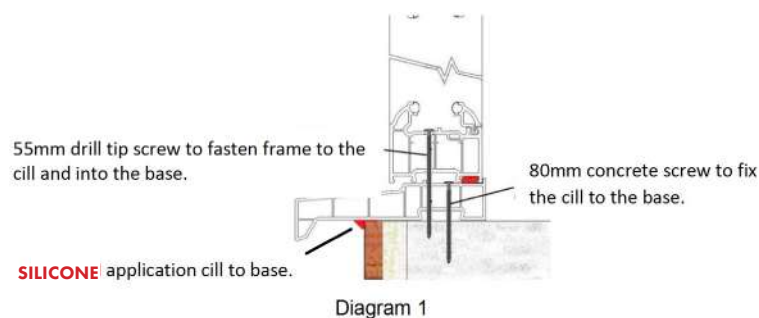
# INSTALLING THE WINDOWS - CILL PLACEMENT



USING THE TECHNICAL DRAWINGS PROVIDED, PLACE YOUR CILLS IN POSITION AND ENSURE THAT THEY FIT THE BASE OF THE CONSERVATORY. YOUR CILL WILL ARRIVE SLIGHTLY OVERLENGTH TO ALLOW FOR ANY MINOR INTOLERANCES IN THE SURVEY. THERE MAY BE DIFFERENCE IN THE DIMENSIONS OF THE FRONT OF THE CILL TO WHERE IT MEETS THE WALL DUE TO WELDED CORNERS NOT BEING PRECISELY 90 DEGREES. AS YOU FIX THE CILL ENSURE THAT THE DIMENSIONS ARE THE SAME TO GIVE A SQUARE CONSERVATORY.



ONCE YOU ARE HAPPY THAT THE CILL IS SUITABLY LOCATED AND THE DIMENSIONS ARE ACCURATE, YOU CAN BEGIN TO FIX THE CILL TO THE BASE / DWARF WALL. WORK FROM THE HOUSE WALL TO THE FRONT OF THE CONSERVATORY, APPLYING FIXINGS NO MORE THAN 500MM APART AND NO MORE THAN 100MM CLOSER TO ANY WELDED JOINT.



3

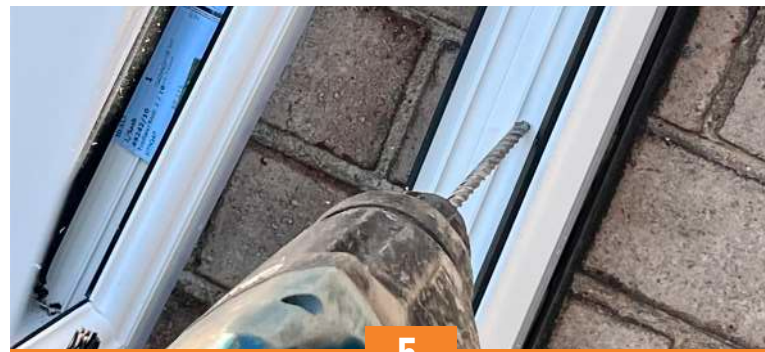
ONCE IN PLACE YOU CAN APPLY A GENEROUS AMOUNT OF SILICONE TO THE UNDER EDGE OF THE CILL (SEE DIAGRAM 1). THE SILICONE WILL REMAIN SOFT WHILST YOU PLACE THE WINDOW FRAMES INTO POSITION.

# INSTALLING THE WINDOWS - CONNECT THE FRAMES



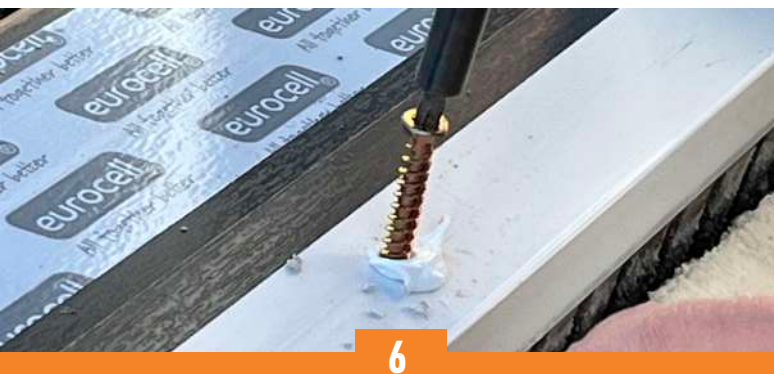
4

ENSURE THE FIRST FRAME IS VERTICALLY ALIGNED AGAINST THE HOUSE WALL USING A PLUMB LINE OR ACCURATE SPIRIT LEVEL AND THE INTERNAL DIMENSIONS ARE CORRECT. THERE IS A SMALL LIP AT THE BACK OF THE CILL AND THE WINDOW FRAME SHOULD BE POSITIONED TIGHT AGAINST THE LIP.



5

DRILL A 6MM PILOT HOLE THROUGH THE FRAME INTO THE HOUSE WALL BRICKWORK. USING THE 100MM CONCRETE SCREWS PROVIDED, SECURE THE FRAME TO THE HOUSE WALL. ENSURE FIXINGS ARE NO MORE THAN 500MM APART AND NO CLOSER THAN 100MM TO A WELDING JOINT.



6

ONCE THE FRAME IS SECURED TO THE WALL, USE 55MM DRILL TIP SCREWS TO SECURE THE WINDOW TO THE CILL, AGAIN ENSURING THAT FIXINGS ARE NO MORE THAN 500MM APART AND NO CLOSER THAN 100MM TO A WELDING JOINT.

# INSTALLING THE WINDOWS - JOIN THE FRAMES



7

MAKE SURE THAT YOU HAVE THE CORRECT FRAMES IN THE CORRECT ORDER BEFORE YOU BEGIN TO CONNECT THE FRAMES TO EACH OTHER. REFER TO THE LAYOUT PROVIDED FOR THIS DETAIL.



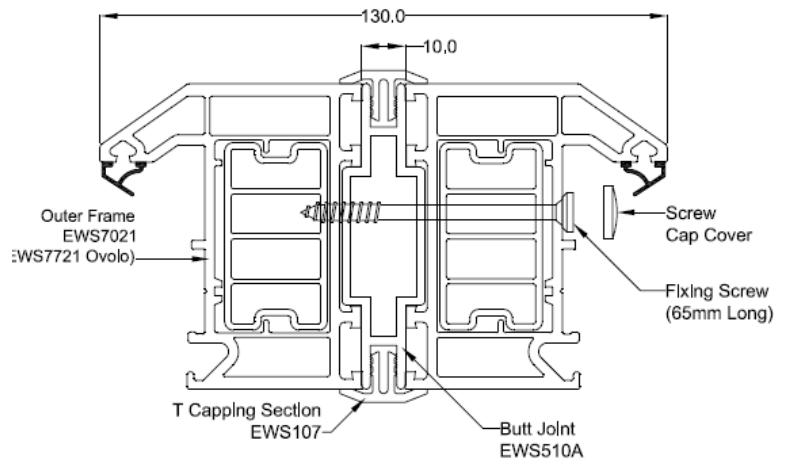
8

APPLY A GENEROUS AMOUNT OF SILICONE ON THE REAR OF THE CILL AS PER DIAGRAM 1 (PAGE 9).



9

PLACE THE WINDOW ONTO THE CILL AND PLACE THE CONNECTOR IN-BETWEEN THE WINDOW FRAMES THAT YOU ARE ABOUT TO CONNECT TO EACH OTHER AS DIAGRAM 2. ONCE AGAIN, FIXINGS SHOULD BE NO MORE THAN 500MM APART AND NOT WITHIN 100MM OF A WELDED JOINT. REPEAT ALL PROCESSES UNTIL ALL FRAMES ARE CONNECTED.



**NOTE 1:** DUE TO MANUFACTURING TOLERANCES, IT MAY BE NECESSARY TO INSERT A PACKER (NOT SUPPLIED) BETWEEN THE FRAMES IN ORDER TO ENSURE A SOUND FIT. THE PACKER IS PLACED NEXT TO THE 10MM CONNECTOR. THE CONSERVATORY PERFORMANCE IS NOT AFFECTED BY THE USE OF THE PACKERS.

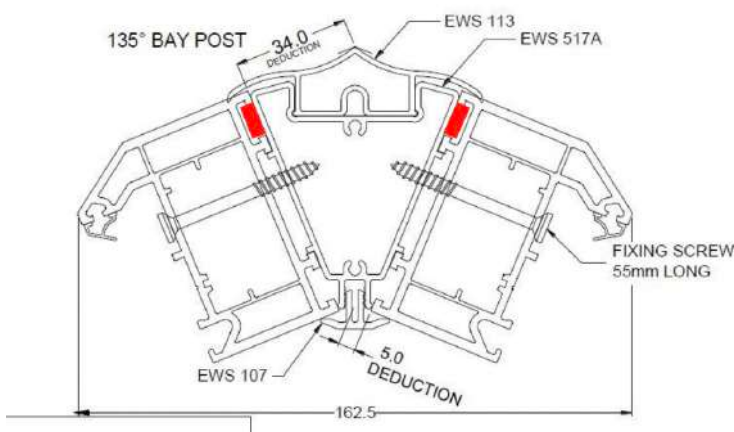
**NOTE 2:** DEPENDING ON THE SIZE OF THE CONSERVATORY, YOU MAY WISH TO DELAY FIXING ALL THE FRAMES TO THE CILL UNTIL YOU HAVE ALL THE FRAMES IN PLACE AND MEASURED THE INTERNAL DIMENSIONS AT THE TOP OF THE WINDOW. THE ROOF HAS BEEN MANUFACTURED TO INTERNAL SIZES AND IT IS IMPORTANT THAT THE FRAMES ARE ADJUSTED TO MATCH THE ROOF DIMENSIONS AT THIS STAGE. YOU MAY NEED TO ADJUST THE POSITION OF THE FRAMES AND CORNER POSTS TO ENSURE THE INTERNAL DIMENSIONS OF THE FRAMES MATCH THE ROOF DIMENSIONS. THE ROOF DIMENSIONS CAN BE FOUND ON THE ROOF MANUFACTURING DRAWINGS.



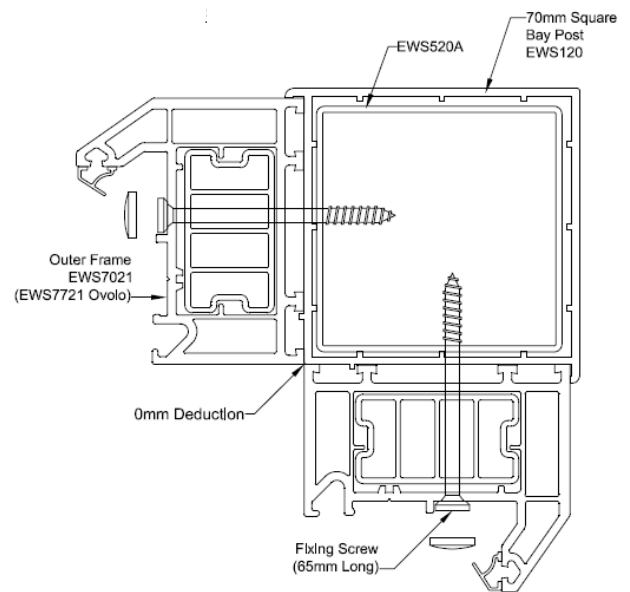
# INSTALLING THE WINDOWS - CORNER POST ASSEMBLY



USING THE TECHNICAL DRAWINGS ESTABLISH THE TYPE OF CORNER POST ASSEMBLY THAT IS REQUIRED. 90 DEGREE CORNER ASSEMBLY IS USED FOR EDWARDIAN, GABLE & LEAN-TO CONSERVATORIES. CHECK THE PVCu CORNER POST HAS THE ALUMINIUM CORNER POST NEXT TO THE FRAME AND ENSURE THE TOP OF THE WINDOW ALIGNS WITH THE TOP OF THE CORNER POST.



ONCE IN POSITION, SECURE THE WINDOW FRAME DIRECTLY TO THE CORNER POST USING THE 55MM DRILL TIP SCREW AS PER DIAGRAM 2 (PAGE 11). FIXINGS SHOULD BE WELL-SPACED BUT NO FURTHER THAN 500MM APART AND NO CLOSER THAN 100MM TO A WELDED JOINT.



