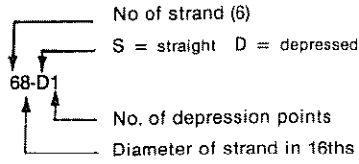


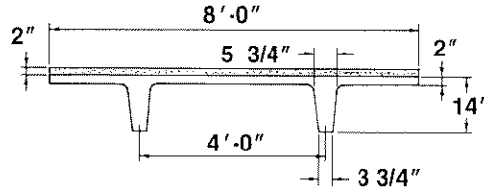
DOUBLE TEE

8'-0" x 14"
Lightweight Concrete

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.



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

Section Properties

	Untopped	Topped
A	306 in. ²	—
I	4508 in. ⁴	7173 in. ⁴
Y_b	10.51 in.	12.40 in.
Y_t	3.49 in.	3.60 in.
Z_b	429 in. ³	578 in. ³
Z_t	1292 in. ³	1992 in. ³
wt	244 plf	444 plf
	31 psf	56 psf
V/S	1.25 in.	

Key

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

8LDT14

Table of safe superimposed service load (psf) and cambers

No Topping

Strand Pattern	e_o e_c	Span, ft.																
		14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46
28-S	8.51	172	139	109	84	66	51	40	32									
	8.51	0.2	0.3	0.3	0.4	0.4	0.5	0.5	0.5									
48-S	7.51				170	137	111	91	75	63	52	44	36	30				
	7.51				0.8	0.9	1.0	1.1	1.3	1.3	1.4	1.4	1.5	1.4				
68-S	4.51				183	147	120	99	82	68	57	48	40	34				
	4.51				0.7	0.8	0.9	1.0	1.1	1.1	1.2	1.2	1.2	1.1				
68-D1	4.51									107	91	78	67	58	50	43	37	31
	8.01									1.9	2.1	2.3	2.4	2.6	2.7	2.7	2.7	2.6
										2.2	2.3	2.4	2.5	2.5	2.4	2.1	1.7	1.2

8LDT14+2

Table of safe superimposed service load (psf) and cambers

2" Normal Weight Topping

Strand Pattern	e_o e_c	Span, ft.																
		14	16	18	20	22	24	26	28	30	32	34	36	38	40			
28-S	8.51	184	146	111	82	60	44	31										
	8.51	0.2	0.3	0.3	0.4	0.4	0.5	0.5										
48-S	7.51				183	144	114	91	72	57	45	35						
	7.51				0.8	0.9	1.0	1.1	1.3	1.3	1.4	1.4						
68-S	4.51				167	134	107	87	67	49								
	4.51				0.8	0.9	1.0	1.1	1.1	1.2								
68-D1	4.51									110	91	76	60	47	35			
	8.01									1.9	2.1	2.3	2.4	2.6	2.7			
										1.3	1.2	1.1	0.9	0.5	0.1			

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

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