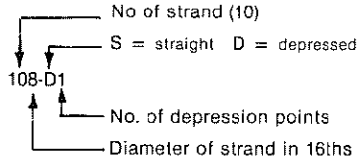


DOUBLE TEE

Strand Pattern Designation

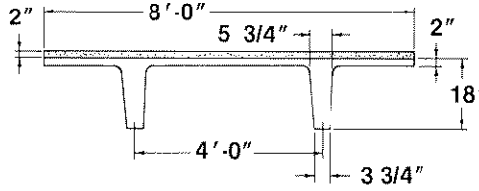


Safe loads shown include dead load of 10 psf for untopped members and 15 psf for topped members. Remainder is live load. Long-time cambers include superimposed dead load but do not include live load.

Key

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

8'-0" x 18"
Lightweight Concrete



$f'_c = 5000$ psi
 $f_{pu} = 270,000$ psi
Low-relaxation strand

Section Properties

	Untopped	Topped
A =	344 in. ²	—
I =	9300 in. ⁴	13,799 in. ⁴
$Y_b =$	13.27 in.	15.51 in.
$Y_t =$	4.73 in.	4.49 in.
$Z_b =$	701 in. ³	890 in. ³
$Z_t =$	1966 in. ³	3073 in. ³
wt =	275 plf	475 plf
	34 psf	59 psf
V/S =	1.32 in.	

8LDT18

Table of safe superimposed service load (psf) and cambers

No Topping

Strand Pattern	e_o e_c	Span, ft.																											
		16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50	52	54	56	58	60	62	64			
28-S	11.27	194	151	118	93	74	59	47	38	30																			
	11.27	0.2	0.2	0.3	0.3	0.4	0.4	0.4	0.4	0.4																			
48-S	10.27				194	159	131	109	92	78	66	56	47	40	34														
	10.27				0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.4	1.4	1.4														
68-S	7.27					191	159	133	113	96	82	70	60	52	45	38	33												
	7.27					0.8	0.9	1.1	1.2	1.3	1.4	1.4	1.5	1.5	1.6	1.6	1.5												
68-D1	7.27							180	154	132	114	99	86	75	65	57	50	44	38	33									
	10.77							1.4	1.6	1.7	1.9	2.1	2.2	2.4	2.5	2.6	2.6	2.6	2.6	2.6									
88-D1	5.27														90	80	71	63	56	49	44	39	35	31					
	10.52														3.1	3.2	3.4	3.5	3.6	3.7	3.8	3.7	3.7	3.5					
108-D1	3.27																							46	41	37	33		
	10.27														3.6	3.6	3.7	3.6	3.5	3.4	3.1	2.8	2.4	1.9					
																							4.5	4.5	4.4	4.2			
																							3.6	3.1	2.5	1.8			

8LDT18 + 2

Table of safe superimposed service load (psf) and cambers

2" Normal Weight Topping

Strand Pattern	e_e e_c	Span, ft.																								
		16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50	52						
28-S	11.27	201	153	115	87	66	49	36																		
	11.27	0.2	0.2	0.3	0.3	0.3	0.4	0.4																		
48-S	10.27					161	130	106	87	70	57	46	37													
	10.27					0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.4													
68-S	7.27							168	138	115	95	79	65	54	44	36										
	7.27					0.9	1.1	1.2	1.3	1.4	1.4	1.5	1.5	1.6												
68-D1	7.27									186	156	132	111	94	80	68	57	48	40	33						
	10.77									1.4	1.6	1.7	1.9	2.1	2.2	2.4	2.5	2.6	2.6	2.6						
88-D1	5.27																85	73	63	54	46	39				
	10.52																3.1	3.2	3.4	3.5	3.6	3.7				
																	2.0	1.8	1.5	1.1	0.7	0.1				

Strength based on strain compatibility; bottom tension limited to $12\sqrt{f'_c}$; see pages 2-3-2-5 for explanation
Values below heavy line require release strengths higher than 3500 psi.