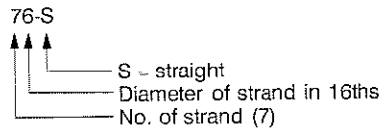


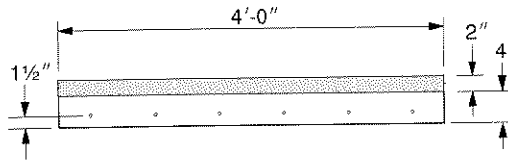
Strand Pattern Designation



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 ²	—
I	= 256 in ⁴	925 in ⁴
y _b	= 2.00 in.	3.10 in.
y _t	= 2.00 in.	2.90 in.
S _b	= 128 in ³	298 in ³
S _t	= 128 in ³	319 in ³
b _w	= 48.00 in.	48.00 in.
wt	= 153 plf	253 plf
	38 psf	63 psf
V/S	= 1.85 in.	

$f'_c = 5,000 \text{ psi}$
 $f'_{ci} = 3,500 \text{ psi}$

Key

- 206 — 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	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 2-2-2-6 for explanation.