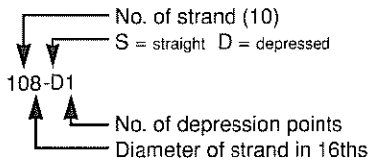


Strand Pattern Designation



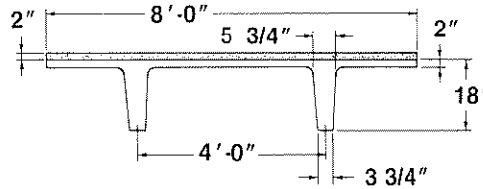
Safe loads shown include dead load of 10 psf for untopped members and 15 psf for topped members. Remainder is live load. Long-time cambers include superimposed dead load but do not include live load.

Key

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

DOUBLE TEE

8'-0" x 18"
Normal Weight Concrete



Section Properties

	Untopped	Topped
A	= 344 in. ²	—
I	= 9,300 in. ⁴	12,749 in. ⁴
y _b	= 13.27 in.	15.00 in.
y _t	= 4.73 in.	5.00 in.
Z _b	= 701 in. ³	850 in. ³
Z _t	= 1,966 in. ³	2,550 in. ³
wt	= 358 plf	558 plf
	45 psf	70 psf
V/S	= 1.32 in.	

$f'_c = 5,000$ psi
 $f_{pu} = 270,000$ psi

8DT18

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	186	144	110	85	65	51	39																	
	11.27	0.1	0.2	0.2	0.2	0.2	0.2	0.2																	
48-S	10.27			187	152	124	102	85	70	58	48	39	32												
	10.27			0.4	0.5	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.6									
68-S	7.27				186	153	127	107	89	75	63	53	45	37	31										
	7.27				0.5	0.6	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.7	0.6									
68-D1	7.27						175	148	126	107	92	79	68	58	50	43	36	31							
	10.77						0.9	1.0	1.1	1.2	1.3	1.3	1.4	1.4	1.4	1.3	1.3	1.2							
88-D1	5.27											109	95	83	73	64	55	48	42	36	31				
	10.52											1.7	1.8	1.8	1.9	1.9	2.0	2.0	1.9	1.8	1.6				
108-D1	3.27																	64	56	50	44	38	34		
	10.27																	2.3	2.3	2.3	2.2	2.1	2.0		

8DT18 + 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							
28-S	11.27	193	146	107	79	58	41																		
	11.27	0.1	0.2	0.2	0.2	0.2	0.2																		
48-S	10.27			196	156	124	100	80	64	50	39														
	10.27			0.4	0.5	0.6	0.6	0.6	0.6	0.7	0.7														
68-S	7.27				162	133	108	89	72	58	47														
	7.27				0.6	0.7	0.7	0.8	0.8	0.8	0.8														
68-D1	7.27						181	151	126	105	88	73	61	50	41										
	10.77						0.9	1.0	1.1	1.2	1.3	1.3	1.4	1.4	1.4										
88-D1	5.27											108	92	78	66	56	47								
	10.52											1.7	1.8	1.8	1.9	1.9	2.0								

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.