Distribution:
SOLARCITY INSTALLER NETWORK

Background

The Canadian Solar CS3K panels have a shallower flange depth than previous solar panels that solarcity have used. This means that the DC cable clips supplied by solarcity no longer fit on the inside of the flange, and must now be installed on the outside.

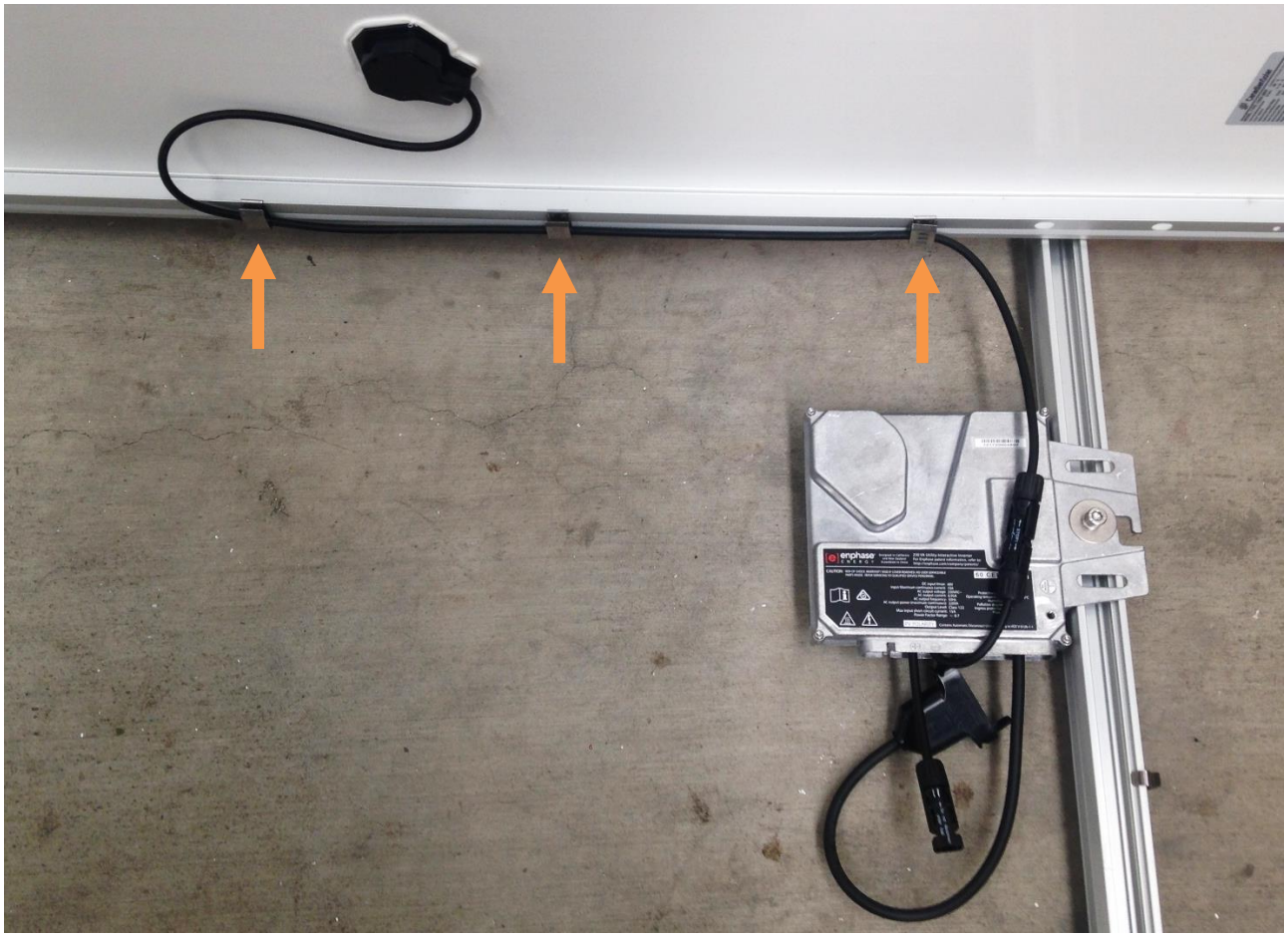
In addition to this, the CS3K panels feature a split junction box, with the positive and negative leads on either side of the panel. This split junction box requires that the leads be installed and positioned in a different order than for combined junction boxes.

This technote sets out the guidelines for using DC cable clips and positioning the panel leads so that they will be adequately supported and won't droop down and touch the roof.

Details

Install the cable clip on the outside of the flange as shown in the photo below.

As a general guideline 3 clips per lead are needed to suitably support the cable and stop it sagging between clips.

For each new panel the lead closest to the previous panel can be clipped to the frame flange before laying the panel as shown in the photo below. The outside lead can be clipped after laying the panel.

Note that for micro inverter systems the panel will need to be lowered to an angle that allows the outside lead to be plugged into the micro inverter before laying the panel flat, as it is difficult to access the micro inverter plug once the panel is laid down. The cable may also need to be secured to the rail using the Enphase cable clips or stainless steel cable ties.