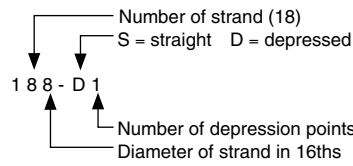


3.4 Double-Tee Load Tables (cont.)

Strand Pattern Designation

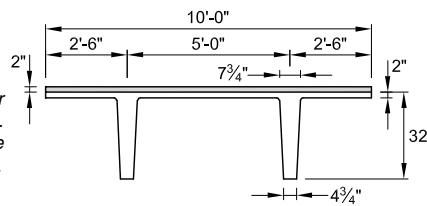


Safe loads shown include dead load of 10 lb/ft² for untopped members and 15 lb/ft² for topped members. Remainder is live load. Long-time cambers include superimposed dead load but do not include live load.

Key

- 180 – Safe superimposed service load, lb/ft²
- 1.7 – Estimated camber at erection, in.
- 2.2 – Estimated long-time camber, in.

10'-0" x 32" Lightweight Concrete



$f'_c = 5000 \text{ psi}$

$f_{pu} = 270,000 \text{ psi}$

1/2-in.-diameter regular strand

Check with regional producers for availability.

Section Properties

	No Topping	2 in. Topping
A	615 in. ²	–
I	59,720 in. ⁴	83,019 in. ⁴
y _b	21.98 in.	25.40 in.
y _t	10.02 in.	8.60 in.
S _b	2717 in. ³	3269 in. ³
S _t	5960 in. ³	9653 in. ³
w _t	491 lb/ft	741 lb/ft
DL	49 lb/ft ²	74 lb/ft ²
V/S	1.69 in.	

10LDT32

Table of safe superimposed service load, lb/ft², and cambers, in.

No Topping

Strand pattern	y _s (end) y _s (center) in.	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	92	94	96	98	100	102	
128-S	7.00	180	163	147	134	122	111	101	92	84	77	70	64	58	53	49	44	40	37	33	30	27									
	7.00	1.7	1.8	1.9	2.0	2.1	2.1	2.2	2.2	2.2	2.3	2.2	2.2	2.2	2.1	2.0	1.9	1.7	1.5	1.3	1.0	0.7									
		2.2	2.2	2.3	2.4	2.4	2.5	2.5	2.5	2.4	2.4	2.3	2.1	2.0	1.8	1.5	1.2	0.8	0.4	-0.2	-0.7	-1.4									
148-S	8.00	186	168	153	139	127	116	106	97	89	82	75	69	63	58	53	49	45	41	37	33	29	26								
	8.00	2.1	2.2	2.3	2.3	2.4	2.5	2.6	2.6	2.6	2.7	2.7	2.6	2.6	2.5	2.4	2.3	2.2	2.0	1.7	1.4	1.1	0.8								
		2.6	2.6	2.7	2.8	2.8	2.9	2.9	2.9	2.8	2.8	2.7	2.6	2.4	2.2	1.9	1.6	1.3	0.8	0.3	-0.3	-1.0	-1.8								
168-S	9.00	186	170	155	142	130	118	107	99	90	83	76	70	65	59	54	50	46	42	38	34	30	27								
	9.00	2.3	2.4	2.5	2.6	2.7	2.8	2.9	2.9	3.0	3.0	3.0	2.9	2.9	2.8	2.7	2.6	2.4	2.2	2.0	1.7	1.4	1.0								
		2.9	3.0	3.1	3.1	3.2	3.2	3.2	3.2	3.1	3.0	2.8	2.6	2.4	2.1	1.8	1.4	1.0	0.5	-0.2	-0.9	-1.7									
188-S	10.00	183	166	151	138	125	114	104	95	88	81	74	68	63	58	53	49	45	41	38	34	30	27								
	10.00	2.5	2.6	2.7	2.8	2.9	3.0	3.1	3.1	3.2	3.2	3.2	3.1	3.1	3.0	2.9	2.7	2.6	2.4	2.1	1.8	1.4	1.0								
		3.1	3.2	3.3	3.4	3.4	3.4	3.4	3.3	3.2	3.1	2.9	2.7	2.5	2.1	1.8	1.4	0.9	0.4	-0.3	-1.1	-1.9									
188-D1	14.39									152	139	128	118	108	100	92	85	78	72	66	60	55	51	46	43	40	37	34	32	30	
	4.00									3.9	4.0	4.2	4.3	4.4	4.5	4.6	4.6	4.6	4.5	4.4	4.3	4.1	3.9	3.7	3.4	3.1	2.7	2.3	1.9		
										4.7	4.8	4.8	4.9	4.9	4.8	4.8	4.7	4.5	4.3	3.9	3.6	3.1	2.6	2.0	1.5	0.9	0.2	-0.5	-1.3	-2.2	
208-D1	15.50														110	102	94	87	80	74	68	63	58	53	48	44	41	38	35	32	
	4.25														4.9	5.0	5.0	5.1	5.1	5.1	5.1	5.1	5.0	4.8	4.6	4.3	4.0	3.7	3.3	2.9	
															5.4	5.4	5.3	5.2	5.0	4.8	4.6	4.2	3.8	3.3	2.7	2.0	1.2	0.5	-0.3	-1.2	

