INTRODUCTION

SunLock commercial roof brackets are a simple, fast framing system for typical Australian steel framed commercial roofs. The solar PV modules are mounted in landscape at either 5°, 10° or 15° above the roof sheet, using brackets on SunLock channel. The channel forms a conduit for cabling. Refer to the Commercial Installation Manual (available for download from www.sunlock.com.au) for detailed information and certification.

15° commercial roof brackets

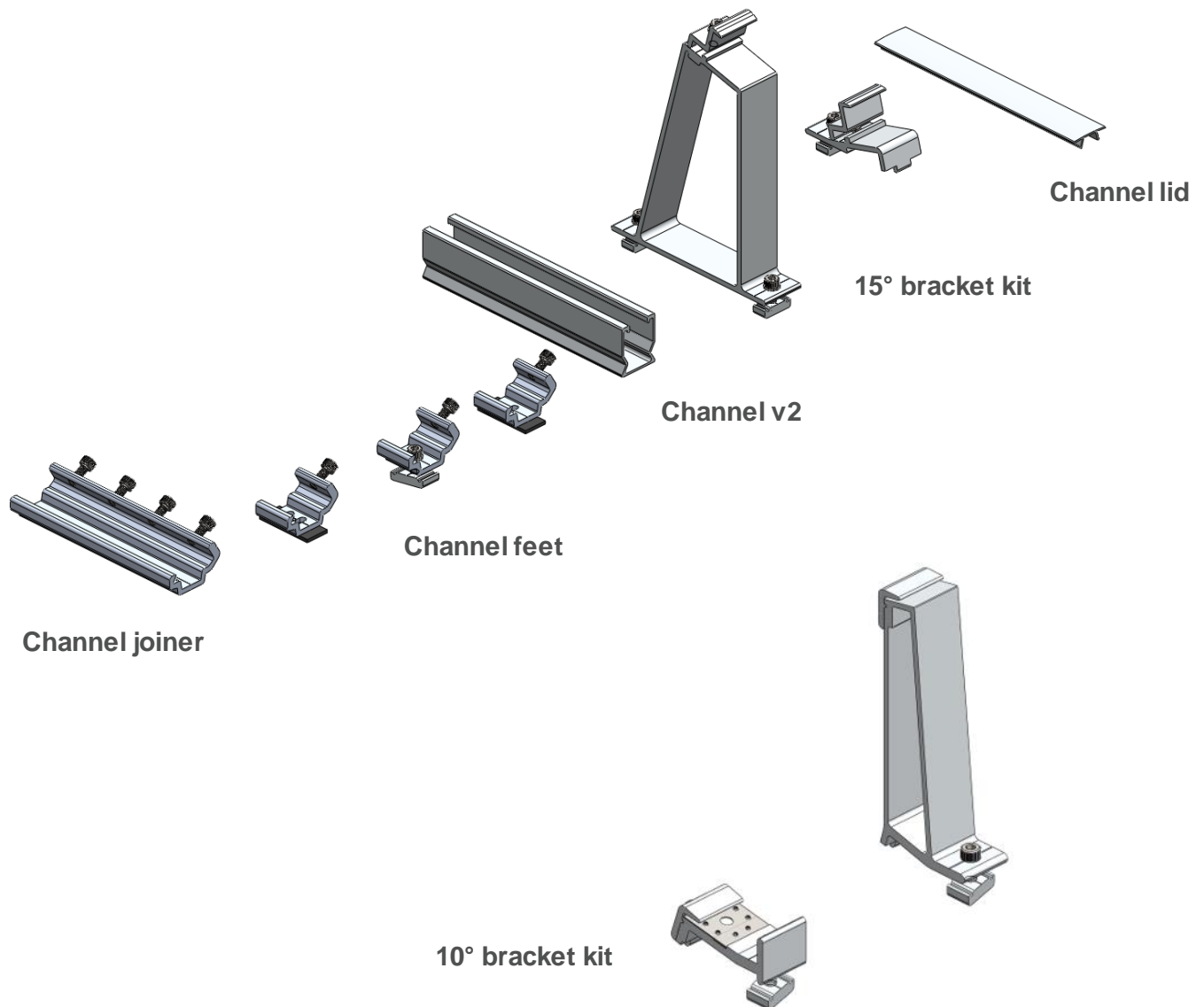**15° commercial roof brackets (on roof clamps)**

PARTS

SunLock commercial roof brackets are supplied as a kit (one front bracket and one rear bracket), including channel nuts for fixing to the SunLock channel. 5° and 15° versions include fixed end-clamps to hold the module to the bracket, while 10° versions have hooks designed to suit a wide range of panels with frame thicknesses up to 1.9 mm thick. The 5° or 15° kits can be supplied with various heights of fixed end-clamps to suit the PV module.

For a standard two-channel installation, two kits are required to fix each module. The brackets suit modules with a width of ~ 1 m, such as a typical 60 cell module using polycrystalline cells.

