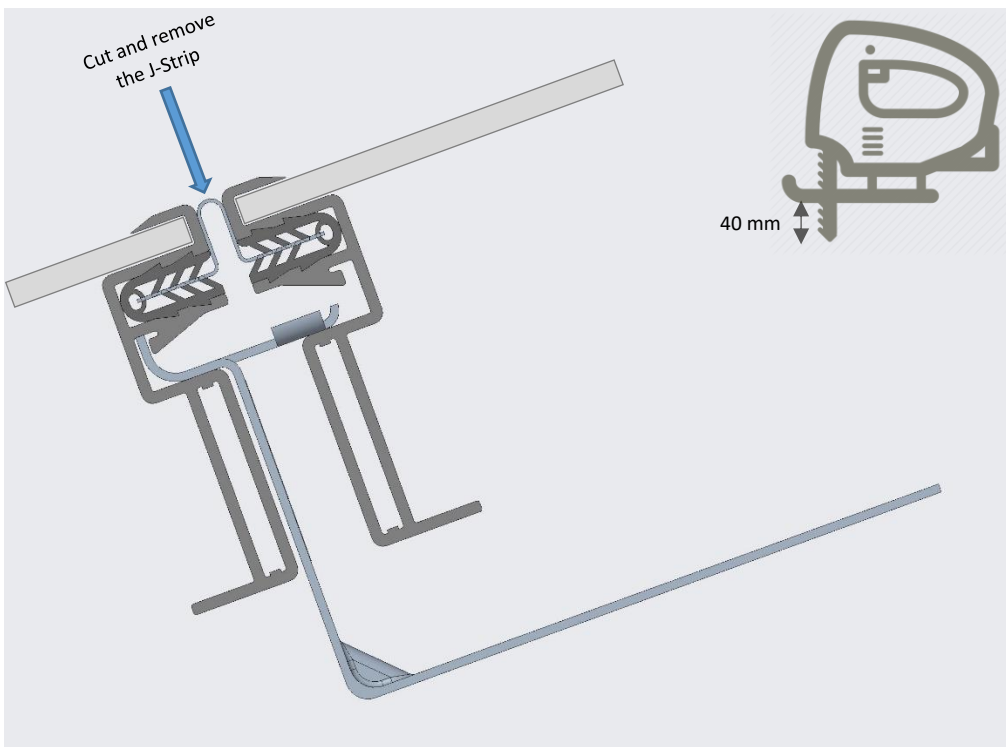
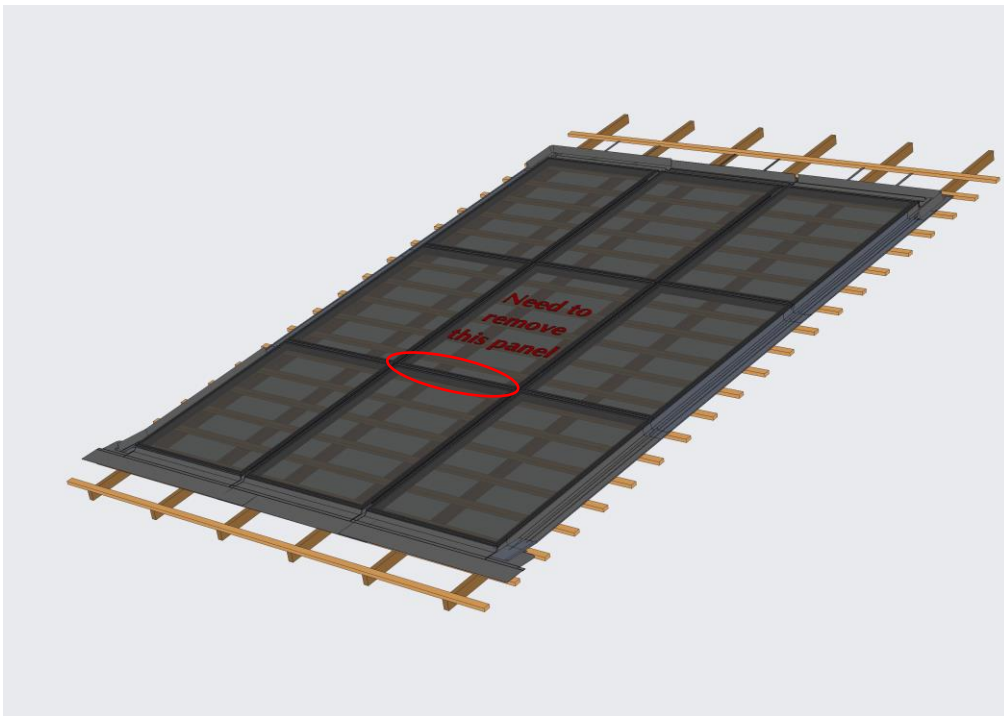


