

Ref No: **C21029-Rev 0**Valen  
105 Loughnan St  
Lake Cargelligo NSW 2678

Date: 3/03/2022

**C21029-Rev 0-SOLAR PANEL MOUNTING BRACKETS  
STRUCTURAL VERIFICATION CERTIFICATION**

We certify that we have checked the structural design of "SOLAR PANEL MOUNTING BRACKETS" as detailed in the drawings labelled in the table below.

| SOLAR PANEL MOUNTING BRACKETS |                    |          |             |               |
|-------------------------------|--------------------|----------|-------------|---------------|
| Part Code                     | Drawing No.        | Revision | No of Pages | Revision Date |
| SB60101                       | 268004-SML-01      | 0        | 2           | 03/03/2022    |
| SB60101                       | 268004-SML-02      | 0        | 2           | 03/03/2022    |
| SB60102                       | 268004-MED-01      | 0        | 2           | 03/03/2022    |
| SB60102                       | 268004-MED-02      | 0        | 2           | 03/03/2022    |
| SB60103                       | 268004-MED-SP V150 | 0        | 2           | 03/03/2022    |
|                               | 268004-CL-SML      | 0        | 1           | 03/03/2022    |
|                               | 268004-CL-MED      | 0        | 1           | 03/03/2022    |
| SB60001                       | 268004-V-BOLT-01   | 0        | 1           | 03/03/2022    |
| SB60002                       | 268004-V-BOLT-02   | 0        | 1           | 03/03/2022    |
|                               | 268004-CH-01       | 0        | 1           | 03/03/2022    |
|                               | 268004-CH-02       | 0        | 1           | 03/03/2022    |
|                               | 268004-CH-03       | 0        | 1           | 03/03/2022    |

We have carried out a structural analysis in based on the following SAI Code of Practices:

- ✓ AS/NZS1170.0 (2002) Structural Design Actions: General Principles
- ✓ AS/NZS1170.2 (2021) Structural Design Actions: Wind Actions
- ✓ AS/NZS1170.3 (2003) Structural Design Actions: Snow and Ice Actions
- ✓ AS3990 (1993) Mechanical Equipment – Steelwork

When manufactured and installed in accordance with the drawings, the structure was found to be compliant with above standards subject to the following conditions:

1. Design life: 25 years max.
2. AS/NZS1170.0 Importance Level: 1
3. AS/NZS1170.2 Terrain Category: 1
4. AS/NZS1170.2 Shielding Multiplier: 1.0 max.
5. AS/NZS1170.2 Hill Shape Multiplier: 1.0 max.
6. Installation height: 5m max.\*
7. Installation angle:
  - a. 60° in Alpine regions
  - b. 15° to 60° in wind region A
  - c. 15° to 30° in wind regions B or C

8. Small Solar Bracket #SB60101 solar panel size range\*\*:
  - a. Height = 215mm to 357mm
  - b. Width = 345mm to 775mm
  - c. Mass = 9kg max.
9. Medium Solar Bracket #SB60102 solar panel size range\*\*:
  - d. Height = 540mm to 682mm
  - e. Width = 515mm to 1005mm
  - f. Mass = 14kg max.
10. Large Solar Bracket #SB60103 solar panel size range\*\*:
  - g. Height = 540-682mm
  - h. Width = 890-1500mm
  - i. Mass = 14kg max.
11. Mounting pole diameter range for V-Bolt # SB60001:  $\varnothing$ 37-80mm\*
12. Mounting pole diameter range for V-Bolt # SB60002:  $\varnothing$ 80-150mm\*

Wind actions relevant to the specific installation site considering local terrain and topography shall be determined in accordance with AS/NZS1170.2 by an appropriately qualified person.

The assemblies are not designed for use in wind region D or lee zones.

\*It is the responsibility of the installer to ensure the mounting pole has sufficient capacity to withstand all applicable structural design actions.

\*\*It is the responsibility of the installer to ensure the solar panel has sufficient capacity to withstand all applicable structural design actions.

This certification shall not be construed as relieving any other party of their responsibilities, liabilities or contractual obligations.

We trust that this information is sufficient for your requirements. Please do not hesitate to contact the undersigned should you require any further information.

Yours sincerely,



Trang Imagineering Pty Ltd  
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