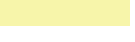




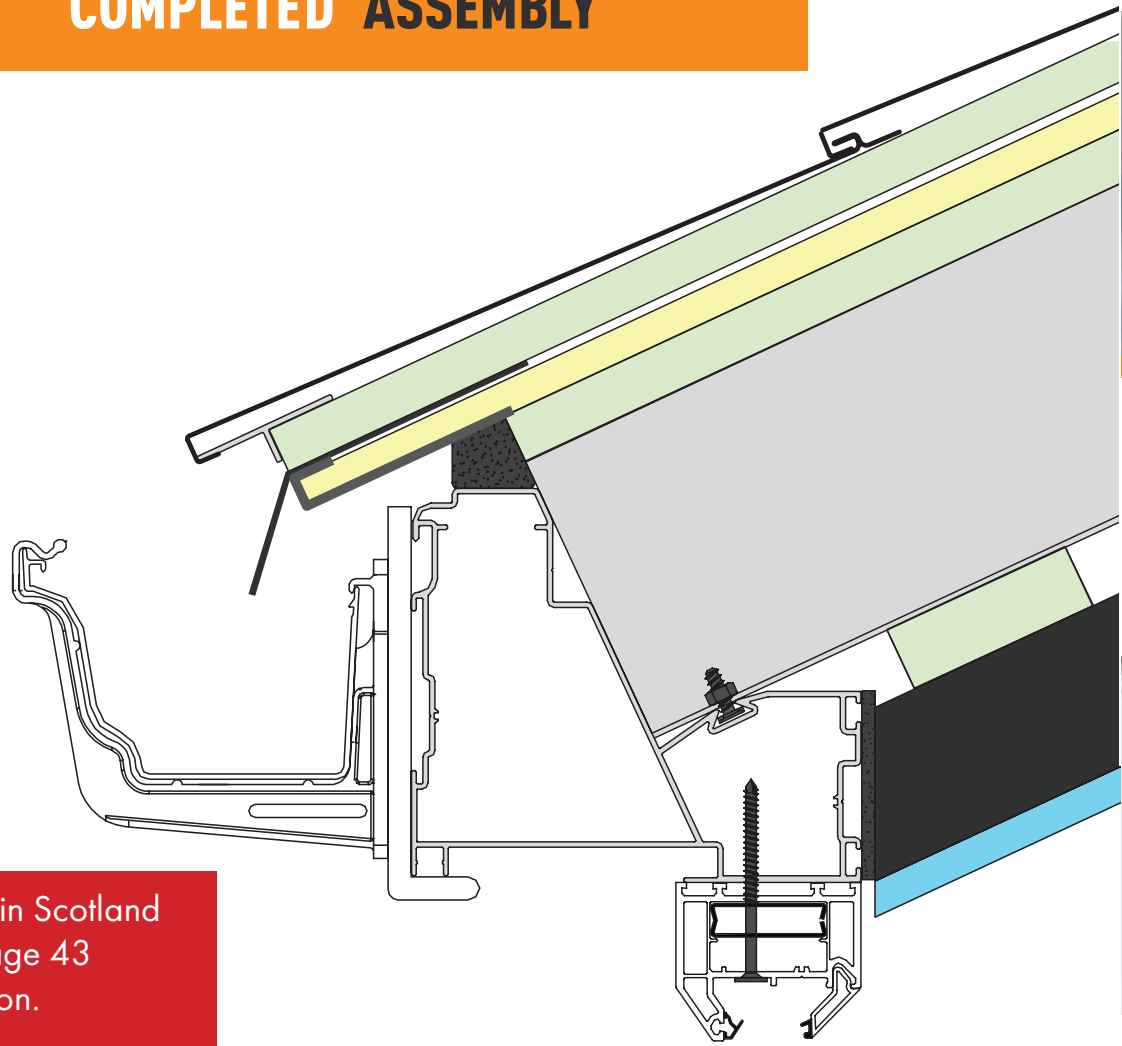
**NOTE 1:** THE 135-DEGREE BAY POST ASSEMBLY FOR VICTORIAN CONSERVATORIES IS VERY SIMILAR TO THE 90 DEGREE CORNER POST. LOCATE THE WINDOW FRAME AGAINST THE ALUMINIUM CORNER POST, AS BEFORE, DRILL A PILOT HOLE INTO THE POST AND THEN USE THE 55MM DRILL TIP SCREW TO SECURE THE FRAME TO ALUMINIUM POST. THE INTERNAL AND EXTERNAL TRIMS (EWS 113 AND EWS 107) ARE FITTED ONCE THE FRAMES ON BOTH SIDES ARE SECURED IN PLACE BY PUSHING INTO THE ALUMINIUM CORNER POST. IF THEY NEED TO BE ADJUSTED, THEY CAN BE SLID OUT OF THE CORNER POST.

**NOTE 2:** AS BEFORE, THE 55MM DRILL TIP SCREWS SHOULD BE NO MORE THAN 500MM APART AND NO CLOSER THAN 100MM TO A WELDED JOINT. THE METHOD TO SECURE THE WINDOW FRAMES TO BOTH THE 135 DEGREE AND 150 DEGREE POSTS, REMAINS THE SAME.

## COMPLETED ASSEMBLY

### KEY

	ALUMINIUM
	LATHS
	OSB
	INSULATION
	PLASTERBOARD



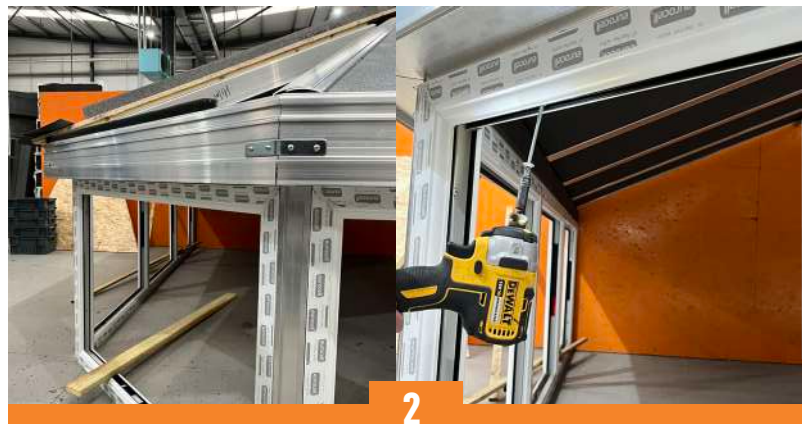
**Please note:** if installing in Scotland or Wales please refer to page 43 before starting the installation.

## INSTALLING THE FRAMEWORK



1

ALIGN THE LOCATING NIB WITH THE FRONT EDGE OF THE WALL/FRAMES AND MEASURE TO ENSURE EACH END OF THE RING BEAM IS THE SAME DISTANCE FROM THE BRICK OR FRAMES.



2

CONTINUE LOCATING THE RING BEAM USING THE INTERNAL AND EXTERNAL BRACKETS AND SELF-DRILL SCREWS.



3

ENSURE THE WINDOW FRAMES ARE CORRECTLY ALIGNED AND THE INTERNAL OF THE EAVES BEAM IS FLUSH WITH THE INTERNAL FRAME LINE.



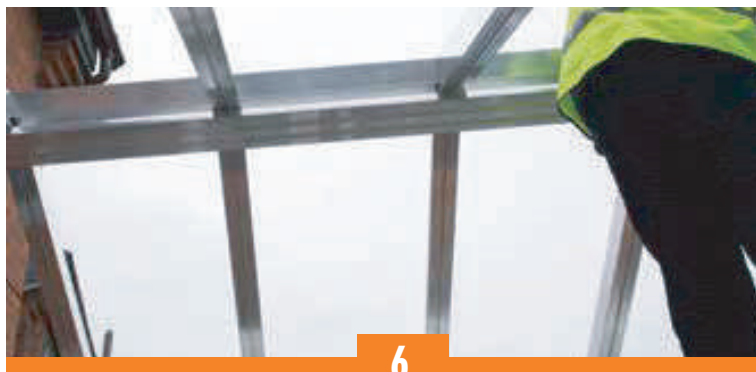
4

ONCE THE RING BEAM IS IN PLACE, SCREW UP FROM THE FRAME USING 55MM SELF-DRILL BAY POLE SCREWS TO SECURE 300MM CENTRES, ENSURING YOU KEEP 150MM AWAY FROM ANY WELDED FRAME POINT.



5

IF NECESSARY, TIDY UP ANY PLASTER SO THE NEW GABLE RAFTERS GO UP TO THE HOST WALL.



6

USING THE PRE-POSITIONED STUDS, LOCATE THE RAFTERS IN THE RING BEAM AND RIDGE IN THE MARKED POSITIONS. DO NOT FULLY TIGHTEN THE NUTS. AGAIN, CHECK THE ALIGNMENT OF THE FRAMES.



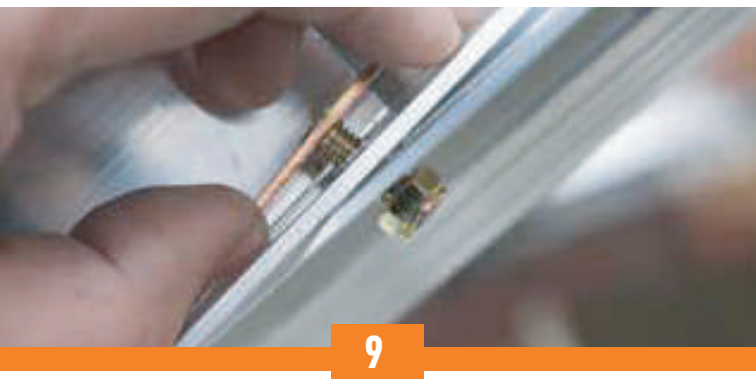
7

ONCE THE RIDGE IS IN PLACE, LOCATE THE HIPS. ALIGNING THE CENTRE OF THE HIP WITH THE CORNER OF THE FRAMES.



8

THE HIPS ARE A TWO-PART COMPONENT AND LOCATED INTO THE RING BEAM AND REST ON THE WOK (TO BE BOLTED LATER).



9

LOCATED ANY JACK RAFTERS ON THE RING BEAM AND STUDS. USE SINGLE STUDS SUPPLIED TO FIX THE TOP OF THE JACK RAFTERS TO THE HIP. **DO NOT TIGHTEN.**



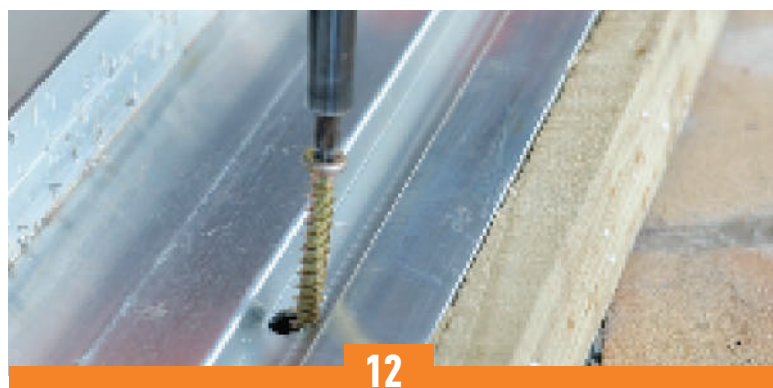
10

CHECK THE HEIGHT OF THE RIDGE. ENSURE RAFTERS ARE ALIGNED. TIGHTEN ALL NUTS IN THE RIDGE AND RING BEAM. AT THIS POINT TIGHTEN JACK RAFTERS AND HIPS. ENSURE THE RIDGE HEIGHT MATCHES PAPERWORK.



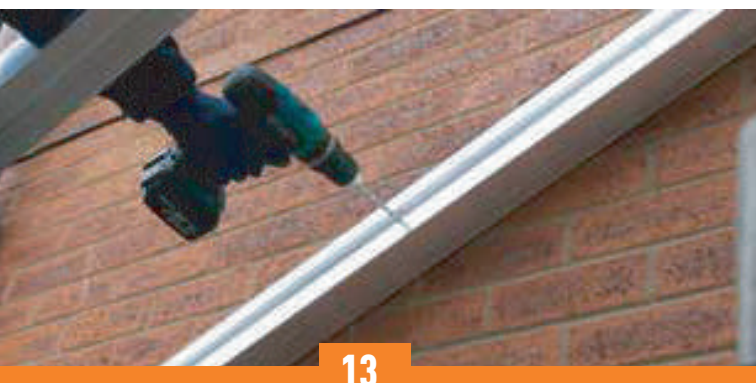
11

CLAMP THE WOK TO THE HIP. USE M6 X 50LG BOLTS, NUTS AND WASHERS SUPPLIED INTO THE PRE-DRILLED HOLES AND BOLT TOGETHER. DO NOT FULLY TIGHTEN.



12

ENSURE JACK RAFTERS AND HIPS ARE CORRECTLY ALIGNED. SET HIPS IN POSITION USING 40MM SELF-TAPPING SCREWS THEN TIGHTEN ALL REMAINING NUTS.



13

FIX GABLE RAFTERS AT 400MM CENTRES TO THE BACK WALL USING SUPPLIED FIXINGS.



14

19 X 38MM BATENS ON THE TOP FACE OF ALL RAFTERS ARE PRE-INSTALLED AT MANUFACTURE.

# INSULATING AND WATERPROOFING



1

ONCE ALL OF THE PAPERWORK FOR THE ROOF IS ASSEMBLED AND TIGHTENED, INSTALL THE PRE-CUT 100MM INSULATION.



2

ENSURE THE INSULATION IS FULLY SEATED DOWN TO MEET THE BASE OF THE RAFTERS.



3

USE AN APPROPRIATE FIRE RETARDANT FOAM TO SEAL THE GAPS AROUND THE INSULATION AND ALUMINIUM.



4

INSERT THE CAVITY INSULATION BETWEEN THE CROWN AND RIDGE, AND IN THE VOID AT THE BOTTOM ON THE HIP WHERE IT MEETS THE RING BEAM.



5

INSTALL THE FOAM STRIP ALONG THE RING BEAM.

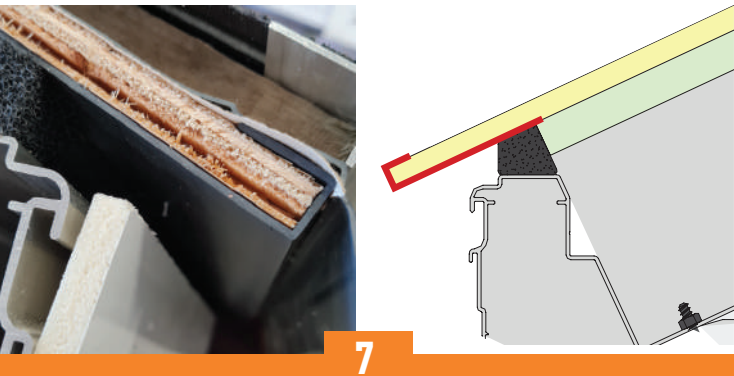
PLEASE NOTE IF FITTING A SOLSIRIUS ROOF, DO NOT INSTALL THE FOAM STRIP IN THE GLAZING AREA.



