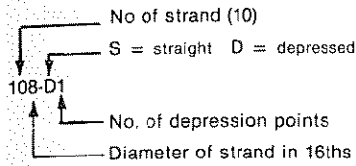


DOUBLE TEE

Strand Pattern Designation

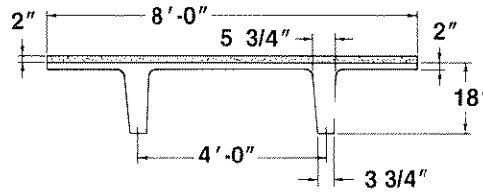


Safe loads shown include dead load of 10 psf for untopped members and 15 psf for topped members. Remainder is live load. Long-time cambers include superimposed dead load but do not include live load.

Key

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

8'-0" x 18"
Lightweight Concrete



$f'_c = 5000$ psi
 $f_{pu} = 270,000$ psi

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_e 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	
28-S	11.27	190	151	118	93	74	59	47	38																
	11.27	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.4																
48-S	10.27				194	159	131	109	92	78	66	56	47	40	34										
	10.27				0.6	0.7	0.8	0.9	1.0	1.0	1.1	1.1	1.2	1.2	1.1										
68-S	7.27					191	159	133	113	96	82	70	60	52	45	38	33								
	7.27					0.8	0.9	1.0	1.1	1.1	1.2	1.3	1.3	1.3	1.3	1.2									
68-D1	7.27							180	154	132	114	99	86	75	65	57	50	44	38	33					
	10.77							1.3	1.5	1.6	1.8	2.0	2.1	2.2	2.2	2.3	2.3	2.3	2.2	2.1					
88-D1	5.27														90	80	71	63	56	49	43	37	33		
	10.52														2.7	2.9	3.0	3.2	3.3	3.4	3.4	3.3	3.1		
108-D1	3.27																							42	37
	10.27																							3.8	3.8
																								2.4	2.0

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					
28-S	11.27	197	153	115	87	66	49	36																
	11.27	0.2	0.2	0.3	0.3	0.3	0.3	0.4																
48-S	10.27				161	130	106	87	70	57	46	37												
	10.27				0.7	0.8	0.9	1.0	1.0	1.1	1.1	1.2												
68-S	7.27					168	138	115	95	79	65	54	44											
	7.27					0.9	1.0	1.1	1.1	1.2	1.3	1.3	1.3											
68-D1	7.27							186	156	132	111	94	80	68	57	48	38							
	10.77							1.3	1.5	1.6	1.8	2.0	2.1	2.2	2.2	2.3	2.3							
88-D1	5.27														85	72	60	49	39					
	10.52														2.7	2.9	3.0	3.2	3.3					
															1.4	1.2	0.9	0.6	0.1					

Bold type — Capacity governed by stresses, others governed by flexural strength

Values below heavy line require release strengths higher than 3500 psi.