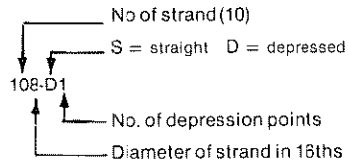


DOUBLE TEE

Strand Pattern Designation

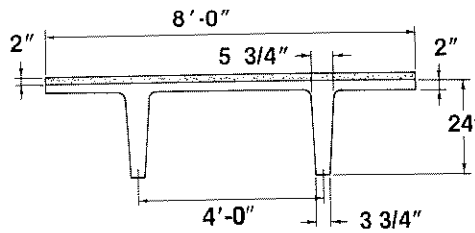


Safe loads shown include dead load of 10 psf for untopped members and 15 psf for topped members. Remainder is live load. Long-time cambers include superimposed dead load but do not include live load.

Key

- 171 — Safe superimposed service load, psf
- 0.6 — Estimated camber at erection, in.
- 0.7 — Estimated long-time camber, in.

8'-0" x 24"
Normal Weight Concrete



Section Properties

	Untopped	Topped
A	401 in. ²	—
I	20,985 in. ⁴	27,720 in. ⁴
Y _b	17.15 in.	19.27 in.
Y _t	6.85 in.	6.73 in.
Z _b	1224 in. ³	1438 in. ³
Z _t	3063 in. ³	4119 in. ³
wt	418 plf	618 plf
	52 psf	77 psf
V/S	1.41 in.	

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

8DT24

Table of safe superimposed service load (psf) and cambers

No Topping

Strand Pattern	e _o e _c	Span, ft.																						
		30	32	34	36	38	40	42	44	46	48	50	52	54	56	58	60	62	64	66	68	70	72	74
68-S	11.15	171	145	124	106	91	78	67	57	49	41	35												
	14.15	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.6	0.6											
88-S	9.15	176	152	131	113	98	85	74	64	56	48	41	35											
	14.15	0.7	0.7	0.8	0.8	0.8	0.9	0.9	0.9	0.9	0.8	0.8	0.7	0.6	0.3									
88-D1	9.15			187	163	143	126	111	98	87	77	68	60	53	47	41	36	31						
	14.40			1.1	1.2	1.3	1.4	1.5	1.5	1.6	1.6	1.6	1.6	1.6	1.5	1.4	1.3	1.2						
108-D1	7.15							142	127	113	101	90	81	72	64	57	51	46	40	36				
	14.15							1.7	1.8	1.9	2.0	2.0	2.1	2.1	2.1	2.1	2.0	2.0	1.8	1.7				
128-D1	5.48															81	73	66	59	53	48	43	38	34
	13.90															2.5	2.5	2.5	2.5	2.5	2.4	2.3	2.1	1.9
148-D1	4.29																				60	54	49	44
	13.65																				2.9	2.9	2.8	2.6

8DT24 + 2

Table of safe superimposed service load (psf) and cambers

2" Normal Weight Topping

Strand Pattern	e _o e _c	Span, ft.																					
		26	28	30	32	34	36	38	40	42	44	46	48	50	52	54	56	58	60	62	64	66	
48-S	14.15	180	147	120	98	80	65	52	41	32													
	14.15	6.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5													
68-S	11.15			171	143	120	100	84	70	58	47	38											
	14.15			0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
68-D1	11.15			180	153	130	110	93	79	67	56	46	38										
	14.65			0.8	0.8	0.9	1.0	1.0	1.0	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
88-D1	9.15					186	161	139	121	105	91	78	67	58	49	41	34						
	14.40					1.1	1.2	1.3	1.4	1.5	1.5	1.6	1.6	1.6	1.6	1.6	1.5						
108-D1	7.15							139	122	107	94	82	72	62	54	46	40						
	14.15							1.7	1.8	1.9	2.0	2.0	2.1	2.1	2.1	2.1	2.0						
128-D1	5.48																	72	64	56	48	41	
	13.90																	2.5	2.5	2.5	2.5	2.5	

Strength based on strain compatibility; bottom tension limited to 12√f'_c; see pages 2-3-2-5 for explanation
Values below heavy line require release strengths higher than 3500 psi.