

## TIE BAR REPLACEMENT KIT (TBRK)



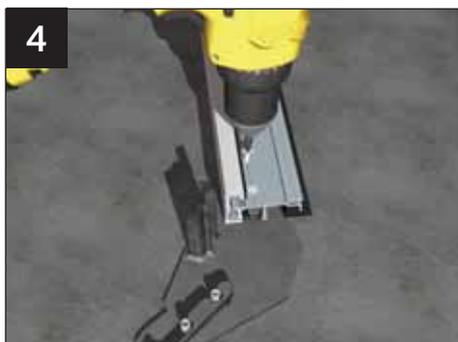
Each eaves corner (90°, 135° and 150°) is supplied pre-fitted with two standard cleats (Georgian 90° illustrated).



Two pilot holes already exist in the next piece of eaves beam – drill two more at 4.5mm diameter through the eaves beam and the cleat and then securely fit the four M5 x 12mm tapite screws.



Where the eaves beam sits against the host masonry wall, it has a structural moulding attached to the eaves beam. This has three fixing positions cast into it to allow attachment into masonry – choose the hole that directly lines up with solid masonry and drill a 10mm hole into the host wall. Attach the structural moulding using the M8x80mm anchor supplied. Silicone seal the gap where the moulding attaches to the eaves beam.



On the ground, away from the conservatory, offer up the first pre-drilled starter bar. Onto the ridge hanger plate fasten using the set screws provided - do not over tighten.



Take the second starter bar and similarly offer this onto the ridge hanger/compression plate assembly. Lift the whole "A" frame assembly and get ready to install it in its final position.



Attach the starter bar using the nut, bolt and spring washer (included in the kit) to the eaves structural moulding. Finger tighten the nut to temporarily allow the assembly to hang.



To set the ridge use an "angle fix" - check the starter bars are at the correct pitch. Chalk/pencil a line on to the wall to mark the pitch line.



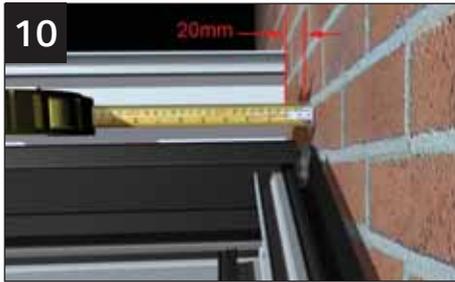
Attach the ridge hanger/compression plate to the host wall. Drill the plate with 2 x 9mm holes, then the wall with an 8mm masonry bit and fasten into the masonry using the two M6 x 65mm sleeve anchors (or resin anchors) provided. If necessary, use aluminium shims to pack out behind the plate. Check the plate is vertical and securely fastened. AT THIS STAGE IT IS ADVISABLE TO CHASE OUT FOR CONSERVAFLASH /LEAD FLASHING.



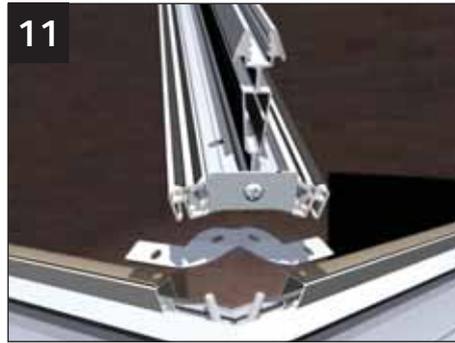
Loosen the "crocodile jaw" bolts on the underside of the main ridge body – ensure it is supported at the front whilst it is gently guided onto the top half of the 'crocodile jaw'.

Note: The starter bar is NOT attached (bolted) to the ridge body.

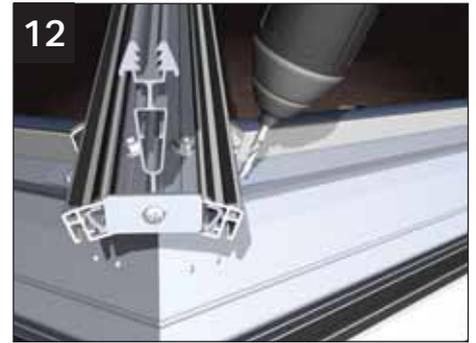
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The ridge body should ideally sit 20mm away from the house wall (or 12mm from the front plate), this allows the compression plate to evenly distribute ridge loads into the host wall (max tolerance 50mm). If the host wall is out of plumb, pack out behind the starter bars and use the longer bolts provided. This ensures the starter bars are at 90° to ridge body (and not tapering).