6

ATTACH OSB BOARDS TO WOOD RAFTERS ENSURE 40MM OVERHANG.

## INSULATING AND WATERPROOFING



7

ENSURE THE OSB IS FITTED WITH THE TRIM WITH THE SHORT SIDE UP.



8

FIX 55MM FROM THE FRONT EDGE USING 20MM SELF-DRILLING SCREWS. CONTINUE OVER THE REST OF THE ROOF WITH 65MM SELF-DRILLING SCREWS POSITIONED 300MM APART.



9

ONCE THE OSB IS FITTED, MEASURE AND TRIM THE DRIP TRAY.



10

FIT THE DRIP TRAY AROUND THE EDGE OF THE ROOF.



11

COVER THE ROOF WITH A BREATHABLE MEMBRANE.



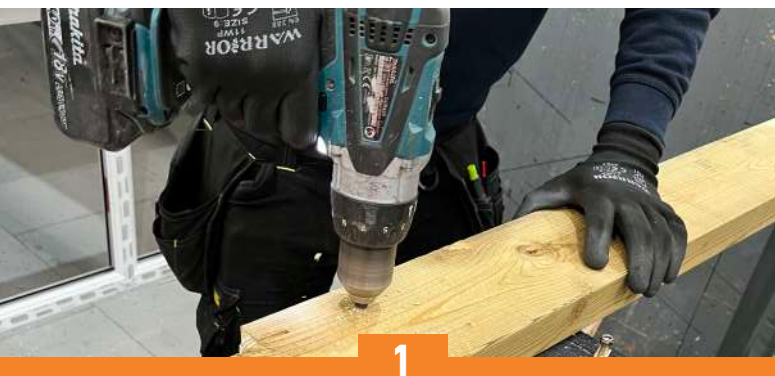
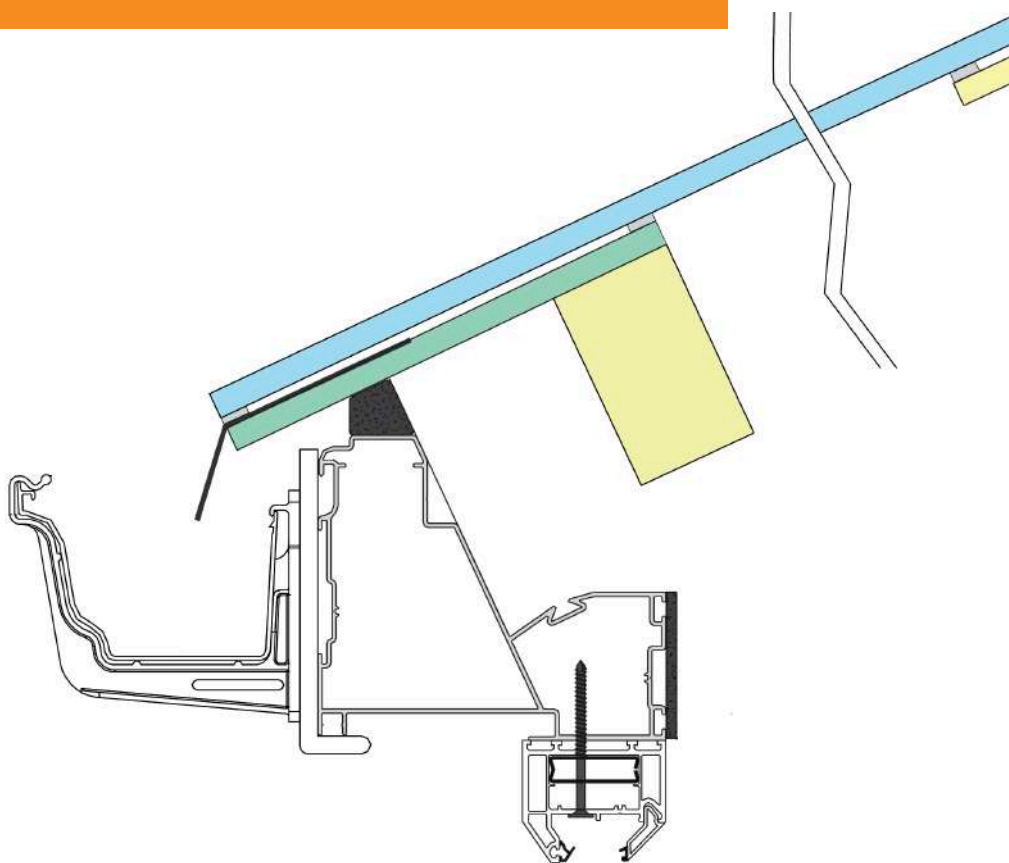
12

ENSURE A 50MM OVERHANG OVER THE EDGE OF THE ROOF (TRIM LATER) FIX INTO PLACE WITH STAPLE GUN.

## GLAZING PANEL INSTALLATION

### KEY

-  GLAZING
-  GLAZING BAR
-  OSB
-  SUPPORT TIMBER
-  DRIP TRAY



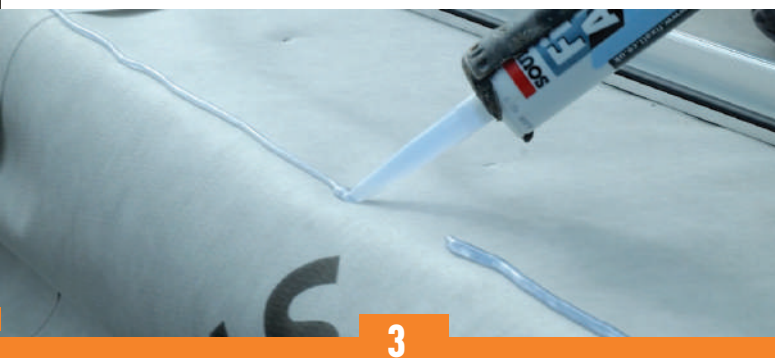
1

PRE-DRILL THE 47 X 125MM GLAZING SUPPORT TIMBERS.



2

ENSURE THE GLAZING SUPPORT TIMBER IS NOTCHED ON EITHER END TO ALLOW FOR BOLTING ONTO THE RING BEAM/ WALL PLATE / RIDGE.



3

RUN A BEAD OF SILICONE FROM TOP TO BOTTOM PRIOR TO FIXING THE GLAZING RAFTER.



4

USING THE PRE-DRILLED HOLES, FIX THE GLAZING SUPPORT TIMBER WITH 60MM BAY POLE SCREWS AT MAX 500MM CENTRES.

# GLAZING PANEL INSTALLATION



MARK THE ALUMINIUM GLAZING RAFTER 30MM FROM END. TO ALLOW FOR A 3MM OVERHANG FROM FRONT OF EAVES GUARD.



CHECK THE GLAZING BAR IS SUPPORTED BY THE 47 X 125MM TIMBER BEFORE FULLY FIXING WITH 60MM BAY POLE SCREWS AT 2 X 500MM CENTRES.



TRIM THE MEMBRANE FROM AROUND THE GLAZING AREA.



RUN A BEAD OF SILICONE ACROSS THE BOTTOM OF THE GLAZING AREA.



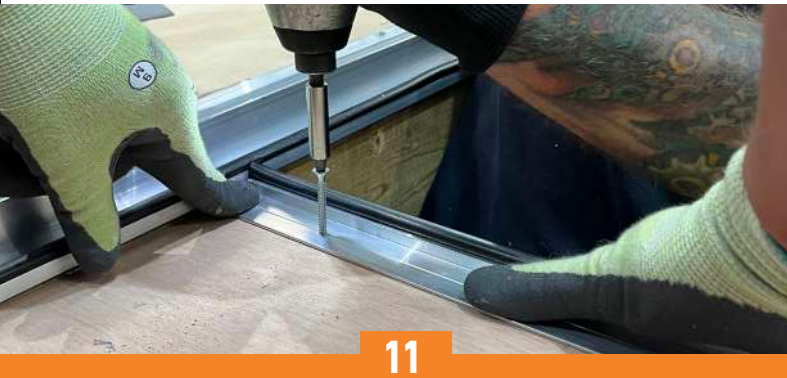
TAKE NOTE OF TOP AND BOTTOM PLYBOARD SECTIONS, THEY ARE MARKED WITH 'T' AND 'B'.



FIX PIECE OF STUD TO 47MM X 125MM GLAZING SUPPORT TIMBER WITH 60MM BAY POLE SCREWS.



# GLAZING PANEL INSTALLATION



11

ON SECTION 'B' - FIT GLAZING SEAL STRIPS ALONG THE EDGE OF EACH PLYBOARD SECTION.



12

POSITION INTO THE GLAZING AREA.



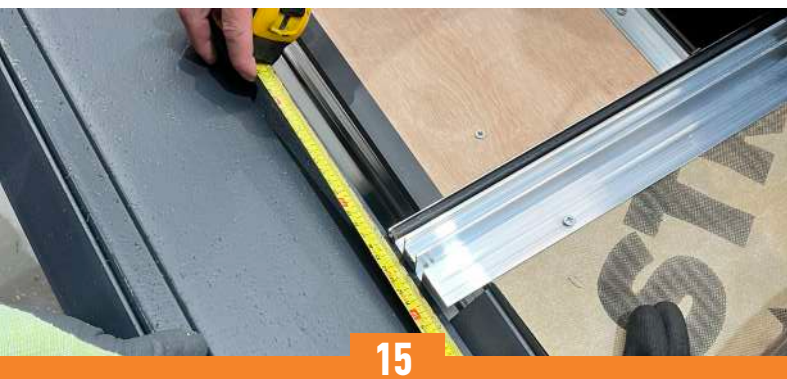
13

LINE UP THE PLYBOARD WITH THE GASKET OF THE ALUMINIUM GLAZING BAR.



14

FIX WITH 60MM BAYPOLE SCREWS, SET ON AN ANGLE AND AT DIFFERENT HEIGHTS TO ENSURE FIXINGS DO NOT CLASH.



15

MEASURE AND CUT THE DRIP TRAY, THEN FIX BETWEEN WITH RAFTERS ON A BEAD OF SILICONE.



16

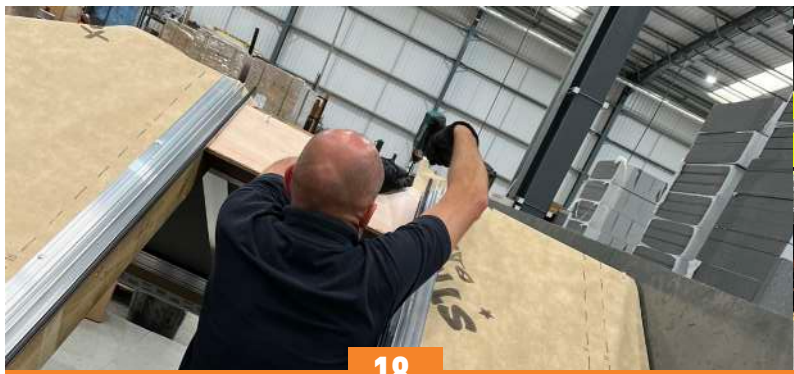
FIX ALUMINIUM GLAZING BAR AT BOTH ENDS OF THE PLYBOARD WITH 42MM BAYPOLE SCREWS AT 500MM CENTRES.

# GLAZING PANEL INSTALLATION



17

THE ASSEMBLY AT THE EAVES SHOULD LOOK LIKE THIS.



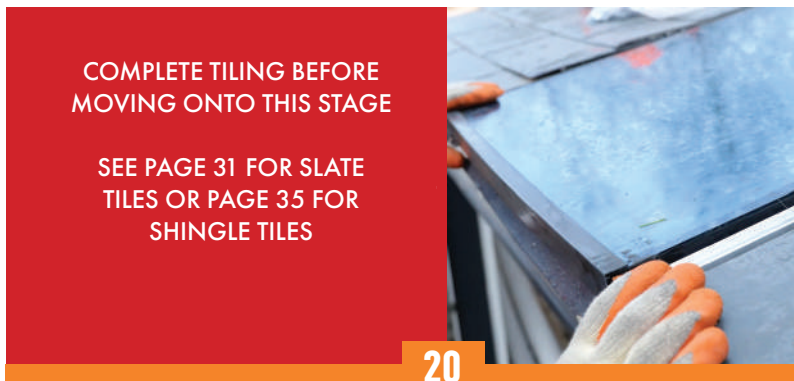
18

ON SECTION 'T' - POSITION INTO THE TOP OF THE GLAZING AREA NEAR THE RIDGE OR WALL PLATE.



19

SECURE INTO THE 47 X 125MM SUPPORT TIMBER BY FIXING AT AN ANGLE WITH 80MM BAYPOLE SCREWS.



20

COMPLETE TILING BEFORE MOVING ONTO THIS STAGE

SEE PAGE 31 FOR SLATE TILES OR PAGE 35 FOR SHINGLE TILES

POSITION THE GLAZING INTO THE GLAZING AREAS AND ENSURE IT LINES UP WITH THE END OF THE GLAZING RAFTERS.



21

POSITION THE GLAZING INTO THE GLAZING AREA AND SECURE USING THE END PLATE AND SCREWS SUPPLIED.

