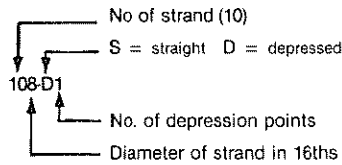
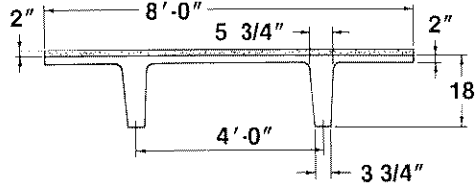


# DOUBLE TEE

## Strand Pattern Designation



8'-0" x 18"  
Normal Weight Concrete



## Section Properties

	Untopped	Topped
A =	344 in. <sup>2</sup>	—
I =	9300 in. <sup>4</sup>	12,749 in. <sup>4</sup>
Y <sub>b</sub> =	13.27 in.	15.00 in.
Y <sub>t</sub> =	4.73 in.	5.00 in.
Z <sub>b</sub> =	701 in. <sup>3</sup>	850 in. <sup>3</sup>
Z <sub>t</sub> =	1966 in. <sup>3</sup>	2550 in. <sup>3</sup>
wt =	358 plf	558 plf
	45 psf	70 psf
V/S =	1.32 in.	

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

## Key

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

**8DT18**

Table of safe superimposed service load (psf) and cambers

No Topping

Strand Pattern	e <sub>o</sub> e <sub>c</sub>	Span, ft.																						
		16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50	52	54	56	58	
28-S	11.27	185	143	109	84	65	50	38																
	11.27	0.1	0.1	0.2	0.2	0.2	0.2	0.2																
48-S	10.27				185	150	123	101	83	69	57	47	39	31										
	10.27				0.4	0.4	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.5										
68-S	7.27				183	150	125	104	87	73	62	52	43	36										
	7.27				0.5	0.5	0.6	0.6	0.7	0.7	0.7	0.7	0.6	0.6										
68-D1	7.27							172	145	123	105	90	77	66	57	49	41	35						
	10.77							0.8	0.9	1.0	1.1	1.1	1.2	1.2	1.2	1.1	1.1	1.0						
88-D1	5.27													107	93	81	71	62	54	47	41	35		
	10.52													1.5	1.6	1.6	1.7	1.7	1.7	1.6	1.5	1.4		
108-D1	3.27																		61	53	46	40	34	
	10.27																		2.0	2.0	1.9	1.9	1.7	

**8DT18+2**

Table of safe superimposed service load (psf) and cambers

2" Normal Weight Topping

Strand Pattern	e <sub>o</sub> e <sub>c</sub>	Span, ft.																					
		16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46						
28-S	11.27	192	144	106	78	57	41																
	11.27	0.1	0.1	0.2	0.2	0.2	0.2																
48-S	10.27				192	153	122	98	78	62	49	37											
	10.27				0.4	0.4	0.5	0.5	0.6	0.6	0.6	0.6											
68-S	7.27				196	159	130	106	86	70	57												
	7.27				0.5	0.5	0.6	0.6	0.7	0.7	0.7												
68-D1	7.27							177	147	123	103	86	71	59	48								
	10.77							0.8	0.9	1.0	1.1	1.1	1.2	1.2	1.2								
88-D1	5.27													105	90	75	61	48					
	10.52													1.5	1.6	1.6	1.7	1.7					

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

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