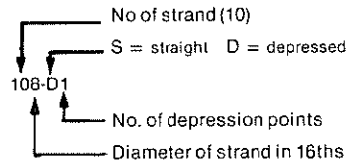


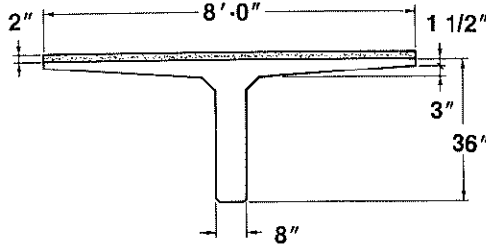
SINGLE TEE

8'-0" x 36"
Lightweight 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 =	570 in. ²	—
I =	68,917 in. ⁴	88,260 in. ⁴
Y _b =	26.01 in.	29.09 in.
Y _t =	9.99 in.	8.91 in.
Z _b =	2650 in. ³	3034 in. ³
Z _t =	6899 in. ³	9906 in. ³
wt =	455 plf	655 plf
	57 psf	82 psf
V/S =	2.16 in.	

Key

- 130 — Safe superimposed service load, psf
- 3.0 — Estimated camber at erection, in.
- 3.6 — Estimated long-time camber, in.

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

8LST36

Table of safe superimposed service load (psf) and cambers

No Topping

Strand Pattern	e _e e _c	Span, ft.																									
		62	64	66	68	70	72	74	76	78	80	82	84	86	88	90	92	94	96	98	100	102	104	106	108	110	
128-D1	12.68	130	120	110	101	93	85	78	72	66	60	55	50	46	42	38	35										
	22.76	3.0	3.1	3.2	3.3	3.4	3.4	3.5	3.5	3.4	3.4	3.3	3.3	3.2	3.0	2.9	2.7										
148-D1	10.29		142	130	120	111	102	95	87	81	74	69	63	58	54	49	45	41	38								
	22.51		3.5	3.6	3.7	3.8	3.8	3.9	4.0	4.1	4.1	4.1	4.1	4.1	4.0	3.8	3.7	3.5	3.3								
168-D1	8.51									95	88	82	76	70	65	60	56	52	48	44	40						
	22.26									4.6	4.7	4.7	4.7	4.7	4.7	4.7	4.6	4.5	4.4	4.2	3.9						
188-D1	7.12									5.2	5.1	5.0	4.8	4.7	4.4	4.1											
	22.01																7.1	6.6	6.2	5.7	5.3	4.9	4.5	4.2	3.9		
208-D1	6.01																					5.8	5.4	5.0	4.6	4.3	
	21.76																					4.6	4.1	3.5	2.8	2.0	
228-D1	5.11																										46
	21.51																										4.8
																											2.9

8LST36 + 2

Table of safe superimposed service load (psf) and cambers

2" Normal Weight Topping

Strand Pattern	e _e e _c	Span, ft.																								
		50	52	54	56	58	60	62	64	66	68	70	72	74	76	78	80	82	84	86						
108-D1	17.61	179	161	145	130	117	105	94	84	75	67	60	53	47												
	23.01	2.0	2.2	2.3	2.4	2.5	2.6	2.6	2.7	2.7	2.8	2.8	2.8	2.8												
128-D1	13.68		197	178	161	146	132	120	108	98	88	80	72	65	58	52										
	22.76		2.4	2.5	2.6	2.8	2.9	3.0	3.1	3.2	3.3	3.4	3.4	3.5	3.5	3.4										
148-D1	11.15									132	120	109	99	90	82	75	67	61	55							
	22.51									3.5	3.6	3.7	3.8	3.9	4.0	4.1	4.1	4.1	4.1							
168-D1	9.26																	83	76	69	63	57				
	22.26																	4.6	4.7	4.7	4.7	4.7				
																		2.5	2.2	1.8	1.4	0.9				

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.