How to remove a panel from the middle of an array

Version 2 (14th June 2020)

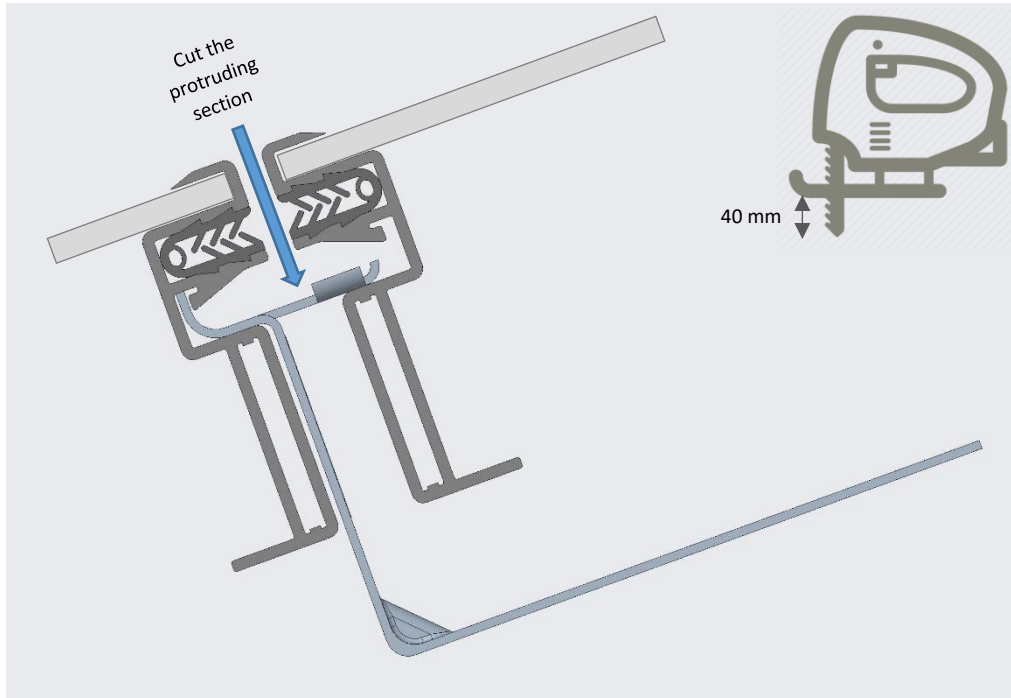
Step 1:

Remove the joining strip (J-Strip) below the panel that needs to be removed. A recommended tool is a cutting device like a power jigsaw.



