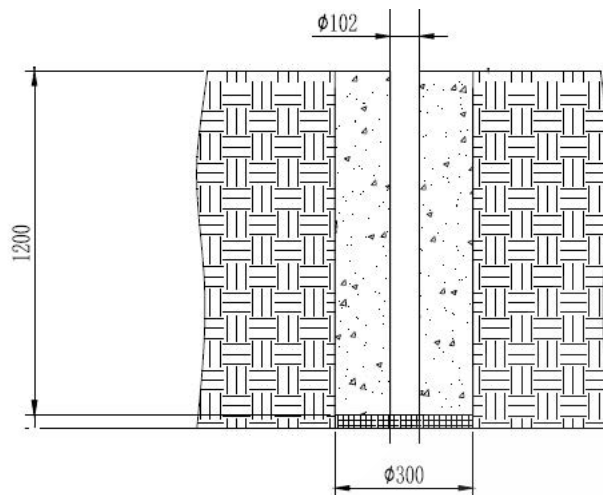


Pole Mount PM2 install guide.

Installing post.



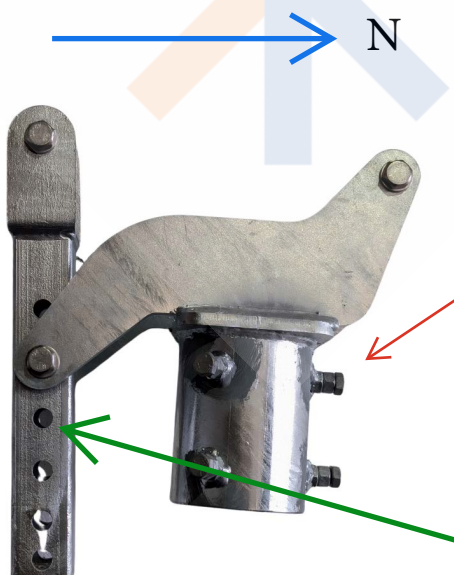
Post should be installed in a hole at a minimum of 1100mm x 300mm. If depth cannot be reached, the hole should be widened to accommodate additional cement. Pole should have at least 1250mm above the surface with a recommendation of 1300-1400mm. Orientation is not important but **pole should be bent end down**. A spirit level should be used to make sure pole is straight during installation.

*In medium to hard ground a 2-panel system should be a minimum of 7-8 bags of rapid set. In softer ground hole should be 1200mm x 325mm and be 8-9 bags of rapid set.

**If site is very sandy soft ground please contact Solar Water Pumps for an installation recommendation.

Pole top and cross beam.

Once rapid set has dried to manufactures specification, you can install the pole top and cross beam. Pole top is installed with the adjustable arm on the South side of the array with the open-end facing North.