The brackets are extruded from 6106-T6 mill-finish aluminium and have a 25+ year service life under Australian conditions.
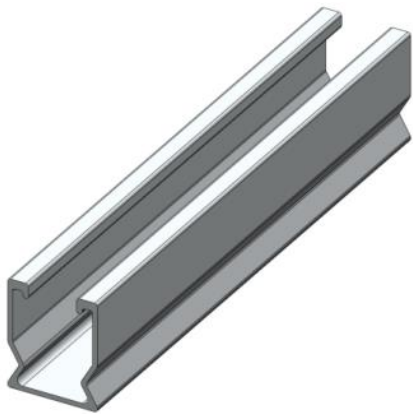
PV modules can be earthed by placing an EarthLock washer on each front bracket, underneath the frame of the PV module. The mill-finish aluminium components form a conductive path, and an earth cable can be attached to the end of each SunLock channel. 10° versions have this EarthLock washer included and pre-assembled on the front hook using adhesive tape.
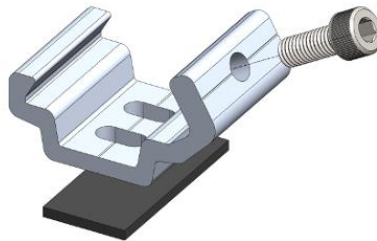
Channel lid

15° bracket kit

Channel v2

Channel feet

Channel joiner

10° bracket kit
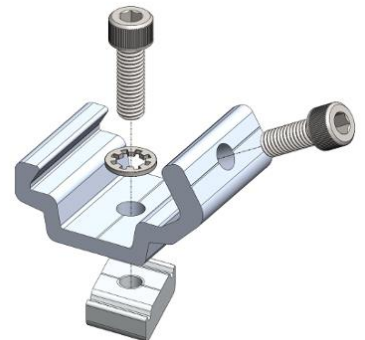
GUIDE TO USE

Install SunLock channel

Install SunLock channel v2 "north-south", using two channels per column of modules. Refer to the installation manual for details. Fix a channel foot to each steel purlin using a standard roofing screw and an EPDM washer. Slot the SunLock channel into the feet and lock it in using the cap screws on the feet. An upper frame can be added using SLCF02 feet between the two layers of channel. If roof clamps are used, use a SLCF02 to connect the roof clamp to the channel (just spin off the channel nut).

SL2C

SLCF03

SLCF02

SLRC305

SLRC406

SLRC700

If necessary, use a sub-frame

A sub-frame can allow the upper frame to be oriented as desired.

Install rear brackets

After determining the appropriate row spacing for the site, install all the rear brackets on the channel. It may be helpful to prepare a spacing jig (cut a length of channel to length) to ensure uniform spacing across the array.

Install modules onto rear brackets

Lay all the modules near the rear brackets. Lift up the rear of the module and attach it to the rear brackets.
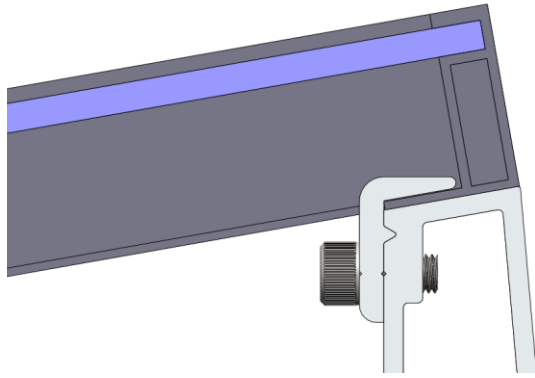
Install front brackets

Slide the front brackets underneath the front of the module and connect them. For 5° and 15° front brackets, don't forget to add an EarthLock washer to each!
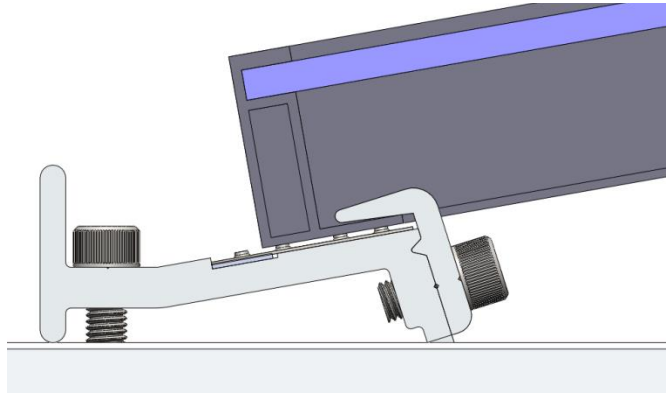
Install cabling

Run cables in the channel, and cover using the channel lid. Optionally, other extra sections of channel can be used as cable conduit.

Guide to the 10° "hook" commercial roof brackets

10° commercial roof brackets have hooks designed to suit a wide range of panels with frame thicknesses up to 1.9 mm thick. An additional advantage is that the EarthLock washers are supplied pre-assembled on the front bracket, saving time on the roof and preventing them from being lost.

Module installed in rear bracket

Module installed in front bracket

10° commercial roof brackets

TECHNICAL & SUPPLY CHAIN INFORMATION

Commercial roof brackets

Sales code	SLCR505-XX (5°, suits ~1 m wide modules, varying clamps) SLCR510 (10°, suits ~1 m wide modules, varying panel heights) SLCR515-XX (15°, suits ~1 m wide modules, varying clamps)
Material	Aluminium 6106-T6
Australian Standard Certification	Certificate of structural adequacy to AS/NZS1170.2:2011 as included in the SunLock installation manual.

SunLock channel, feet, joiner, lid

Sales code	SL2C-CL/m, SL2C6.0 (channel) SLCF02 / SLCF03 (feet) SLCJ01 / SLCJ02 (joiner) SLCL-CL/m, SLCL3.0 (lid)
Material	Aluminium 6106-T6
Australian Standard Certification	Certificate of structural adequacy to AS/NZS1170.2:2011 as included in the SunLock commercial installation manual.

FURTHER INFORMATION

For further information contact Apollo Energy on 1300 855 484 or sunlock@apolloenergy.com.au.