Lay the butterfly cleat over the two captivated roofing bolts. Fit the Georgian hip bar at the eaves and ridge end. Note: A butterfly cleat is not required on 3 or 5 facet fronts unless the eaves beam joins a box gutter at the facet joint. (See image below)



Drill a 5.5mm hole either side and then fix the 'butterfly' cleat into the head of the eaves beam at the 90 degree corners using the fixing provided.

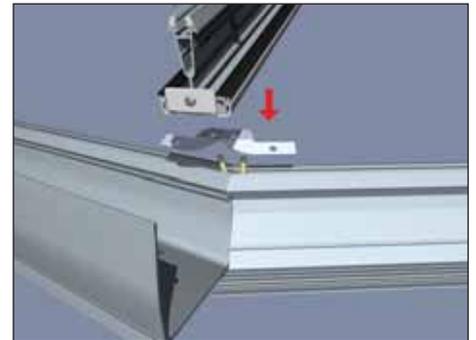


Ensure that the fixing on the eaves moulding and the nuts on the 'crocodile hanger' are tightened up. Also ensure the bolts at the top of the starter bar, are tightened up.



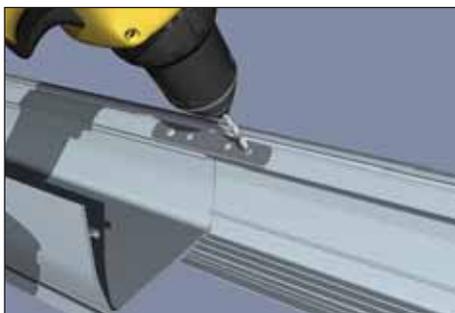
Drill an 11mm hole through the aluminium starter and its factory inserted reinforcement. Then use a 10mm masonry drill bit for the host masonry.

IT IS IMPORTANT THAT AN ANCHOR BOLT GOES INBOARD AND OUTBOARD OF THE EAVES BEAM.



## 135° EAVES AND BOX GUTTER ASSEMBLY

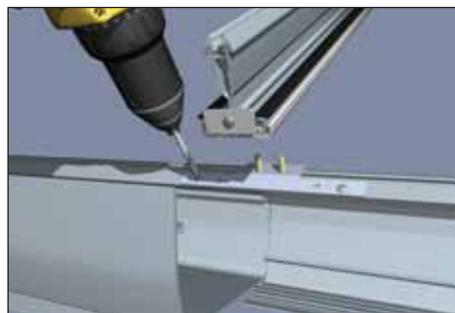
Place the 135° butterfly strap (SES004) over the roofing bolts. Offer the glazing bar on to the bolts, align and secure. Once in position fix the strap down with the two fixings supplied (UZBGF001-D).



## 180° INLINE EAVES AND BOX GUTTER ASSEMBLY

Place the inline cleat (SES002) over the butt joint. Fix down either side of the joint with the two fixings supplied (UZBGF001-D).

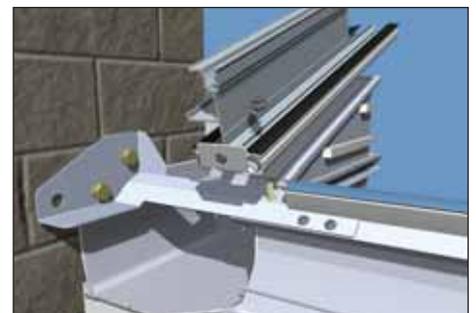
Note: Only two of the four holes need to be used.



## 180° INLINE EAVES TO BOX GUTTER JOINT

Place the inline cleat (SES003) over the butt joint. Offer the glazing bar on to the bolts, align and secure. Once in position fix the cleat down with the two fixings supplied (UZBGF001-D).

Note: Only two of the four holes are used.



## 90° EAVES AND RAISED BACK BOX GUTTER ASSEMBLY

Place the inline strap (SES005, 165mm / SES006, 265mm) over the single roofing bolt on the sloped gutter. Temporarily fix the bracket to the host wall using three M8 sleeve anchor bolts (SAB001) supplied. Fit the starter bar. Secure the strap to the eaves with the two fixings supplied (UZBGF001-D). Finally, fix anchor bolts.