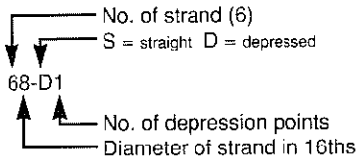


Strand Pattern Designation



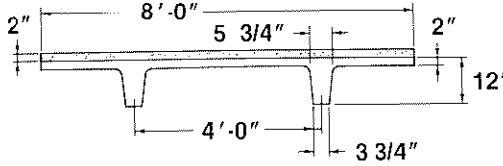
Safe loads shown include dead load of 10 psf for untopped members and 15 psf for topped members. Remainder is live load. Long-time cambers include superimposed dead load but do not include live load.

Key

- 186 — Safe superimposed service load, psf
- 0.2 — Estimated camber at erection, in.
- 0.3 — Estimated long-time camber, in.

DOUBLE TEE

8'-0" x 12"
Lightweight Concrete



Section Properties

	Untopped	Topped
A =	287 in. ²	—
I =	2,872 in. ⁴	4,819 in. ⁴
y _b =	9.13 in.	10.82 in.
y _t =	2.87 in.	3.18 in.
Z _b =	315 in. ³	445 in. ³
Z _t =	1,001 in. ³	1,515 in. ³
wt =	229 plf	429 plf
	29 psf	54 psf
V/S =	1.22 in.	

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

8LDT12

Table of safe superimposed service load (psf) and cambers

No Topping

Strand Pattern	e _e e _c	Span, ft.															
		12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42
28-S	7.13	186	144	116	89	68	53	41	31								
	7.13	0.2	0.3	0.4	0.5	0.5	0.6	0.6	0.6								
48-S	5.13		195	153	120	95	77	62	50	41	33						
	5.13		0.6	0.7	0.8	1.0	1.1	1.2	1.3	1.3	1.3						
68-S	3.13				169	133	106	86	70	57	47	39	32				
	3.13				0.6	0.8	0.9	1.0	1.0	1.1	1.1	1.1	1.0				
68-D1	3.13													72	61	52	45
	6.63													2.6	2.8	3.0	3.1

8LDT12 + 2

Table of safe superimposed service load (psf) and cambers

2" Normal Weight Topping

Strand Pattern	e _e e _c	Span, ft.															
		12	14	16	18	20	22	24	26	28	30	32	34	36	38		
28-S	7.13	207	157	123	91	66	47	33									
	7.13	0.2	0.3	0.4	0.5	0.5	0.6	0.6									
48-S	5.13				175	134	103	80	62	48	36						
	5.13				0.7	0.8	1.0	1.1	1.2	1.3	1.3						
68-S	3.13					162	126	99	79	62	47						
	3.13					0.8	0.9	1.0	1.0	1.1	1.1						
68-D1	3.13													72	59	46	33
	6.63													2.6	2.8	3.0	3.1

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.