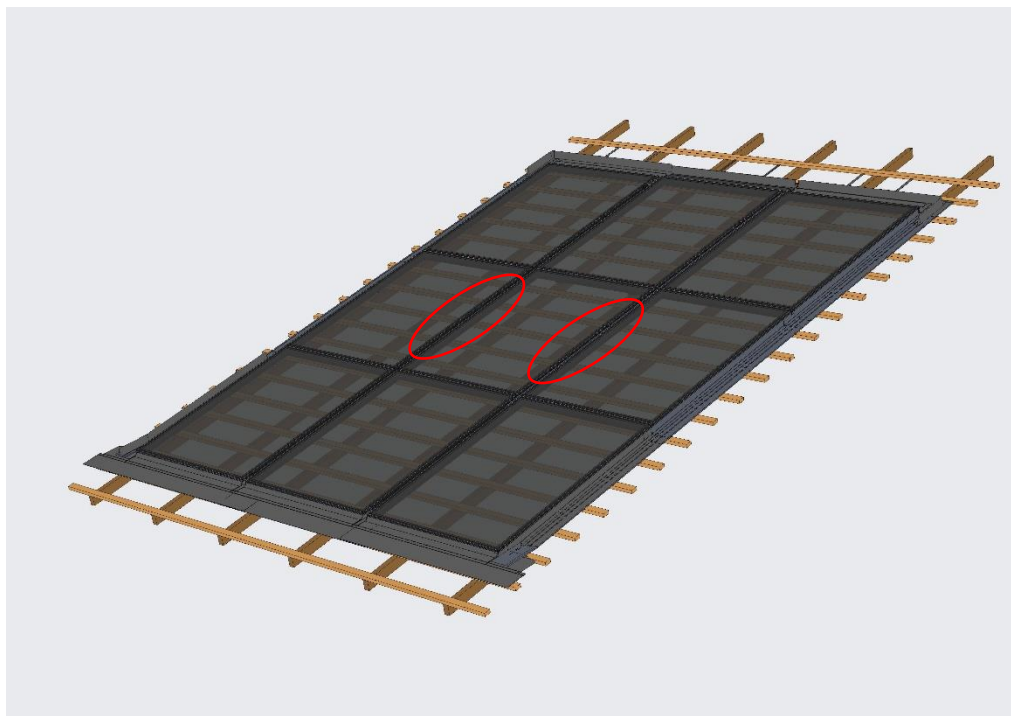
Step 2:

Using the same tool, i.e. a power jigsaw, cut the protruding section of the rafter bracket.



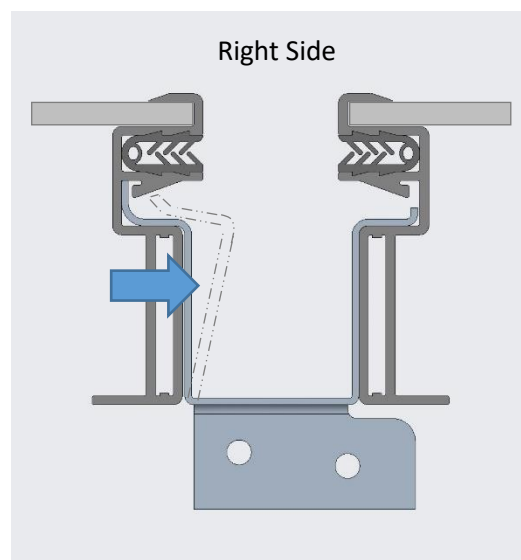
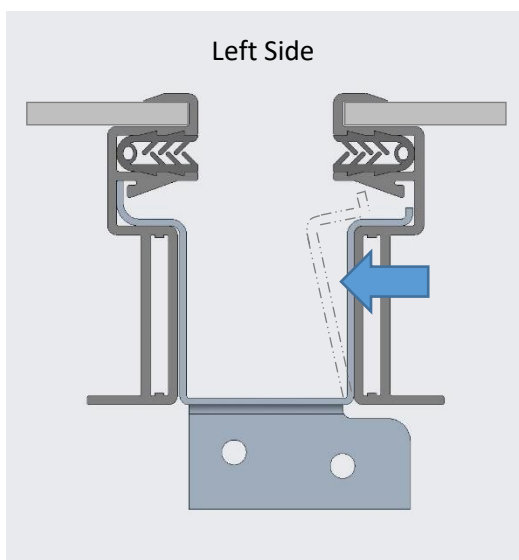
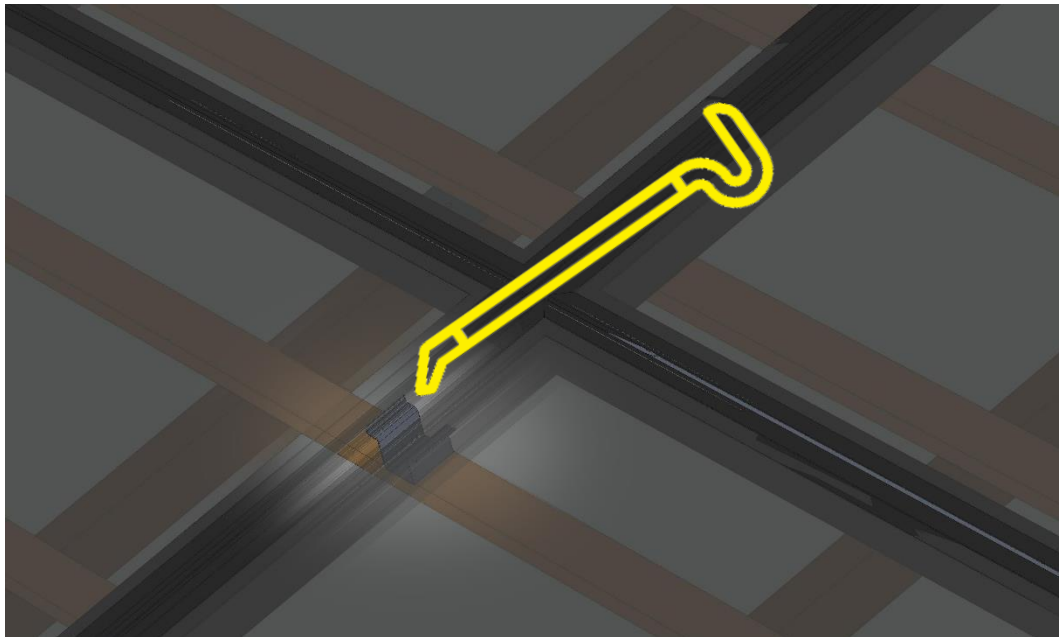
Step 3:

Working from the bottom up, remove the gutter covers and the gutters either side of the panel that needs to be removed



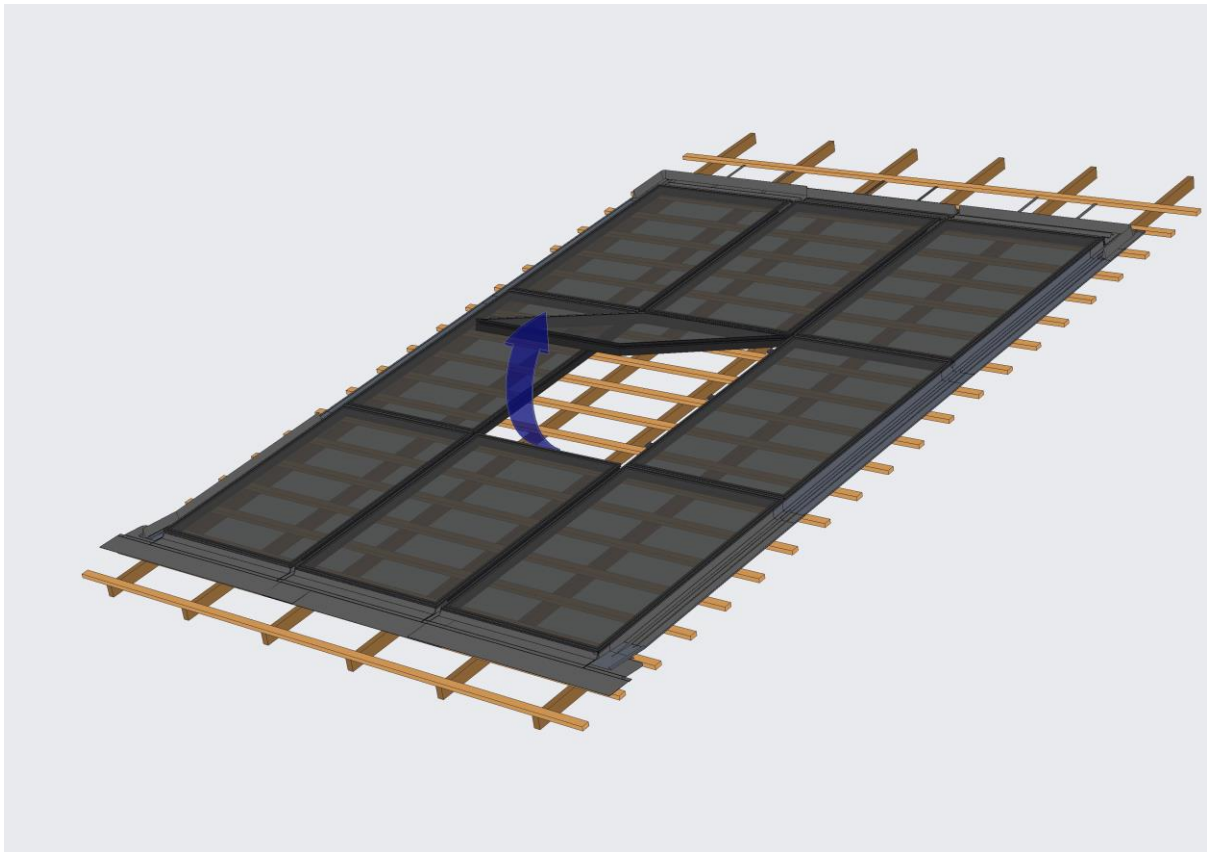
Step 4:

