

Multideck 50-V2

Fire Resistance Load Tables

Dramix[®] Reinforced Concrete (20kg/m³ RC-80/60-BN)

1 Hour Fire Rating - Normal Weight Concrete

Slab Depth (mm)	Span (m)													
	Gauge 0.9mm							Gauge 1.0mm						
	Total Applied Load (kN/m ²)							Total Applied Load (kN/m ²)						
	2.0	4.0	5.0	6.7	8.0	10.0	12.0	2.0	4.0	5.0	6.7	8.0	10.0	12.0
100	5.01	4.16	3.88	3.52	3.30	3.02	2.82	5.22	4.34	4.05	3.66	3.44	3.16	2.94
110	5.17	4.34	4.05	3.67	3.45	3.17	2.95	5.37	4.50	4.20	3.81	3.58	3.29	3.07
120	5.35	4.52	4.23	3.84	3.62	3.34	3.11	5.54	4.68	4.38	3.98	3.74	3.45	3.22
130	5.53	4.70	4.41	4.02	3.78	3.49	3.26	5.72	4.86	4.55	4.16	3.91	3.61	3.38
140	5.70	4.87	4.58	4.18	3.94	3.64	3.41	5.88	5.03	4.73	4.32	4.07	3.76	3.52
150	5.85	5.03	4.73	4.34	4.09	3.79	3.55	6.03	5.20	4.88	4.48	4.23	3.91	3.66
160	6.02	5.20	4.91	4.50	4.25	3.95	3.70	6.19	5.35	5.05	4.63	4.38	4.05	3.80
170	6.16	5.35	5.05	4.65	4.40	4.08	3.83	6.34	5.52	5.20	4.79	4.53	4.20	3.95
180	6.31	5.51	5.21	4.80	4.55	4.23	3.97	6.50	5.68	5.37	4.95	4.69	4.35	4.09
190	6.44	5.65	5.34	4.94	4.68	4.35	4.09	6.62	5.80	5.50	5.08	4.81	4.48	4.20
200	6.58	5.79	5.49	5.08	4.82	4.49	4.22	6.75	5.95	5.64	5.21	4.95	4.61	4.34

1.5 Hour Fire Rating - Normal Weight Concrete

Slab Depth (mm)	Span (m)													
	Gauge 0.9mm							Gauge 1.0mm						
	Total Applied Load (kN/m ²)							Total Applied Load (kN/m ²)						
	2.0	4.0	5.0	6.7	8.0	10.0	12.0	2.0	4.0	5.0	6.7	8.0	10.0	12.0
110	3.64	3.06	2.86	2.60	2.45	2.25	2.10	3.74	3.14	2.94	2.67	2.51	2.31	2.16
120	3.82	3.23	3.02	2.76	2.59	2.39	2.23	3.91	3.31	3.10	2.83	2.66	2.45	2.30
130	3.98	3.40	3.19	2.91	2.74	2.53	2.37	4.09	3.48	3.27	2.98	2.81	2.60	2.43
140	4.16	3.56	3.35	3.06	2.89	2.68	2.51	4.24	3.63	3.41	3.13	2.95	2.73	2.55
150	4.31	3.71	3.50	3.20	3.03	2.80	2.63	4.38	3.78	3.55	3.26	3.08	2.85	2.67
160	4.45	3.85	3.63	3.34	3.16	2.93	2.74	4.56	3.95	3.73	3.42	3.23	3.00	2.81
170	4.63	4.02	3.80	3.50	3.31	3.08	2.88	4.71	4.10	3.88	3.56	3.38	3.13	2.95
180	4.77	4.16	3.95	3.63	3.45	3.20	3.01	4.86	4.24	4.02	3.70	3.51	3.27	3.06
190	4.89	4.29	4.06	3.76	3.56	3.32	3.12	4.99	4.38	4.16	3.84	3.64	3.39	3.19
200	5.02	4.43	4.20	3.88	3.69	3.44	3.23	5.13	4.52	4.30	3.98	3.77	3.52	3.31

