**A.L. WOOD (ENGINEERS)** CONSULTING ENGINEERS STRUCTURAL & CIVIL



The General Manager Mid Coast Council Taree 2430 Job No. MC11272 Sallyanne & Alan Scutts 132 Church Street Gloucester 2422 Lot 7 DP 212252 10th June 2025

# **Engineer's Certificate of Structural Design Compliance**

This is to certify that the Specification Sheets attached to the Building Application submitted by Spanline Mid Coast complies with all relevant Standards Australia, National Construction Code 2022 and Australian Building Codes Board Housing Provisions.

All Panelspan Specification Sheets do comply with the relevant Standards and are being updated to notate the following:-

AS 4055-2021 Wind loads for housing.

AS/NZS 1170.2-2021 Wind actions.

AS 1562.3-2006 Design and installation of plastic roof and wall cladding.

AS 3600:2018 Concrete Structures.

AS 4100:2020 Steel Structures.

ABCB HP Part 4.2 – Footings and slabs Construction.

ABCB HP Part 7 – Roof and Wall cladding.

ABCB HP Part 7.2 – Sheet roofing.

Glazed Windows and Doors :-

AS 2047:2014 Windows and external glazed doors in buildings. AS 1288:2021 Glass in buildings. ABCB HP Parts 8.2, 8.3, & 8.4.

Stormwater Drainage :-AS/NZS 3500.3 -2021 Plumbing and drainage Stormwater.

Yours faithfully,

Allan L. Wood MIE Aust. CP Eng. No302797 For A.L.Wood Engineers

## SPANLINE ENGINEERING SPECIFICATION SHEET ALLOWABLE EDGE BEAM SPANS FOR ALUMINIUM SINGLE BEAMS - ALL AREAS

4800

5400

### TABLE 6

ROOF

PROJECTION

1500

2400

3000

3600

4200

4800

5400

100 x 50 x 1.6 ALUMINIUM BOX BEAM						
ROOF PROJECTION	APPLICABLE COEFFICIENT	N1	N2	N3/C1	N4/C2	
1500	0.7	4500	4000	3900	3300	
2400	0.7	3800	3400	3100	2600	
3000	0.7	3500	3200	2800	2300	
3600	0.7	3400	3000	2600	2100	
4200	0.7	3200	2800	2400	1900	
4800	0.7	3000	2700	2200	1800	
5400	0.7	2900	2500	2100	1700	

150 x 50 x 3.0 ALUMINIUM BOX BEAM

N1

7100

6300

6000

5700

5400

5200

5000

N2

6800

5800

5400

5100

4800

4600

4400

N3/C1

6700

5700

5200

4700

4400

4100

3900

N4/C2

5800

4800

4200

3900

3600

3300

3200

APPLICABLE

COEFFICIENT

0.7

0.7

0.7

0.7

0.7

0.7

0.7

#### 100 x 50 x 3.0 ALUMINIUM BOX BEAM ROOF APPLICABLE N3/C1 N4/C2 N1 N2 COEFFICIENT PROJECTION 4700 1500 4100 0.7 5400 4900 2400 0.7 4600 4100 4000 3500 3000 4300 3800 3700 3100 0.7 3600 0.7 4000 3600 3500 2800 4200 3400 2600 0.7 3800 3200

3700

3500

3200

3100

3000

2800

2400

2300

## 200 x 50 x 3.0 ALUMINIUM BOX BEAM

0.7

0.7

ROOF PROJECTION	ROOFAPPLICABLEROJECTIONCOEFFICIENT		N2	N3/C1	N4/C2	
1500	0.7	8600	8600	8600	7400	
2400	0.7	7700	7500	7300	6000	
3000	0.7	7200	7000	6500	5300	
3600	0.7	6900	6600	5900	4900	
4200	0.7	6700	6200	5500	4500	
4800	0.7	6400	5900	5100	4200	
5400	0.7	6200	5700	4800	4000	

250 x 50 x 3.0 ALUMINIUM BOX BEAM						
ROOF PROJECTION	APPLICABLE COEFFICIENT	N1 N2 N3/C		N3/C1	N4/C2	
1500	0.7	10000	10000	10000	9100	
2400	0.7	8900	8900	8800	7200	
3000	0.7	8400	8400	7900	6400	
3600	0.7	8000	8000	7200	5900	
4200	0.7	7700	7600	6600	5400	
4800	0.7	7500	7200	6200	5100	
5400	0.7	7200	7000	5800	4800	

#### WHEN REQUIRED FOR OTHER COEFFICIENT VALUES

#### Cp'n OF 0.45 AND 0.7 ARE THE SAME ON TABLE 6 ALL SPANS REDUCED BY 5% FOR Cpn 1.0 ALL SPANS REDUCED BY 10% FOR Cpn 1.1 ALL SPANS REDUCED BY 15% FOR Cpn 1.2 ALL SPANS REDUCED BY 20% FOR Cpn 1.6

#### MAX BEAM OVERHANG TO BE LIMITED TO 25% OF BEAM SPAN



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ROOF PROJECTION

BEAM SPAN

- NOTE: MAXIMUM ROOF SHEET OVERHANG TO A MAXIMUM OF 600mm NOTE: REFER TO TABLE 1 FOR ALLOWABLE ROOF SHEET SPANS IN RB100 OR RB102
- NOTE: BEAM OVERHANG TO A MAXIMUM OF 600mm





#### ALUMINIUM SINGLE BEAMS

28/02/2023



28/02/2023



SPACEMAKER 1000 SPAN TABLES

Sallyanne & Alan Scutts 132 Church Street Gloucester 2422 Lot 7 DP 212252

Panel Size 60 mm

In accordance with: - Wind actions: AS/NZS 1170.2:2011 - Clauses 5.3, 5.4 and D4; AS 4055-2012. Imposed load on roof: AS/NZS 1170.1:2002 - Clause 3.5: 1.1 kN

(110kg) per panel, concentrated load for typical foot-traffic.

Wind Class in		Maximum Single Span (mm)			
accordance	Panel Size		<b>A</b>	<b>A</b>	
		Fully	One-Side	Two/Three	
	(((((((((((((((((((((((((((((((((((((((	Enclosed	Open	Sides Open	
A54055-2012		Room			
N1 (W28N)	60	7595	7020	7595	
N2 (W33N)	60	6480	5876	6480	
N3 (W41N)	60	5100	4633	5100	
N4 (W50N)	60	4144	3768	4144	
C1 (W41C)	60	4850	3866	5100	
C2 (W50C)	60	3947	3154	4144	
C3 (W60C)	60	3234	2590	3396	

#### Notes:

- 1. This Table is based on Structural Insulated Roof Panels (SIRP) manufactured with insulation butt-joint located at center (midspan) as in SIRP used in structural load tests.
- 2. This table shall be studied in conjunction with information included in this document on: Sheet 2 of 4, Sheet 3 of 4 and Sheet 4 of 4







# ATTACHING POST TO EXISTING TIMBER DECKS DETAIL

