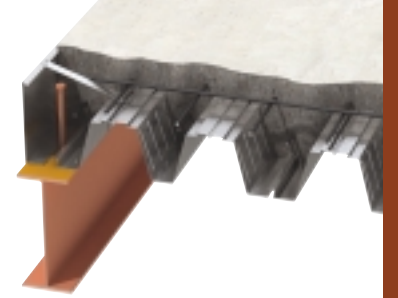


# Fire Resistance Load Tables



Anchored 16mm diameter bar reinforcement.

## Unpropped - Normal Weight Concrete

Maximum Span (m) all 146 gauges

Slab Depth (mm)	Concrete Volume (m <sup>3</sup> )	Minimum Mesh Size	Fire rating: 0.5 hour							Fire rating: 1.0 hour						
			Total Applied Load (kN/m <sup>2</sup> )													
			4.0	5.0	6.0	7.0	8.0	10.0	12.0	4.0	5.0	6.0	7.0	8.0	10.0	12.0
215	0.128	A142	7.54	7.05	6.65	6.30	6.01	5.53	5.14	7.54	7.05	6.64	6.30	6.01	5.52	5.10
225	0.138	A142	7.67	7.19	6.78	6.44	6.15	5.66	5.27	7.67	7.18	6.78	6.44	6.14	5.66	5.27
235	0.148	A193	7.79	7.31	6.91	6.57	6.27	5.79	5.40	7.78	7.31	6.91	6.57	6.27	5.79	5.40
245	0.158	A193	7.89	7.42	7.03	6.69	6.39	5.91	5.52	7.89	7.42	7.03	6.69	6.39	5.91	5.52
255	0.168	A193	7.99	7.53	7.14	6.80	6.51	6.02	5.63	7.99	7.53	7.14	6.80	6.51	6.02	5.63
265	0.178	A252	8.08	7.63	7.24	6.91	6.61	6.13	5.73	8.08	7.63	7.24	6.91	6.61	6.13	5.73
275	0.188	A252	8.17	7.72	7.34	7.01	6.72	6.23	5.84	8.17	7.72	7.34	7.01	6.72	6.23	5.84
285	0.198	A252	8.25	7.81	7.43	7.10	6.81	6.33	5.93	8.25	7.81	7.43	7.10	6.81	6.33	5.92
295	0.208	A393	8.33	7.89	7.52	7.19	6.90	6.42	6.03	8.33	7.89	7.52	7.19	6.90	6.42	5.96
305	0.218	A393	8.40	7.97	7.60	7.28	6.99	6.51	6.12	8.40	7.97	7.60	7.28	6.99	6.51	6.01

## Unpropped - Normal Weight Concrete

Maximum Span (m) all 146 gauges

Slab Depth (mm)	Concrete Volume (m <sup>3</sup> )	Minimum Mesh Size	Fire rating: 1.5 hour							Fire rating: 2.0 hour						
			Total Applied Load (kN/m <sup>2</sup> )													
			4.0	5.0	6.0	7.0	8.0	10.0	12.0	4.0	5.0	6.0	7.0	8.0	10.0	12.0
215	0.128	A142	-	-	-	-	-	-	-	-	-	-	-	-	-	-
225	0.138	A142	7.64	7.16	6.76	6.42	6.12	5.64	4.90	-	-	-	-	-	-	-
235	0.148	A193	7.76	7.28	6.89	6.55	6.25	5.77	5.07	7.62	7.15	6.76	6.43	6.14	5.51	4.80
245	0.158	A193	7.87	7.40	7.00	6.67	6.37	5.89	5.23	7.73	7.27	6.88	6.55	6.26	5.70	4.97
255	0.168	A193	7.97	7.51	7.12	6.78	6.49	6.00	5.38	7.83	7.37	6.99	6.66	6.37	5.87	5.13
265	0.178	A252	8.06	7.61	7.22	6.89	6.60	6.11	5.49	7.92	7.47	7.09	6.77	6.48	5.99	5.25
275	0.188	A252	8.15	7.70	7.32	6.99	6.70	6.21	5.56	8.00	7.56	7.19	6.86	6.58	6.07	5.33
285	0.198	A252	8.23	7.79	7.41	7.08	6.79	6.31	5.62	8.08	7.65	7.28	6.96	6.67	6.14	5.40
295	0.208	A393	8.30	7.87	7.50	7.17	6.88	6.40	5.68	8.16	7.73	7.36	7.04	6.76	6.20	5.46
305	0.218	A393	8.38	7.95	7.58	7.26	6.97	6.49	5.73	8.23	7.81	7.44	7.13	6.85	6.26	5.52

