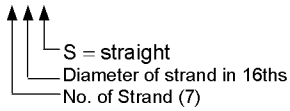


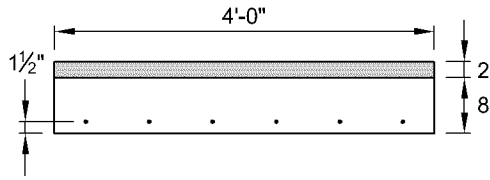
**Strand Pattern Designation**  
76-S



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.

Key  
361 – Safe superimposed service load, psf  
0.1 – Estimated camber at erection, in.  
0.2 – Estimated long-time camber, in.

**SOLID FLAT SLAB**  
8 in. Thick  
Normal Weight Concrete



$f'_c = 5,000$  psi  
 $f_{pu} = 270,000$  psi

**Section Properties**  
Untopped Topped

A =	384 in. <sup>2</sup>	480 in. <sup>2</sup>
I =	2,048 in. <sup>4</sup>	3,630 in. <sup>4</sup>
y <sub>b</sub> =	4.00 in.	4.81 in.
y <sub>t</sub> =	4.00 in.	5.19 in.
S <sub>b</sub> =	512 in. <sup>3</sup>	755 in. <sup>3</sup>
S <sub>t</sub> =	512 in. <sup>3</sup>	699 in. <sup>3</sup>
wt =	400 plf	500 plf
DL =	100 psf	125 psf
V/S =	3.43 in.	

**FS8**

**Table of safe superimposed service load (psf) and cambers (in.)**

**No Topping**

Strand Designation Code	Span, ft																											
	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36				
66-S	361	330	278	236	201	171	146	125	107	91	77	65	54	44	36	28												
	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	-0.1	-0.2	-0.2	-0.3	-0.4	-0.6												
	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.0	-0.1	-0.2	-0.3	-0.5	-0.6	-0.8	-1.0												
76-S		393	333	284	243	209	180	155	134	116	100	86	73	62	52	41	32											
		0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.0	-0.1	-0.1	-0.2	-0.3	-0.4	-0.6											
		0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.0	-0.1	-0.2	-0.3	-0.5	-0.7	-0.9	-1.1										
58-S				372	324	281	245	214	187	164	144	125	107	92	78	65	54	44	35	27								
				0.2	0.3	0.3	0.3	0.3	0.2	0.2	0.1	0.1	0.0	-0.1	-0.2	-0.3	-0.4	-0.6	-0.8									
				0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.1	0.0	-0.1	-0.3	-0.5	-0.7	-0.9	-1.2	-1.5								
68-S					394	344	301	265	232	203	177	154	134	117	101	87	74	63	52	43	34	27						
					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	-0.1	-0.3	-0.5	-0.6	-0.9						
					0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.3	0.3	0.2	0.0	-0.1	-0.3	-0.5	-0.8	-1.0	-1.4	-1.7						
78-S							352	308	270	237	209	183	161	142	124	108	94	81	70	59	50	41	33	26				
							0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.3	0.2	0.1	0.0	-0.1	-0.3	-0.5	-0.7	-1.0				
							0.6	0.7	0.7	0.7	0.6	0.6	0.5	0.5	0.3	0.2	0.1	-0.1	-0.3	-0.6	-0.9	-1.2	-1.6	-2.0				

**FS8 + 2**

**Table of safe superimposed service load (psf) and cambers (in.)**

**2 in. Normal Weight Topping**

Strand Designation Code	Span, ft																							
	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33					
66-S	360	305	260	222	190	163	139	119	98	75	55	37												
	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	-0.1	-0.2	-0.2	-0.3												
	0.1	0.1	0.1	0.0	0.0	-0.1	-0.1	-0.2	-0.3	-0.4	-0.6	-0.8												
76-S		365	313	269	232	201	174	150	125	99	77	57	40											
		0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.0	-0.1	-0.1	-0.2	-0.3											
		0.1	0.1	0.1	0.1	0.0	0.0	-0.1	-0.2	-0.3	-0.5	-0.6	-0.8											
58-S				359	313	274	240	210	177	147	121	98	78	59	43	28								
				0.3	0.3	0.3	0.2	0.2	0.2	0.1	0.1	0.0	-0.1	-0.2	-0.3	-0.4								
				0.2	0.2	0.2	0.2	0.1	0.0	-0.1	-0.2	-0.3	-0.5	-0.7	-0.9	-1.1								
68-S					381	335	296	261	224	190	161	135	112	91	72	56	40	27						
					0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.2	0.2	0.1	0.0	-0.1	-0.3	-0.5						
					0.4	0.4	0.3	0.3	0.2	0.2	0.1	-0.1	-0.2	-0.4	-0.6	-0.8	-1.1	-1.4						
78-S						392	348	309	271	234	201	172	146	123	102	83	66	51	37					
						0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.3	0.2	0.1	0.0	-0.1	-0.3					
						0.5	0.5	0.5	0.4	0.4	0.3	0.2	0.1	-0.1	-0.2	-0.5	-0.7	-1.0	-1.3					

Strength is based on strain compatibility; bottom tension is limited to  $7.5\sqrt{f'_c}$ ; see pages 2-7 through 2-10 for explanation.