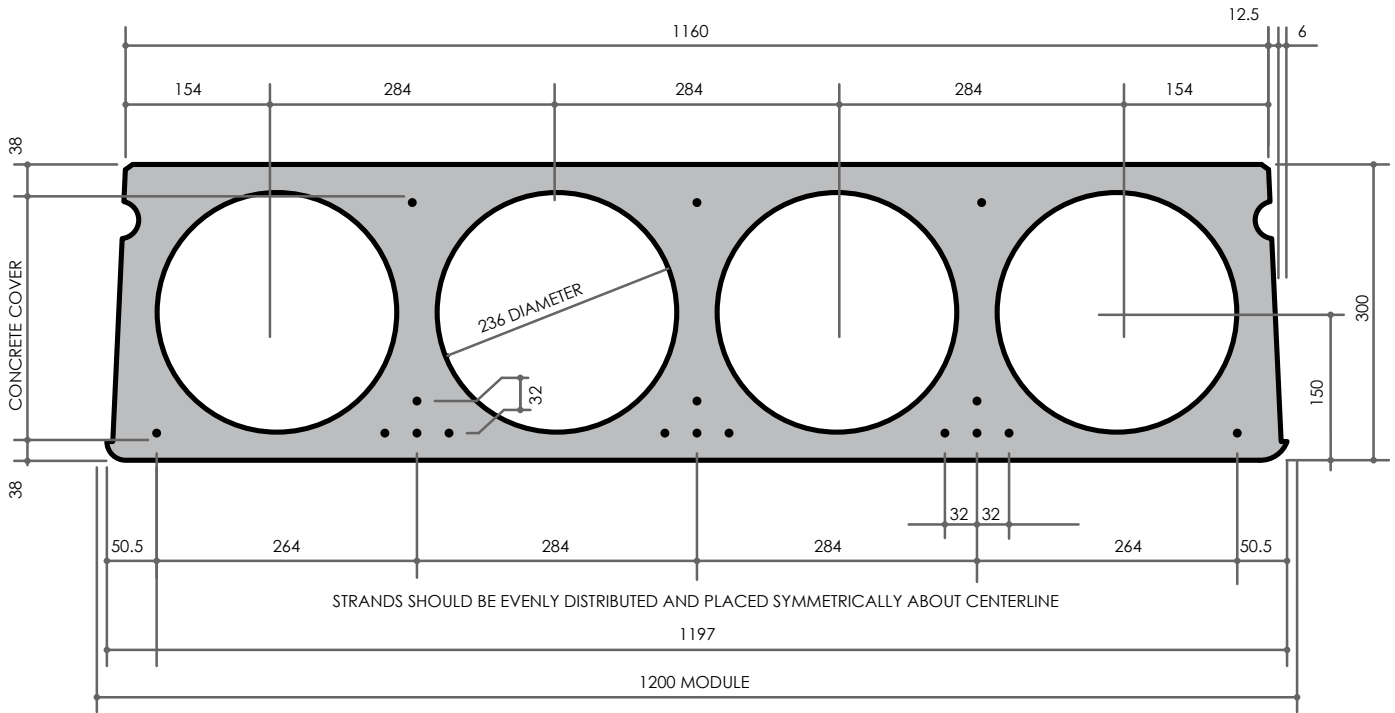


# 30cm Slab and Reinforcing Geometry

These tables are for general descriptive purposes only.

Actual design load tables are dependent on local codes and standards, material properties and product end usage.