## Unpropped - Light Weight Concrete

Maximum Span (m) all 146 gauges

Slab Depth (mm)	Concrete Volume (m <sup>3</sup> )	Minimum Mesh Size	Fire rating: 0.5 hour							Fire rating: 1.0 hour						
			Total Applied Load (kN/m <sup>2</sup> )													
			4.0	5.0	6.0	7.0	8.0	10.0	12.0	4.0	5.0	6.0	7.0	8.0	10.0	12.0
215	0.128	A142	7.95	7.38	6.92	6.54	6.21	5.68	5.27	7.95	7.38	6.92	6.54	6.21	5.68	5.27
225	0.138	A142	8.10	7.54	7.08	6.69	6.36	5.83	5.41	8.10	7.54	7.08	6.69	6.36	5.83	5.41
235	0.148	A193	8.24	7.68	7.22	6.84	6.51	5.97	5.54	8.24	7.68	7.22	6.84	6.51	5.97	5.54
245	0.158	A193	8.37	7.82	7.36	6.97	6.64	6.10	5.67	8.37	7.82	7.36	6.97	6.64	6.10	5.67
255	0.168	A193	8.50	7.94	7.49	7.10	6.77	6.23	5.80	8.50	7.94	7.49	7.10	6.77	6.23	5.80
265	0.178	A252	8.61	8.08	7.61	7.23	6.89	6.35	5.91	8.61	8.06	7.61	7.23	6.89	6.35	5.91
275	0.188	A252	8.72	8.18	7.73	7.34	7.01	6.46	6.03	8.72	8.18	7.73	7.34	7.01	6.46	6.03
285	0.198	A252	8.82	8.29	7.84	7.45	7.12	6.57	6.13	8.82	8.29	7.84	7.45	7.12	6.57	6.13
295	0.208	A393	8.92	8.39	7.94	7.56	7.23	6.68	6.24	8.92	8.39	7.94	7.56	7.23	6.68	6.24
305	0.218	A393	9.01	8.48	8.04	7.66	7.33	6.78	6.34	9.01	8.48	8.04	7.66	7.33	6.78	6.34

## Unpropped - Light Weight Concrete

Maximum Span (m) all 146 gauges

Slab Depth (mm)	Concrete Volume (m <sup>3</sup> )	Minimum Mesh Size	Fire rating: 1.5 hour							Fire rating: 2.0 hour						
			Total Applied Load (kN/m <sup>2</sup> )													
			4.0	5.0	6.0	7.0	8.0	10.0	12.0	4.0	5.0	6.0	7.0	8.0	10.0	12.0
215	0.128	A142	7.95	7.38	6.92	6.54	6.21	5.68	5.27	-	-	-	-	-	-	-
225	0.138	A142	8.10	7.54	7.08	6.69	6.36	5.83	5.41	8.10	7.54	7.08	6.69	6.36	5.83	5.41
235	0.148	A193	8.24	7.68	7.22	6.84	6.51	5.97	5.54	8.24	7.68	7.22	6.84	6.51	5.97	5.54
245	0.158	A193	8.37	7.82	7.36	6.97	6.64	6.10	5.67	8.37	7.82	7.36	6.97	6.64	6.10	5.67
255	0.168	A193	8.50	7.94	7.49	7.10	6.77	6.23	5.80	8.50	7.94	7.49	7.10	6.77	6.23	5.80
265	0.178	A252	8.61	8.06	7.61	7.23	6.89	6.35	5.91	8.61	8.06	7.61	7.23	6.89	6.35	5.91
275	0.188	A252	8.72	8.18	7.73	7.34	7.01	6.46	6.03	8.72	8.18	7.73	7.34	7.01	6.46	6.03
285	0.198	A252	8.82	8.29	7.84	7.45	7.12	6.57	6.13	8.82	8.29	7.84	7.45	7.12	6.57	6.13
295	0.208	A393	8.92	8.39	7.94	7.56	7.23	6.68	6.34	8.92	8.39	7.94	7.56	7.23	6.68	6.24
305	0.218	A393	9.01	8.48	8.04	7.66	7.33	6.78	6.34	9.01	8.48	8.04	7.66	7.33	6.78	6.34

Fire Tables continued over leaf.