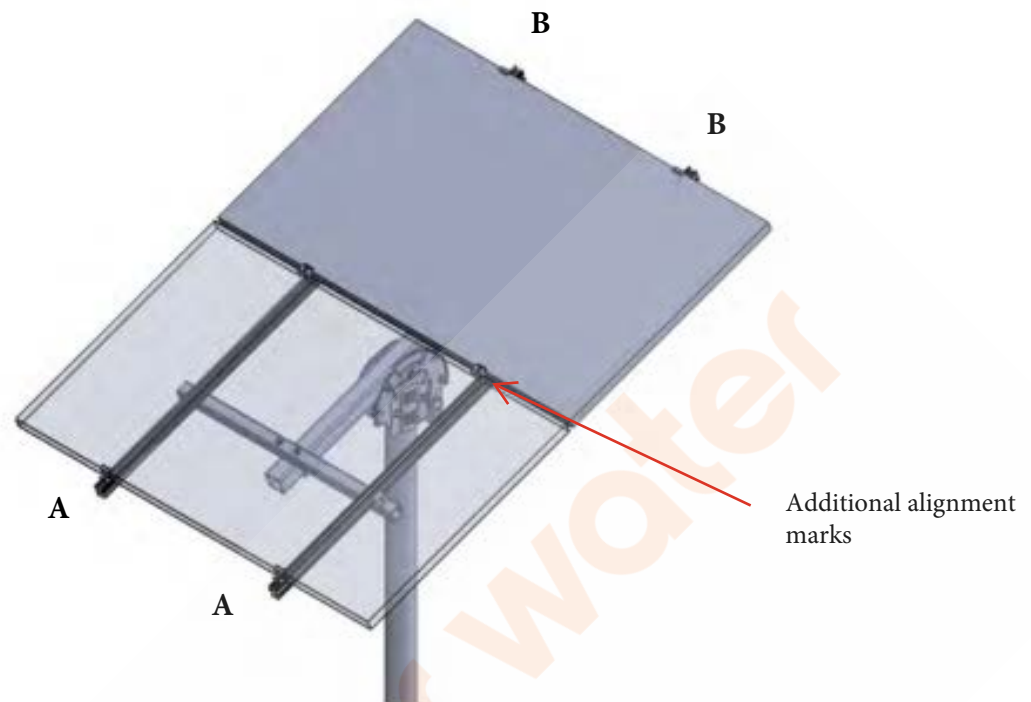


Once orientation is done tighten the pole top bolts onto the pole.

Install the frame (main beam of array) onto the pole top. Tighten bolts, but not too tight at this stage, as angle will need to be adjusted later. Make sure the N arrow is facing North.

Leave the array flat for now but **once assembly is finished**, including panels, **change support arm to the third hole**. Once adjustment is done tighten all array bolts.

Array numbering and lettering



Our arrays have been pre-assembled and marked before transport. Panels will be separate but the frame will have been assembled. If the frame requires assembling please see further instructions at the end of this document

Panel installation

Line up first panel marked A with white marks on panel lining up with black marks on rail.

All letters should be facing away from the pole (outwards) on the array. Additional lines will be marked on the inner side of the panel and rail.

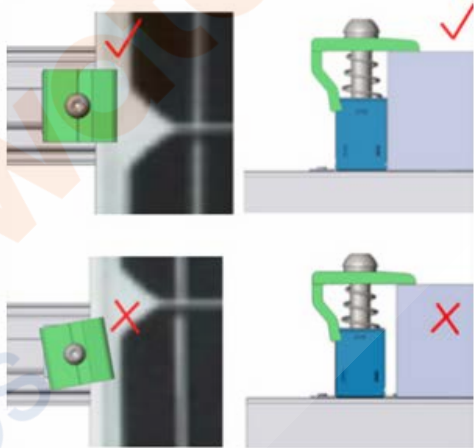
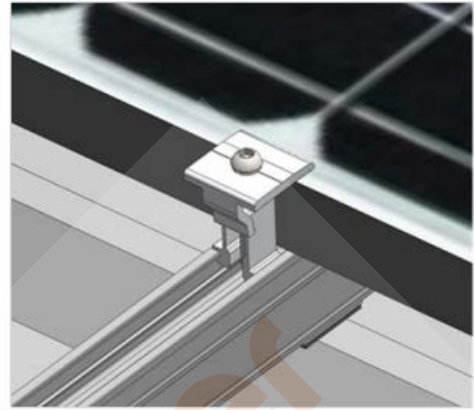
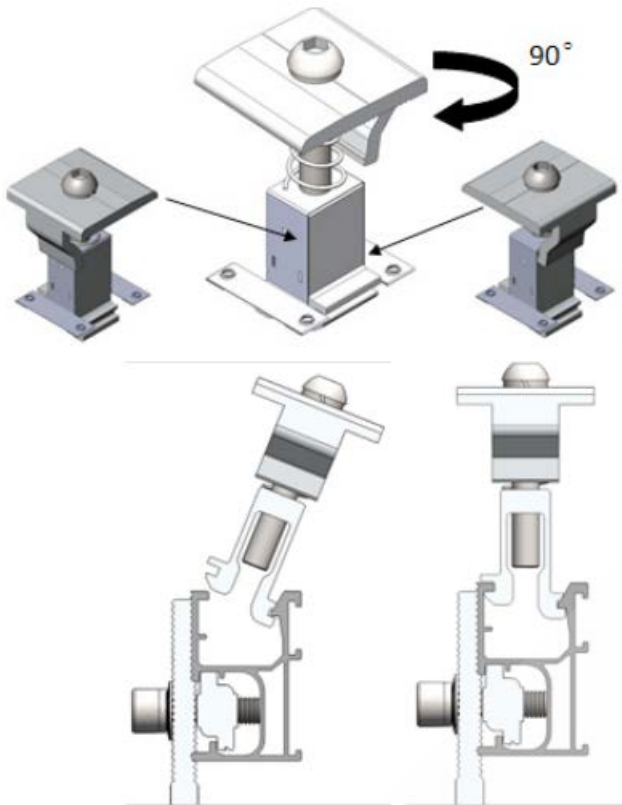
Attach outer clamps. **Clamps will click into place as per image on the next page.** Panel should sit on the S/S earthing bracket. Tighten clamp until it holds the panel, don't tighten too much as some adjustment may be required.

