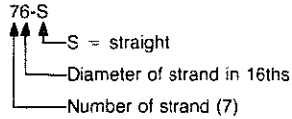


# SOLID FLAT SLAB

## Strand Pattern Designation

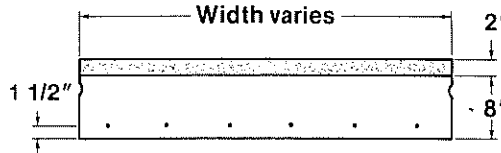


8" Thick  
 Normal Weight Concrete

## Section Properties per foot of width

	Untopped	Topped
A	96.00 in. <sup>2</sup>	—
I	512.00 in. <sup>4</sup>	907.50 in. <sup>4</sup>
Y <sub>b</sub>	4.00 in.	4.81 in.
Y <sub>t</sub>	4.00 in.	5.19 in.
Z <sub>b</sub>	128.00 in. <sup>3</sup>	188.68 in. <sup>3</sup>
Z <sub>t</sub>	128.00 in. <sup>3</sup>	174.85 in. <sup>3</sup>
b <sub>w</sub>	12.00 in.	12.00 in.
w <sub>t</sub>	100 psf	125 psf
W/S	4.00 in.	

Safe loads shown include dead load of 10 psf for untopped members and 15 psf for topped members. Remainder is live load. Long-time cambers include superimposed dead load but do not include live load.



$f'_c = 5000$  psi

$f'_{ci} = 3500$  psi

Low-relaxation strand

## Key

- 266 — Safe superimposed service load, psf
- 0.1 — Estimated camber at erection, in.
- 0.2 — Estimated long-time camber, in.

**FS8**

Table of safe superimposed service load (psf) and cambers

No Topping

Strand Designation Code	Span, ft.															
	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
66-S	266	233	205	173	146	122	103	86	71							
	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0							
	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.0	-0.1							
76-S	306	279	249	212	180	153	131	111	94	79	66					
	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.0	-0.1					
	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.0	-0.1	-0.2					
58-S	312	285	260	239	221	206	184	160	138	120	103	89	75	65		
	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.1	0.1	0.0	-0.1		
	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.1	-0.0	-0.1	-0.3		
68-S	318	291	266	245	227	209	196	181	169	155	136	119	103	88	75	63
	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.2	0.2	0.1	0.0
	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.3	0.3	0.2	0.1	-0.1	-0.3
78-S	297	272	251	230	215	199	184	172	160	150	141	128	112	97	83	
	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.3	0.2	0.1	
	0.5	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.6	0.6	0.5	0.3	0.2	0.1	-0.1	

**FS8 + 2**

Table of safe superimposed service load (psf) and cambers

2" Normal Weight Topping

Strand Designation Code	Span, ft.												
	17	18	19	20	21	22	23	24	25	26	27	28	29
66-S	203	161	126	95	69								
	0.1	0.1	0.1	0.0	0.0								
	0.0	0.0	-0.1	-0.1	-0.2								
76-S	270	221	179	144	113	87	64						
	0.1	0.1	0.1	0.1	0.1	0.0	0.0						
	0.1	0.1	0.0	0.0	-0.1	-0.2	-0.3						
58-S	298	273	237	205	178	152	124	100	79				
	0.3	0.3	0.3	0.2	0.2	0.2	0.1	0.1	0.0				
	0.2	0.2	0.2	0.1	0.1	0.0	-0.1	-0.2	-0.4				
68-S	304	283	261	245	225	197	167	140	115	94	74		
	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.2	0.2	0.1		
	0.4	0.4	0.3	0.3	0.3	0.2	0.1	0.0	-0.1	-0.3	-0.4		

Strength based on strain compatibility; bottom tension limited to  $6\sqrt{f'_c}$ ; see pages 2-3-2-5 for explanation