30cm Load Table



## Load Table of Allowable Superimposed Service Loads in kN/sq. metre

Strand	Area of Steel (mm <sup>2</sup> )	φMn (kN-m)	Span in metres															
			9	9.5	10	10.5	11	11.5	12	12.5	13	13.5	14	14.5	15	15.5	16	16.5
6 - 9mm	330	137.3	2.7	2.2	1.7													
5 - 11mm	371	152.6	3.3	2.7	2.2	1.7	1.3											
4 - 13mm	395	162.3	3.7	3.0	2.5	2.0	1.6											
5 - 13mm	495	200.7	7.7	6.7	5.8	5.0	4.3	3.7	3.2	2.8	2.4							
7 - 11mm	519	210.3	8.2	7.1	6.2	5.4	4.6	4.0	3.5	3.0	2.6	2.2						
6 - 13mm	594	238.2	9.7	8.4	7.3	6.4	5.6	4.9	4.3	3.8	3.3	2.8	2.5	2.1				
8 - 11mm	594	238.5	9.7	8.4	7.3	6.4	5.6	4.9	4.3	3.8	3.3	2.9	2.5	2.1	1.8			
7 - 13mm	693	274.9	11.5	10.1	8.9	7.8	6.9	6.1	5.4	4.7	4.2	3.7	3.2	2.9	2.5	2.2		
10 - 11mm	742	293.2	12.5	10.9	9.6	8.5	7.5	6.6	5.9	5.2	4.6	4.1	3.6	3.2	2.8	2.5	2.2	
8 - 13mm	792	310.6	13.4	11.7	10.3	9.1	8.1	7.2	6.4	5.7	5.1	4.5	4.0	3.6	3.2	2.8	2.5	2.2
11 - 11mm	816	319.7	13.4	12.2	10.7	9.5	8.4	7.5	6.7	5.9	5.3	4.7	4.2	3.7	3.3	2.9	2.6	2.3
9 - 13mm	891	345.0	13.4	12.7	11.8	10.4	9.3	8.3	7.4	6.6	5.9	5.3	4.7	4.2	3.8	3.4	3.0	2.7
10 - 13mm	990	378.0	13.4	12.7	12.1	11.5	10.4	9.3	8.3	7.5	6.7	6.0	5.4	4.9	4.4	4.0	3.6	3.2
11 - 13mm	1089	409.1	13.4	12.7	12.1	11.5	11.0	10.3	9.2	8.3	7.5	6.8	6.1	5.5	5.0	4.5	4.1	3.7

(Includes 0.5 kN/m<sup>2</sup> dead load)

Values below lower heavy line indicate web shear controls.

Values above upper heavy line indicate long-time camber less than zero with no superimposed service loads.

## Slab Selection and Material Properties

Net Area	165 511 mm
Moment of Inertia	2 049.8 x 10 <sup>6</sup> mm <sup>4</sup>
Centroid From Slab Bottom	150 mm
Section Modulus, Top	13 665 x 10 <sup>3</sup> mm <sup>3</sup>
Section Modulus, Bottom	13 665 x 10 <sup>3</sup> mm <sup>3</sup>
Web Width	200 mm
V/s Ratio	59.7 mm
Self Weight	3.51 kN/m <sup>2</sup> 358.44 kg/m <sup>2</sup>

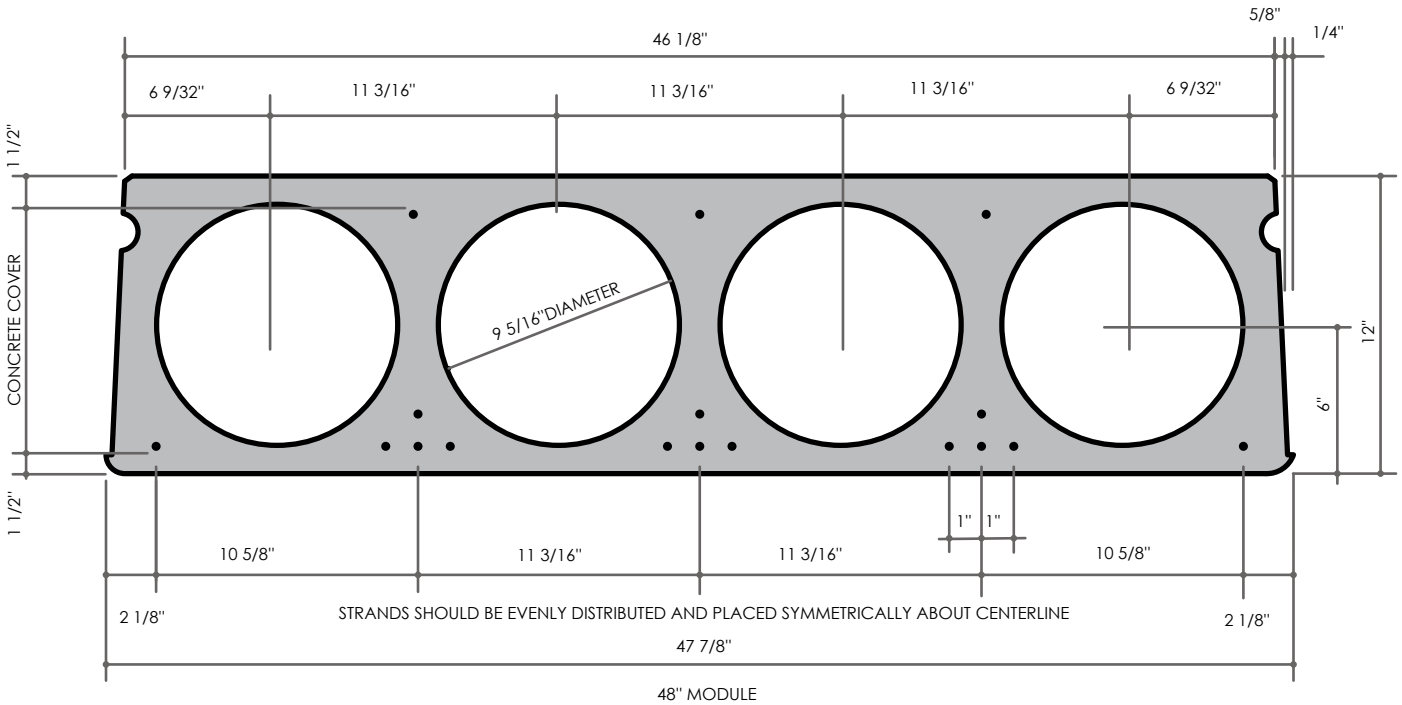
Strength of Concrete	40 MPa
Strength at Release	28 MPa
Unit Weight of Concrete	2400 kg/m <sup>3</sup>
Ultimate Steel Strength	1860 MPa
Strand Jacking Stress	1395 MPa
Strand Type	Low Relaxation
Grout Joint Requirements	134 m <sup>2</sup> /m <sup>3</sup>