**PLEASE NOTE** THERE ARE SCREW CAP COVERS PROVIDED.

# LEAN-TO ROOF INSTALLATION - SOLID ROOF



AFTER PREPARING THE RING BEAM, AND INSTALLING BASE FRAMEWORK AS DETAILED ON PAGES 5 AND 6, ATTACH THE SUPPLIED WEDGE TO FRAMEWORK USING APPROPRIATE FIXING FOR YOUR WINDOW OR SHAPED WEDGE.



AFTER FIXING INTO PLACE MEASURE TO ENSURE STRUCTURE IS EQUAL AT BOTH SIDES AS PER ORDER.



ONCE HAPPY WITH THE STRUCTURE PLACE WALL PLATE TO THE HEIGHT SHOWN ON THE PAPERWORK SUPPLIED. USE A SPIRIT LEVEL TO MAKE SURE THAT STRUCTURE IS LEVEL AND SECURE.

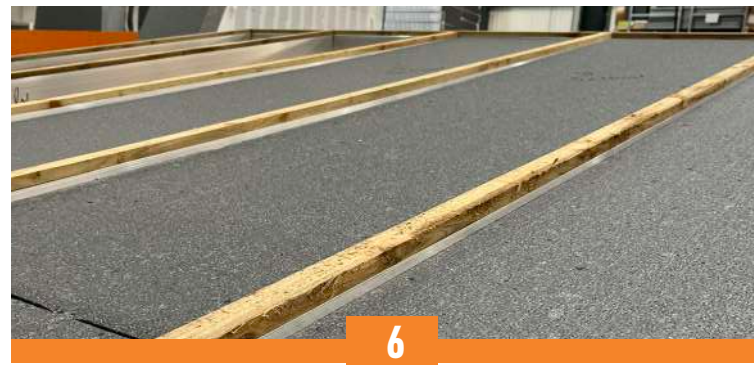


FIX RAFTERS AND END RAFTERS TO WALLPLATE AND EAVES BEAM WITH BOLTS PROVIDED, INSTALL YOUR SHAPED FRAMES TO SIDE AND FIX DOWN INTO LOWER WINDOW AND UP INTO THE RAFTERS AND INTO THE HOST WALL TO SECURE IN PLACE.



ATTACH REMAINING RAFTERS ACROSS TOP OF ROOF FRAMES - THE ALUMINIUM STRUCTURE WILL BE MARKED WHERE THEY NEED TO BE PLACED.

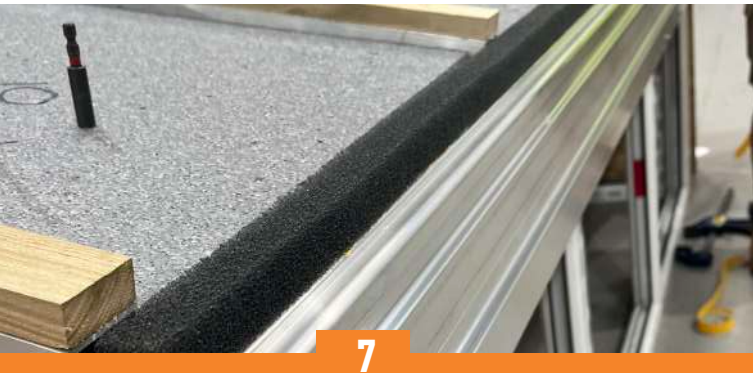
**TIP: PLACE INSULATION BETWEEN RAFTERS BEFORE CONTINUING TO ENSURE GABLE FRAMES ARE IN CORRECT POSITION.**



ONCE HAPPY WITH GABLE RAFTER PLACEMENT PLACE INTERNAL INSULATION INBETWEEN RAFTERS.

INSULATION WILL BE NUMBERED FOR EASY FITTING. USE EXPANDING FOAM TO FILL ANY GAPS IN THE INSULATION AND ALUMINIUM.

# LEAN-TO ROOF INSTALLATION - SOLID ROOF



7

APPLY FOAM STRIP ALONG EAVES BEAM BELOW INSULATION.



8

ATTACH OSB BOARDS TO WOOD RAFTERS ENSURE 40MM OVERHANG. THE OSB BOARDS WILL ARRIVE NUMBERED TO ENSURE EASY FITTING.



9

ATTACH OSB TRIM ALONG BOTTOM OF OSB AND TRIM ANY EXCESS.



10

ATTACH EAVES GUARD ACROSS BOTTOM OF THE OSB OVERLAPPING THE OSB TRIM.



11

ATTACH MEMBRANE ACROSS OSB USING A HAMMER TACKER AND TRIM THE EXCESS. ENSURE EACH LAYER OF MEMBRANE OVERLAPS THE PREVIOUS LAYER. THE MEMBRANE SHOULD ALSO OVERHANG OVER THE EAVES GUARD.

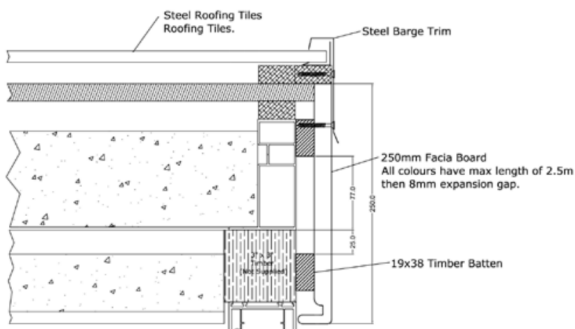


12

ATTACH THE TILE BATONS ACROSS THE TOP OF THE STRUCTURE AT 200MM SPACINGS.

**NOTE: ENSURE TILE BATONS ARE INSTALLED VERTICALLY.**

# LEAN-TO ROOF INSTALLATION - SOLID ROOF



13

ATTACH TIMBER BATONS TO WEDGE USING APPROPRIATE FIXINGS. (DOUBLE BATONS).



14

PLACE SOAKER ACROSS END BATON AND HOLD INTO PLACE. THE FIRST TILE CLEAT SHOULD SIT FLUSH ACROSS THE TOP OF THE BARGE. THEN REFER TO PAGE 33 FOR SLATE TILE INSTALLATION.



15

ATTACH 250MM CAPPING BOARD TO SIDE OF STRUCTURE.



16

ATTACH BOX END ONTO FRAME AND FIX INTO PLACE. ADDITIONAL SILICONE WILL NEED TO BE USED TO ENSURE ALL AREAS ARE FULLY SEALED.



17

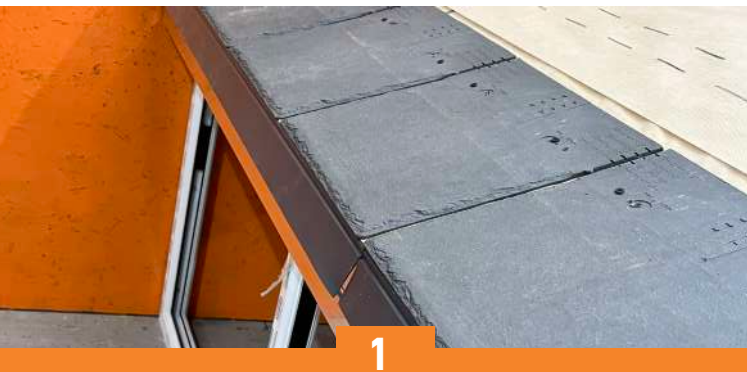
ATTACH THE BARGE ON TOP OF THE SOAKER TO FINISH.



18

THE BARGE WILL SIT OVER THIS AS DEPICTED IN IMAGE FOR NEAT FINISH.

## ROOF LIGHT INSTALLATION - SOLID SLATE TILES



BEFORE BEGINNING ROOFLIGHT INSTALLATION LAY YOUR FIRST COURSE OF TILES. FOR FULL INSTRUCTIONS ON HOW TO DO THIS SEE TILE APPLICATION - SOLID SLATE TILES ON PAGE 33.



DRILL HOLES AT THE SIDE OF THE RAFTERS FROM UNDERNEATH THE ROOF. THE PLACEMENT OF THE DRILL HOLES WILL DEPEND ON THE SIZE OF THE ROOFLIGHT.



TRIM FELT OFF THE TOP OF ROOF TO MAKE WAY FOR THE ROOF VENT.



REMOVE THE GLAZING PANEL FROM THE ROOF VENT BY PRESSING THE "PRESS BUTTON AT EITHER SIDE OF THE GLAZING PANEL. THE PANEL SHOULD THEN EASILY LIFT OUT OF THE FRAME.



PLACE VENT ONTO THE ROOF WHERE IT IS TO BE FITTED AND MARK AROUND THE VENT LEAVING A 10MM GAP.



REMOVE VENT AND STORE AWAY FOR LATER. THEN CUT OUT THE PLYWOOD USING A CIRCULAR SAW.

## ROOF LIGHT INSTALLATION - SOLID SLATE TILES



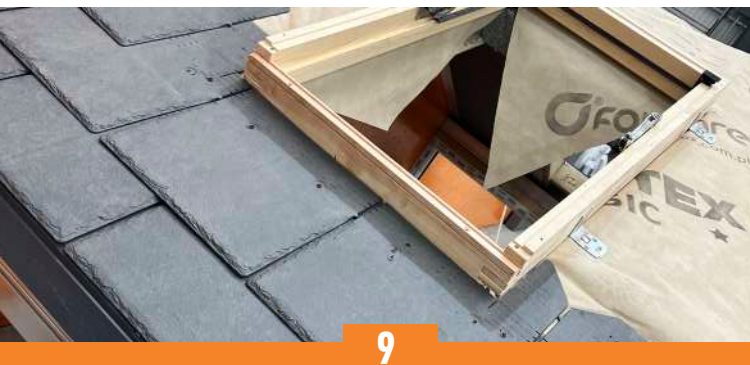
7

FIT BRACKETS ONTO ROOF VENT - ENSURE BRACKETS ARE PLACED 100MM FROM THE TOP AND 230MM FROM THE BOTTOM.



8

FIX ROOF VENT INTO PLACE AND MAKE SURE VENT IS LEVEL.



9

CONTINUE WITH TILING UP TO THE ROOF VENT.



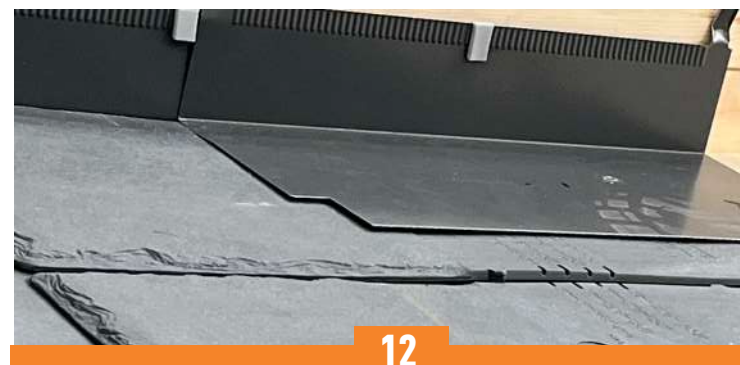
10

FIT FLASHING KIT PARTS IN NUMERICAL ORDER. PART 1 SHOULD BE FITTED 320MM FROM THE BOTTOM OF ROOF.  
PLEASE NOTE - EACH PIECE OF FLASHING KIT NEEDS TO BE INSTALLED ON A NEW TILE COURSE AS PER BUILDING REGULATIONS.



11

ONCE EACH PIECE OF FLASHING KIT IS IN PLACE TILE OVER THE PIECE TO KEEP ITEM IN PLACE AND FOR A CLEAN FINISH.



12

CONTINUE FITTING EACH PART OF THE FLASHING KIT AS DETAILED ABOVE USING FIXINGS PROVIDED.

## ROOF LIGHT INSTALLATION - SOLID SLATE TILES



13

ONCE FULL ROOF VENT IS IN PLACE, PLACE TOP CAPS OVER EXPOSED FIXINGS AND FIX INTO PLACE.



14

CONTINUE TILING ROOF AND APPLY VALLEY TRAY AS SHOWN ON PAGE 35.



15

FIX GLAZING PANEL BACK INTO ROOF VENT BY PRESSING THE PRESS BUTTON AND FITTING HINGES BACK INTO HOLES.

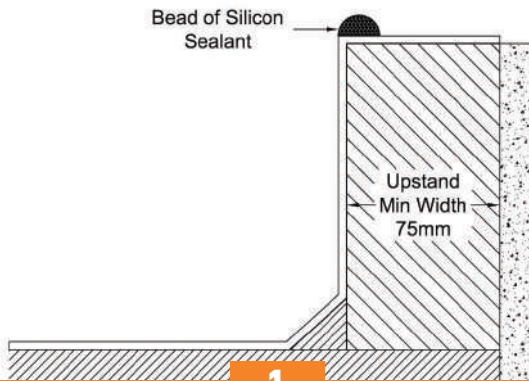


16

TURN GLAZING PANEL INTO PLACE AND THE FITTING IS COMPLETE.

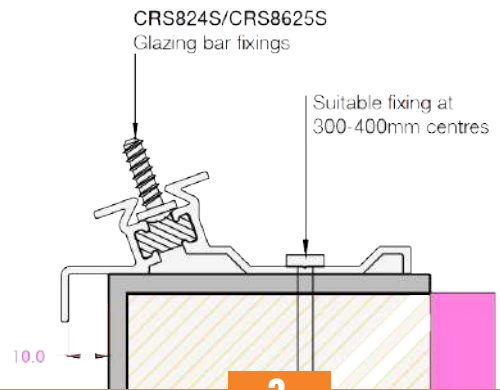


# SOLAPEX POD INSTALLATION - SOLID ROOF



1

ENSURE THE KERB IS CLEAN AND FREE FROM DEBRIS, THEN RUN A BEAD OF SILICONE AROUND THE EXTERNAL EDGE AS SHOWN ABOVE.



