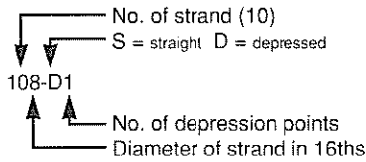


Strand Pattern Designation



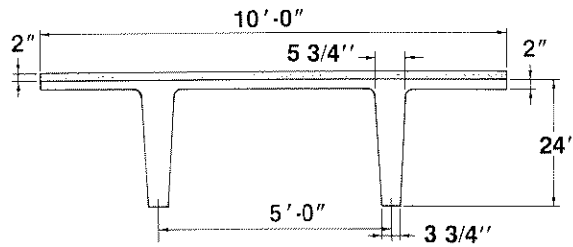
Safe loads shown include dead load of 10 psf for untopped members and 15 psf for topped members. Remainder is live load. Long-time cambers include superimposed dead load but do not include live load.

Key

- 124 — Safe superimposed service load, psf
- 0.9 — Estimated camber at erection, in.
- 1.1 — Estimated long-time camber, in.

DOUBLE TEE

10'-0" x 24"
Lightweight Concrete



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

Section Properties

	Untopped	Topped
A	= 449 in. ²	—
I	= 22,469 in. ⁴	31,515 in. ⁴
y_b	= 17.77 in.	20.53 in.
y_t	= 6.23 in.	5.47 in.
Z_b	= 1,264 in. ³	1,535 in. ³
Z_t	= 3,607 in. ³	5,761 in. ³
wt	= 359 plf	609 plf
	36 psf	61 psf
V/S	= 1.35 in.	

10LDT24

Table of safe superimposed service load (psf) and cambers

No Topping

Strand Pattern	e_e e_c	Span, ft.																								
		32	34	36	38	40	42	44	46	48	50	52	54	56	58	60	62	64	66	68	70	72	74	76		
68-S	11.77	124	106	92	80	69	60	52	46	40	34	30														
	11.77	0.9	1.0	1.1	1.1	1.2	1.2	1.3	1.3	1.3	1.3	1.2														
88-S	9.77	150	130	113	99	86	76	66	58	51	45	40	35	30												
	9.77	1.0	1.1	1.2	1.3	1.4	1.5	1.5	1.5	1.6	1.6	1.6	1.5	1.4												
88-D1	9.77	181	158	139	123	109	97	86	77	69	61	55	49	44	39	35	31									
	15.02	1.6	1.7	1.9	2.0	2.2	2.3	2.4	2.6	2.7	2.7	2.8	2.8	2.8	2.8	2.8	2.7									
108-D1	7.77							110	98	89	80	72	65	59	53	48	43	39	35	32						
	14.77							2.8	3.0	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.8	3.7	3.6	3.5						
128-D1	6.10															60	55	50	45	41	37	34	31			
	14.52															4.4	4.5	4.6	4.6	4.6	4.5	4.4	4.2			
148-D1	4.91																						42	38		
	14.27																						5.4	5.3		

10LDT24 + 2

Table of safe superimposed service load (psf) and cambers

2" Normal Weight Topping

Strand Pattern	e_e e_c	Span, ft.																								
		24	26	28	30	32	34	36	38	40	42	44	46	48	50	52	54	56	58	60	62	64				
48-S	14.77	182	148	121	100	82	67	55	44	35																
	14.77	0.5	0.5	0.6	0.7	0.7	0.8	0.8	0.9	0.9																
68-S	11.77			171	143	120	100	84	71	59	49	41	33													
	11.77			0.7	0.8	0.9	1.0	1.1	1.1	1.2	1.2	1.3	1.3													
68-D1	11.77			177	149	127	108	92	79	67	57	48	40	33												
	15.27			1.0	1.1	1.2	1.4	1.4	1.5	1.6	1.7	1.7	1.8	1.8												
88-D1	9.77					179	155	134	117	101	88	77	66	57	50	43	36									
	15.02					1.6	1.7	1.9	2.0	2.2	2.3	2.4	2.6	2.7	2.7	2.8	2.8									
108-D1	7.77															102	90	79	70	61	53	47	40			
	14.77															2.8	3.0	3.2	3.3	3.4	3.5	3.6	3.7			
128-D1	6.10																						48	41		
	14.52																						4.4	4.5		

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.