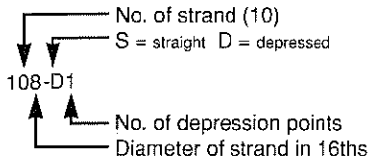


**Strand Pattern Designation**



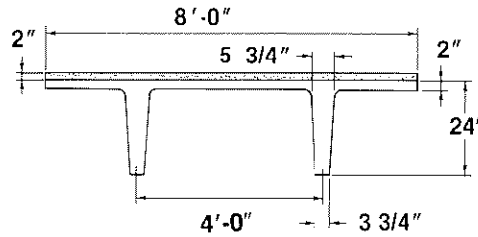
Safe loads shown include dead load of 10 psf for untopped members and 15 psf for topped members. Remainder is live load. Long-time cambers include superimposed dead load but do not include live load.

**Key**

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

**DOUBLE TEE**

**8'-0" x 24"**  
**Normal Weight Concrete**



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

**Section Properties**

	Untopped	Topped
A	401 in. <sup>2</sup>	—
I	20,985 in. <sup>4</sup>	27,720 in. <sup>4</sup>
$y_b$	17.15 in.	19.27 in.
$y_t$	6.85 in.	6.73 in.
$Z_b$	1,224 in. <sup>3</sup>	1,438 in. <sup>3</sup>
$Z_t$	3,063 in. <sup>3</sup>	4,119 in. <sup>3</sup>
wt	418 plf	618 plf
	52 psf	77 psf
V/S	1.41 in.	

**8DT24**

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

**No Topping**

Strand Pattern	$e_e$ $e_c$	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	173	147	126	108	92	79	68	58	50	43	36	30											
	11.15	0.5	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.6	0.6	0.5											
88-S	9.15	180	155	134	116	100	87	76	66	57	49	43	36	31										
	9.15	0.7	0.7	0.8	0.8	0.8	0.8	0.9	0.8	0.8	0.8	0.7	0.6	0.5										
88-D1	9.15			190	166	146	129	114	100	89	79	70	62	54	48	42	37	32						
	14.40			1.1	1.2	1.3	1.4	1.5	1.5	1.6	1.6	1.6	1.6	1.5	1.4	1.3	1.2							
108-D1	7.15							145	129	116	103	92	83	74	66	59	53	47	42	37	32			
	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	1.5			
128-D1	5.48															83	75	68	61	55	49	44	40	35
	13.90															2.5	2.5	2.5	2.5	2.5	2.4	2.3	2.1	1.9
148-D1	4.29																				61	55	50	45
	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	$e_e$ $e_c$	Span, ft.																					
		26	28	30	32	34	36	38	40	42	44	46	48	50	52	54	56	58	60	62	64		
48-S	14.15	183	149	122	100	82	66	53	42	33													
	14.15	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5													
68-S	11.15		175	147	123	103	86	72	60	49	39												
	11.15		0.5	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7												
68-D1	11.15				184	156	133	113	96	81	69	58	48	39									
	14.65				0.7	0.8	0.9	0.9	1.0	1.0	1.0	1.0	1.0	1.0									
88-D1	9.15					190	165	143	124	107	93	80	69	59	51	43							
	14.40					1.1	1.2	1.3	1.4	1.5	1.5	1.6	1.6	1.6	1.6	1.6							
108-D1	7.15							142	124	109	96	84	74	64	56	48							
	14.15							1.7	1.8	1.9	2.0	2.0	2.1	2.1	2.1	2.1							
128-D1	5.48															74	65	57	49				
	13.90															2.5	2.5	2.5	2.5				

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.