2

ENSURE CORRECT AMOUNT OF GLAZING BAR FIXING STUDS ARE SLID INTO THE RING BEAM BEFORE ANY FIXING COMMENCES. POSITION THE THE RING BEAM SO AN EQUAL OVERHANG IS ACHIEVED AROUND PERIMETER AND FIX USING SUITABLE 5-6MM FIXINGS AT 300 - 400MM CENTRES (STARTING AND ENDING 100MM AWAY FROM INTERNAL CORNER RING BEAM).



3

RUN A BEAD OF SILICONE SEALANT ALONG THE MITRED EDGE OF THE RING BEAM TO SEAL THE CORNER JOINT, WHEN THE NEXT RING BEAM IS OFFERED UP.



4

FIX THE ADJACENT RING BEAM ENSURING THE JOINT IS TIGHT. REMOVE ANY EXCESS SEALANT AND SECURE CORNER USING A STEEL CORNER CLEAT WITH A 4-OFF 4.8X25 LG SCREWS (SUPPLIED).

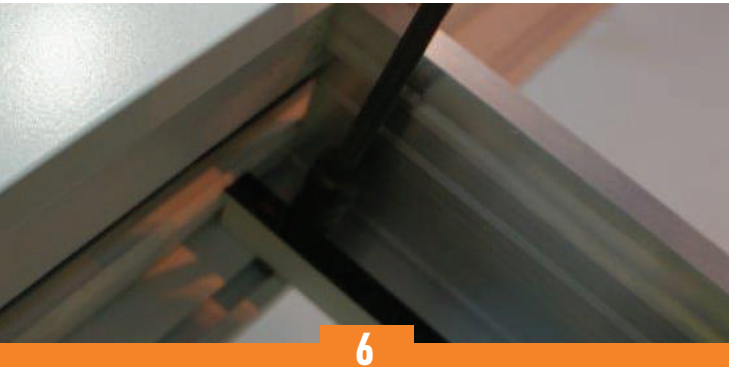


5

YOU CAN THEN PROCEED TO LOOSELY SECURE THE SIDE RAFTERS TO THE RING BEAM USING THE THREADED STUDS LOCATED DOWN THE RING BEAM.

**NOTE:** IF ACCESS TO THE BAR END IS LIMITED, IT IS ADVISABLE TO FIT THE GLAZING STOPS AND END CAPS AS SHOWN (RIGHT) BEFORE FIXING RAFTERS TO THE RING BEAM.

## SOLAPEX POD INSTALLATION - SOLID ROOF



SUPPORTING THE RIDGE, THE RAFTER BARS CAN BE SECURED TO THE RIDGE USING THE THREADED STUDS. ONCE OPPOSING RAFTERS HAVE BEEN SECURED THE RIDGE SHOULD BE SELF SUPPORTING.



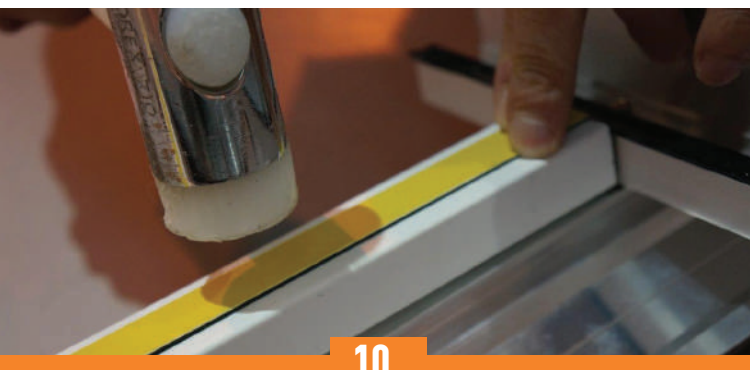
USING 2 X CRS8624S SINGLE STUDS, SECURE EACH HIP TO THE SPIDER CASTING. THE BODY OF THE STUD SHOULD LOCATE BETWEEN THE RETAINING RIBS ON THE LOWER CASTING FACE TO STOP THE STUD FROM SPINNING.



LOCATE THE HIP ONTO THE EXTERNAL RING BEAM STUDS AND LOOSELY SECURE USING FIXING NUTS.



FASTEN THE CENTRAL RAFTERS TO THE SPIDER USING 1 X CRS8625S DOUBLE STUD AND NUTS.



IF NOT ALREADY FITTED, CLIP IN THE EAVES BEAM SEALS BETWEEN THE RAFTERS AND HIP USING A NYLON Mallet. CHECK THE RAFTERS ARE ALL SQUARE TO THE RING BEAM AND RIDGE, AND THEN TIGHTEN ALL ROOF FIXING NUTS.



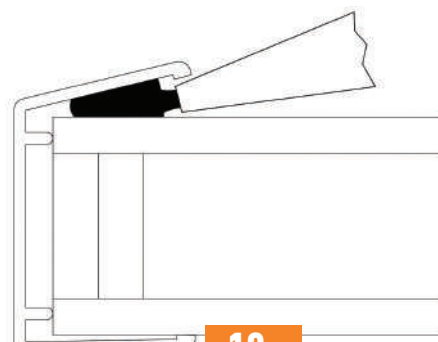
LOCATE THE NYLON BAR THROUGH THE SPIDER AND LOCK OFF USING NUTS AND WASHERS EITHER SIDE OF THE SPIDER. THE NYLON BAR SHOULD SIT 5MM BELOW THE CREST OF THE RIDGE PROFILE.

## SOLAPEX POD INSTALLATION - SOLID ROOF



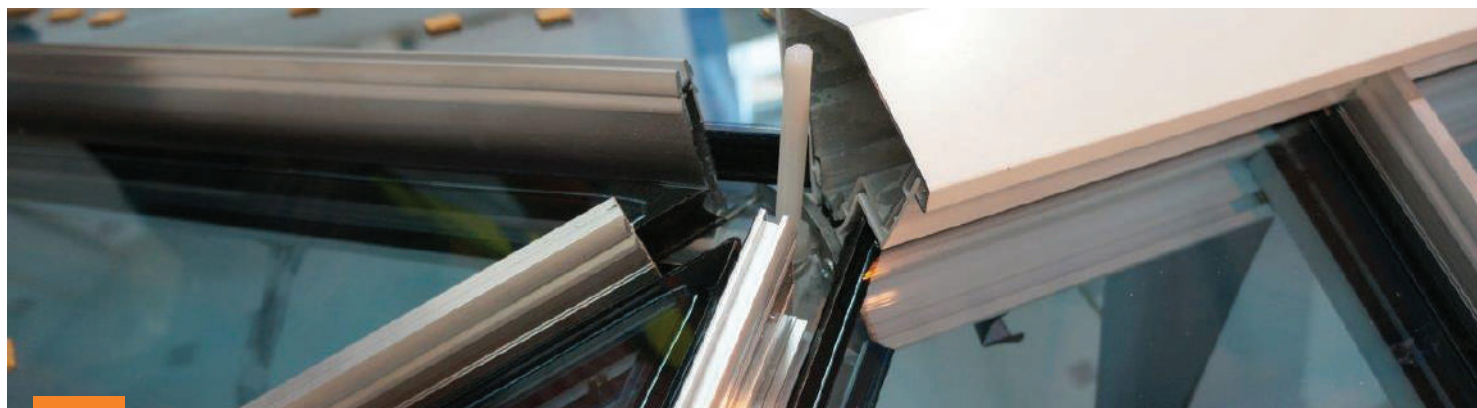
12

POSITION THE SPIDER BOTTOM CAP AND FIX USING THE DECORATIVE BOSS ONTO NYLON THREADED BAR. NOTE THE NYLON BAR MAY REQUIRE TRIMMING DOWN IN LENGTH.



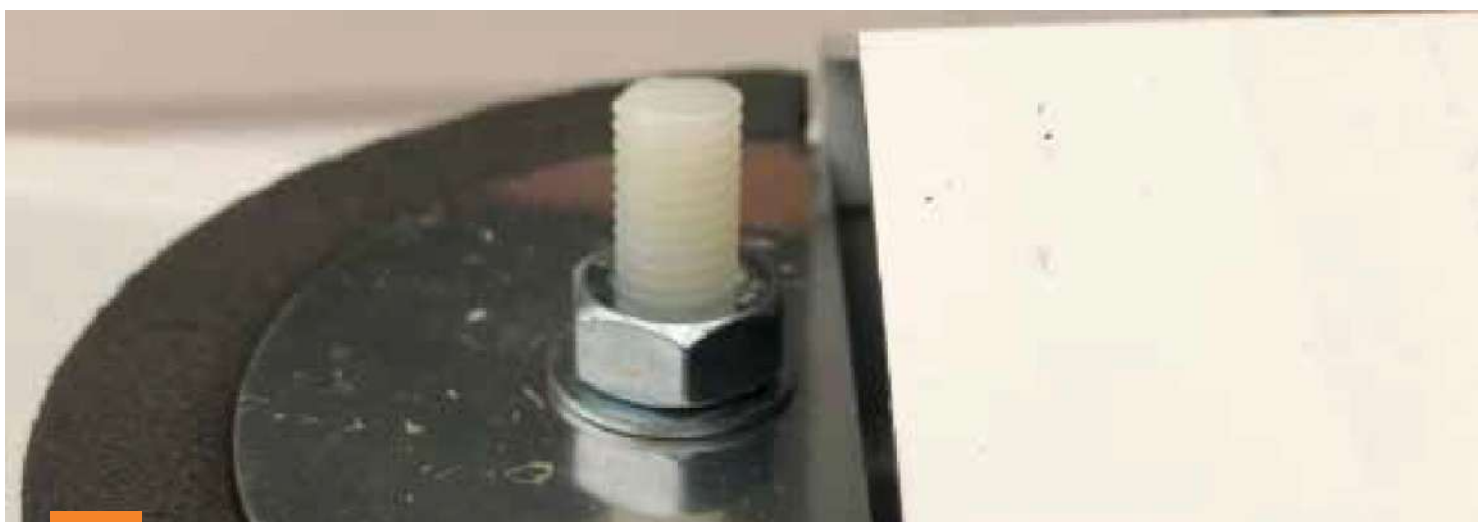
13

FIT THE GLAZING END CLOSURES TO THE GLASS AND RUN A BEAD OF SEALANT BETWEEN THE PROFILE AND TOP PANE OF GLASS AS SHOWN ABOVE. ONLY USE A SUITABLE SEALANT WITH SELF CLEANING GLASS.



14

IF NOT ALREADY FITTED, FIT THE GLAZING BAR END CAPS AND GLAZING STOPS. THEN PEEL BACK TWO INCHES OF EAVES BEAM SEAL TAPE FILM AND FOLD TO THE OUTSIDE. INSERT GLAZING UNIT ENSURING EQUAL COVERAGE AND ENSURING THE GLASS IS RESTING ONTO THE GLAZING STOPS.



15

FILL THE FOAM BUNG AND CLAMP PLATE AND TIGHTEN M10 NUT UNTIL THE FOAM IS FIRMLY PRESSED DOWN ONTO GLAZING.

## SOLAPEX POD INSTALLATION - SOLID ROOF



16

FIT THE RAFTER AND HIP TOP CAPS USING A NYLON MALLET, THEN ENSURING THE GLASS IS POSITIONED CORRECTLY, PEEL THE REMAINING EAVES BEAM SEAL TAPE FILM AWAY AND PRESS GLAZING DOWN TO ENSURE CONTACT WITH EAVES TAPE.



16B

POSITION TIMBER ON TOP OF THE CAPPING TO SPREAD THE FORCE THEN USE A MALLET TO TAP THE CAPPING DOWN STARTING AT THE TOP AND PROGRESSIVELY WORKING DOWN THE TOP CAP.



16C

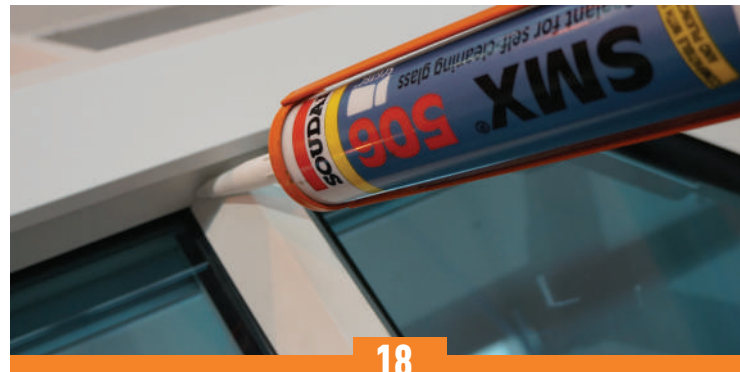
PROTECTIVE FILM CAN NOW BE PEELED OFF AND THEN GLAZING STOP PLUS END PLUS END CAPS FULLY TIGHTENED AND SECURE.

