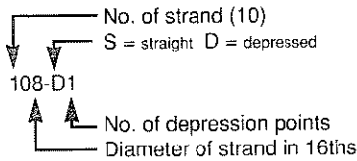


Strand Pattern Designation



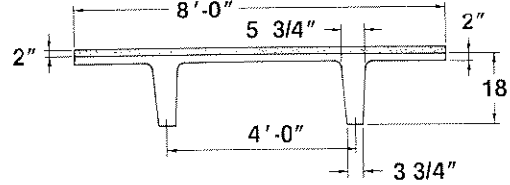
Safe loads shown include dead load of 10 psf for untopped members and 15 psf for topped members. Remainder is live load. Long-time cambers include superimposed dead load but do not include live load.

Key

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

DOUBLE TEE

8'-0" x 18"
Lightweight Concrete



Section Properties

Untopped Topped

A	=	344 in. ²	—
I	=	9,300 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	=	1,966 in. ³	3,073 in. ³
wt	=	275 plf	475 plf
		34 psf	59 psf
V/S	=	1.32 in.	

$f'_c = 5,000$ psi

$f_{pu} = 270,000$ psi

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	62	64
28-S	11.27	194	152	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			196	160	133	111	93	79	67	57	48	41	35												
	10.27			0.7	0.8	0.9	1.0	1.1	1.2	1.2	1.3	1.3	1.4	1.4												
68-S	7.27			195		162	136	115	98	84	72	62	53	46	39	34										
	7.27			0.8		0.9	1.1	1.2	1.3	1.4	1.4	1.5	1.5	1.5	1.5	1.5										
68-D1	7.27					184	156	134	116	101	88	76	67	59	51	45	39	34								
	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							92	81	72	64	57	51	45	40	36	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																					47	42	38	34	
	10.27																					4.5	4.5	4.4	4.2	

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	154	116	88	66	50	37																	
	11.27	0.2	0.2	0.3	0.3	0.4	0.4	0.4																	
48-S	10.27			164	133	108	88	72	59	47	38														
	10.27			0.8	0.9	1.0	1.1	1.2	1.2	1.3	1.3														
68-S	7.27					171	141	117	97	81	67	55	46	37											
	7.27					0.9	1.1	1.2	1.3	1.4	1.4	1.5	1.5	1.5											
68-D1	7.27							190	159	134	114	96	82	69	59	49	41	34							
	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																								
	10.52																								

Strength based on strain compatibility; bottom tension limited to $12\sqrt{f'_c}$; see pages 2-3-2-6 for explanation. Shaded values require release strengths higher than 3500 psi.