Single Span – L/150 deflection limit

Slab Thickness (mm)	Unpropped			1 Row of Props			2 Rows of Props		
	0.75 mm	0.90mm	1.00mm	0.75 mm	0.90 mm	1.00 mm	0.75 mm	0.90 mm	1.00mm
110	2200	2550	2750	4700	5600	6100	N/A	N/A	N/A
120	2150	2500	2700	4600	5500	6000	N/A	N/A	N/A
130	2150	2450	2600	4500	5300	5800	7050	N/A	N/A
140	2100	2400	2550	4400	5200	5700	6900	N/A	N/A
150	2050	2350	2500	4300	5100	5600	6750	8100	N/A
160	2000	2300	2450	4100	5000	5400	6600	7950	8700
170	1950	2250	2450	4100	4900	5300	6450	7650	8400
180	1950	2200	2400	4000	4800	5200	6300	7500	8250
190	1900	2200	2350	3900	4700	5100	6150	7350	8100
200	1850	2150	2300	3800	4600	5000	6000	7200	7950
210	1850	2100	2250	3700	4500	4900	5850	7050	7800
220	1800	2100	2250	3600	4400	4800	5700	6900	7650
230	1800	2050	2200	3600	4300	4800	5700	6900	7500
240	1750	2050	2150	3500	4200	4700	5550	6750	7350
250	1750	2000	2150	3400	4200	4600	5400	6300	7350

Single Spans – L/240 deflection limit

mm	0.75 mm	0.90 mm	1.00 mm	0.75 mm	0.90 mm	1.00 mm	0.75 mm	0.90 mm	1.00 mm
110	2200	2500	2600	4700	5600	6100	N/A	N/A	N/A
120	2150	2400	2500	4600	5500	6000	N/A	N/A	N/A
130	2150	2300	2450	4500	5300	5800	7050	7800	N/A
140	2100	2200	2350	4400	5200	5700	6900	7350	8100
150	2050	2150	2250	4300	5100	5600	6750	6750	7650
160	2000	2050	2200	4100	5000	5400	6000	6000	7050
170	1950	2000	2100	4100	4900	5300	5400	5400	6600
180	1900	1900	2050	4000	4700	5200	5250	5250	5400
190	1850	1850	2000	3900	4400	5000	5100	5100	5400
200	1800	1800	1900	3800	4000	4700	5100	5100	5250
210	1750	1750	1850	3600	3600	4400	4950	4950	5250
220	1700	1700	1800	3500	3500	4100	4950	4950	5100
230	1650	1650	1750	3500	3500	3600	4800	4800	5100
240	1600	1600	1700	3400	3400	3600	4800	4800	4950
250	1550	1550	1700	3400	3400	3500	4800	4800	4950

Two or More Spans – L/150 deflection limit

mm	0.75 mm	0.90 mm	1.00 mm	0.75 mm	0.90 mm	1.00 mm	0.75 mm	0.90 mm	1.00 mm
110	2350	2800	3050	5000	5900	6500	N/A	N/A	N/A
120	2300	2750	3000	4900	5800	6300	N/A	N/A	N/A
130	2250	2650	2900	4700	5600	6200	7050	N/A	N/A
140	2200	2600	2850	4600	5500	6000	6900	N/A	N/A
150	2150	2550	2800	4500	5400	5900	6750	8100	N/A
160	2050	2500	2700	4400	5300	5800	6600	7950	8700
170	2050	2450	2650	4300	5100	5600	6450	7650	8400
180	2000	2400	2600	4200	5000	5500	6300	7500	8250
190	1950	2350	2550	4100	4900	5400	6150	7350	8100
200	1900	2300	2500	4000	4800	5300	6000	7200	7950
210	1850	2250	2450	3900	4700	5200	5850	7050	7800
220	1800	2200	2400	3800	4600	5100	5700	6900	7650
230	1800	2150	2400	3800	4600	5000	5700	6900	7500
240	1750	2100	2350	3700	4500	4900	5550	6750	7350
250	1700	2100	2300	3600	4200	4900	5400	6300	7350

Spans printed in ***bold italics*** exceed the recommended span-to-thickness limits

Two or More Spans – L/240 deflection limit

Slab Thickness (mm)	Unpropped			1 Row of Props			2 Rows of Props		
	0.60 mm	0.75 mm	1.00 mm	0.60 mm	0.75 mm	1.00 mm	0.60 mm	0.75 mm	1.00 mm
110	2350	2800	3050	5000	5900	6200	N/A	N/A	N/A
120	2300	2750	3000	4900	5600	6000	N/A	N/A	N/A
130	2250	2650	2900	4700	5200	5700	7050	7800	N/A
140	2200	2600	2850	4600	4900	5400	6900	7350	8100
150	2150	2550	2800	4500	4500	5100	6750	6750	7650
160	2050	2500	2700	4000	4000	4700	6000	6000	7050
170	2050	2450	2650	3600	3600	4400	5400	5400	6600
180	2000	2350	2600	3500	3500	3600	5250	5250	5400
190	1950	2200	2500	3400	3400	3600	5100	5100	5400
200	1900	2000	2350	3400	3400	3500	5100	5100	5250
210	1800	1800	2200	3300	3300	3500	4950	4950	5250
220	1750	1750	2050	3300	3300	3400	4950	4950	5100
230	1750	1750	1800	3200	3200	3400	4800	4800	5100
240	1700	1700	1800	3200	3200	3300	4800	4800	4950
250	1700	1700	1750	3200	3200	3300	4800	4800	4950

Spans printed in ***bold italics*** exceed the recommended span-to-thickness limits

Armourdeck™ 300 Span Table Guidelines

- The spans shown in the tables are the maximum allowable centreline to centreline span between supports after all propping has been removed.
  These design tables are for the formwork stage only and do not consider spanning capacity of the slab when props are removed.

- Allowance for concrete ponding due to sheet deformation has been included. Other loadings included are dead load resulting from the sheeting and construction live load allowances determined in accordance with AS1170, AS2327 and AS3610 as outlined for Stage 2 wet concrete loads.

- The tables are based on the mechanical properties of the sheeting derived from testing alone, consequently the capacity of the composite action has not been considered as a limiting factor. It is recommended that a qualified structural engineer design the composite slab to ensure capacity and long-term effects are considered, and that the composite slabs are fit for purpose.

- While concrete ponding due to deflection of the sheeting has been considered, mounding of concrete above finished concrete levels should be discouraged. Mounding based on a number of varying load cases have been considered in the tables, including a 3 kPa loading over the middle section of the span, with associated live loading, and an additional 1 kPa loading at mid-span which considers concrete self-weight and live loading. If mounding is considered necessary, a suitably qualified engineer should assess the locations, to minimise both the permanent deflections and loads imposed on the decking.

- A span-to-thickness ratio of 35 for single span slabs and 40 for continuous spanning slabs is recommended as an upper limit to minimise vibration of slabs. In the tables, where maximum spans exceed these span-to-thickness limits, the spans are printed in bold italics. When props are utilised, the design of the spanning slab needs to be verified by an engineer prior to removing props.

Span Table Notes

- Concentrated loading should be avoided at the sheet overlap joints and unsupported edges.
- Support widths are assumed to be 50mm at sheeting ends and 100mm over intermediate supports.
- The tables assume that when using two or more spans, the lengths of adjacent spans do not vary by more than 5%.

The information contained in this publication is intended for guidance only. This information is to be used only in conjunction with advice from a qualified structural engineer.

Further details are available from Big River Group.