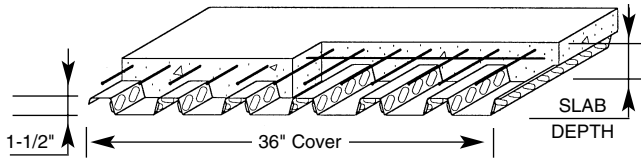


# 1.5 SBR Normal Weight



Section Properties (per ft. of width)

Gage	t in	Wd psf	Sp in <sup>3</sup>	Sn in <sup>3</sup>	lp in <sup>4</sup>	In in <sup>4</sup>	As in <sup>2</sup>	Fy ksi
22	0.0295	1.7	0.180	0.172	0.182	0.146	0.478	50
20	0.0358	2.0	0.229	0.218	0.221	0.190	0.581	50
18	0.0474	2.7	0.311	0.301	0.294	0.284	0.769	40
16	0.0600	3.4	0.394	0.388	0.373	0.374	0.973	40

145 pcf Normal Weight Concrete

Total Slab Depth D	Gage	Maximum Unshored Clear Spans			Composite Properties		Superimposed Live Loads - psf: No Studs												
		Single Span	Double Span	Triple Span	Iavg in <sup>4</sup> /ft	Sc in <sup>3</sup> /ft	Span - Feet and Inches												
							6'-0"	6'-6"	7'-0"	7'-6"	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	
4" 42.2 psf 36.3 in <sup>2</sup>	22	5'-8"	7'-5"	7'-9"	4.800	1.190	400	400	397	342	296	259	227	201	178	158	141	126	
	20	6'-7"	8'-5"	8'-8"	5.146	1.415	400	400	400	400	358	314	276	244	217	194	169	148	
	18	6'-11"	8'-9"	9'-1"	5.724	1.812	400	400	400	400	367	322	283	251	223	199	179	160	
	16	7'-11"	9'-11"	10'-3"	6.278	2.221	400	400	400	400	367	322	283	251	223	199	179	160	
4-1/2" 48.3 psf 41.1 in <sup>2</sup>	22	5'-5"	7'-1"	7'-4"	6.671	1.399	400	400	400	400	350	306	268	237	210	187	167	150	
	20	6'-3"	8'-0"	8'-3"	7.142	1.667	400	400	400	400	400	371	327	289	257	230	206	185	
	18	6'-7"	8'-4"	8'-8"	7.929	2.140	400	400	400	400	400	381	336	298	265	237	212	191	
5" 54.3 psf 45.7 in <sup>2</sup>	22	5'-2"	6'-10"	7'-1"	8.963	1.613	400	400	400	400	400	353	311	275	244	217	194	174	
	20	6'-0"	7'-8"	7'-11"	9.580	1.923	400	400	400	400	400	400	378	335	298	267	239	215	
	18	6'-3"	8'-0"	8'-4"	10.618	2.475	400	400	400	400	400	400	390	346	308	275	247	222	
	16	7'-2"	9'-1"	9'-5"	11.626	3.048	400	400	400	400	400	400	390	346	308	275	247	222	
5-1/2" 60.4 psf 50.2 in <sup>2</sup>	22	5'-0"	6'-7"	6'-9"	11.714	1.829	400	400	400	400	400	400	353	312	277	247	221	198	
	20	5'-9"	7'-4"	7'-7"	12.502	2.184	400	400	400	400	400	400	400	382	340	304	273	246	
	18	6'-0"	7'-8"	8'-0"	13.831	2.816	400	400	400	400	400	400	400	395	352	315	282	254	
	16	6'-11"	8'-9"	9'-0"	15.129	3.475	400	400	400	400	400	400	400	395	352	315	282	254	
6" 66.4 psf 54.8 in <sup>2</sup>	22	4'-10"	6'-4"	6'-6"	14.963	2.048	400	400	400	400	400	400	397	351	312	278	249	223	
	20	5'-7"	7'-1"	7'-4"	15.945	2.448	400	400	400	400	400	400	400	400	400	382	342	307	276
	18	5'-10"	7'-5"	7'-8"	17.608	3.161	400	400	400	400	400	400	400	400	400	396	354	318	287
	16	6'-9"	8'-5"	8'-9"	19.238	3.906	400	400	400	400	400	400	400	400	400	396	354	318	287

