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STRUCTURAL CERTIFICATION - DAR POSTS - BLACKBUTT

TGA Engineers were engaged to review and certify the 3RT Technologies Pty Ltd standardised post, sizes 90x90, 115x115, 140x140 and 190x190, DAR 2.4m long non-laminated, unfinger-jointed product. Posts, as defined in AS/NZS 1720.3 - 2016: Design criteria for timber-framed residential buildings, are generally required to support axial loads, either compression or tension only.

Characteristic design parameters for Blackbutt have been obtained through a NATA accredited test facility and determined in accordance with AS4063.2–2010, *Determination of characteristics values*.

Based on the characteristic values it can be confirmed the Blackbutt product conforms to F27 grade.

TABLE 1 - 3RT Blackbutt Characteristic Values for Design

| Grade | f'b | f't | f's | f'c | MOE | G | Strength Group |
|-------|-----|-----|-----|-----|-------|------|-------------------|
| F27 | 67 | 42 | 5.1 | 51 | 18500 | 1230 | SD6 |

The information detailed in this document is for service class 1 interior applications only (ie not for use in external applications etc).

This document only provides information regarding structural properties and all other design and regulatory requirements are to comply with the National Construction Code and local authorities.

Design of the posts shall be in accordance with AS/NZS 1720.1 – 2010 - Timber Structures, Design methods or AS/NZS 1720.3 - 2016: Design criteria for timber-framed residential buildings .

References:

- AS/NZS 1170.1-2002 SAA Loading Code Part 1 Dead and Live Loads and Load Combinations.
- AS 1720.1-2010 SAA Timber Structures Code Part 1 Design Methods
- AS 1720.3 2016 SAA Design criteria for timber-framed residential buildings
- AS/NZS 4063.2-2010 Part 2 Determination of Characteristics Values

Yours Sincerely,

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