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**Email** 

4 April, 2018

Metalcraft Roofing Ltd P O Box 51 286 Pakuranga Auckland

Attention: J Campbell

Dear Jasper,

re: Solar panel clamp, Producer Statement Metalcraft espan470 standing seam roof profile

You have engaged us to summarise the test results for your Metalcraft espan Solarmount clamp on the espan470 standing seam metal roof profile carried out by SGS Industrial. Their report reference is INZ61838-01A dated 5 March 2018. The clamp detail is shown on the Metalcraft "Espan Solarmount Data Sheet version 1.0".

The tests reached failure by pull-out of the roofing clip and not failure of the clamp. The two relevant tests showed failure occurred at an equivalent static pressure of at least 4.88 kPa on the solar panel area of 1.64 m2.

Allowing for a depreciation factor of 1.17 on the minimum test result, as per AS/NZS 1170.0 Table B1, a panel uplift of 4.1 kPa on 1.64m2, or a clamp strength of 1.7 kN is derived (four clamps per panel) can be used for design.

I believe on reasonable grounds that the Metalcraft espan Solarmount Clamp on the espan470 standing seam metal roof profile, if constructed and installed in accordance with the Metalcraft datasheet/specifications, will provide an uplift strength of 1.7 kN, in accordance with the relevant provisions of B1 of the Building Code.

The design firm issuing this statement holds a current policy of Professional Indemnity Insurance of no less than \$200,000. The design firm is member of ACENZ.

Yours faithfully,

J T Dale

CPEng 55660

Director

on behalf of JD Consulting Engineers Ltd.