## SOLAPEX POD INSTALLATION - SOLID ROOF



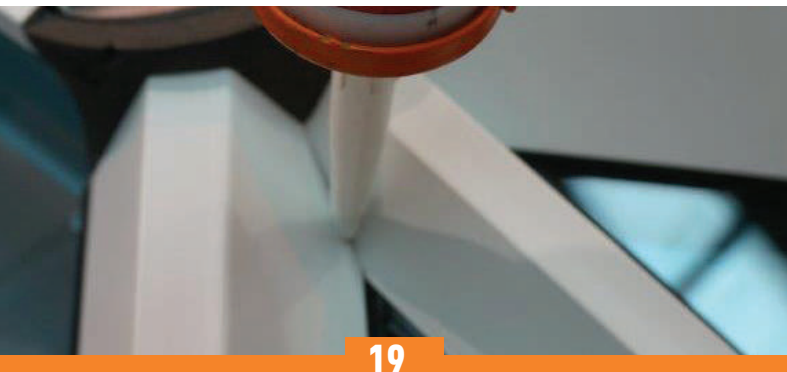
17

SEAL AROUND PERIMETER OF THE FOAM BUNG WHERE IT INTERSECTS THE RIDGE GLAZING SEAL, GLASS AND GLAZING BAR TOP CAPS.



18

SEAL AROUND RAFTER TOP CAPS TO RIDGE GLAZING TRIM.  
ONLY USE SUITABLE SEALANT WITH SELF-CLEANING GLASS.



19

SEAL THE RAFTER TOP CAP TO HIP TOP CAP FROM THE GASKET INTERSECTION TO FOAM BUNG.



20

USING A SUITABLE HIGH-GRAB ADHESIVE SEALANT, RUN A SMALL BEAD ON THE PERIMETER EDGES OF THE TOP CAP AND LARGER BEAD FURTHER INBOARD.



21

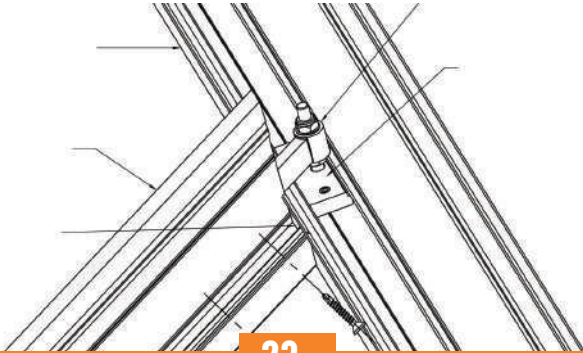
SPLAY THE TOP CAP AND LOWER ONTO THE RIDGE WHILST CHECKING THE CAPPING IS POSITIONED CORRECTLY OVER THE RAFTER AND HIP TOP CAPS. THE CAPPING RETURNS SHOULD CLIP UNDER THE RIDGE PROFILE WHEN POSITIONED CORRECTLY.



22

ENSURE THE CAPPING IS SEALED DOWN CORRECTLY AND REMOVE ANY EXCESS SEALANT FROM ALL EDGES.

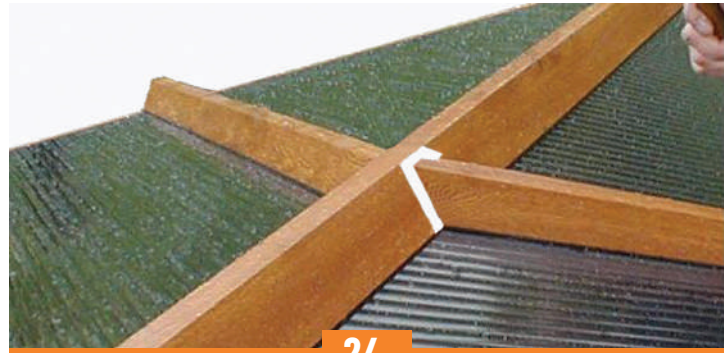
## SOLAPEX POD INSTALLATION - SOLID ROOF



23

LOCATE THE JACK RAFTER TENON (CRS8209) ONTO THE JACK RAFTER FIXING BOLT AND ADJUST THE LOWER NUT TO ALIGN GASKET BEFORE TIGHTENING THE TOP NUT.

THEN SEAL THE JACK RAFTER INTERNALLY TO THE HIP.



24

SEAL JACK TOP CAPPING JOINTS.

ONLY USE SUITABLE SEALANT WITH SELF-CLEANING GLASS.

# TILE APPLICATION - SOLID SLATE



1

MEASURE APPROX 305MM (3/4) FROM THE BOTTOM OF THE SLATE AND CUT.



2

ALIGN SLATE WITH THE END OF THE PLYBOARD ON THE EAVES.



3

FIX WITH TWO SCREWS AND CONTINUE WITH THE REST OF THE STARTER COURSE.



4

WHERE THE TILES MEET A HOST WALL, LEAD SOAKERS CUT OUT CODE THREE LEAD OR STANDARD TIN SOAKERS SHOULD BE INSTALLED UNDER EACH TILE WITH IN LINE WITH BUILDING REGULATIONS.



5

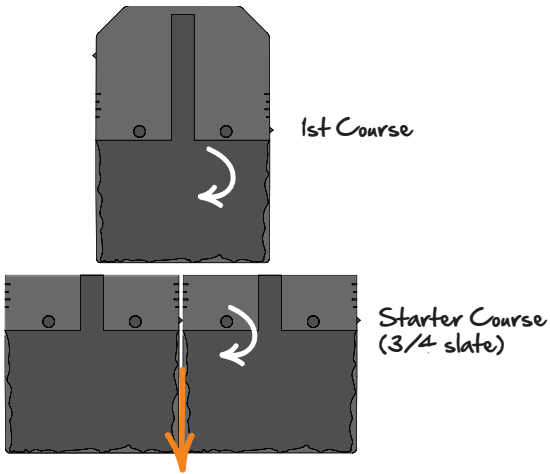
IF AN END BAR IS PRESENT INSTALL AND PREPARE THE VERGE TRAY BY RUNNING TWO BEADS OF SILICONE UNDERNEATH EACH TILE.



6

TO BEGIN THE FIRST COURSE, ALIGN THE TILE USING THE CENTRE LINE OVER THE STARTER COURSE.

# TILE APPLICATION - SOLID SLATE



WHEN STARTING OR FINISHING WITH A CUT SLATE, THE CUT EDGE SHOULD BE INSTALLED INWARDS.

DO NOT INSTALL SLATES SMALLER THAN 100MM

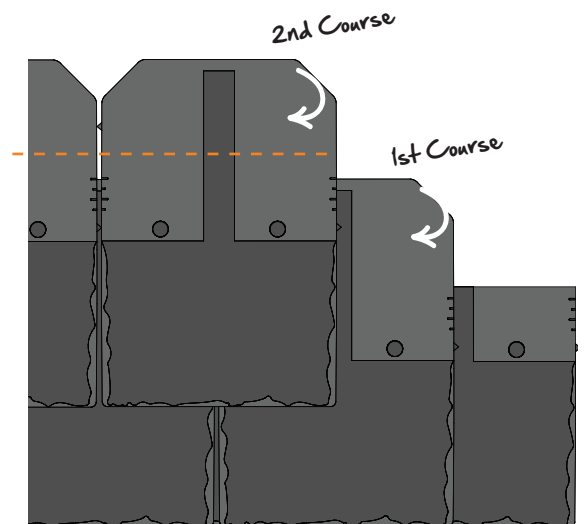
7



8

DEPENDING ON THE ROOF PITCH, ALIGN THE SECOND COURSE WITH THE EXPOSURE GAUGE

PLEASE NOTE SLATE TILES CAN'T BE FITTED ON A ROOF PITCH BELOW 12°.



9

CONTINUE WITH SLATES AND USE THE GAUGE AND OVERLAP OVER THE WHOLE ROOF.

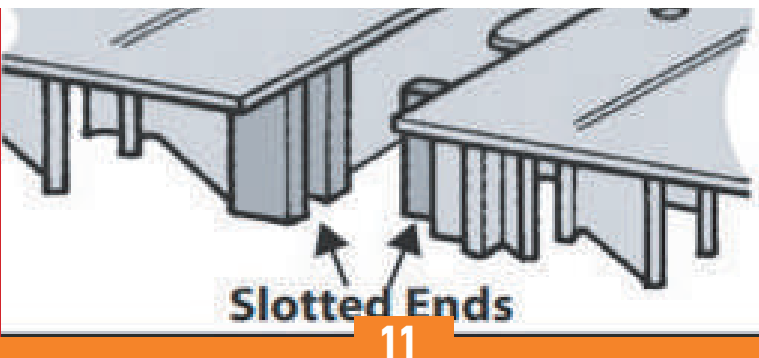


10

WHERE TWO FACETS MEET THE HIPS, THE TILES NEED TO BE CUT AND MITRED.



## TILE APPLICATION - SOLID SLATE



FIX RIDGE MOULDINGS ALONG THE RIDGE, IF HOST WALL IS PRESENT POSITION THE MOULDERING SO DIRECTIONAL ARROWS FACE AWAY FROM THE HOST WALL. FIX HIP MASTER MOULDINGS UP THE HIPS ENSURING DIRECTIONS ARROWS POINT UPWARDS TOWARDS THE CROWN.



ENSURE THE MOULDINGS ARE CLIPPED TOGETHER USING THE SLOTS AS SHOWN ABOVE AND FIX IN MARKED LOCATIONS APPROX. 150MM CENTRES USING 60MM SCREWS.



THE RIDGE AND HIP MASTERS WILL REQUIRE MITRING / SCRIBING INTO EACH OTHER WHEN THEY REACH THE CROWN AND SEALING WITH BUTYBAND.



INSTALL RIDGE TILES USING 60MM FIXINGS WITH APPROPRIATE OVERLAP AND MARKED FIXING LOCATIONS. AT THE RIDGE INTERSECTION THE TILES WILL REQUIRE MITRING TOGETHER TO SUIT THE ROOF GEOMETRY.

## VALLEY TRAY PREP - SOLID SLATE



15

USING A NYLON Mallet, FLATTEN THE VALLEY TRAY SIDES AGAINST A HARD SURFACE.



16

MARK AND CUT THE VALLEY TO SUIT THE TILE OVERHANG, FIX THE OUTSIDE EDGES USING SELF DRILL SCREWS. RUN A LARGE BEAD OF SILICONE UP EACH SIDE OF THE VALLEY TRAY 50MM FROM THE CENTRE OF THE VALLEY.



17

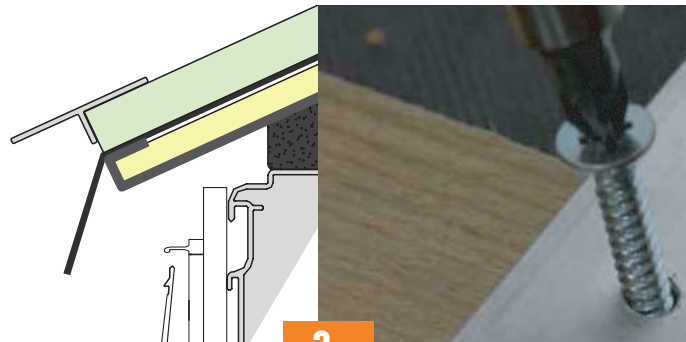
MITRE THE SLATES SO THEY FINISH 25MM FROM THE VALLEY CENTRE LINE.

# TILE APPLICATION - SOLID SHINGLE



1

FIX TILING BATTONS AT 200MM CENTRES VERTICALLY.



2

FIX THE TILE STARTER CLEAT TO THE BASE OF THE BATTONS.



3

HOOK THE FIRST TILE OVER THE CLEAT TO LOCATE.



4

FIX THE FIRST SHINGLE USING 4 NAILS OR SCREWS EVENLY. WORK FROM RIGHT TO LEFT AND CONTINUE TO LAY THE TILES, ENSURING THEY INTERLOCK CORRECTLY. NAIL EACH TILE AT THE LOWEST POINT INTO THE EAVES BATTEN.



5

MEASURE AND CUT THE TILES AT THE HIPS AND / OR WALL.



6

CONTINUE TO INSTALL THE TILES.

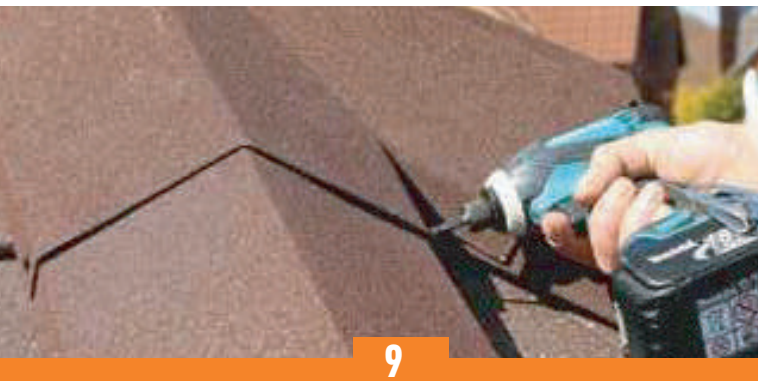
## TILE APPLICATION - SOLID SHINGLE



ONCE THE ROOF IS FULLY TILED, LAY THE TIMBER FRAMEWORK TO TILE THE HIP AND RIDGES. USING A RIDGE TILE TO SET THE WIDTH, FIX TIMBER BATTENS OVER RIDGE AND HIP.



AFFIX HIP RIDGE TILES AND FINISH WITH END CAPS.



COMPLETE THE TILING BY FITTING THE RIDGE MOULDING.



COVER ALL EXPOSED SCREW HEADS WITH THE REPAIR KIT SUPPLIED.

## NON-STANDARD ROOF CROWN - SOLID SHINGLE



1

ONCE THE RIDGE TILE POSITION HAS BEEN ESTABLISHED, MARK THE FLASH WITH THE CENTRAL LOCATION OF EACH HIP. THIS WILL IDENTIFY THE CAPPING POINT.



