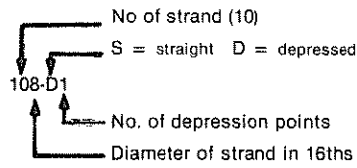


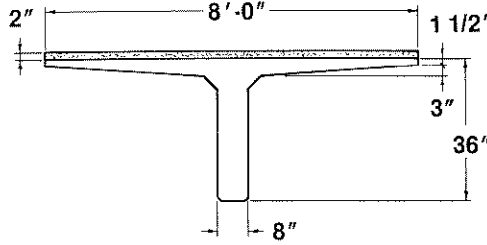
# SINGLE TEE

## 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 36"  
Normal Weight Concrete



## Section Properties

	Untopped	Topped
A =	570 in. <sup>2</sup>	—
I =	68,917 in. <sup>4</sup>	83,212 in. <sup>4</sup>
Y <sub>b</sub> =	26.01 in.	28.28 in.
Y <sub>t</sub> =	9.99 in.	9.72 in.
Z <sub>b</sub> =	2650 in. <sup>3</sup>	2942 in. <sup>3</sup>
Z <sub>t</sub> =	6899 in. <sup>3</sup>	8561 in. <sup>3</sup>
wt =	594 plf	794 plf
	74 psf	99 psf
V/S =	2.16 in.	

## Key

- 157 — Safe superimposed service load, psf
- 1.5 — Estimated camber at erection, in.
- 1.8 — Estimated long-time camber, in.

$f'_c = 5000 \text{ psi}$   
 $f_{pu} = 270,000 \text{ psi}$

**8ST36**

Table of safe superimposed service load (psf) and cambers

No Topping

Strand Pattern	e <sub>e</sub> e <sub>c</sub>	Span, ft.																							
		56	58	60	62	64	66	68	70	72	74	76	78	80	82	84	86	88	90	92	94	96	98	100	
128-D1	13.68	157	142	129	117	106	96	87	79	72	65	58	52	47	42										
	22.76	1.5	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.5	1.4	1.3	1.2	1.1	0.9										
148-D1	11.15	186	169	154	141	128	117	107	98	89	81	74	67	61	55	50	44								
	22.51	1.6	1.7	1.8	1.8	1.9	1.9	2.0	2.0	1.9	1.9	1.8	1.7	1.6	1.5	1.3	1.1								
168-D1	9.26								126	116	106	98	89	82	75	68	61	55	49	44					
	22.26								2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.1	1.9	1.8	1.6	1.4					
188-D1	7.79														96	87	80	72	66	59	53	48			
	22.01														2.4	2.4	2.4	2.4	2.3	2.2	2.0	1.8			
208-D1	6.61																			69	63	57	51	46	
	21.76																			1.8	1.6	1.2	0.8	0.4	
228-D1	5.65																					60	54	49	44
	21.51																					2.6	2.5	2.3	2.1

**8ST36 + 2**

Table of safe superimposed service load (psf) and cambers

2" Normal Weight Topping

Strand Pattern	e <sub>e</sub> e <sub>c</sub>	Span, ft.																						
		50	52	54	56	58	60	62	64	66	68	70	72	74	76	78	80	82						
108-D1	17.61	165	147	130	116	102	90	80	70	61	53													
	23.01	1.2	1.2	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.2													
128-D1	13.68		105	165	148	133	119	106	95	85	75	66	58											
	22.76		1.4	1.5	1.5	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.5											
148-D1	11.15			179	162	146	131	119	107	96	86	77	68	58										
	22.51			1.6	1.7	1.8	1.8	1.9	1.9	2.0	2.0	1.9	1.9	1.8										
168-D1	9.26										116	105	95	84	74	64	56							
	22.26										2.1	2.2	2.2	2.2	2.2	2.2	2.2							
188-D1	7.79																	79	69	61				
	22.01																	2.4	2.4	2.4				

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

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