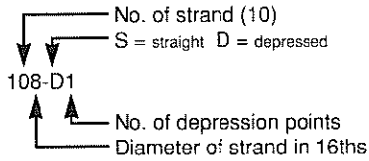


Strand Pattern Designation



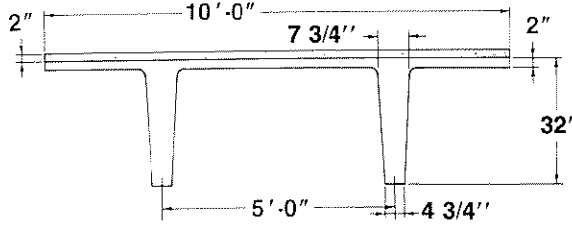
Safe loads shown include dead load of 10 psf for untopped members and 15 psf for topped members. Remainder is live load. Long-time cambers include superimposed dead load but do not include live load.

Key

- 130 — Safe superimposed service load, psf
- 2.4 — Estimated camber at erection, in.
- 2.9 — Estimated long-time camber, in.

DOUBLE TEE

10'-0" x 32"
Lightweight Concrete



Section Properties

	Untopped	Topped
A	= 615 in. ²	—
I	= 59,720 in. ⁴	82,732 in. ⁴
y _b	= 21.98 in.	25.37 in.
y _t	= 10.02 in.	8.63 in.
Z _b	= 2,717 in. ³	3,261 in. ³
Z _t	= 5,960 in. ³	9,587 in. ³
wt	= 491 plf	741 plf
	49 psf	74 psf
V/S	= 1.69 in.	

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

10LDT32

Table of safe superimposed service load (psf) and cambers

No Topping

Strand Pattern	e _e e _c	Span, ft.																							
		54	56	58	60	62	64	66	68	70	72	74	76	78	80	82	84	86	88	90	92	94	96	98	
128-D1	12.81	130	118	108	98	89	82	74	68	62	56	51	47	42	38	35	31								
	18.73	2.4	2.5	2.6	2.7	2.7	2.7	2.8	2.8	2.8	2.7	2.7	2.6	2.5	2.4	2.2	2.0								
148-D1	10.48	153	139	127	116	107	98	89	82	75	69	63	58	53	49	44	40	37	33						
	18.48	2.7	2.8	2.9	3.0	3.1	3.2	3.3	3.3	3.4	3.3	3.3	3.3	3.2	3.1	3.0	2.8	2.6	2.4						
168-D1	8.98	175	160	147	135	124	114	105	96	89	82	75	69	64	59	54	50	46	42	38	35				
	18.23	2.9	3.1	3.2	3.3	3.5	3.6	3.7	3.8	3.8	3.9	3.9	4.0	3.9	3.9	3.8	3.6	3.5	3.3	3.1	2.8				
188-D1	7.59							119	110	101	94	87	80	74	69	63	59	54	50	46	42	39	36		
	17.98							4.0	4.1	4.2	4.3	4.4	4.4	4.4	4.4	4.4	4.4	4.3	4.1	3.9	3.7	3.4	3.1		
208-D1	6.48													84	78	72	67	62	58	53	48	44	41	38	
	17.73													4.9	4.9	4.9	4.9	4.9	4.8	4.7	4.5	4.3	4.0	3.7	
228-D1	5.57																	70	64	59	55	50	46	42	
	17.48																	5.4	5.4	5.3	5.2	5.0	4.8	4.6	

10LDT32 + 2

Table of safe superimposed service load (psf) and cambers

2" Normal Weight Topping

Strand Pattern	e _e e _c	Span, ft.																						
		42	44	46	48	50	52	54	56	58	60	62	64	66	68	70	72	74	76	78	80	82		
108-D1	16.08	192	169	150	133	118	105	93	82	73	64	56	49	43										
	18.98	1.5	1.6	1.7	1.8	1.9	2.0	2.1	2.1	2.2	2.2	2.2	2.3	2.3										
128-D1	12.81			188	168	150	135	121	108	97	87	77	69	61	55	48								
	18.73			2.0	2.1	2.1	2.3	2.4	2.5	2.6	2.7	2.7	2.8	2.8	2.8									
148-D1	10.48			199	178	161	145	130	118	106	96	86	77	70	62	56	50							
	18.48			2.3	2.4	2.5	2.7	2.8	2.9	3.0	3.1	3.2	3.3	3.3	3.4	3.3	3.3							
168-D1	8.98					168	152	138	125	113	103	93	84	76	69	62	56							
	18.23					2.9	3.1	3.2	3.3	3.5	3.6	3.7	3.8	3.8	3.9	3.9	4.0							
188-D1	7.59													108	99	90	82	74	67	61	55			
	17.98													4.0	4.1	4.2	4.3	4.4	4.4	4.4	4.4			
208-D1	6.48																	78	71	65	58			
	17.43																	4.8	4.9	4.9	4.9			

Strength based on strain compatibility; bottom tension limited to 12√f'_c; see pages 2-3-2-6 for explanation. Shaded values require release strengths higher than 3500 psi.