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1 Kerin Avenue, Five Dock NSW 2046
mobile: +61 452 588 578
phone: +61 2 8097 6046
mailto: plama.pro@outlook.com
info@plamaprojects.com.au
ABN: 4862 100 2659

TO WHOM IT MAY CONCERN

STRUCTURAL DESIGN CERTIFICATE

RE: ACETECH WOOD PLASTIC COMPOSITE (WPC) DECKING SYSTEM

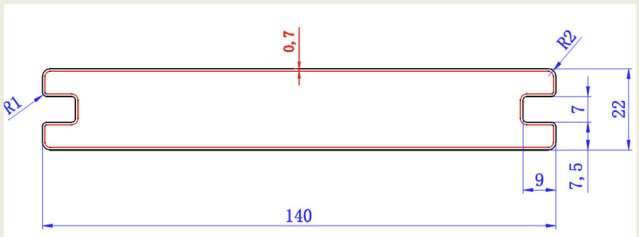
This is to certify that the proposed decking system developed by Acetech Architectural Pty Ltd is designed in accordance with the generally accepted engineering principles, the Performance Requirements of the Building Code of Australia NCC2022 and other relevant Australian Standards, namely:

- ✓ NCC2022 – Performance Requirements
- ✓ AS1170.0:2011 Structural Design Actions - Part 0: General Principles
- ✓ AS1170.1:2002 Structural Design Actions - Part 1: Permanent Imposed and other Actions, in particular Table 3.1 C3 (e): **Area without obstacles for moving people such as balconies, and roofs used for floor type activities.**
- ✓ AS3566.1-2002 Self Drilling Screws for the Building and Construction Industries - Part 1

PRODUCT NAME: **ACETECH WPC DECKING**

DESCRIPTIONS: Wood Plastic Composite (WPC) Decking Board

Nominated Size:	140x22mm
Density:	1.23g/cm^3
Bending Strength:	33.48 MPa
Breaking Strength:	5.1kN
Modulus of Elasticity:	4.5 GPa



INSTALLATION REQUIREMENTS

The structural design and installation requirements are as follows:

- Supporting rail battens are at maximum 450mm maximum center-to-center.
- ACETECH WPC Decking Boards are to be installed over a minimum of two (2x) spans.
- Point Live Load is to be shared between two (2x) adjacent boards.
- Application of the ACETECH WPC Decking Board shall be strictly limited as designated for areas without obstacles for moving people such as balconies, and roofs used for floor type

activities (uniformed distributed actions = 4 to 10kPa or maximum concentrated actions = 1.8kN).

- Application of the ACETECH WPC Decking Board for other areas (including corridors, hallways, aisles, stairs, landings, concourses, terraces, plazas, footpaths, museum floors, and art galleries, etc…) must be fully glued or attached to the substrates and must not be on battens unless verified by a qualified engineer.
- Maximum deflection limit: span/300 in accordance with AS1170.0-2002
- Long-term loading factor: $\Psi = 0.6$
- The design serviceability and strength have been determined in accordance with engineering principles, laboratory testing and structural analysis.
- The loading table is limited to standard conditions, therefore application to any specific building is subject to its geometry and loading.
- Installation shall be in accordance with ACETECH's recommendations.

The ultimate and serviceability limit strength have been determined using AS1170.0-2002.This certification may be considered as "Evidence of Suitability" under the National Construction Code of Australia (NCC2022), Performance Solutions.

This certificate shall not be misconstrued as relieving the building contractors of their contractual and professional responsibilities.

Should you need anything further, or require any matters elaborated on, please contact the undersigned.

Yours faithfully,

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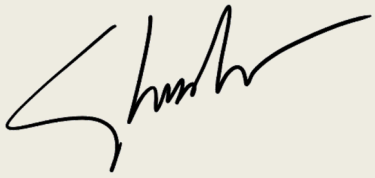

Mr Lucas Tran - Director
Principal Design Practitioner | Chartered Professional Engineer
Practising Structural | Civil | Hydraulic | Glass&Façade Engineer
BEng MIEAust CPEng NER APEC Engineer IntPE(Aus)
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23 June 2023