2

USING THE RIDGE TILE POSITION, FIX THE BATTONS FOR THE RIDGE AND HIP TO CREATE A FRAMEWORK FOR THE CAP. THE RIDGE TILES RUNNING UP THE HIP SHOULD BE SPREAD TO REDUCE THE HEIGHT, SO THEY FIT UNDER THE RIDGE.



3

ONCE THE CAP IS CREATED, USE THE CENTRE LINE DRAWN IN STEP 1 TO LINE UP AND MARK THE TILES THEN COVER THE HIPS.



4

ONCE YOU ARE HAPPY WITH THE POSITION OF THE TILES, YOU CAN CUT THEM TO SIT IN POSITION.



5

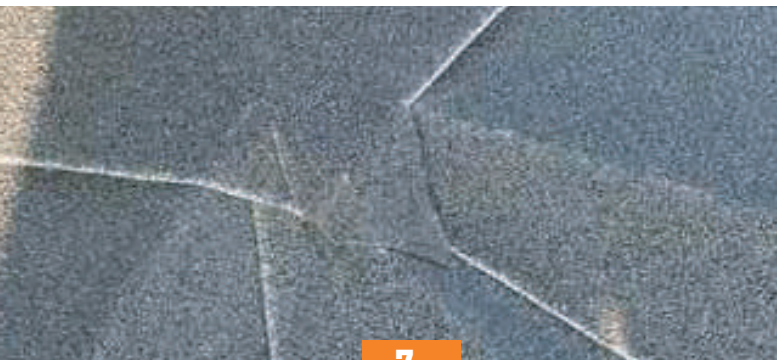
CONTINUE WORKING YOUR WAY AROUND THE CAP, CUTTING EACH RIDGE TILE INTO THE PREVIOUS ONE.



6

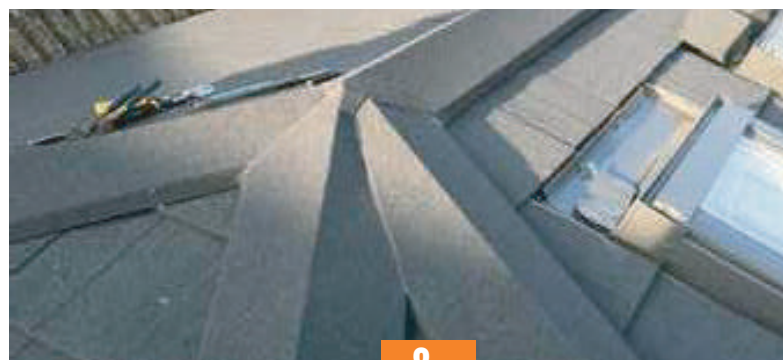
ONCE THE HIP TILES ARE IN PLACE, POSITION THE RIDGE TILE. MARK CAREFULLY SO THE RIDGE TILE SITS AT THE CAP OF THE ROOF.

## NON-STANDARD ROOF CROWN - SOLID SHINGLE



7

CUT THE TILE AND FIT INTO POSITION.



8

USE THE GLUE AND DUST KIT (SUPPLIED) IF ADDITIONAL COVER OF THE JOINS IS REQUIRED.

# FINISHING AND INTERNAL INSULATION



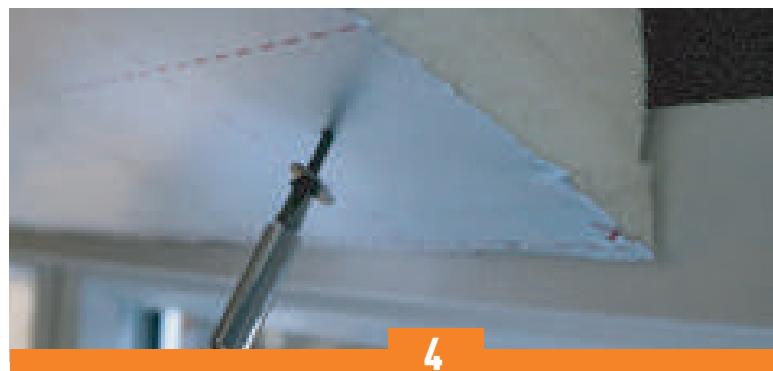
IF EXISTING LEAD IS IN GOOD CONDITION AND APPROPRIATE LENGTH FOR THE NEW ROOF CONSTRUCTION, REPOSITION IT TO COMPLETE THE EXTERNAL INSTALLATION. IF LEAD WORK REQUIRES REPLACING ENSURE THE VERTICAL DROP AND TILE COVERAGE MEETING APPROPRIATE GUIDELINES.



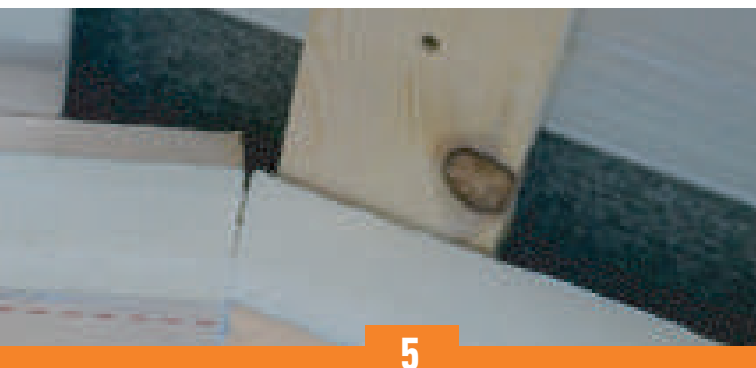
WE ADVISE CARRYING OUT A WATER TEST FOR ALL TILE TYPES USING A HOSE TO REPRESENT HEAVY RAINFALL THE WATER SHOULD FALL VERTICALLY, DO NOT DIRECT WATER UP THE TILE JOINTS.



FIX THE PLYWOOD PLATE TO THE BASE OF THE RIDGE OR ALTERNATIVELY FIX TO RAFTER BATTENS LOWER DOWN TO CREATE A VAULTED CEILING.



USING STOCK SHEETS OF 72.5MM INSULATED PLASTERBOARD, MITRE THE BOTTOM EDGE TO SUIT THE ROOF PITCH, ENSURE IT IS FLUSH.

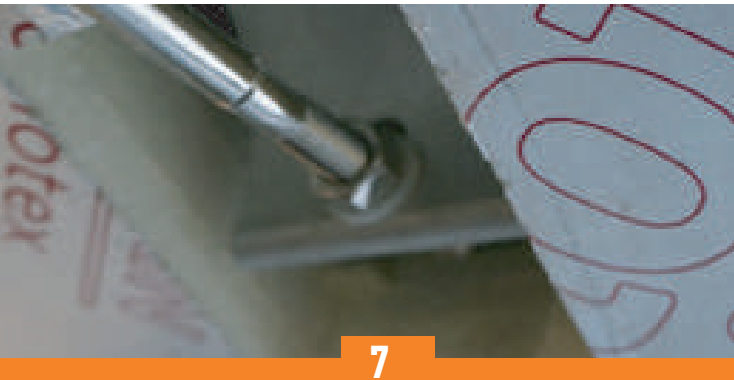


CONTINUE TO INSTALL INSULATION AROUND THE ROOF, USE HIP AND VALLEY CENTRES AS MEASUREMENT REFERENCES SHOW, AND ENSURE CUTS HAVE APPROPRIATE MITRES WHERE NECESSARY. GAPS BETWEEN INSULATION SHOULD BE KEPT TO A MINIMUM.



PROCEED FROM THE BOTTOM OF THE ROOF WORKING UPWARDS, CUTTING THE SHAPES FROM THE STOCK SHEETS TO FIT THE ROOF FACES.

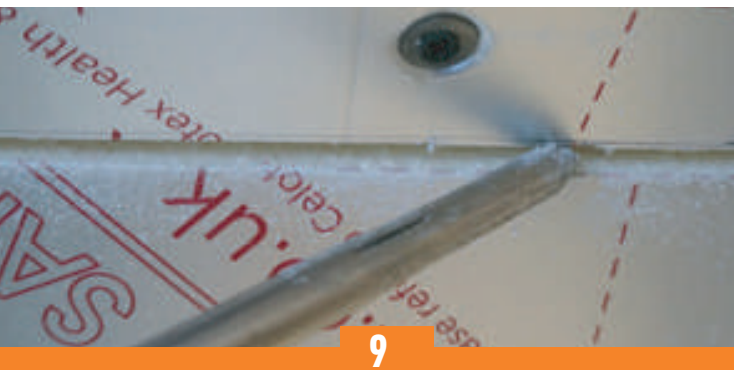
## FINISHING AND INTERNAL INSULATION



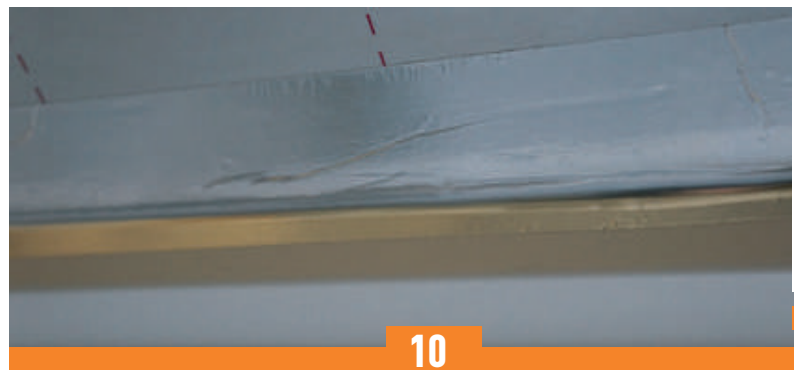
IF TIE WIRES HAVE BEEN INSTALLED, CUT TWO INSULATION SHEETS SO THE JOINT IS IN LINE WITH THE TIE WIRE, THEN MARK OUT THE TIE WIRE BRACKET LOCATION AND CUT AWAY THE MINIMUM AMOUNT OF INSULATION.



FILL THE VOID WITH AN APPROPRIATE EXPANDING FOAM TO FULLY COVER THE BRACKET. LEAVE FOAM TO SET AND TRIM ANY EXCESS AWAY BEFORE COVERING WITH PIR FOIL TAPE.



ENSURE ANY GAPS IN BETWEEN THE INSULATION ARE FILLED WITH AN APPROPRIATE EXPANDING FOAM AND ALL JOINTS ARE TAPED.



ONCE ALL JOINTS ARE SEALED, INSTALL THE 72.5MM INSULATED PLASTERBOARD USING 100MM DRYWALL SCREWS, ENSURING THEY PICK UP THE BATTENS.



DRYWALL SCREWS SHOULD BE INSTALLED AT 300MM CENTRES, 10MM FROM BOUND AND 13MM FROM CUT EDGES.

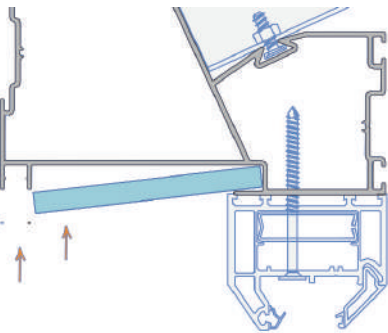
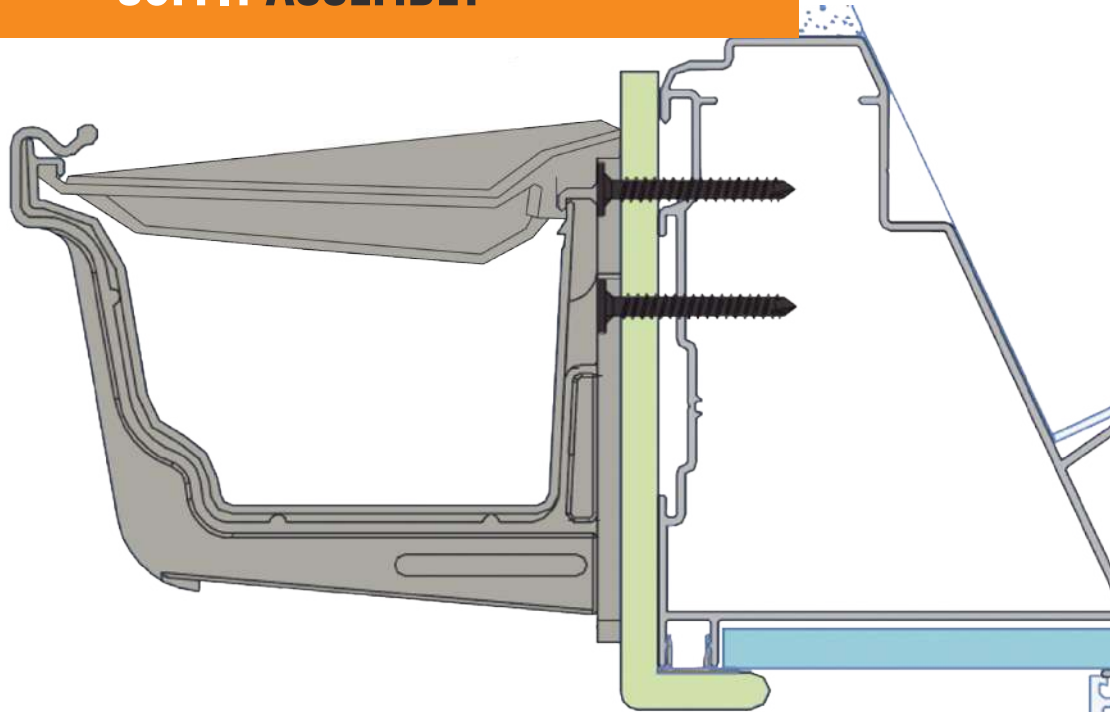
THE ROOF IS NOW READY FOR PLASTERING.