Pry open the exposed combi batten brackets with a lever to the left and right of the panel that needs to be removed. A recommended tool is a metal bar, preferably with a wedge shape at the end, e.g. a small crowbar.



Step 5:

With three sides free, lift and rotate the panel away from the roof. Replace or repair MLPE if necessary.

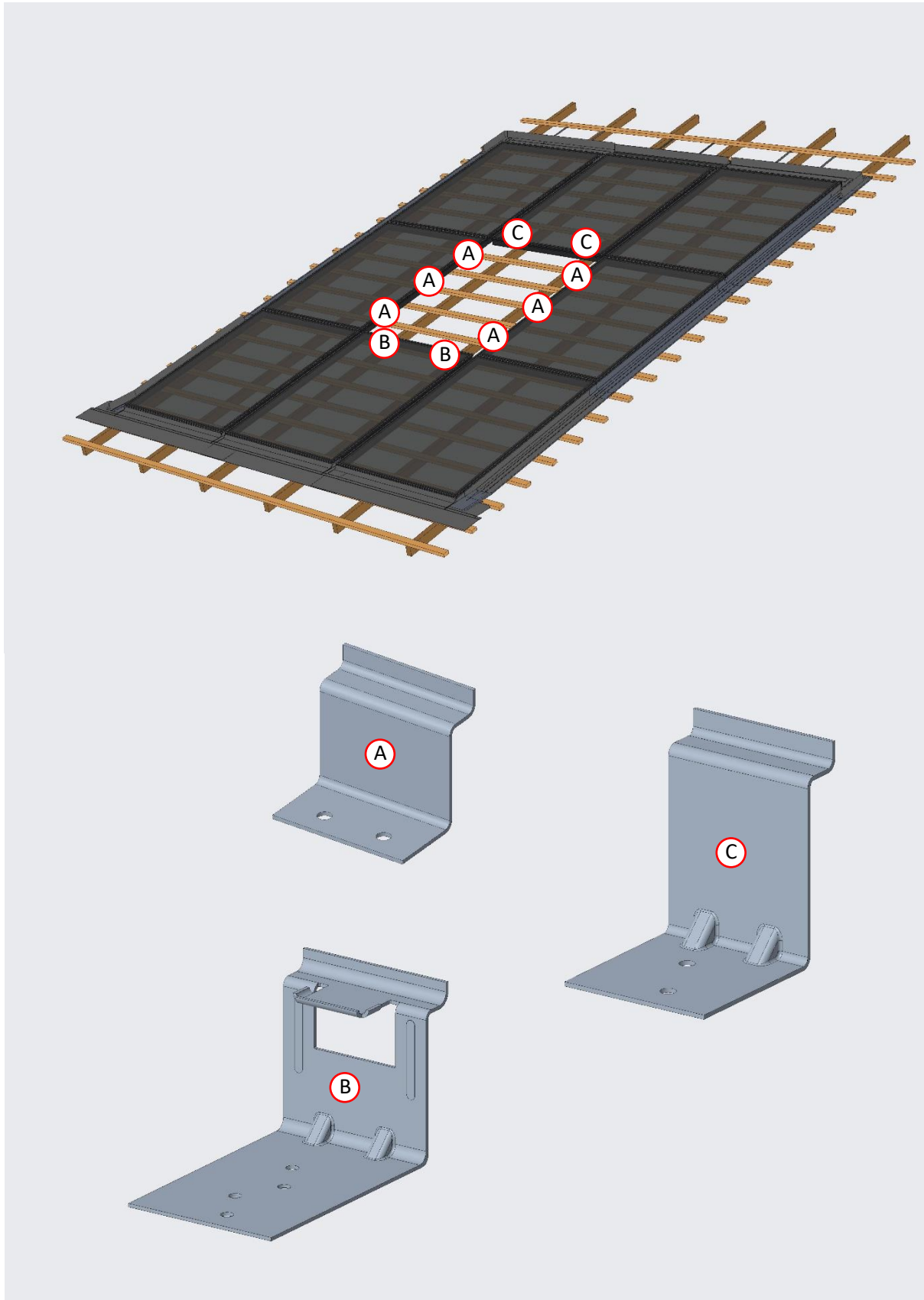


Step 6:

Remove any unused brackets from the roof.

