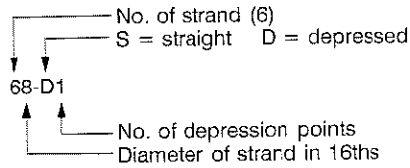


**Strand Pattern Designation**

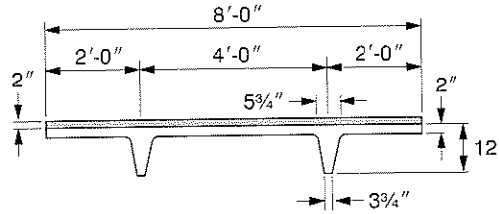


Safe loads shown include dead load of 10 psf for untopped members and 15 psf for topped members. Remainder is live load. Long-time cambers include superimposed dead load but do not include live load.

**Key**  
 186 — Safe superimposed service load, psf  
 0.2 — Estimated camber at erection, in.  
 0.3 — Estimated long-time camber, in.

**DOUBLE TEE**

**8'-0" x 12"**  
**Lightweight Concrete**



**Section Properties**

	Untopped	Topped
A	= 287 in <sup>2</sup>	—
I	= 2,872 in <sup>4</sup>	4,819 in <sup>4</sup>
y <sub>b</sub>	= 9.13 in.	10.82 in.
y <sub>t</sub>	= 2.87 in.	3.18 in.
S <sub>b</sub>	= 315 in <sup>3</sup>	445 in <sup>3</sup>
S <sub>t</sub>	= 1,001 in <sup>3</sup>	1,515 in <sup>3</sup>
wt	= 229 plf	429 plf
	29 psf	54 psf
V/S	= 1.22 in.	

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

**8LDT12**

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

**No Topping**

Strand Pattern	e <sub>s</sub> , in. e <sub>c</sub> , in.	Span, ft																
		12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	
28-S	7.13	186	144	116	89	68	53	41	31									
	7.13	0.2	0.3	0.4	0.5	0.5	0.6	0.6	0.6									
48-S	5.13			195	153	120	95	77	62	50	41	33						
	5.13			0.6	0.7	0.8	1.0	1.1	1.2	1.3	1.3	1.3						
68-S	3.13				169	133	106	86	70	57	47	39	32					
	3.13				0.6	0.8	0.9	1.0	1.0	1.1	1.1	1.1	1.0					
68-D1	3.13												72	61	52	45	38	33
	6.63												2.6	2.8	3.0	3.1	3.2	3.2
													2.9	2.9	2.9	2.7	2.4	2.1

**8LDT12+2**

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

**2" Normal Weight Topping**

Strand Pattern	e <sub>s</sub> , in. e <sub>c</sub> , in.	Span, ft														
		12	14	16	18	20	22	24	26	28	30	32	34	36	38	
28-S	7.13	207	157	123	91	66	47	33								
	7.13	0.2	0.3	0.4	0.5	0.5	0.6	0.6								
48-S	5.13				175	134	103	80	62	48	36					
	5.13				0.7	0.8	1.0	1.1	1.2	1.3	1.3					
68-S	3.13					162	126	99	79	62	47					
	3.13					0.8	0.9	1.0	1.0	1.1	1.1					
68-D1	3.13												72	59	46	33
	6.63												2.6	2.8	3.0	3.1
													1.3	1.0	0.6	0.0

Strength based on strain compatibility; bottom tension limited to  $12\sqrt{f'_c}$ ; see pages 2-2-2-6 for explanation. Shaded values require release strengths higher than 3500 psi.