Repeat the process with panel B. As a rule of thumb there should be around 20mm between top and bottom panels.

***Please note, panel positioning may need to be slightly adjusted as rail does flex and main cross bar may twist slightly which can put the markings out by a few mm. Panels should be adjusted to have the bottom/ top and side edges lining up to the eye, and pushed up tight against all clamps.**

Once panels are correctly in position tighten all clamps onto the panels. The recommended torque is 14-16NM for the end clamps and 16-18NM for middle clamps. If the clamp begins to twist your are likely over tightening.

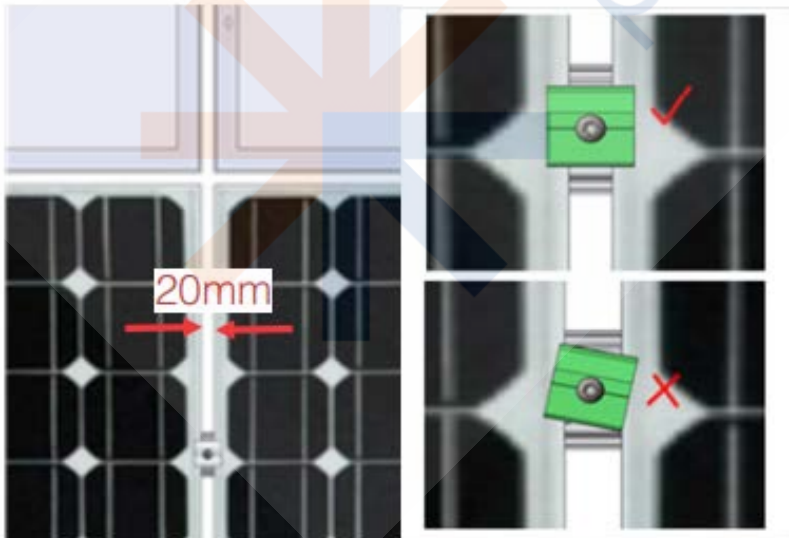
Universal Clamp installation.



Click clamp in as shown in image.

Orientate top of clamp to suit end or middle clamping position.

