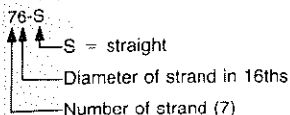


# SOLID FLAT SLAB

## Strand Pattern Designation

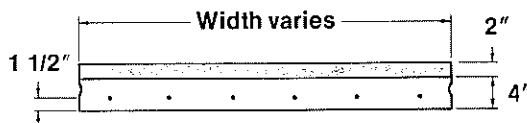


4" Thick  
Lightweight Concrete

## Section Properties per foot of width

	Untopped	Topped
A =	48.00 in. <sup>2</sup>	—
I =	64.00 in. <sup>4</sup>	231.25 in. <sup>4</sup>
Y <sub>b</sub> =	2.00 in.	3.10 in.
Y <sub>t</sub> =	2.00 in.	2.90 in.
Z <sub>b</sub> =	32.00 in. <sup>3</sup>	74.60 in. <sup>3</sup>
Z <sub>t</sub> =	32.00 in. <sup>3</sup>	79.75 in. <sup>3</sup>
b <sub>w</sub> =	12.00 in.	12.00 in.
wt =	38 psf	63 psf
V/S =	2.00 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

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

**LFS4**

Table of safe superimposed service load (psf) and cambers

No Topping

Strand Designation Code	Span, ft.							
	10	11	12	13	14	15	16	17
66-S	176	148	126	108	93	78		
	0.1	0.1	0.1	0.1	0.1	0.1		
	0.2	0.2	0.2	0.1	0.1	0.0		
76-S	206	174	148	128	110	91	75	
	0.2	0.2	0.2	0.2	0.2	0.2	0.1	
	0.2	0.2	0.2	0.2	0.2	0.1	0.0	
58-S	263	222	190	163	136	113	95	80
	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2
	0.3	0.4	0.4	0.3	0.3	0.2	0.1	-0.1
68-S	301	244	200	166	139	117	99	85
	0.3	0.4	0.4	0.4	0.5	0.5	0.5	0.4
	0.4	0.5	0.5	0.5	0.5	0.4	0.4	0.2

**LFS4+2**

Table of safe superimposed service load (psf) and cambers

2" Normal Weight Topping

Strand Designation Code	Span, ft.							
	11	12	13	14	15	16	17	18
66-S	273	233	201	163	123	91		
	0.1	0.1	0.1	0.1	0.0	0.0		
	0.1	0.0	-0.1	-0.1	-0.3	-0.5		
76-S	274	237	197	153	117	86		
	0.2	0.2	0.2	0.1	0.1	0.0		
	0.1	0.0	-0.1	-0.2	-0.3	-0.6		
58-S	304	258	206	164	129	100		
	0.3	0.3	0.3	0.3	0.2	0.1		
	0.2	0.1	0.0	-0.1	-0.3	-0.5		
68-S	279	229	184	147	116			
	0.5	0.5	0.4	0.4	0.3			
	0.2	0.2	0.0	-0.1	-0.3			

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