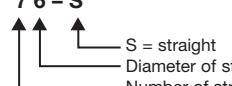


3.8 Solid Flat Slab Load Tables (cont.)

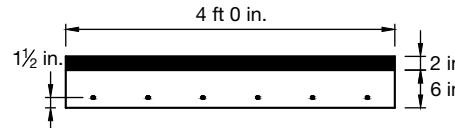
Strand Pattern Designation

7 6 - S


Load capacities shown include dead load of 10 lb/ft² for untopped members and 15 lb/ft² for topped members. Remainder is live load. Long-time cambers include superimposed dead load but do not include live load.

Key
 203 – Superimposed service load capacity, lb/ft²
 0.1 – Estimated camber at erection, in.
 0.2 – Estimated long-time camber, in.

6 in. thick normalweight concrete



$$f'_c = 5000 \text{ psi}$$

$$f_{pu} = 270,000 \text{ psi}$$

Section Properties	
No topping	2 in. topping ($f'_c = 3000 \text{ psi}$)
A = 288 in. ²	–
I = 864 in. ⁴	1834 in. ⁴
y_b = 3.00 in.	3.82 in.
y_t = 3.00 in.	4.18 in.
S_b = 288 in. ³	480 in. ³
S_t = 288 in. ³	439 in. ³
wt = 300 lb/ft	400 lb/ft
DL = 75 lb/ft ²	100 lb/ft ²
V/S = 2.67 in.	

Table of superimposed service load capacity, lb/ft², and cambers, in.

FS6
No topping

Strand pattern	Span, ft																				
	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
66-S	203	180	163	148	133	120	110	103	93	79	68	53	42	33							
	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.0	0.0	-0.1	-0.2	-0.3	-0.5								
	0.2	0.2	0.2	0.2	0.1	0.1	0.0	-0.1	-0.2	-0.3	-0.5	-0.7	-1.0								
76-S	220	198	180	165	150	138	128	114	96	80	66	54	43	34	26						
	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.0	0.0	-0.1	-0.2	-0.3	-0.5	-0.7						
	0.2	0.3	0.3	0.3	0.2	0.2	0.1	0.0	-0.1	-0.2	-0.4	-0.5	-0.8	-1.0	-1.3						
58-S	188	170	158	143	133	120	112	103	95	88	77	65	54	44	35	28					
	0.3	0.3	0.3	0.3	0.4	0.4	0.3	0.3	0.3	0.2	0.0	-0.1	-0.2	-0.3	-0.5	-0.7					
	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.2	0.1	-0.2	-0.4	-0.6	-0.9	-1.2	-1.6					
68-S	213	195	180	165	155	145	135	125	118	98	84	71	60	50	42	34	27				
	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.3	0.2	0.1	0.0	-0.2	-0.4	-0.6	-0.9			
	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.4	0.2	0.0	-0.2	-0.4	-0.7	-1.1	-1.5	-1.9			
78-S	230	213	198	185	173	160	150	137	119	103	89	77	66	56	47	39	32	25			
	0.5	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.6	0.5	0.4	0.4	0.3	0.1	0.0	-0.2	-0.5	-0.7	-1.0		
	0.7	0.7	0.8	0.8	0.8	0.8	0.7	0.6	0.5	0.4	0.2	0.0	-0.3	-0.6	-0.9	-1.4	-1.8	-2.4			

FS6 + 2

Table of superimposed service load capacity, lb/ft², and cambers, in.

2 in. normalweight topping

Strand pattern	Span, ft																
	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
66-S	240	220	200	183	168	155	120	92	68	47	29						
	0.2	0.2	0.2	0.2	0.1	0.1	0.0	-0.1	-0.1	-0.2	-0.3						
	0.1	0.1	0.0	0.0	-0.1	-0.2	-0.3	-0.5	-0.7	-0.9							
76-S	265	243	225	208	184	148	118	91	68	48	31						
	0.2	0.2	0.2	0.2	0.1	0.1	0.0	0.0	-0.1	-0.2	-0.3						
	0.2	0.1	0.0	0.0	-0.1	-0.2	-0.4	-0.5	-0.7	-1.0							
58-S	230	210	195	183	168	155	137	110	87	66	48	32					
	0.3	0.3	0.4	0.3	0.3	0.3	0.2	0.1	0.0	-0.1	-0.2	-0.3					
	0.3	0.3	0.3	0.2	0.1	0.0	-0.1	-0.3	-0.4	-0.7	-1.2						
68-S	248	228	213	200	179	148	121	98	77	59	42	28					
	0.5	0.5	0.5	0.5	0.4	0.3	0.3	0.2	0.1	0.0	-0.2	-0.4	-0.6	-0.9	-1.2	-1.5	
	0.4	0.4	0.4	0.3	0.1	0.0	-0.2	-0.3	-0.6	-0.9	-1.2						
78-S	265	255	240	221	186	156	130	107	86	68	51	36					
	0.6	0.7	0.7	0.6	0.6	0.5	0.4	0.3	0.1	0.0	-0.2	-0.5	-0.8	-1.1	-1.5		
	0.5	0.5	0.5	0.4	0.3	0.1	0.0	-0.2	-0.5	-0.8	-1.1	-1.5					

Strength is based on strain compatibility; bottom tension is limited to $7.5\sqrt{f'_c}$; see pages 3–8 through 3–11 for explanation.

See Section 3.3.2, Item 3, Note 4 for explanation of vertical line.