

25 June 2023

School of Civil Engineering

**SUBJECT: Certification of performance: 3RT - White Gum H3 treated solid timber products  
Manufactured by 3RT Technologies Pty Ltd ABN 89 611 680  
Distributed by: 3RT Australia Pty Ltd ABN 34 644 217 229**

**Characteristic Design Properties for use with AS 1720.1 - 2010**

Samples of 3RT White Gum posts and beams, 2.4m posts (90x90) and 140x45 beams, representative of the products currently sold into the Australian market, have been submitted by 3RT Technologies for testing in accordance with AS/NZS 4063.1 and analysis in accordance with AS / NZS 4063.2. The samples have been provided to the Department of Infrastructure Engineering, Melbourne University and UniSA STEM, both of which are suitable laboratories for the relevant tests. The test results are representative of the quality and performance of the product to the market and both beams and posts satisfy the minimum performance requirements of F17, as specified in AS 1720.1 – 2010. All products are preservative treated to H3 in accordance with AS 1604 and can be used in Service Class 1, 2 & 3 environments – all above ground.

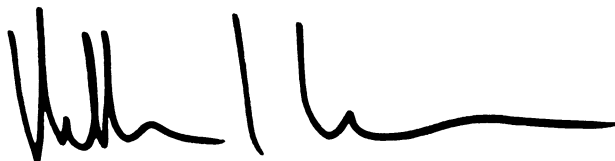
The 3RT beam products are manufactured under a Standard Operating Procedures and Quality Management System (factory production control), which will be applied to 3RT manufacturing facility.

I have reviewed test reports and undertaken an independent analysis of test data produced by Melbourne University, undertaken in accordance with AS / NZS 4063.2 – 2010. The structural properties of 3RT beams have been designated on the basis of grade substitution, as noted in AS/NZS 4357.0.

Clause 3.4 of AS/NZS 4357.0 states: “Adoption of an F-grade and hence F-grade properties, as given for structural timber in AS 1720., shall be permitted, provided that none of the principal properties, the modulus of elasticity, and the characteristic strength properties in bending, tension and compression are less than the corresponding property given in AS 1720.1, for the adopted F-grade.”

Based on analysis of the test results, the minimum relevant design properties for use of the 3RT products to conform with Australian Timber Design Standard AS 1720.1, and the Australian Residential Timber Framed Construction Standard AS 1684; are those specified for F17 structural members used in bending (on edge) or as compression or tension members (e.g. vertical posts). The 3RT products represented by the test sample, can be safely used as a substitute product for F17 timber products, and in such cases will comply with the performance requirements of the National Construction Code of Australia. No testing for joint classification has been undertaken.

Yours sincerely



**Prof Keith Crews BE(hons) ME PhD**

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