10LDT32 + 2

Table of safe superimposed service load, lb/ft², and cambers, in.

2 in. Normalweight Topping

Strand pattern	y _s (end) y _s (center) in.	Span, ft																														
		44	46	48	50	52	54	56	58	60	62	64	66	68	70	72	74	76	78	80	82	84	86	88	90	92						
128-S	7.00	199	177	159	142	128	114	103	92	83	74	67	60	53	47	41	35	28														
	7.00	1.6	1.7	1.8	1.9	2.0	2.1	2.1	2.2	2.2	2.2	2.3	2.2	2.2	2.2	2.1	2.0	1.9														
		1.6	1.6	1.6	1.6	1.6	1.5	1.4	1.3	1.2	1.0	0.8	0.5	0.2	-0.2	-0.6	-1.1	-1.7														
148-S	8.00									183	165	148	134	121	109	98	89	80	72	64	56	49	42	36	31							
	8.00									2.1	2.2	2.3	2.3	2.4	2.5	2.6	2.6	2.6	2.7	2.7	2.6	2.6	2.5	2.4	2.3							
										1.9	1.9	1.9	1.8	1.7	1.6	1.4	1.2	1.0	0.7	0.3	-0.1	-0.5	-1.0	-1.6								
168-S	9.00									184	166	150	136	123	112	100	89	79	71	62	55	48	42	36	31	26						
	9.00									2.3	2.4	2.5	2.6	2.7	2.8	2.9	2.9	3.0	3.0	3.0	3.0	2.9	2.8	2.7	2.6	2.5						
										2.1	2.1	2.1	2.1	2.0	1.9	1.7	1.6	1.3	1.1	0.7	0.4	-0.1	-0.6	-1.1	-1.8	-2.5						
188-S	10.00									182	165	149	135	121	107	95	85	76	68	60	53	46	40	34	29							
	10.00									2.5	2.6	2.7	2.8	2.9	3.0	3.1	3.1	3.2	3.2	3.2	3.2	3.1	3.0	2.9	2.8							
										2.3	2.3	2.2	2.2	2.1	1.9	1.7	1.5	1.3	1.0	0.6	0.2	-0.3	-0.8	-1.5	-2.1							
188-D1	14.39														149	136	124	112	100	90	80	72	64	56	49	42	36	31	26			
	4.00														3.9	4.0	4.2	4.3	4.4	4.5	4.6	4.6	4.6	4.6	4.5	4.4	4.3	4.1	3.9			
															3.1	3.0	2.9	2.7	2.5	2.2	1.9	1.5	1.1	0.5	-0.1	-0.9	-1.7	-2.6	-3.6			
208-D1	15.50																			103	92	83	74	66	59	52	45	39	34	28		
	4.25																			4.9	5.0	5.0	5.1	5.1	5.1	5.1	5.1	5.0	4.8	4.6		
																				2.8	2.5	2.1	1.7	1.2	0.7	0.0	-0.7	-1.5	-2.5	-3.5		

Strength is based on strain compatibility; bottom tension is limited to 12√f_c; see pages 3-8 through 3-11 for explanation. Shaded values require release strengths higher than 3500 psi.