D, Wc, Ac	Gage	Maximum Unshored Clear Spans			Stud Factors		Superimposed Live Loads - psf: Studs @ 1'-0" O.C.													
		Single Span	Double Span	Triple Span	2' o.c.	3' o.c.	Span - Feet and Inches													
							6'-0"	6'-6"	7'-0"	7'-6"	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"		
4" 42.2 psf 36.3 in <sup>2</sup>	22	5'-8"	7'-5"	7'-9"	1.00	0.96	400	400	400	400	370	324	286	245	210	182	158	138		
	20	6'-7"	8'-5"	8'-8"	1.00	0.94	400	400	400	400	400	367	309	263	225	195	169	148		
	18	6'-11"	8'-9"	9'-1"	0.99	0.92	400	400	400	400	400	400	344	292	251	216	188	165		
	16	7'-11"	9'-11"	10'-3"	0.95	0.91	400	400	400	400	400	400	377	321	275	237	206	181		
4-1/2" 48.3 psf 41.1 in <sup>2</sup>	22	5'-5"	7'-1"	7'-4"	1.00	0.96	400	400	400	400	400	400	378	333	295	263	235	211	190	
	20	6'-3"	8'-0"	8'-3"	1.00	0.94	400	400	400	400	400	400	400	357	313	270	235	206		
	18	6'-7"	8'-4"	8'-8"	0.99	0.93	400	400	400	400	400	400	400	376	336	300	261	228		
5" 54.3 psf 45.7 in <sup>2</sup>	22	5'-2"	6'-10"	7'-1"	1.00	0.97	400	400	400	400	400	400	400	381	338	301	269	241	217	
	20	6'-0"	7'-8"	7'-11"	1.00	0.94	400	400	400	400	400	400	400	400	400	365	327	294	266	
	18	6'-3"	8'-0"	8'-4"	0.99	0.93	400	400	400	400	400	400	400	400	400	386	346	311	281	
	16	7'-2"	9'-1"	9'-5"	0.95	0.91	400	400	400	400	400	400	400	400	400	400	400	382	335	
5-1/2" 60.4 psf 50.2 in <sup>2</sup>	22	5'-0"	6'-7"	6'-9"	1.00	0.97	400	400	400	400	400	400	400	400	400	380	339	303	272	245
	20	5'-9"	7'-4"	7'-7"	1.00	0.95	400	400	400	400	400	400	400	400	400	400	369	332	300	
	18	6'-0"	7'-8"	8'-0"	0.99	0.93	400	400	400	400	400	400	400	400	400	400	400	391	352	318
	16	6'-11"	8'-9"	9'-0"	0.95	0.91	400	400	400	400	400	400	400	400	400	400	400	400	400	400
6" 66.4 psf 54.8 in <sup>2</sup>	22	4'-10"	6'-4"	6'-6"	1.00	0.97	400	400	400	400	400	400	400	400	400	376	337	302	272	
	20	5'-7"	7'-1"	7'-4"	1.00	0.95	400	400	400	400	400	400	400	400	400	400	400	370	334	
	18	5'-10"	7'-5"	7'-8"	0.99	0.94	400	400	400	400	400	400	400	400	400	400	400	392	354	
	16	6'-9"	8'-5"	8'-8"	0.96	0.92	400	400	400	400	400	400	400	400	400	400	400	400	400	

- 1) Refer to the Design Notes, Note 7, for information on live load limits for fire-rated construction. See Page CD-3.
- 2) If stud spacing exceeds 1'-0" o.c., reduce live load by applicable stud factor listed above for actual stud spacing.
- 3) If welded wire fabric is not used, the live loads should be reduced by 10%.

# 1.5 SBR Lightweight



## 115 pcf Lightweight Concrete

Total Slab Depth D	Gage	Maximum Unshored Clear Spans			Composite Properties		Superimposed Live Loads - psf: No Studs											
		Single Span	Double Span	Triple Span	Iavg in <sup>4</sup> /ft	Sc in <sup>3</sup> /ft	Span - Feet and Inches											
							6'-0"	6'-6"	7'-0"	7'-6"	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"
4" 33.5 psf 36.3 in <sup>2</sup>	22	6'-2"	8'-1"	8'-4"	3.900	1.152	400	400	390	336	292	256	225	199	171	147	128	112
	20	7'-2"	9'-1"	9'-4"	4.205	1.366	400	400	400	400	351	300	253	215	184	159	138	121
	18	7'-6"	9'-6"	9'-10"	4.707	1.742	400	400	400	400	358	314	278	240	206	178	155	135
	16	8'-8"	10'-9"	11'-1"	5.180	2.126	400	400	400	400	358	314	278	240	206	178	155	135
4-1/2" 38.3 psf 41.1 in <sup>2</sup>	22	5'-10"	7'-9"	8'-0"	5.404	1.358	400	400	400	398	346	303	267	237	211	188	169	152
	20	6'-10"	8'-8"	9'-0"	5.821	1.613	400	400	400	400	365	322	286	255	220	191	168	
	18	7'-2"	9'-1"	9'-5"	6.509	2.063	400	400	400	400	374	330	293	262	234	211	187	
	16	8'-3"	10'-3"	10'-7"	7.161	2.525	400	400	400	400	374	330	293	262	234	211	187	
4-3/4" 40.7 psf 43.4 in <sup>2</sup>	22	5'-9"	7'-7"	7'-10"	6.279	1.463	400	400	400	400	373	327	288	255	227	203	182	164
	20	6'-8"	8'-6"	8'-9"	6.759	1.739	400	400	400	400	394	348	309	276	247	222	195	
	18	7'-0"	8'-11"	9'-2"	7.554	2.226	400	400	400	400	400	357	317	283	254	228	206	
	16	8'-1"	10'-1"	10'-5"	8.309	2.728	400	400	400	400	400	357	317	283	254	228	206	
5" 43.1 psf 45.7 in <sup>2</sup>	22	5'-8"	7'-5"	7'-8"	7.239	1.568	400	400	400	400	400	351	309	274	244	218	196	176
	20	6'-6"	8'-4"	8'-7"	7.789	1.866	400	400	400	400	400	374	332	297	266	239	216	
	18	6'-10"	8'-9"	9'-0"	8.700	2.392	400	400	400	400	400	384	341	305	273	246	222	
	16	7'-11"	9'-10"	10'-2"	9.569	2.935	400	400	400	400	400	384	341	305	273	246	222	
5-3/4" 50.3 psf 52.5 in <sup>2</sup>	22	5'-4"	7'-0"	7'-3"	10.675	1.890	400	400	400	400	400	374	332	296	265	238	214	
	20	6'-2"	7'-10"	8'-2"	11.466	2.252	400	400	400	400	400	400	400	360	323	290	262	
	18	6'-6"	8'-3"	8'-6"	12.785	2.896	400	400	400	400	400	400	400	400	371	332	299	271
	16	7'-5"	9'-4"	9'-8"	14.052	3.564	400	400	400	400	400	400	400	400	371	332	299	271