2.0 Hour Fire Rating - Normal Weight Concrete

Slab Depth (mm)	Span (m)													
	Gauge 0.9mm							Gauge 1.0mm						
	Total Applied Load (kN/m ²)							Total Applied Load (kN/m ²)						
	2.0	4.0	5.0	6.7	8.0	10.0	12.0	2.0	4.0	5.0	6.7	8.0	10.0	12.0
125	3.58	3.04	2.85	2.60	2.45	2.27	2.12	3.66	3.10	2.91	2.66	2.50	2.31	2.16
130	3.65	3.11	2.92	2.66	2.52	2.32	2.17	3.73	3.19	2.99	2.73	2.57	2.38	2.23
140	3.84	3.29	3.09	2.83	2.67	2.48	2.31	3.91	3.36	3.16	2.89	2.73	2.52	2.36
150	3.99	3.44	3.24	2.97	2.80	2.60	2.44	4.07	3.51	3.30	3.03	2.87	2.66	2.48
160	4.15	3.59	3.39	3.12	2.95	2.73	2.56	4.23	3.67	3.46	3.18	3.01	2.79	2.62
170	4.30	3.74	3.54	3.26	3.09	2.87	2.69	4.37	3.80	3.59	3.30	3.13	2.91	2.73
180	4.46	3.90	3.69	3.40	3.23	3.00	2.82	4.52	3.95	3.74	3.45	3.27	3.04	2.86
190	4.60	4.04	3.83	3.54	3.36	3.13	2.94	4.66	4.09	3.88	3.59	3.40	3.16	2.98
200	4.73	4.16	3.95	3.66	3.48	3.24	3.05	4.80	4.24	4.02	3.73	3.54	3.30	3.10

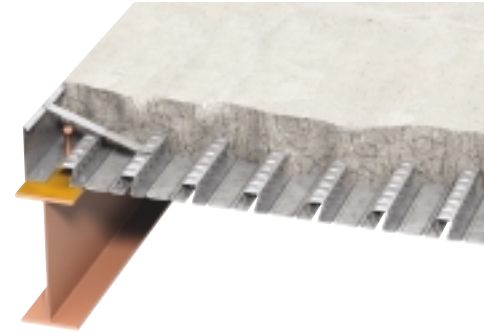
Notes:

These tables are not applicable to slabs where the deck is supplied in single span lengths (use Multideck Design software to determine suitable bottom bar requirements)

Multideck 50-V2

Fire Resistance Load Tables

Dramix® Reinforced Concrete (20kg/m³ RC-80/60-BN)



Multideck 50-V2

1 Hour Fire Rating - Normal Weight Concrete

Slab Depth (mm)	Span (m)						
	Gauge 1.2mm						
	Total Applied Load (kN/m ²)						
	2.0	4.0	5.0	6.7	8.0	10.0	12.0
101	5.61	4.67	4.36	3.95	3.70	3.40	3.16
110	5.77	4.84	4.52	4.09	3.84	3.54	3.30
120	5.92	5.01	4.69	4.26	4.01	3.70	3.45
130	6.08	5.16	4.84	4.42	4.16	3.84	3.59
140	6.23	5.34	5.01	4.58	4.32	3.99	3.73
150	6.39	5.50	5.18	4.74	4.48	4.14	3.88
160	6.53	5.66	5.33	4.89	4.63	4.29	4.02
170	6.69	5.82	5.49	5.05	4.78	4.44	4.16
180	6.83	5.96	5.64	5.20	4.92	4.58	4.30
190	6.98	6.12	5.80	5.35	5.07	4.72	4.44
200	7.09	6.25	5.93	5.48	5.20	4.85	4.56

1.5 Hour Fire Rating - Normal Weight Concrete

Slab Depth (mm)	Span (m)						
	Gauge 1.2mm						
	Total Applied Load (kN/m ²)						
	2.0	4.0	5.0	6.7	8.0	10.0	12.0
110	3.92	3.30	3.09	2.80	2.63	2.43	2.27
120	4.10	3.47	3.25	2.96	2.79	2.57	2.41
130	4.27	3.64	3.42	3.12	2.94	2.72	2.54
140	4.43	3.80	3.57	3.27	3.09	2.85	2.67
150	4.59	3.95	3.72	3.41	3.22	2.98	2.80
160	4.74	4.11	3.88	3.56	3.37	3.13	2.93
170	4.88	4.25	4.02	3.70	3.50	3.25	3.05
180	5.00	4.38	4.14	3.82	3.62	3.37	3.16
190	5.16	4.52	4.29	3.96	3.76	3.50	3.29
200	5.30	4.67	4.43	4.10	3.90	3.63	3.41

2.0 Hour Fire Rating - Normal Weight Concrete

Slab Depth (mm)	Span (m)						
	Gauge 1.2mm						
	Total Applied Load (kN/m ²)						
	2.0	4.0	5.0	6.7	8.0	10.0	12.0
125	3.80	3.23	3.03	2.77	2.61	2.41	2.25
130	3.88	3.31	3.11	2.84	2.68	2.48	2.31
140	4.06	3.48	3.27	3.00	2.83	2.62	2.45
150	4.21	3.63	3.42	3.14	2.97	2.75	2.58
160	4.37	3.78	3.57	3.28	3.10	2.88	2.70
170	4.49	3.91	3.70	3.41	3.23	3.00	2.81
180	4.63	4.05	3.83	3.53	3.35	3.12	2.93
190	4.80	4.22	4.00	3.70	3.50	3.27	3.07
200	4.94	4.36	4.13	3.83	3.63	3.39	3.19

Notes:

These tables are not applicable to slabs where the deck is supplied in single span lengths (use Multideck Design software to determine suitable bottom bar requirements)