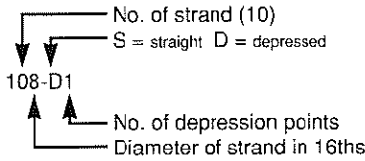


Strand Pattern Designation



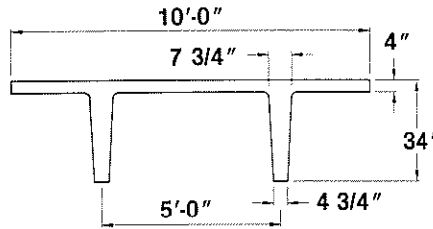
Because these units are pretopped and are typically used in parking structures, safe loads shown do not include any superimposed dead loads. Loads shown are live load. Long-time cambers do not include live load.

Key

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

PRETOPPED DOUBLE TEE

10'-0" x 34"



Section Properties

	Normal Weight	Lightweight
A	= 855 in. ²	855 in. ²
I	= 80,780 in. ⁴	80,780 in. ⁴
y _b	= 25.07 in.	25.07 in.
y _t	= 8.93 in.	8.93 in.
Z _b	= 3,222 in. ³	3,222 in. ³
Z _t	= 9,046 in. ³	9,046 in. ³
wt	= 891 plf	683 plf
	89 psf	68 psf
V/S	= 2.32 in.	2.32 in.

$f'_c = 5,000$ psi

$f_{pu} = 270,000$ psi

10DT34

Table of safe superimposed service load (psf) and cambers

No Topping

Strand Pattern	e _e e _c	Span, ft.																						
		46	48	50	52	54	56	58	60	62	64	66	68	70	72	74	76	78	80	82	84	86	88	90
128-D1	13.40	172	152	135	119	105	92	81	71	62	54	46	39	33										
	21.82	0.9	1.0	1.0	1.0	1.0	1.0	1.0	0.9	0.9	0.8	0.7	0.6	0.5										
148-D1	12.21		185	165	147	131	116	104	92	81	72	63	55	48	41	35								
	21.57		1.2	1.2	1.2	1.3	1.3	1.3	1.2	1.2	1.1	1.0	0.9	0.8	0.6									
168-D1	12.07			196	175	157	141	127	113	102	91	81	72	64	56	49	43	37	32					
	21.32			1.4	1.5	1.5	1.6	1.6	1.6	1.6	1.6	1.5	1.4	1.3	1.2	1.1	0.9	0.7						
188-D1	10.68				181	163	147	132	119	108	97	87	78	70	62	55	48	42	37	32				
	21.07				1.7	1.7	1.8	1.8	1.9	1.9	1.9	1.8	1.8	1.7	1.6	1.5	1.4	1.2	1.0	0.7				
208-D1	9.57					184	167	151	137	124	112	101	91	82	74	66	59	53	47	41	36	31		
	20.82					1.9	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.0	1.9	1.8	1.6	1.5	1.2	1.0	0.7		
228-D1	8.66									140	127	115	105	95	86	78	70	63	56	50	45	39	34	
	20.57									2.3	2.3	2.3	2.4	2.3	2.3	2.3	2.2	2.0	1.9	1.7	1.5	1.3	1.0	

10LDT34

Table of safe superimposed service load (psf) and cambers

No Topping

Strand Pattern	e _e e _c	Span, ft.																						
		46	48	50	52	54	56	58	60	62	64	66	68	70	72	74	76	78	80	82	84	86	88	90
128-D1	13.40	189	169	152	136	122	109	98	88	79	71	63	56	50	44	39	34							
	21.82	1.6	1.6	1.7	1.8	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.7	1.6	1.5	1.3							
148-D1	12.21		182	164	148	134	121	109	99	89	80	72	65	59	52	47	42	37	32					
	21.57		2.0	2.1	2.2	2.3	2.3	2.4	2.4	2.4	2.4	2.4	2.4	2.3	2.2	2.1	1.9	1.8	1.6					
168-D1	12.07			192	174	158	144	131	119	108	98	89	81	73	67	60	54	49	44	39	35	31		
	21.32			2.4	2.5	2.7	2.8	2.9	2.9	3.0	3.1	3.1	3.1	3.0	3.0	2.9	2.8	2.7	2.5	2.4	2.1	1.9		
188-D1	10.68				198	180	164	150	136	125	114	104	95	87	79	72	66	60	54	49	44	39	35	
	21.07				2.7	2.9	3.0	3.1	3.2	3.3	3.4	3.5	3.6	3.6	3.6	3.5	3.5	3.4	3.2	3.1	2.9	2.7	2.4	
208-D1	9.57									141	129	118	109	100	91	84	76	70	64	58	53	48	43	
	20.82									3.6	3.7	3.8	3.9	4.0	4.0	4.0	4.1	4.0	3.9	3.8	3.6	3.4	3.2	
228-D1	8.66																							
	20.57									4.9	5.0	5.1	5.2	5.2	5.3	5.2	5.2	5.1	4.9	4.6	4.3	4.1	3.8	

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.