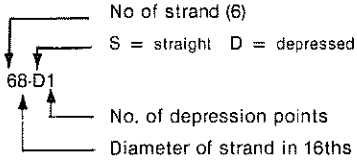


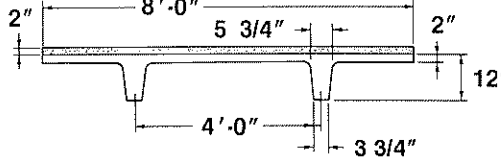
# DOUBLE TEE

**8'-0" x 12"**  
Normal Weight 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.



### Section Properties

	Untopped	Topped
A	287 in. <sup>2</sup>	—
I	2872 in. <sup>4</sup>	4389 in. <sup>4</sup>
Y <sub>b</sub>	9.13 in.	10.45 in.
Y <sub>t</sub>	2.87 in.	3.55 in.
Z <sub>b</sub>	315 in. <sup>3</sup>	420 in. <sup>3</sup>
Z <sub>t</sub>	1001 in. <sup>3</sup>	1236 in. <sup>3</sup>
wt	299 plf	499 plf
	37 psf	62 psf
V/S	1.22 in.	

### Key

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

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

**8DT12**

**Table of safe superimposed service load (psf) and cambers**

**No Topping**

Strand Pattern	$e_e$ $e_c$	Span, ft.																	
		12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46
28-S	7.13	178	137	108	81	60	45	33											
	7.13	0.2	0.2	0.3	0.3	0.3	0.3	0.3											
48-S	5.13		188	143	110	86	68	53	42	33									
	5.13		0.4	0.5	0.5	0.6	0.7	0.7	0.7	0.7									
68-S	3.13			159	123	97	77	61	49	39	31								
	3.13			0.4	0.5	0.5	0.6	0.6	0.6	0.5	0.5								
68-D1	3.13									92	76	64	53	44	37	30			
	6.63									1.4	1.5	1.6	1.6	1.7	1.7	1.6			
88-D1	1.13															37	31		
	6.38															1.8	1.7		

**8DT12 + 2**

**Table of safe superimposed service load (psf) and cambers**

**2" Normal Weight Topping**

Strand Pattern	$e_e$ $e_c$	Span, ft.											
		12	14	16	18	20	22	24	26	28	30	32	34
28-S	7.13	200	150	116	83	58	39						
	7.13	0.2	0.2	0.2	0.3	0.3	0.3						
48-S	5.13			164	124	94	71	53	39				
	5.13			0.5	0.5	0.6	0.7	0.7	0.7				
68-S	3.13				198	151	117	90	70	50			
	3.13				0.4	0.5	0.5	0.6	0.6	0.6			
68-D1	3.13									98	79	64	50
	6.63									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.