Step 7:

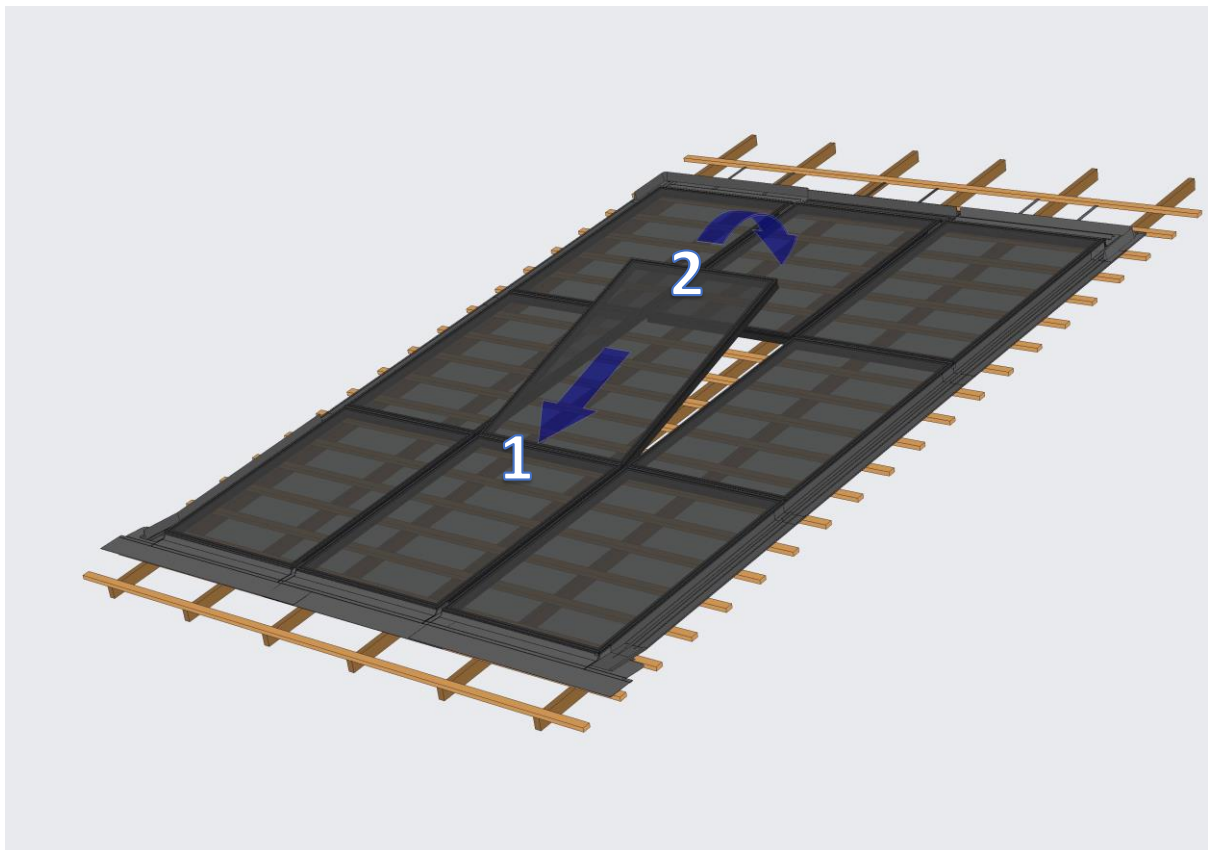
Open up the repairs box. Ensure the side of each panel has 3 batten repair brackets (A), the lower panel has rafter combi brackets (B), and the upper panel has rafter brackets (C).



Step 8: Install the lower joining strip (J-Strip) into the lower panel.