						Superimposed Live Loads - psf: Studs @ 1'-0" O.C.												
D, Wc, Ac	Gage	Single Span	Double Span	Triple Span	Stud Factors		Span - Feet and Inches											
					2' o.c.	3' o.c.	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"
4" 33.5 psf 36.3 in <sup>2</sup>	22	6'-2"	8'-1"	8'-4"	1.00	0.93	400	400	400	400	333	278	234	199	171	147	128	112
	20	7'-2"	9'-1"	9'-4"	0.96	0.91	400	400	400	400	360	300	253	215	184	159	138	121
	18	7'-6"	9'-6"	9'-10"	0.95	0.89	400	400	400	400	336	283	240	206	178	155	135	
	16	8'-8"	10'-8"	11'-1"	0.92	0.87	400	400	400	400	369	311	264	227	196	170	149	
4-1/2" 38.3 psf 41.1 in <sup>2</sup>	22	5'-10"	7'-9"	8'-0"	1.00	0.93	400	400	400	400	385	324	276	237	204	178	156	
	20	6'-10"	8'-8"	9'-0"	0.97	0.91	400	400	400	400	400	350	297	255	220	191	168	
	18	7'-2"	9'-1"	9'-5"	0.95	0.89	400	400	400	400	400	391	332	285	246	214	187	
	16	8'-3"	10'-3"	10'-7"	0.92	0.87	400	400	400	400	400	400	366	313	271	236	206	
4-3/4" 40.7 psf 43.4 in <sup>2</sup>	22	5'-9"	7'-7"	7'-10"	1.00	0.94	400	400	400	400	400	365	321	275	237	206	181	
	20	6'-8"	8'-4"	8'-9"	0.97	0.91	400	400	400	400	400	400	345	296	256	222	195	
	18	7'-0"	8'-11"	9'-2"	0.95	0.90	400	400	400	400	400	400	386	331	286	248	217	
	16	8'-1"	10'-1"	10'-5"	0.92	0.88	400	400	400	400	400	400	400	364	314	273	239	
5" 43.1 psf 45.7 in <sup>2</sup>	22	5'-8"	7'-5"	7'-8"	1.00	0.94	400	400	400	400	400	390	346	309	274	238	208	
	20	6'-6"	8'-4"	8'-7"	0.97	0.92	400	400	400	400	400	400	398	341	295	256	224	
	18	6'-10"	8'-9"	9'-0"	0.95	0.90	400	400	400	400	400	400	400	381	329	286	250	
	16	7'-11"	9'-10"	10'-2"	0.92	0.88	400	400	400	400	400	400	400	400	362	315	275	
5-3/4" 50.3 psf 52.5 in <sup>2</sup>	22	5'-4"	7'-0"	7'-3"	1.00	0.94	400	400	400	400	400	400	400	367	330	297	268	
	20	6'-2"	7'-10"	8'-2"	0.97	0.92	400	400	400	400	400	400	400	400	400	361	327	
	18	6'-6"	8'-3"	8'-6"	0.96	0.91	400	400	400	400	400	400	400	400	400	382	346	
	16	7'-5"	9'-4"	9'-8"	0.92	0.88	400	400	400	400	400	400	400	400	400	400	400	

- 1) Refer to the Design Notes, Note 7, for information on live load limits for fire-rated construction. See Page CD-3.
- 2) If stud spacing exceeds 1'-0" o.c., reduce live load by applicable stud factor listed above for actual stud spacing.
- 3) If welded wire fabric is not used, the live loads should be reduced by 10%.