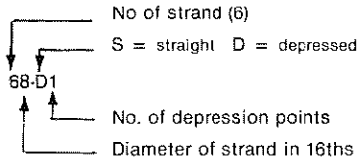


DOUBLE TEE

Strand Pattern Designation

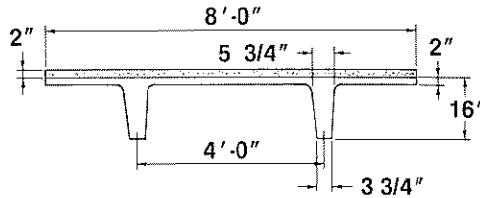


Safe loads shown include dead load of 10 psf for untopped members and 15 psf for topped members. Remainder is live load. Long-time cambers include superimposed dead load but do not include live load.

Key

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

8'-0" x 16"
Normal Weight Concrete



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

Section Properties

	Untopped	Topped
A =	325 in. ²	—
I =	6634 in. ⁴	9306 in. ⁴
$Y_b =$	11.93 in.	13.52 in.
$Y_t =$	4.07 in.	4.48 in.
$Z_b =$	556 in. ³	688 in. ³
$Z_t =$	1630 in. ³	2077 in. ³
wt =	339 plf	539 plf
	42 psf	67 psf
V/S =	1.29 in.	

8DT16

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	50	52	54	56	
28-S	9.93	200	160	122	93	71	54	41	31															
	9.93	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2															
48-S	8.93				197	157	127	103	84	69	57	47	38	31										
	8.93				0.5	0.5	0.6	0.7	0.7	0.8	0.8	0.8	0.8	0.8										
68-S	5.93				182	147	121	100	82	68	57	47	39	32										
	5.93				0.5	0.6	0.6	0.7	0.8	0.8	0.8	0.8	0.8	0.7	0.7									
68-D1	5.93							173	145	122	103	88	75	64	54	46	39	33						
	9.43							0.9	1.0	1.1	1.3	1.3	1.4	1.5	1.5	1.5	1.5	1.4						
88-D1	3.93														77	67	58	50	43	37	32			
	9.18														1.9	2.0	2.0	2.0	2.0	2.0	1.8	1.4	1.1	
108-D1	1.93																				43	38	33	
	8.93																				2.2	2.1	2.0	

8DT16 + 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
28-S	9.93	167	124	90	65	47	32									
	9.93	0.2	0.2	0.2	0.2	0.2	0.2									
48-S	8.93				164	129	102	81	64	50	38					
	8.93				0.5	0.6	0.7	0.7	0.8	0.8	0.8					
68-S	5.93				161	130	104	84	68	54	42					
	5.93				0.6	0.6	0.7	0.8	0.8	0.8	0.8					
68-D1	5.93							183	151	125	103	85	70	58	47	38
	9.43							0.9	1.0	1.1	1.3	1.3	1.4	1.5	1.5	1.5
88-D1	3.93															
	9.18													0.6	0.4	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.