| SUNLOCK | | | created | JL |
|----------------|----------|---------------------------|------------|----------|
| Tech. Bulletin | Rev. Nr. | Flush mounting on channel | checked | JM |
| | 1.0 | | valid from | 09/09/13 |

INTRODUCTION

A solar PV array can be installed flush on a roof using SunLock channel instead of rail. This can decrease parts cost by ~ 5% and also decrease installation time. Furthermore, the channel forms a conduit for cabling.



Flush mounted solar PV array on a commercial building



Close up



GUIDE TO USE

On typical steel framed commercial buildings the solar PV modules will be installed in landscape with SunLock channel running from the gutter to the ridge cap. Use two channels per column of modules. Fix the channel to the purlins using channel feet and standard roofing screws. Fix the modules to the channel using mid-clamps and end-clamps with channel nuts.

A key advantage of channel is that a channel foot (SLCF03) can accept two roofing screws, instead of the single screw in the base of an L-foot.



SLECF38C (end-clamp 38 mm)

SLMC024C (mid-clamp 30-40 mm)



CERTIFICATION AND FIXING SPACINGS

The installation is similar to a flush mount using SunLock rail. Rail and channel have similar strength and both types of frame are limited by the fixing capacity of the roofing screws. Therefore, use drawings S3 and S4 from the SunLock installation manual v4.5, available for download at <u>www.sunlock.com.au</u>. These are valid for flush mounting onto roofs with a steel purlins and a 5-30 degree pitch, TC2 or TC3.

Note that because the SLCF03 channel foot can accept two roofing screws instead of the single roofing screw in an L-foot, the fixing spacings can be increased up to 1800 mm, where the rail/channel is the limiting factor.

Contact SunLock for a site specific certification if required.

TECHNICAL & SUPPLY CHAIN INFORMATION

| Sales code | SL2C-CL/m, SL2C3.0, SL2C6.0 (channel) SLCF01, SLCF02, SLCF03 (feet) SLCJ (joiner) | |
|--------------------------------------|---|--|
| | SLCL-CL/m, SLCL3.0 (lid) SLELBT02C (EarthLock bonding terminal) SLMC024C, SLECF38C (mid-clamp, end-clamp) | |
| Material | Aluminium 6106-T6 | |
| Australian Standard Certification | Certificate of structural adequacy to AS/NZS1170.2:2011 as included in the SunLock installation manual. | |

FURTHER INFORMATION

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