Step 9: Position 3 batten repair brackets (A) onto the replacement panel, and tape to secure them in place.

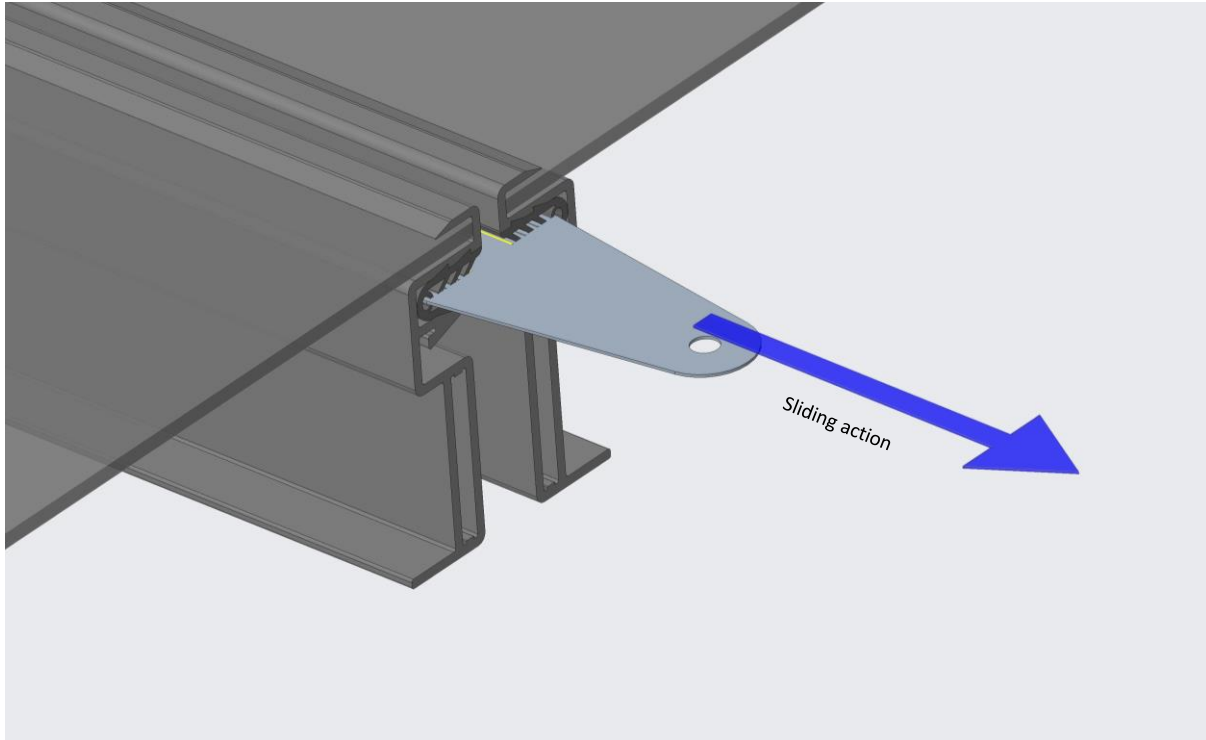
Step 10: Fit the panel into the lower joining strip, and drop into array. The replacement panel should engage with the rafter combi bracket.



Step 11: Adjust location of the batten repair brackets, and fix into the battens.

Step 12: Reinstall gutters and gutter covers. Ensure correct lapping as per standard installation.

Step 13: Reinstall a special joining strip into the upper panel. This must be done with a sliding action and apply lubricant, e.g. Windolene or silicone gel, for ease of insertion.



Step 14: There is a likelihood that the gasket of the lower panel might get damaged and is in unknown condition due to the replacement. Hence, it may be prudent to apply a bead of roofing silicone sealant along the joining strip for precautionary measure.

Additional Notes:-

- As with all repair work, a risk assessment shall be carried out in advance to make sure that the work can be conducted in a safe manner by a competent person.
- The PV system shall be shutdown according to the recommended safe procedures prior to the repair.
- During the repair, it is recommended to make provisions to spread the load evenly across the surface of the solar panels, e.g. by using a padded roof ladder. This is to avoid potential damages like micro cracks in PV cells and glass breakage resulting from sharp pressure points.
- All new electrical connections shall be inspected thoroughly both visually and electrically before recommissioning.