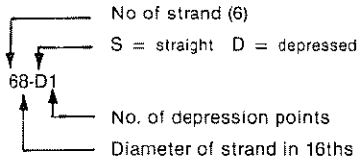


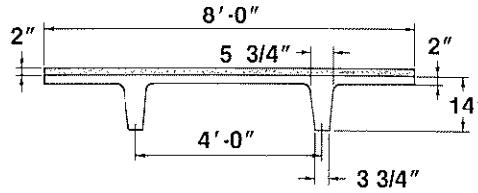
DOUBLE TEE

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.

8'-0" x 14"
Normal Weight Concrete



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

Section Properties

	Untopped	Topped
A	306 in. ²	—
I	4508 in. ⁴	6539 in. ⁴
Y_b	10.51 in.	11.97 in.
Y_t	3.49 in.	4.03 in.
Z_b	429 in. ³	546 in. ³
Z_t	1292 in. ⁴	1623 in. ⁴
wt	319 plf	519 plf
	40 psf	65 psf
V/S	1.25 in.	

Key

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

8DT14

Table of safe superimposed service load (psf) and cambers

No Topping

Strand Pattern	e_e e_c	Span, ft.																	
		14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48
28-S	8.51	168	134	102	77	58	44	33											
	8.51	0.2	0.2	0.2	0.3	0.3	0.3	0.3											
48-S	7.51				163	129	103	83	68	55	45	36							
	7.51				0.5	0.6	0.7	0.8	0.8	0.9	0.9	0.9							
68-S	4.51				175	139	112	91	74	61	50	40	33						
	4.51				0.5	0.5	0.6	0.7	0.7	0.7	0.7	0.7	0.6						
68-D1	4.51							142	118	99	83	70	59	50	42	35	30		
	8.01							1.1	1.2	1.3	1.4	1.5	1.6	1.6	1.6	1.5	1.4		
88-D1	2.51														60	52	44	38	32
	7.76														2.0	2.0	2.0	2.0	1.9

8DT14 + 2

Table of safe superimposed service load (psf) and cambers

2" Normal Weight Topping

Strand Pattern	e_e e_c	Span, ft.												
		14	16	18	20	22	24	26	28	30	32	34	36	
28-S	8.51	181	141	103	74	52	36							
	8.51	0.2	0.2	0.2	0.2	0.3	0.3							
48-S	7.51				176	136	106	83	65	50	38			
	7.51				0.5	0.6	0.7	0.8	0.8	0.9	0.9			
68-S	4.51				159	126	100	79	62	49				
	4.51				0.5	0.6	0.7	0.7	0.7	0.7				
68-D1	4.51							152	124	102	83	68	55	44
	8.01							1.1	1.2	1.3	1.4	1.5	1.6	1.6

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.