# SOFFIT ASSEMBLY

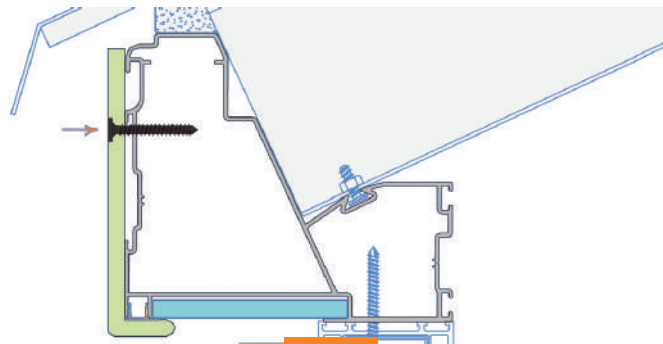
## KEY

-  GUTTER
-  FASCIA
-  SOFFIT BOARD



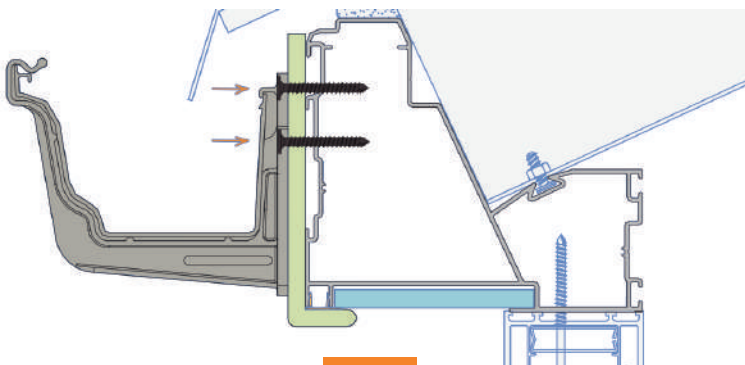
1

INSERT THE REAR EDGE OF THE 100MM SOFFIT BOARD INTO THE CHANNEL UNDERNEATH THE EAVES BEAM



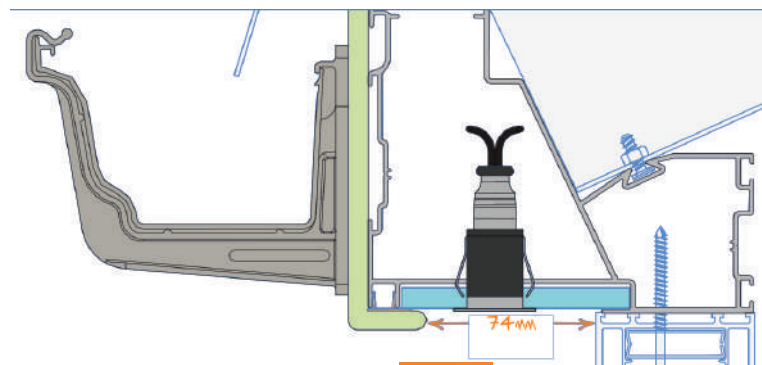
2

POSITION THE 150MM FASCIA BOARD AND TEMPORARILY FIX USING A LIMITED AMOUNT OF FIXING AT ENDS AND MID SPAN. ENSURE THE FIXINGS ARE POSITIONED HIGH AND BEHIND THE GUTTER BRACKET LOCATIONS



3

INSTALL GUTTER BRACKETS USING 4.2 X 38LG SCREWS GIVING SLIGHT FALL TO DOWNPIPE POSITIONS IF POSSIBLE. IF BOX GUTTERS EXIST, ENSURE GUTTERS ALIGN WITH ADAPTORS. GUTTER BRACKETS SHOULD BE SPACED AT 600MM CENTRES MAX. FINISH WITH SEALANT FROM FRAME / BRICK TO SOFFIT



4

ANY LIGHTING UNIT MUST BE FITTED BY A COMPETENT AND QUALIFIED ELECTRICIAN. ENSURE OVERALL LIGHTING DIMENSIONS ARE SMALLER THAN 70MM AND THE BODY INC. CONNECTION FITS WITHIN THE PROFILE CAVITY

# GLAZING THE CONSERVATORY - ROOF AND FRAMES



CAREFULLY BUT FIRMLY PLACE AND PUSH THE GLAZING INTO THE FRAME.



ONCE YOU'RE HAPPY WITH THE POSITION FIT THE GLAZING BEAD AROUND THE EDGES OF THE GLAZING, STARTING AT THE TOP.

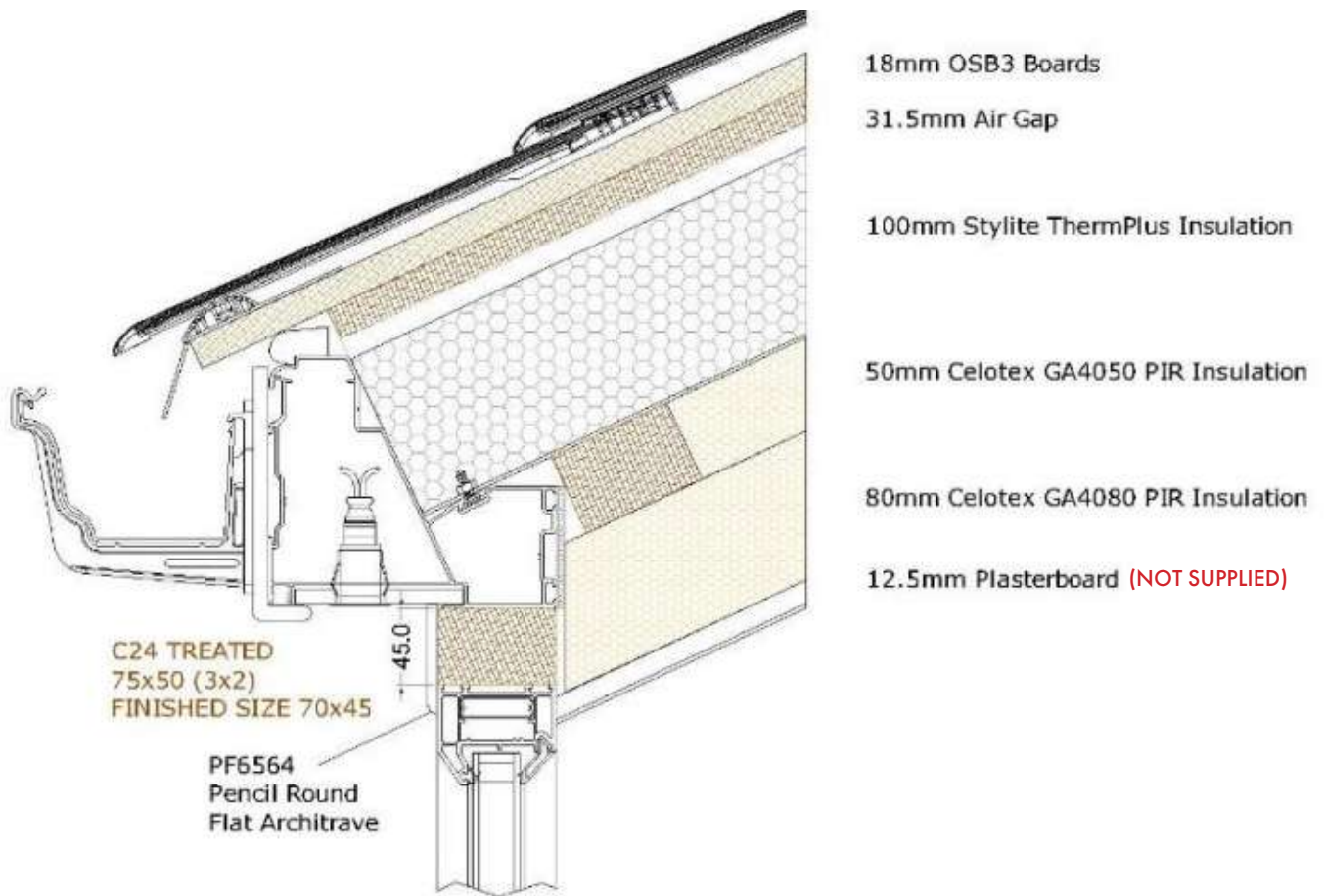


CAREFULLY TAP INTO PLACE USING A NYLON HAMMER (**DO NOT USE A METAL HAMMER**). AVOID CONTACT WITH THE GLASS.

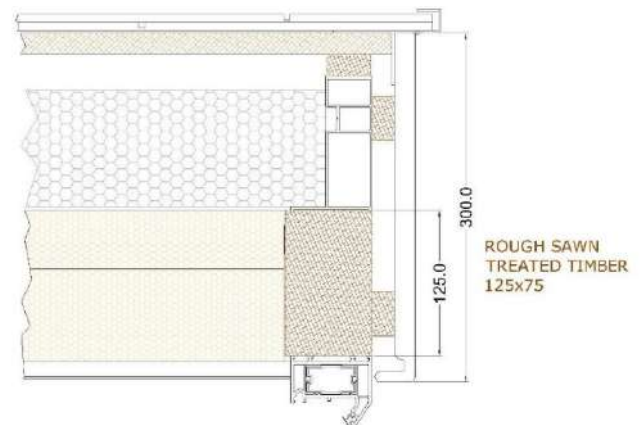


YOU CAN NOW START GLAZING THE DOOR IN THE SAME FASHION, USING GLAZING PACKERS IF REQUIRED.

# ON 0.12 U VALUE ROOFS - SCOTLAND & WALES

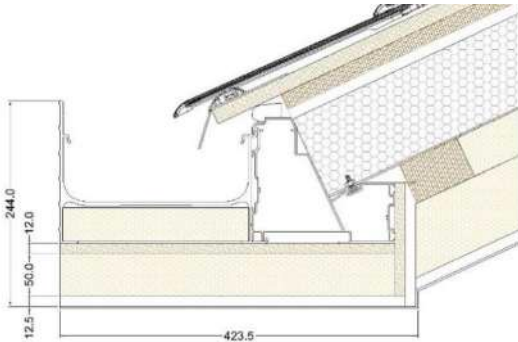


EAVES BEAM PACKING: THE SOFFIT EAVES WILL REQUIRE PACKING UP BY 45MM TREATED TIMBER.



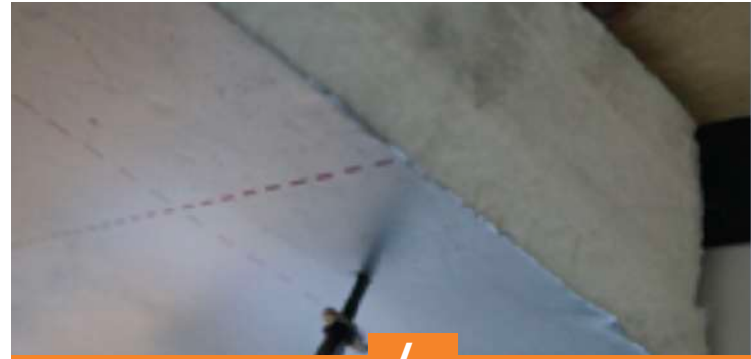
THE CURRENT 75MM TIMBER PACKER USED ON GABLE FRAMES WILL NEED TO INCREASE TO ALLOW FOR THE ADDITIONAL ROOF THICKNESS - THIS WILL NOW REQUIRE 125MM TIMBER PACKER.

# ON 0.12 U VALUE ROOFS - SCOTLAND & WALES



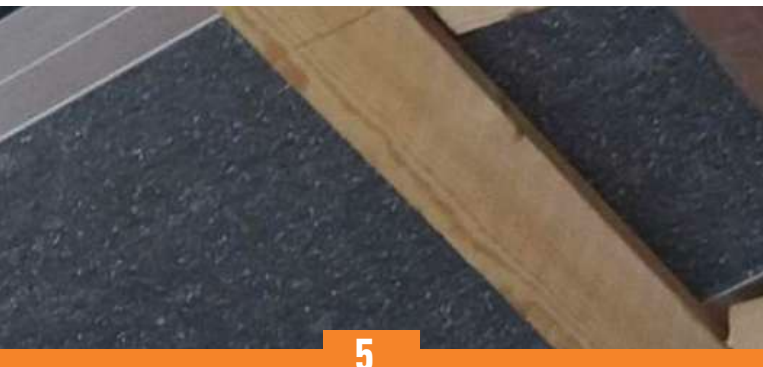
3

BOX GUTTER INSULATION - WILL NOW REQUIRE 50MM PIR INSULATION TO THE BOTTOM OF THE BOX GUTTER.



4

THE PREVIOUS VOIDS BETWEEN THE INTERNAL BATTENS WILL NOW BE FILLED WITH 50MM PIR INSULATION.



5

WHEN FITTING INTERNAL BATTENS PLEASE ENSURE A 50MM THICK BATTEN IS INSTALLED TO MEET SCOTTISH AND WELSH BUILDING REGULATIONS.



6

THE THICKNESS OF THE INTERNAL PIR WAS PREVIOUSLY 60MM – THIS WILL BE INCREASED TO 80MM THICK.

# NOTES

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## TECHNICAL & INSTALLATION

Our team is on hand to answer any technical queries that you have about the installation of our products.

**01226 890 890**