Self weights are based on grouted section.

# 12" Slab and Reinforcing Geometry

These tables are for general descriptive purposes only.

Actual design load tables are dependent on local codes and standards, material properties and product end usage.



12" Load Table

**Load Table of Allowable Superimposed Service Loads in Pounds / sq. ft.**

Strand	Area of Steel (In <sup>2</sup> )	φMn (kip-ft.)	Span in Feet																											
			30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54			
6 - 3/8"	0.510	103.5	51	44	38	32	27	22																						
5 - 7/16"	0.575	115.2	63	56	49	42	37	31	27																					
4 - 1/2"	0.612	122.6	71	63	55	49	43	37	32	27	23																			
5 - 1/2"	0.765	151.8	154	141	129	117	107	98	90	82	75	68	62	56	51															
7 - 7/16"	0.805	159.0	164	150	137	126	115	105	97	88	81	74	67	61	56	51	46	41												
6 - 1/2"	0.918	180.3	194	178	163	150	138	127	117	108	99	91	84	77	71	65	60	55	50	45	41									
8 - 7/16"	0.920	180.3	194	178	163	150	138	127	117	108	99	91	84	77	71	65	60	55	50	45	41	37								
7 - 1/2"	1.071	208.2	232	214	197	182	168	156	144	133	123	114	106	98	91	84	78	72	66	61	56	52	47	30	39					
10 - 7/16"	1.115	222.0	252	232	214	198	183	170	157	146	135	126	117	108	101	93	87	80	74	69	64	59	54	43	46	42	38			
8 - 1/2"	1.224	235.5	270	250	231	214	198	184	170	158	147	137	127	118	110	102	95	89	82	76	71	66	61	50	52	48	44			
11 - 7/16"	1.265	242.3	280	258	239	221	205	190	177	164	153	142	133	123	115	107	100	93	86	80	75	69	64	56	55	51	47			
9 - 1/2"	1.337	262.2	297	284	263	244	227	211	196	183	170	159	148	138	129	120	113	105	98	92	85	80	74	60	64	60	56			
10 - 1/2"	1.530	288.0	297	288	279	270	255	237	221	206	193	180	168	157	147	138	129	121	113	106	99	93	87	69	76	71	67			
11 - 1/2"	1.683	312.9	297	288	279	270	262	255	245	229	214	200	188	176	165	155	145	136	128	120	113	106	100	82	88	82	77			

(Includes 10PSF dead load)

Values below lower heavy line indicate web shear controls.

Values above upper heavy line indicate long-time camber less than zero with no superimposed service loads.

## Slab Selection and Material Properties

Net Area	275.34 in <sup>2</sup>
Moment of Inertia	5352.7 in <sup>4</sup>
Centroid From Slab Bottom	6.00 in
Section Modulus, Top	892.12 in <sup>3</sup>
Section Modulus, Bottom	892.12 in <sup>3</sup>
Web Width	8.50 in
V/s Ratio	2.47 in
Self Weight	77.1 psf

Strength of Concrete	6000 psi
Strength at Release	4000 psi
Unit Weight of Concrete	150 pcf
Ultimate Steel Strength	270 ksi
Strand Jacking Stress	202.5 ksi
Strand Type	Low Relaxation
Grout Joint Requirements	1161 ft <sup>2</sup> /yd <sup>3</sup>

Self weights are based on grouted section.