TEST SUMMARY SHEET – TS1130
Reappraisal Date of Test Summary Sheet: 30 June 2023 (See Note 2 below)

Static and cyclic simulated wind load strength testing was conducted on REC N-Peak Series Photovoltaic Solar Panels. The testing was performed with the use of new materials provided by REC Solar Pte. Ltd.

Description of Photovoltaic Solar Panels and Set-Up Tested
- **Product Name**: REC N-Peak Series
- **Panel Geometry**: 1,680 mm long and 997 mm wide
- **Panel Description**: 3.2 mm thick glass and photovoltaic module fixed to top flange of a perimeter frame
- **Panel Frame Description**: Nominally 1.65 mm thick “Cee” shaped aluminium extrusions with outer top and bottom flange width of 12 mm and 28 mm respectively. Web height of 30 mm, comprised a box section nominally 11 mm wide.
- **Module Mounting Rail**: Rectangular section aluminium extrusion with overall dimensions 53 × 30 mm varying thicknesses between 1.5 mm and 2.95 mm.
- **L-Foot Bracket**: 80 × 50 × 8 mm “L” shaped aluminium extrusion bracket 40 mm wide. Horizontal ribs on external side of vertical face and a central 26 × 9 mm slot milled along its height. 1.4 mm thick rubber pad affixed to the external side of horizontal face.
- **Mid Clamp Assembly**: “T” shaped aluminium extrusion 20 mm high, 45 mm wide and 45 mm length with flange thickness of 4 mm and a 14 mm central groove. 40 × 40 mm locking washer and M8 × 50 mm bolt and locking nut.
- **End Clamp Assembly**: Male “L” shaped aluminium extrusion nominally 20 × 27 × 4 mm with a depth of 45 mm with angled ribs on both sides of vertical face. Female “L” shaped aluminium extrusion nominally 30 × 27 × 4 mm with a depth of 45 mm. M8 × 35 mm bolt and locking nut.

Manufacturer’s Details
- **Name of Manufacturer**: REC Solar Pte. Ltd.
- **Address of Manufacturer**: 20 Tuas South Avenue 14, Singapore 637312

Report and Test Details
- **Report Title**: Static and Cyclic Simulated Wind Load Strength Testing of REC N-Peak Series Photovoltaic Solar Modules
- **Test Regimes**: Static wind load testing to **AS 4040.2**, cyclic wind load to **NCC 2016 LHL**

### Recommended Limit State Design Wind Pressures

<table>
<thead>
<tr>
<th>Module Size (mm)</th>
<th>Rail Spacing (mm)</th>
<th>L-Foot Bracket Spacing (mm)</th>
<th>System Tested</th>
<th>Recommended Static Test Ultimate Strength Limit State Design Wind Capacity (kPa)</th>
<th>Recommended Cyclic Test Ultimate Strength Limit State Design Wind Capacity (kPa)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,680 × 997</td>
<td>915</td>
<td>1,000</td>
<td>Three Modules</td>
<td>5.20</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>750</td>
<td></td>
<td>5.55</td>
<td>5.07</td>
</tr>
</tbody>
</table>

Conditions of Use
1. Refer to Report No. TS1130, (contact REC Solar Pte. Ltd.) for full details of the Photovoltaic Solar Panels installation, test methods and results;
2. These test results are based on legislation and standards that are current at the time of issue and may be subject to change. Therefore this Test Summary Sheet should be reappraised by the date noted.

Signed

Mr. S. Ingham
Senior Engineer
Date 15-3-2019

Mr. J. Doolan
Director
Date 15-3-2019