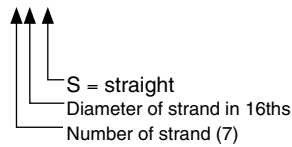


3.8 Solid Flat-Slab Load Tables

Strand Pattern Designation

76-S

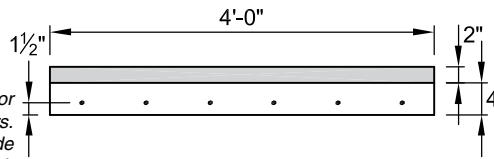


Safe loads shown include dead load of 10 lb/ft² for untopped members and 15 lb/ft² for topped members. Remainder is live load. Long-time cambers include superimposed dead load but do not include live load.

Key

- 119 – Safe superimposed service load, lb/ft²
- 0.1 – Estimated camber at erection, in.
- 0.1 – Estimated long-time camber, in.

4 in. Thick Normalweight Concrete



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

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

Section Properties

	No Topping	2 in. topping
A	192 in. ²	-
I	256 in. ⁴	763 in. ⁴
y _b	2.00 in.	2.84 in.
y _i	2.00 in.	3.16 in.
S _b	128 in. ³	269 in. ³
S _i	128 in. ³	242 in. ³
wt	200 lb/ft	300 lb/ft
DL	50 lb/ft ²	75 lb/ft ²
V/S	1.85 in.	

FS4

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

No Topping

Strand designation code	Span, ft												
	10	11	12	13	14	15	16	17	18	19	20	21	22
66-S	119	105	94	86	76	70	61	48	38	29			
	0.1	0.1	0.1	0.0	0.0	-0.1	-0.2	-0.3	-0.4	-0.6			
	0.1	0.1	0.0	0.0	-0.1	-0.3	-0.4	-0.6	-0.9	-1.2			
76-S	148	130	116	106	93	85	72	58	47	37	28		
	0.1	0.1	0.1	0.1	0.0	0.0	-0.1	-0.2	-0.3	-0.5	-0.7		
	0.1	0.1	0.1	0.0	-0.1	-0.2	-0.3	-0.5	-0.7	-1.0	-1.4		
58-S	135	120	107	98	90	82	74	66	61	51	42	34	26
	0.2	0.2	0.2	0.2	0.1	0.1	0.0	0.0	-0.1	-0.3	-0.4	-0.7	-0.9
	0.2	0.2	0.2	0.2	0.1	0.0	-0.1	-0.3	-0.5	-0.8	-1.1	-1.5	-2.0
68-S	169	149	132	120	110	100	87	73	62	52	43	36	30
	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.0	-0.1	-0.3	-0.4	-0.7
	0.3	0.3	0.3	0.3	0.2	0.2	0.1	-0.1	-0.3	-0.5	-0.8	-1.2	-1.6

FS4 + 2

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

2 in. Normalweight Topping

Strand designation code	Span, ft												
	11	12	13	14	15	16	17	18	19	20	21	22	
66-S	200	180	161	147	108	76	49	27					
	0.1	0.1	0.0	0.0	-0.1	-0.2	-0.3	-0.4					
	0.0	0.0	-0.1	-0.2	-0.3	-0.5	-0.7	-1.0					
76-S	250	225	200	177	134	99	70	45					
	0.1	0.1	0.1	0.0	0.0	-0.1	-0.2	-0.3					
	0.0	0.0	-0.1	-0.1	-0.3	-0.4	-0.6	-0.9					
58-S		210	187	175	154	146	111	82	58	37			
		0.2	0.2	0.1	0.1	0.0	0.0	-0.1	-0.3	-0.4			
		0.1	0.0	0.0	-0.1	-0.3	-0.4	-0.7	-0.9	-1.3			
68-S			228	215	190	184	146	114	87	64	43	25	
			0.2	0.2	0.2	0.2	0.1	0.0	-0.1	-0.3	-0.4	-0.7	
			0.1	0.1	0.0	-0.1	-0.3	-0.5	-0.7	-1.0	-1.4	-1.9	

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 item 3, note 4, Section 3.3.2 for explanation of vertical line.