



ENGINEERING ANALYSIS

Ref: KLE-LO-16-02

25 July 2016

Klevaklip Systems Pty Ltd
63/176 South Creek Rd
Cromer NSW 2099

Attention: Mr Greg Doupe

RFEA

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NSW 2065

RE: FREP Joist Hanger

The structural testing for the NJH14045 FREP Joist hanger has been undertaken in conjunction with this firm.

We certify that the testing detailed in ALS test report 34162 is in accordance with normal engineering practice and principals and the relevant sections of the following Australian Standards:

- AS/NZS 1170.0:2002 Structural design actions – Part 0: General principles
- AS/NZS 1170.1:2002 Structural design actions – Part 1: Permanent, imposed and other actions
- AS 1720.1-2010 Timber structures Part 1: Design methods

From the test results detailed in the aforementioned report, we certify that the limit state design capacity of the Klevaklip NJH14045 joist hanger exceeds 7.5kN. This capacity corresponds to a joist span x joist spacing of 0.9m² for a live load of 4kPa or 1.7m² for a live load of 2.0kPa when combined with 0.5kPa dead load.

To achieve the structural design capacity, it is essential that the joists and joist hangers be installed in strict accordance with the fixing details provided by the manufacturer's specification. The stated connection capacity is based on the joist hanger being fastened to a JD3 joint group bearer (e.g. F17 LVL).

It is noted that this certification relates to the joist hanger only, and does not extend to cover any connected joists, bearers or associated structure.

This certificate shall not be construed as relieving any other party of their legal responsibilities or contractual obligations.

Regards,

A handwritten signature in black ink, appearing to read 'Ryan Feller'.

Ryan Feller
MIEAust CPEng
for RFEA