

**CONTINUOUS SLAB DESIGN LOAD TABLES FOR NEGATIVE BENDING**

**Maximum Allowable Total Superimposed Load (psf) for Continuous Slab Design**

Slab Depth (in.)	Slab Span (ft)	Continuous Spans														
		#5's @ 12" o.c. Over Supports			#4's @ 6" o.c. Over Supports			#6's @ 12" o.c. Over Supports			#5's @ 6" o.c. Over Supports			#6's @ 6" o.c. Over Supports		
		wL/2 9	wL/2 10	wL/2 11	wL/2 9	wL/2 10	wL/2 11	wL/2 9	wL/2 10	wL/2 11	wL/2 9	wL/2 10	wL/2 11	wL/2 9	wL/2 10	wL/2 11
4"	12	127	145	163	168	190	212	185	209	233	255	287	319	336	377	418
	13	103	119	134	138	157	176	152	173	194	212	239	267	281	316	351
	14	85	98	111	114	131	147	127	145	162	178	202	225	238	268	298
	15	69	81	92	95	110	124	106	122	137	151	171	192	203	229	256
	16	57	67	77	80	92	105	89	103	117	129	147	165	174	198	221
	17	47	56	64	67	78	89	75	87	99	110	126	142	151	171	192
	18		46	54	56	66	76	64	74	85	95	109	123	131	149	167
	19			45	47	56	65	54	63	73	82	94	107	114	130	147
	20					47	55	45	54	63	70	82	93	100	114	129
	21					40	47		46	54					87	101
4 3/4"	13	132	151	170	176	200	224	195	221	247	275	310	345	373	419	465
	14	108	124	141	146	167	188	163	185	208	232	262	292	316	356	396
	15	89	103	117	122	148	158	137	156	176	197	223	249	271	305	340
	16	73	86	98	103	118	134	115	132	150	168	191	214	233	263	294
	17	60	71	83	86	100	114	97	113	128	144	165	185	202	229	255
	18	49	59	69	73	85	98	83	96	110	124	142	161	176	200	224
	19	40	49	58	61	72	84	70	82	94	107	124	140	153	175	197
	20		40	49	51	61	72	59	70	81	93	108	123	135	154	173
	21			40	43	52	61	50	60	70	81	94	107	118	136	154
	22					44	52	42	51	60	70	82	94	104	120	136
5 1/4"	14	123	142	161	168	191	215	187	212	238	267	302	336	369	415	461
	15	102	118	134	140	161	181	157	179	202	227	257	287	315	355	395
	16	84	92	105	118	136	154	132	152	172	194	220	247	272	307	342
	17	69	82	95	99	115	131	112	130	147	167	190	214	236	267	298
	18	57	68	80	84	98	112	95	111	126	144	165	186	205	233	261
	19	47	57	67	71	83	96	81	95	109	125	143	162	180	205	230
	20		47	56	59	71	81	69	81	94	108	125	142	158	180	203
	21			47	50	60	71	58	70	81	94	109	125	139	160	180
	22				41	51	60	49	59	70	82	96	110	123	141	160
	23					43	51	41	51	60	71	84	97	109	126	143
24						44		43	52	61	73	85	96	112	127	
5 1/2"	14	131	151	171	178	200	228	199	226	253	285	322	358	395	444	495
	15	108	125	143	149	171	193	167	191	214	242	274	306	338	381	423
	16	89	105	120	125	145	164	141	162	183	207	235	263	291	329	367
	17	74	87	101	106	123	140	120	138	157	178	203	228	253	286	319
	18	61	73	85	89	104	120	102	118	135	154	176	198	220	250	280
	19	50	60	71	75	89	103	86	101	116	133	153	173	193	220	246
	20	40	50	60	63	76	88	73	87	100	116	134	152	170	194	218
	21		41	50	53	64	75	62	74	86	101	117	133	149	171	193
	22			41	44	54	65	52	64	75	87	102	117	132	152	172
	23					46	55	44	54	64	76	90	103	117	135	153
24						47		46	55	66	79	91	103	120	127	
25									47	57	69	80	92	107	122	
26									40	49	60	71	81	95	110	
6"	14	147	169	191	200	227	255	222	253	283	320	362	403	447	503	558
	15	121	140	143	167	191	216	187	214	240	272	308	344	383	431	479
	16	100	117	134	141	162	183	158	182	205	233	265	296	330	373	415
	17	83	98	113	119	138	157	134	155	176	201	229	257	287	324	362
	18	68	82	95	100	117	134	114	133	151	173	198	223	260	284	317
	19	56	68	80	85	100	115	97	114	130	150	173	195	219	249	279
	20	46	56	67	72	85	99	83	98	118	131	151	171	193	220	247
	21		46	56	60	73	85	70	84	97	114	132	150	170	195	219
	22			47	50	61	73	59	72	84	99	116	133	150	173	195
	23				42	52	62	50	61	73	86	102	117	133	154	174
24					43	53	42	52	62	75	89	103	118	137	156	
25						45		44	54	65	78	91	105	122	140	
26									46	56	68	80	93	109	125	
27										49	60	71	83	98	112	

**General Notes:**

- All designs are based on the use of regular weight concrete (145 pcf), with a compressive strength of 4000 psi.
- No reinforcing steel other than Versa-Dek is required for simple spans. Reinforcing steel is required over interior supports for continuous spans. See Negative Reinforcing Table for suggested rebar sizes. Table assumes 3/4" concrete cover for reinforcing steel over supports. Reinforcing steel other than Versa-Dek shall have a minimum yield strength of 60 ksi.
- Spans should be approximately equal with the larger of the two adjacent spans not greater than the shorter by more than 20%. See ACI 318-99/8.3.3
- Reinforcing over supports should extend a minimum of 0.3 X L on both sides of the supports. See Chapter 12 (ACI 318-99) Development and Splices of Reinforcement.
- Maximum allowable deflection under the total superimposed load (live + dead) is limited to L/360 in all cases.
- Temperature and shrinkage reinforcement, consisting of welded wire fabric, shall have a minimum area of 0.00075 X Ac but not less than the area of 6X6-W1.4XW1.4.
- The live loads and unshored construction clear spans are based on the Steel Deck Institute's Composite Deck Design Handbook, March 1997 and Design Manual, Pub. No. 30 and ASCE's Standard for the Structural Design of Composite Slabs.
- See Maximum Unshored Construction Clear Spans Table for shoring requirements.

