holmessolutions

Viking Roofspec

PO Box 14541

Panmure

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09/10/2015

To whom it may concern,

This letter serves to summarise the testing conducted on your WarmSpan system and described in our test report ref: 113359 RP 0815 (1.0) dated 09 October 2015. The letter contains an outline summary of the completed testing and is intended for reference purposes only. In the event that a comprehensive product understanding is required we refer the reader to the complete test report referenced above.

Results

The testing was completed in accordance with the principles and test procedures detailed in the NZ metal roof and wall cladding code of practice 2014 and AS/NZS 1170.0. Where necessary deviations to the testing protocol were adopted due to the unique structural composition of the WarmSpan system. Please refer to the report above for detail.

Notes:

1. The system was tested to replicate the worst-case loading of an end-span installation. Consequently the table can be applied to both mid-span and end-span installations.

2. The system passed all performance criteria as required by the NZ metal roof and wall cladding code of practice 2014. Including point load, ULS/SLS and cyclic testing.

3. The tested system met the following performance criteria with respect to roof access:

    a. Full system – Type 1 – Access from open windows or awnings
    b. Cladding only – Type 2 – Access for maintenance purposes.

4. The system was tested with a head lap of 50mm. Installed systems must maintain a head lap of at least 50mm to maintain structural performance. Additional lap may be required for durability or environmental requirements.

5. The system was connected to purlins by pan fixing in every trough using 12G 14x20 C4 self-drilling screws. Any deviations from this fixing pattern must be confirmed with the structural engineer.

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6. The SLS and ULS capacity need to exceed the demand requirements on the installed system as determined in accordance with AS/NZS1170. However, although the tested system was installed on cold formed steel purlins, for comparative purposes we note that the achieved loadings meet or exceed "Extra High" as described by NZS 3604:2011 – Timber framed buildings.

7. It should be noted that the testing was conducted using Metcom 7 0.55g cladding as the steel substrate. A lower gauge profile may not be used.

Span (m)	Design Load Wind/Snow (SLS) (kPa)	Design Load Wind/Snow (ULS) (kPa)	Calculated Wind speed (ULS) (m/s)	Calculated Wind speed (ULS) (km/h)
<1.2	4.4	7.1	108	391
1.2	4.4	7.1	108	391
1.5	3.6	5.9	99	358
1.8	3.0	5.0	91	327
2.1	2.5	4.1	83	298
2.4	2.1	3.4	75	271
2.7	1.8	2.9	69	248
3	1.6	2.4	64	229
3.3	1.6	2.2	60	216
3.6	1.6	2.0	58	209

Best Regards,

Andrew Sarratt, B.E. (Hons)
DESIGN & TEST ENGINEER

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