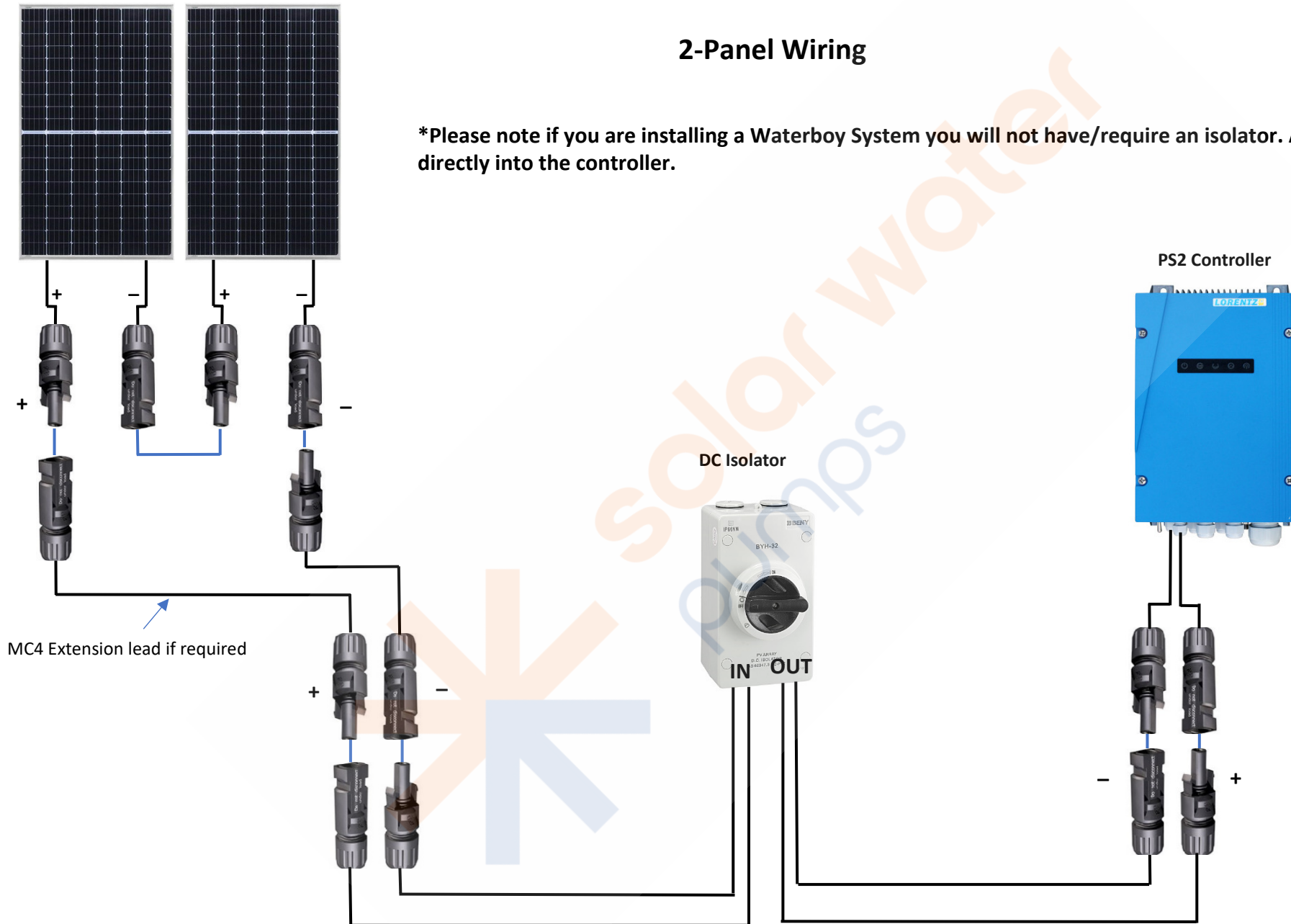
**Image for illustration purposes only as rail and connecting clamp set up show a roof mount.*



Once all clamps are secure you can begin to wire up the array. It is your preference as to when to complete wiring but we usually install the isolator/controller prior to finalising wiring.

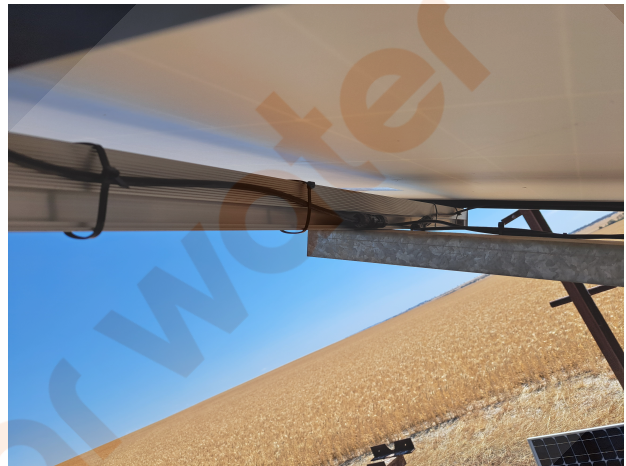
2-Panel Wiring

***Please note if you are installing a Waterboy System you will not have/require an isolator. Array will plug directly into the controller.**



You will have been provided with enough cable ties to secure the cables neatly underneath the panels. There is no set way to do this but cables should not be bent, stretched or be too tight. Attach them to either the aluminium or galvanised sections of the frame.

**images are for illustration purposes only and your array may differ from the ones shown.*



Your array should now be complete and you are ready to adjust the angle and finish tightening when you are ready for that step.