

ComFlor 80 Quick Reference Tables

Load Span Table - Normal Weight Concrete													
						MAXIMUM SPAN (m)							
						Deck Thickness 0.9 (mm)				Deck Thickness 1.2 (mm)			
						Superimposed Live Load (kPa)							
						1.5	2.5	3.0	4.0	1.5	2.5	3.0	4.0
Props	Span	Fire Rating	Slab Depth (mm)	Bar No	Mesh Type	Superimposed Dead Load (kPa)							
						0.8	0.1	0.8	1.0	0.8	0.1	0.8	1.0
No Temporary Props	Single span	0.5 hr	140	0	A142	4.10	4.10	4.10	4.10	4.40	4.40	4.40	4.40
		1 hr	150	0	A252	4.00	4.00	4.00	4.00	4.30	4.30	4.30	4.30
	Double span	0.5 hr	140	0	A142	4.55	4.55	4.55	4.55	5.10	5.20	5.05	5.00
		1 hr	150	0	A252	4.55	4.55	4.55	4.55	5.20	5.20	5.20	5.00
1 Row of Temporary Props	Single span	0.5 hr	140	One per tough	A252	5.50	5.60	5.20	4.95	5.70	5.75	5.35	5.10
		1 hr	150	One per tough	A393	5.60	5.70	5.50	5.20	5.80	5.90	5.60	5.35
	Double span	0.5 hr	140	One per tough	A252	5.50	5.60	5.30	5.00	5.70	5.80	5.45	5.30
		1 hr	150	One per tough	A393	5.60	5.60	5.55	5.30	5.80	5.90	5.75	5.45

Parameters assumed for quick reference span tables

All spans are shown in metres.

Comdek design software is available on CD from Corus New Zealand or online at www.corusnz.com

Steel Grade In New Zealand ComFlor 80 is manufactured from Grade 500 strip with a minimum yield of 500 MPa. For deck material specification see previous page.

Spans Measured centre to centre of support. The support width is 150mm in tables.

Prop Width Assumed to be 100mm.

Mesh See notes on previous page.

Concrete Grade The concrete is assumed to be Grade 30 (25MPa Cylinder Strength) with a maximum aggregate size of 20mm. The wet weight of concrete is taken to be 2400kg/m³. The modular ratio is 10 for normal weight concrete.

Construction Load 1.5kN/m² is taken into account in accordance with BS5950: Part 4. No allowance has been made for heaping of concrete during the casting of the slab.

Superimposed Live Load In the fire condition the proportion of occupancy imposed load considered as non-permanent is taken as 0.5.

Superimposed Dead Load The loads stated in the table are to cover partitions, finishes, ceilings and services. The dead load of the slab has been taken into account and need not be considered as part of the applied load.

Fire Insulation The minimum slab thickness indicated in the table satisfies the fire insulation requirements of BS5950: Part 8.

Simplified Fire Design Method For unpropped spans the fire ratings in the tables are based on Simplified Design Method.

Fire Engineering Method For propped spans the fire ratings in the table is based on the Fire Engineering Method. To calculate the reinforcement needed for fire, load and span conditions, please use the Comdek design software

Deflections Construction Stage L/130 or 30mm - ponding has been taken into account.

Composite Stage L/350 but not greater than 20mm.

Total Load Deflection L/250 but not greater than 30mm.