# Fire Resistance Load Tables

Unanchored 16mm diameter bar reinforcement.

## Unpropped - Normal Weight Concrete

Maximum Span (m) all 146 gauges

Slab Depth (mm)	Concrete Volume (m <sup>3</sup> )	Minimum Mesh Size	Fire rating: 0.5 hour							Fire rating: 1.0 hour						
			Total Applied Load (kN/m <sup>2</sup> )							Total Applied Load (kN/m <sup>2</sup> )						
			4.0	5.0	6.0	7.0	8.0	10.0	12.0	4.0	5.0	6.0	7.0	8.0	10.0	12.0
215	0.128	A142	7.54	6.71	5.96	5.36	4.87	4.12	3.57	7.24	6.33	5.62	5.06	4.59	3.88	3.36
225	0.138	A142	7.67	6.97	6.21	5.60	5.10	4.32	3.75	7.51	6.59	5.87	5.30	4.82	4.09	3.55
235	0.148	A193	7.79	7.21	6.44	5.82	5.31	4.52	3.93	7.77	6.84	6.12	5.53	5.04	4.29	3.74
245	0.158	A193	7.89	7.42	6.66	6.04	5.52	4.71	4.11	7.89	7.08	6.35	5.75	5.26	4.49	3.91
255	0.168	A193	7.99	7.53	6.88	6.24	5.72	4.89	4.28	7.99	7.31	6.57	5.96	5.46	4.67	4.08
265	0.178	A252	8.08	7.63	7.01	6.38	5.85	5.02	4.40	8.08	7.45	6.71	6.11	5.60	4.81	4.21
275	0.188	A252	8.17	7.72	7.08	6.45	5.93	5.10	4.48	8.17	7.52	6.79	6.19	5.69	4.90	4.30
285	0.198	A252	8.25	7.81	7.14	6.52	6.00	5.18	4.55	8.25	7.58	6.86	6.27	5.77	4.98	4.38
295	0.208	A393	8.33	7.89	7.19	6.58	6.07	5.25	4.62	8.33	7.63	6.93	6.34	5.84	5.05	4.45
305	0.218	A393	8.40	7.97	7.24	6.64	6.13	5.32	4.69	8.40	7.68	6.99	6.41	5.91	5.13	4.53

Slab Depth (mm)	Concrete Volume (m <sup>3</sup> )	Minimum Mesh Size	Fire rating: 1.5 hour							Fire rating: 2.0 hour						
			Total Applied Load (kN/m <sup>2</sup> )							Total Applied Load (kN/m <sup>2</sup> )						
			4.0	5.0	6.0	7.0	8.0	10.0	12.0	4.0	5.0	6.0	7.0	8.0	10.0	12.0
215	0.128	A142	-	-	-	-	-	-	-	-	-	-	-	-	-	-
225	0.138	A142	6.99	6.13	5.46	4.93	4.49	3.81	3.30	-	-	-	-	-	-	-
235	0.148	A193	7.26	6.39	5.72	5.17	4.71	4.01	3.49	6.87	6.05	4.51	4.89	4.46	3.80	3.30
245	0.158	A193	7.51	6.64	5.96	5.40	4.93	4.21	3.67	7.14	6.31	5.66	5.12	4.68	4.00	3.49
255	0.168	A193	7.75	6.88	6.18	5.62	5.14	4.40	3.85	7.39	6.56	5.89	5.35	4.90	4.19	3.66
265	0.178	A252	7.91	7.04	6.34	5.77	5.30	4.54	3.98	7.56	6.73	6.06	5.51	5.06	4.34	3.80
275	0.188	A252	7.98	7.12	6.44	5.87	5.39	4.64	4.07	7.64	6.82	6.16	5.62	5.16	4.44	3.90
285	0.198	A252	8.04	7.20	6.52	5.96	5.48	4.73	4.16	7.72	6.91	6.26	5.72	5.26	4.54	3.99
295	0.208	A393	8.10	7.27	6.60	6.04	5.57	4.81	4.24	7.79	6.99	6.35	5.81	5.35	4.63	4.08
305	0.218	A393	8.15	7.34	6.67	6.12	5.65	4.89	4.32	7.85	7.07	6.43	5.89	5.44	4.72	4.16

