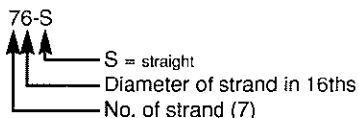


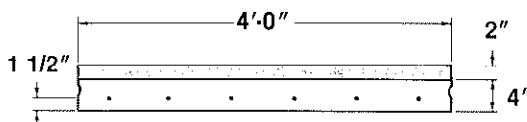
**Strand Pattern Designation**



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.

**SOLID FLAT SLAB**

**4" Thick  
 Lightweight Concrete**



**Section Properties**

	Untopped	Topped
A	= 192 in. <sup>2</sup>	—
I	= 256 in. <sup>4</sup>	925 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>	= 128 in. <sup>3</sup>	298 in. <sup>3</sup>
Z <sub>t</sub>	= 128 in. <sup>3</sup>	319 in. <sup>3</sup>
b <sub>w</sub>	= 48.00 in.	48.00 in.
wt	= 153 plf	253 plf
	38 psf	63 psf
V/S	= 1.85 in.	

**Key**

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

$f'_c = 5,000$  psi

$f'_{ci} = 3,500$  psi

**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	18	19	20	21	22	23	24
66-S	206	175	143	116	95	78	64	52	42	34					
	0.1	0.1	0.1	0.1	0.1	0.0	0.0	-0.1	-0.3	-0.5					
	0.2	0.2	0.1	0.1	0.0	-0.2	-0.3	-0.5	-0.8	-1.2					
76-S	239	201	163	133	110	91	75	62	51	42	34				
	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.0	-0.1	-0.3	-0.5				
	0.2	0.2	0.2	0.2	0.1	0.0	-0.2	-0.4	-0.6	-1.0	-1.3				
58-S	263	222	190	163	136	113	95	80	68	57	48	40	33		
	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.1	0.0	-0.2	-0.4	-0.6		
	0.3	0.4	0.4	0.3	0.3	0.2	0.1	-0.1	-0.3	-0.5	-0.9	-1.3	-1.8		
68-S	309	261	223	189	158	133	112	95	81	69	59	50	42	36	30
	0.3	0.4	0.4	0.4	0.5	0.5	0.5	0.4	0.3	0.2	0.1	-0.1	-0.3	-0.5	-0.9
	0.4	0.5	0.5	0.5	0.5	0.4	0.4	0.2	0.0	-0.2	-0.5	-0.9	-1.4	-1.9	-2.6

**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	19	20	21
66-S	322	276	213	163	123	91	63	41			
	0.1	0.1	0.1	0.1	0.0	0.0	-0.1	-0.3			
	0.1	0.0	0.0	-0.1	-0.3	-0.5	-0.7	-1.0			
76-S	375	319	252	197	153	117	86	61	40		
	0.2	0.2	0.2	0.2	0.1	0.1	0.0	-0.1	-0.3		
	0.1	0.1	0.0	-0.1	-0.2	-0.3	-0.6	-0.8	-1.2		
58-S	351	304	258	206	164	129	100	75	54	35	
	0.3	0.3	0.3	0.3	0.3	0.2	0.1	0.0	-0.2	-0.4	
	0.2	0.2	0.1	0.0	-0.1	-0.3	-0.5	-0.5	-1.2	-1.7	
68-S	360	310	251	204	164	131	103	79	59		
	0.4	0.5	0.5	0.5	0.4	0.3	0.2	0.1	-0.1		
	0.3	0.3	0.2	0.1	-0.1	-0.3	-0.6	-0.9	-1.3		

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