

Standard Residential deck loading - Class A -- 2Kpa Live Load , 0.2Kpa Dead Load , 1.8 KN Point Load*

Profile	Joist Span (recommended)	Bearer Span	Cantilever (max)
28 x 50	600mm	600mm	N/A
55 x 55	1200mm	1400mm	250mm
110 x 45	2100mm	1750mm	500mm

> Max Point loading 1.8Kn Distributed over 2 Joists

*Please contact us for high loading span tables



CONSULTING ENGINEERS	Project				Job Ref.	
	Span Table for Attached Aluminum Joists and Bearers				2021618A	
	Section				Page No/rev.	
	110x45mm, 55x55mm			1		
	Calc. by	Date	Chk'd by	Date	App'd by	Date
	HW 23/08/2021 AQ 24/06/2021			AQ	24/06/2021	

Design Certificate

Date : 24 August 2021

ClickDeck Modular Decking system 2/5 Kelletts Road, Rowville VIC 3178

To whom it may concern

Certificate for Aluminium Joists and Bearers Span Tables

QED Engineers, Practicing Civil and Structural Engineers, hereby certify that we have carried out computations in accordance with proper design principles, and we confirm that that design tables conform to the building code of Australia and the following codes:

AS 1170.1- 2002 Structural design actions – Permanent imposed and other actions AS 1170.2 2002 Structural design actions – wind actions AS 1664- 1997 Aluminium Structures

Approved by :

- dhe

Abdullah Qasemi B.Eng(Civil), M.Eng.sc, MIEAust NER, RBP Tel: +61 468 413 867 Email: <u>aq@qedengineers.com.au</u>

CLICKDECK PROFILE SPAN TABLE (G=0.2 kPa and Q = 2.0 kPa

Table 1. Joist span table (450mm max. joist spacing

(L/300 deflection with vibration control

PROFILE	Max. simply supported Joist span (mm)	Max. continuous Joist span (mm)		
55x55	1050	1200	250	
110x45	1900	2100	500	

Table 2. Joist span table (450mm max. joist spacing

(L/500 deflection, no vibration control)

PROFILE	Max. simply	Max. continuous	Max. Joist
PROFILE	supported Joist	Joist span (mm)	cantilever (mm)
55x55	1400	1600	250
110x45	2400	2500	500

Table 3. Simply-supported bearer span table

PROFILE	Bearer centre-to-centre spacing (mm)			
	1200	1600	2000	2500
55x55	1200	1100	1000	-
110x45	2100	1900	1750	1500

Table 4. Continuous bearer span table

PROFILE	Bearer centre-to-centre spacing (mm)			
	1200	1600	2000	2500
55x55	1400	1200	1100	-
110x45	2200	1900	1750	1500

Table 5. Cantilever bearer span table

PROFILE	Bearer centre-to-centre spacing (mm)			
	1200	1600	2000	2500
55x55	300	300	250	-
110x45	500	500	450	300

Notes:

1 All units are in mm

- 2 Joist and bearer is designed to have deflection less than L/300 under UDL load.
- 3 For joist, additional criteria is considered to have deflection no more than 2mm under 1 kN static load for vibration control
- 4 The strength of the profile is analysed in accordance with AS1664.2
- 5 For cantilever span, the backspan of the cantilever must have min. 90% of the span obtained from:
 - * Simply supported span from Table 1 (Joist) or Table 3 (Bearer) if the backspan is not continuous

* Continuous span from Table 1 (Joist) or Table 4 (Bearer) if the backspan is continuous

6 Table 2 must be used with caution as the vibration control criteria from AS1170.0 Table C1 is not considered hence floor vibration may be apparent.