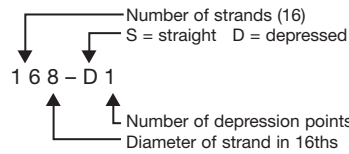


3.4 Double-Tee Load Tables (cont.)

Strand Pattern Designation

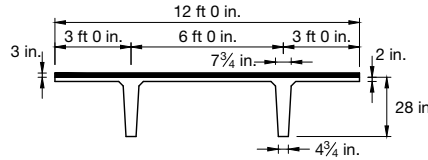


Load capacities shown include dead load of 10 lb/ft² for untopped members and 15 lb/ft² for topped members. Remainder is live load. Long-time cambers include superimposed dead load but do not include live load.

- Key
 146 – Superimposed service load capacity, lb/ft²
 1.4 – Estimated camber at erection, in.
 1.8 – Estimated long-time camber, in.

Check with regional producers for availability.

12 ft 0 in. x 28 in.
 lightweight (115 lb/ft³) concrete



$f'_c = 5000$ psi
 $f_{pu} = 270,000$ psi
 1/2 in. diameter regular strand

Section Properties

	No topping	3 in. topping ($f'_c = 3000$ psi)
A	= 613 in. ²	–
I	= 43,700 in. ⁴	68,216 in. ⁴
y_b	= 20.13 in.	24.33 in.
y_t	= 7.87 in.	6.67 in.
S_b	= 2171 in. ³	2803 in. ³
S_t	= 5552 in. ³	10,230 in. ³
wt	= 490 lb/ft	940 lb/ft
DL	= 41 lb/ft ²	78 lb/ft ²
V/S	= 1.57 in.	

12LDT28
 No topping

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

Strand pattern	y_s (end) y_s (center), in.	Span, ft																										
		40	42	44	46	48	50	52	54	56	58	60	62	64	66	68	70	72	74	76	78	80	82	84	86	88	90	
108-S	6.00	146	132	116	102	90	84	75	67	60	54	49	44	40	36	32	28											
	6.00	1.4	1.5	1.6	1.7	1.7	1.8	1.9	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.7	1.6											
		1.8	1.9	2.0	2.1	2.1	2.1	2.2	2.2	2.1	2.0	1.9	1.7	1.5	1.3	0.9	0.6											
128-S	7.00	170	150	135	122	110	98	90	80	73	66	60	55	50	40	41	37	33	29									
	7.00	1.6	1.7	1.8	2.0	2.1	2.2	2.3	2.4	2.5	2.5	2.5	2.6	2.5	2.5	2.4	2.3	2.1	2.0									
		2.0	2.1	2.2	2.4	2.5	2.5	2.6	2.6	2.5	2.5	2.5	2.3	2.2	2.1	1.9	1.5	1.0	0.7									
148-S	8.00	187	166	149	132	121	109	99	90	81	74	68	63	58	52	47	42	39	35	32	29							
	8.00	1.8	1.9	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.8	2.8	2.8	2.8	2.7	2.6	2.6	2.5	2.3	2.1							
		2.3	2.4	2.6	2.8	2.8	2.9	3.0	3.1	3.1	3.1	3.1	2.9	2.7	2.6	2.4	2.1	1.8	1.4	0.9	0.4							
168-S	9.00	186	167	151	136	123	112	101	92	84	76	70	64	58	53	48	45	42	36	33	30							
	9.00	2.1	2.2	2.3	2.5	2.6	2.7	2.9	3.0	3.0	3.1	3.1	3.1	3.1	3.1	3.0	2.9	2.8	2.5	2.3	2.3							
		2.6	2.8	2.9	3.0	3.1	3.2	3.3	3.4	3.4	3.4	3.4	3.3	3.2	3.0	2.7	2.5	2.1	1.8	1.4	0.9	0.3						
168-D1	13.00					156	142	130	120	108	100	94	86	78	70	64	60	54	50	46	42	38	35	33	30			
	3.75					3.1	3.3	3.4	3.5	3.7	3.8	4.0	4.0	4.2	4.2	4.2	4.2	4.1	4.0	3.9	3.7	3.6	3.4	3.2	2.9			
						3.9	4.0	4.1	4.3	4.4	4.5	4.5	4.5	4.3	4.2	4.0	3.8	3.6	3.4	2.8	2.4	2.0	1.2	0.6	0.0			
188-D1	14.39													104	95	89	81	74	69	63	58	54	50	46	42	38	35	32
	4.00													4.4	4.6	4.7	4.8	4.8	4.8	4.8	4.7	4.6	4.5	4.3	4.1	3.8	3.5	
														5.2	5.2	5.2	5.1	4.9	4.7	4.5	4.3	3.9	3.5	3.1	2.3	1.9	1.1	0.4

12LDT28 + 3
 3 in. normalweight topping

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

Strand pattern	y_s (end) y_s (center), in.	Span, ft																									
		40	42	44	46	48	50	52	54	56	58	60	62	64	66	68	70	72	74	76	78						
108-S	6.00	140	123	106	92	82	70	60	52	45	38	32	26														
	6.00	1.5	1.6	1.7	1.7	1.8	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
		1.2	1.2	1.2	1.1	1.0	0.9	0.7	0.5	0.2	-0.2	-0.6	-1.6														
128-S	7.00	170	150	130	115	100	90	78	68	58	49	42	35	27													
	7.00	1.7	1.9	2.0	2.1	2.1	2.3	2.4	2.4	2.4	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
		1.4	1.4	1.4	1.4	1.3	1.2	1.0	0.8	0.6	0.2	-0.1	-0.4	-1.0													
148-S	8.00	190	165	144	126	110	96	86	76	70	59	52	44	35	28												
	8.00	1.8	1.9	2.0	2.1	2.2	2.4	2.5	2.6	2.7	2.7	2.8	2.8	2.9	2.9												
		1.6	1.6	1.6	1.6	1.6	1.5	1.4	1.2	1.0	0.6	0.3	-0.1	-0.6	-1.1												
168-S	9.00	190	170	150	130	116	100	86	76	68	58	50	43	34	27												
	9.00	2.1	2.2	2.3	2.5	2.6	2.7	2.8	2.9	3.0	3.0	3.1	3.1	3.1	3.1												
		1.8	1.8	1.8	1.8	1.7	1.5	1.4	1.2	0.9	0.6	0.2	-0.2	-0.7	-1.5												
168-D1	13.00													138	124	110	100	89	78	70	62	54	46	38	32		
	3.75													3.3	3.5	3.6	3.7	3.8	4.0	4.1	4.2	4.2	4.2	4.2	4.2		
														2.3	2.2	2.1	1.9	1.7	1.3	1.0	0.6	0.0	-0.7	-1.4	-2.2		
188-D1	14.39																										
	4.00																										

Strength is based on strain compatibility; bottom tension is limited to $12\sqrt{f'_c}$; see pages 3–8 through 3–11 for explanation. Shaded values require release strengths higher than 3500 psi.