## Unpropped - Light Weight Concrete

Maximum Span (m) all 146 gauges

Slab Depth (mm)	Concrete Volume (m <sup>3</sup> )	Minimum Mesh Size	Fire rating: 0.5 hour							Fire rating: 1.0 hour						
			Total Applied Load (kN/m <sup>2</sup> )							Total Applied Load (kN/m <sup>2</sup> )						
			4.0	5.0	6.0	7.0	8.0	10.0	12.0	4.0	5.0	6.0	7.0	8.0	10.0	12.0
215	0.128	A142	7.95	7.38	6.59	5.88	5.30	4.44	3.82	7.95	7.38	6.50	5.80	5.24	4.38	3.77
225	0.138	A142	8.10	7.54	6.88	6.15	5.56	4.67	4.02	8.10	7.54	6.80	6.08	5.50	4.61	3.97
235	0.148	A193	8.24	7.68	7.16	6.41	5.81	4.89	4.22	8.24	7.68	7.08	6.34	5.75	4.83	4.17
245	0.158	A193	8.37	7.82	7.36	6.67	6.05	5.11	4.41	8.37	7.82	7.35	6.60	5.99	5.05	4.37
255	0.168	A193	8.50	7.94	7.49	6.92	6.29	5.32	4.61	8.50	7.94	7.49	6.85	6.22	5.26	4.56
265	0.178	A252	8.61	8.06	7.61	7.09	6.45	5.47	4.75	8.61	8.06	7.61	7.02	6.39	5.42	4.70
275	0.188	A252	8.72	8.18	7.73	7.19	6.55	5.57	4.84	8.72	8.18	7.73	7.12	6.49	5.52	4.80
285	0.198	A252	8.82	8.29	7.84	7.28	6.65	5.66	4.93	8.82	8.29	7.84	7.22	6.59	5.61	4.89
295	0.208	A393	8.92	8.39	7.94	7.37	6.74	5.75	5.02	8.92	8.39	7.94	7.31	6.68	5.70	4.98
305	0.218	A393	9.01	8.48	8.04	7.45	6.82	5.84	5.10	9.01	8.48	8.04	7.39	6.77	5.79	5.06

Slab Depth (mm)	Concrete Volume (m <sup>3</sup> )	Minimum Mesh Size	Fire rating: 1.5 hour							Fire rating: 2.0 hour						
			Total Applied Load (kN/m <sup>2</sup> )							Total Applied Load (kN/m <sup>2</sup> )						
			4.0	5.0	6.0	7.0	8.0	10.0	12.0	4.0	5.0	6.0	7.0	8.0	10.0	12.0
215	0.128	A142	7.95	7.27	6.39	5.70	5.14	4.30	3.70	-	-	-	-	-	-	-
225	0.138	A142	8.10	7.54	6.69	5.98	5.40	4.54	3.91	8.10	7.42	6.54	5.84	5.28	4.43	3.82
235	0.148	A193	8.24	7.68	6.97	6.24	5.66	4.76	4.11	8.24	7.68	6.82	6.11	5.54	4.66	4.02
245	0.158	A193	8.37	7.82	7.24	6.50	5.90	4.98	4.30	8.37	7.82	7.10	6.37	5.78	4.88	4.22
255	0.168	A193	8.50	7.94	7.49	6.75	6.14	5.19	4.50	8.50	7.94	7.36	6.63	6.02	5.09	4.41
265	0.178	A252	8.61	8.06	7.61	6.93	6.31	5.35	4.64	8.61	8.06	7.55	6.81	6.19	5.25	4.56
275	0.188	A252	8.72	8.18	7.73	7.03	6.41	5.45	4.74	8.72	8.18	7.66	6.91	6.30	5.36	4.66
285	0.198	A252	8.82	8.29	7.84	7.13	6.51	5.55	4.83	8.82	8.29	7.76	7.02	6.41	5.46	4.75
295	0.208	A393	8.92	8.39	7.94	7.22	6.61	5.64	4.92	8.92	8.39	7.85	7.11	6.50	5.55	4.84
305	0.218	A393	9.01	8.48	8.04	7.31	6.70	5.73	5.01	9.01	8.48	7.94	7.20	6.60	5.64	4.93