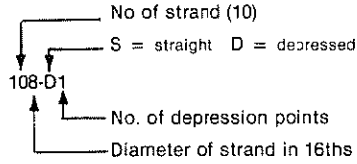


DOUBLE TEE

Strand Pattern Designation

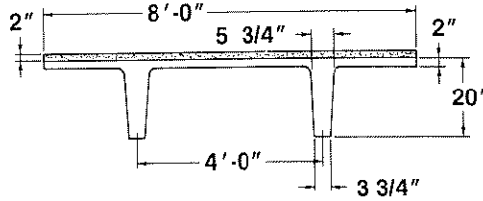


Safe loads shown include dead load of 10 psf for untopped members and 15 psf for topped members. Remainder is live load. Long-time cambers include superimposed dead load but do not include live load.

Key

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

8'-0" x 20"
Normal Weight Concrete



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

Section Properties

	Untopped	Topped
A =	363 in. ²	—
I =	12,551 in. ⁴	16,935 in. ⁴
$Y_b =$	14.59 in.	16.45 in.
$Y_t =$	5.41 in.	5.55 in.
$Z_b =$	860 in. ³	1029 in. ³
$Z_t =$	2320 in. ³	3051 in. ³
wt =	378 plf	578 plf
	47 psf	72 psf
V/S =	1.35 in.	

8DT20

Table of safe superimposed service load (psf) and cambers

No 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	66	68
48-S	11.59	173	142	117	97	81	68	56	47	39	32													
	11.59	0.4	0.5	0.5	0.6	0.6	0.6	0.7	0.7	0.6	0.6													
68-S	8.59	180	150	126	106	90	76	65	55	46	39	32												
	8.59	0.5	0.6	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.7	0.7												
68-D1	8.59		199	168	143	123	106	91	78	68	58	50	43	37	31									
	12.09		0.8	0.9	1.0	1.1	1.1	1.2	1.2	1.3	1.3	1.3	1.2	1.2	1.1									
88-D1	6.59					166	144	126	110	96	84	74	65	57	50	44	38	33						
	11.84					1.3	1.4	1.5	1.6	1.7	1.8	1.8	1.8	1.9	1.8	1.8	1.7	1.6						
108-D1	4.59												75	67	59	52	46	41	36	31				
	11.59												2.2	2.3	2.3	2.3	2.2	2.2	2.0	1.8				
128-D1	2.92																	53	47	42	37	33		
	11.34																	2.6	2.5	2.4	2.3	2.0		

8DT20 + 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
48-S	11.59	176	141	114	92	74	59	47	36								
	11.59	0.4	0.5	0.5	0.6	0.6	0.6	0.6	0.6								
68-S	8.59	189	155	128	105	87	71	58	47	37							
	8.59	0.6	0.6	0.7	0.7	0.8	0.8	0.8	0.8	0.8							
68-D1	8.59		169	142	119	100	84	70	59	48	39						
	12.09		0.9	1.0	1.1	1.1	1.2	1.2	1.3	1.3	1.3						
88-D1	6.59					169	145	124	106	91	78	66	56	48	40		
	11.84					1.3	1.4	1.5	1.6	1.7	1.8	1.8	1.9	1.9	1.8		
108-D1	4.59												68	59	50		
	11.59												2.2	2.2	2.3		

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.