

Overview

TimberLab QuickSpan Flooring Panel is a cost-effective solution to provide rapidly installed floors for both commercial and residential application.

The efficient engineered design allows for long unsupported spans whilst maintaining minimal overall floor depth for effective use of space.

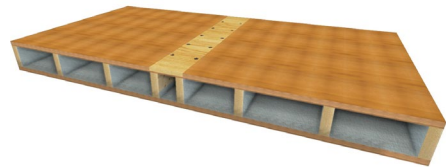
Long length, lightweight panels ensure speed of construction.

Panels have simple lapped or spline joints for ease of installation which are screw-fixed to achieve diaphragm action.

The cavity within the Cassette option can be used for services and/or thermal insulation and for the Slab option, thermal insulation can be factory-fixed to the underside.

QuickSpan Small Span Floors

Solid cross-banded LVL (Hyspan) with optional 50mm insulation fixed to the underside.
1200mm wide standard module. Any length up to 13m. Suitable for span requirements up to 3.15m.



QuickSpan Large Span Floors

LVL (Hyspan) top and bottom skins, laminated to timber joists with optional insulation between.
1200mm standard module. Any length up to 13m. Suitable for spans greater than 3.15m.

Availability

Panels are made on a per-project basis to suit specific requirements. Typical panels are 1200 mm wide with end panels custom-made to suit the layout. Panels can be produced in lengths of up to 13m.



QuickSpan Slab



QuickSpan Cassette

Span Tables

QUICKSPAN SLAB - SIMPLY SUPPORTED SPAN (mm)

	Self weight	Thermal Rating (EN12524 to EN12526)	Q = 1.5kPa Floor		Q = 3.0kPa Floor		Q = 5.0kPa Floor		Q = 0.25kPa Roof & 1kPa Ground Snow Load	
			Superimposed Dead Load		Superimposed Dead Load		Superimposed Dead Load		Superimposed Dead Load	
			0kPa	0.5kPa	0kPa	0.5kPa	0kPa	0.5kPa	0.2kPa	0.5kPa
42mm Slab	25 kg/m ²	R1.76	* 1600	* 1600	1550	1400	1350	1250	2100	1900
63mm Slab	38 kg/m ²	R1.92	* 2350	2300	2250	2050	1950	1850	2950	2700
75mm Slab	45 kg/m ²	R2.02	* 2700	* 2700	2650	2400	2300	2150	3450	3150
90mm Slab	54 kg/m ²	R2.13	* 3150	* 3150	3100	2850	2700	2550	4000	3650

QUICKSPAN CASSETTE - SIMPLY SUPPORTED SPAN (mm)

	Selfweight	Thermal Rating (cavity filled with EPS)	Q = 1.5kPa Floor		Q = 3.0kPa Floor		Q = 5.0kPa Floor		Q = 0.25kPa Roof & 1kPa Ground Snow Load	
			Superimposed Dead Load		Superimposed Dead Load		Superimposed Dead Load		Superimposed Dead Load	
			0kPa	0.5kPa	0kPa	0.5kPa	0kPa	0.5kPa	0.2kPa	0.5kPa
146mm Cassette	39 kg/m ²	R2.73	* 4750	* 4750	* 4750	4300	3000	2800	6750	6050
160mm Cassette	47 kg/m ²	R2.84	* 5200	* 5200	5000	4500	3150	2950	7300	6600
196mm Cassette	41 kg/m ²	R3.94	* 5850	* 5850	* 5850	5700	4300	4000	8300	7700
210mm Cassette	50 kg/m ²	R4.05	* 6350	* 6350	* 6350	6150	4400	4100	8700	8100
246mm Cassette	44 kg/m ²	R5.16	* 6800	* 6800	* 6800	* 6800	5650	5250	9450	8800
260mm Cassette	53 kg/m ²	R5.27	* 7350	* 7350	* 7350	* 7350	5750	5300	9850	9200
296mm Cassette	47 kg/m ²	R6.38	* 7700	* 7700	* 7700	* 7700	7000	6550	10450	9750
310mm Cassette	56 kg/m ²	R6.49	* 8250	* 8250	* 8250	* 8250	7000	6550	10900	10200

Floor spans governed by long-term deflection L/400 or strength, roof spans governed by long-term deflection L/300.

* These limits on spans have been set to reduce floor liveliness. Floor dynamics is a complex consideration and experience shows that floor spans based on strength and static load deflection limits alone can be unacceptably lively.

Span tables are indicative only and should not be relied upon for detailed design. QuickSpan panels are subject to specific design to be carried out by a suitably qualified structural engineer.

QuickSpan Benefits

- Reduced Risk** Easily established on any site (flat or sloped) and in remote locations. Cost structure is therefore consistent across all topographies and site locations with low geotechnical risk.
- Light Weight** QuickSpan panels have a high strength-to-weight ratio. The significant reduction in self-weight reduces gravity loading on the foundation and seismic bracing demand. Light weight panels are rapidly installed to minimize crane time and site program.
- Seismic Performance** Following an earthquake event, QuickSpan ground floor system can be easily re-levelled.
- Flood** Raised ground floor system protects flood-prone dwellings. Flood water can flow under dwelling and if necessary, drainage systems can be installed. Future insurance benefits may exist with sea-level rise.
- Thermal** Thermal performance of QuickSpan can be designed to be significantly greater than the minimum requirements of the NZ Building Code.
- Accuracy** Panels are factory-manufactured to fine tolerances of ±0.5mm; no remedial work required, or site waste generated.
- Construction Speed** 1200mm wide QuickSpan modules can be lifted and fixed at a rate of approximately 35 panels per day. Frames can be erected on the timber platform as soon as panels are fixed (no curing time necessary).
- Safety** QuickSpan floor system ensures building gets out of the ground quickly and becomes an immediate and safe working platform.
- Truck Movements** Fewer truck deliveries required compared with traditional building systems and there is no waste generated on the building site which requires later removal.
- Weather Risk** Being a dry trade, which is easily installed; there is no dependence on weather.