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**Maximum Allowable Total Superimposed Load (psf) for Continuous Slab Design**

Slab Depth (in.)	Slab Span (ft)	Continuous Spans														
		#5's @ 12" o.c. Over Supports			#4's @ 6" o.c. Over Supports			#6's @ 12" o.c. Over Supports			#5's @ 6" o.c. Over Supports			#6's @ 6" o.c. Over Supports		
		wL^2/9	wL^2/10	wL^2/11	wL^2/9	wL^2/10	wL^2/11	wL^2/9	wL^2/10	wL^2/11	wL^2/9	wL^2/10	wL^2/11	wL^2/9	wL^2/10	wL^2/11
6 3/4"	15	140	163	185	194	222	250	217	248	279	318	360	401	450	507	563
	16	116	136	155	164	188	213	184	211	238	272	309	346	389	438	488
	17	96	114	131	138	160	182	156	180	204	235	267	300	338	382	426
	18	80	95	110	117	132	156	133	154	176	203	232	261	295	334	373
	19	66	79	93	99	117	134	114	133	152	176	202	228	259	294	329
	20	54	66	78	84	100	115	97	114	131	153	177	200	228	260	291
	21	43	54	66	71	85	99	82	98	114	134	155	176	201	230	259
	22		44	55	59	72	85	70	84	98	117	136	155	178	204	231
	23			45	49	61	73	59	72	85	102	120	137	158	182	206
	24				40	51	62	49	61	73	89	105	121	140	163	185
	25					43	53	41	52	63	77	92	107	125	145	166
	26						44		44	54	67	81	95	111	130	149
	27										46	58	71	84	99	116
28											50	62	74	88	104	120
29											42	54	65	78	93	108
7"	15	147	170	193	203	232	262	228	260	292	333	377	421	473	532	591
	16	122	142	162	171	197	223	193	221	249	285	324	362	408	460	512
	17	101	119	137	145	168	190	164	189	214	246	280	314	355	401	447
	18	84	100	116	123	143	163	140	162	184	213	243	274	310	351	392
	19	69	83	97	104	122	140	119	139	159	185	212	239	272	309	346
	20	56	69	82	88	104	121	102	120	138	161	185	210	240	273	306
	21	45	57	69	74	89	104	86	103	119	140	163	185	212	242	272
	22		47	57	62	76	89	73	88	103	122	143	163	187	215	243
	23			47	52	64	77	62	76	89	107	126	144	166	192	217
	24				42	54	65	52	65	77	93	110	127	148	171	194
	25					45	56	43	55	66	81	97	113	132	153	174
	26						47		46	57	71	85	100	117	137	156
	27										48	61	74	88	104	122
28										41	52	65	78	93	110	127
29											45	57	68	82	98	114
30												49	60	73	88	102
31												42	52	64	78	92
7 1/2"	16	133	155	176	186	214	242	210	240	271	312	353	395	447	504	561
	17	110	129	149	158	182	207	178	206	233	269	306	343	389	439	490
	18	91	108	126	134	156	178	152	176	200	233	266	299	340	385	430
	19	75	91	106	113	133	153	130	152	173	202	232	261	298	339	379
	20	61	75	90	96	114	132	111	130	150	176	203	230	263	299	336
	21	50	62	75	81	97	113	95	112	130	154	178	202	232	265	298
	22		51	63	63	83	98	80	92	113	134	156	178	206	236	266
	23		41	52	57	70	84	68	83	98	117	137	158	183	210	238
	24			42	47	59	72	57	71	84	102	121	140	163	188	213
	25					49	61	48	60	73	89	106	123	145	168	191
	26					41	51		51	62	78	93	109	129	151	172
	27						43		42	53	67	82	97	115	135	155
	28										45	58	72	85	102	121
29											50	62	75	91	108	126
30											42	54	66	81	97	113
31												46	58	71	87	102
32												40	50	63	77	92
33													43	55	69	82
8"	17	119	140	161	171	197	224	193	222	252	291	331	371	423	477	532
	18	99	117	136	145	169	192	165	191	217	252	288	324	370	418	467
	19	81	98	115	123	144	166	141	164	188	219	251	283	325	368	412
	20	67	82	97	104	123	143	120	141	163	191	220	249	286	326	365
	21	54	68	82	88	105	123	103	122	141	167	193	219	253	289	325
	22	43	56	68	74	90	106	87	105	122	146	170	194	224	259	290
	23		45	56	62	76	91	74	90	106	128	149	171	199	229	259
	24			46	51	64	78	62	77	92	111	132	152	177	206	232
	25				42	54	66	52	65	79	97	116	134	158	183	209
	26					45	56	43	55	68	85	102	119	141	164	188
	27						47		46	58	73	89	105	126	147	169
	28									49	63	78	93	112	132	152
	29										41	54	68	82	100	118
30											46	59	72	89	106	124
31												51	63	79	95	111
32												44	55	69	85	100
33													47	61	76	90