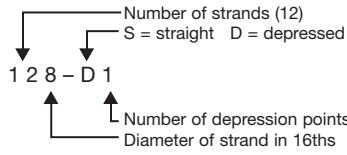


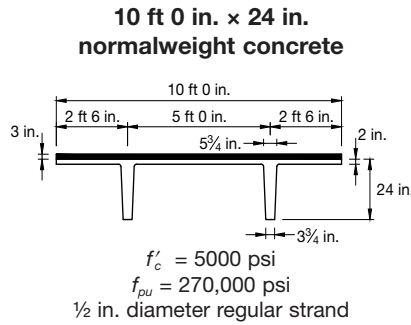
3.4 Double-Tee Load Tables

Strand Pattern Designation



Load capacities shown include dead load of 10 lb/ft<sup>2</sup> for untopped members and 15 lb/ft<sup>2</sup> for topped members. Remainder is live load. Long-time cambers include superimposed dead load but do not include live load.

Key  
 171 – Superimposed service load capacity, lb/ft<sup>2</sup>  
 0.6 – Estimated camber at erection, in.  
 0.8 – Estimated long-time camber, in.



Section Properties	
No topping	3 in. topping (f'c = 3000 psi)
A = 449 in. <sup>2</sup>	–
I = 22,469 in. <sup>4</sup>	32,947 in. <sup>4</sup>
y <sub>b</sub> = 17.77 in.	20.73 in.
y <sub>t</sub> = 6.23 in.	6.27 in.
S <sub>b</sub> = 1264 in. <sup>3</sup>	1589 in. <sup>3</sup>
S <sub>t</sub> = 3607 in. <sup>3</sup>	5258 in. <sup>3</sup>
w <sub>t</sub> = 468 lb/ft	843 lb/ft
DL = 47 lb/ft <sup>2</sup>	84 lb/ft <sup>2</sup>
V/S = 1.35 in.	

Check with regional producers for availability.

10DT24

Table of superimposed service load capacity, lb/ft<sup>2</sup>, and cambers, in.

No topping

Strand pattern	y <sub>s</sub> (end) y <sub>s</sub> (center), in.	Span, ft																									
		30	32	34	36	38	40	42	44	46	48	50	52	54	56	58	60	62	64	66	68	70	72	74	76	78	
68-S	4.00	171	146	126	109	94	82	71	62	54	47	41	35	30	26												
	4.00	0.6	0.7	0.7	0.8	0.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.8	0.8	0.7											
88-S	5.00	192	167	146	127	112	98	86	77	68	60	53	47	40	36	32	26										
	5.00	0.9	1.0	1.1	1.2	1.2	1.3	1.3	1.4	1.4	1.4	1.4	1.4	1.4	1.3	1.2	1.1										
108-S	6.00			177	156	137	121	108	96	85	76	68	61	54	48	43	38	33	29								
	6.00			1.3	1.3	1.4	1.6	1.6	1.7	1.8	1.8	1.9	1.9	1.8	1.8	1.8	1.7	1.6	1.5								
128-S	7.00				159	141	125	112	100	90	80	72	64	58	52	46	41	36	31	26							
	7.00				1.6	1.7	1.8	2.0	2.0	2.1	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.1	1.9	1.8	1.7						
128-D1	11.67										100	90	80	72	64	57	51	46	41	37	33	30	26				
	3.25										2.5	2.5	2.6	2.6	2.6	2.6	2.6	2.5	2.4	2.2	2.0	1.7	1.5				
148-D1	12.86																68	61	56	51	46	39	36	32	28		
	3.50																3.2	3.2	3.1	3.1	3.0	2.8	2.7	2.5	2.1		

10DT24 + 3

Table of superimposed service load capacity, lb/ft<sup>2</sup>, and cambers, in.

3 in. normalweight topping

Strand pattern	y <sub>s</sub> (end) y <sub>s</sub> (center), in.	Span, ft																								
		30	32	34	36	38	40	42	44	46	48	50	52	54	56	58	60	62	64	66						
68-S	4.00	172	145	122	102	86	71	59	49	40	30															
	4.00	0.8	0.8	0.8	0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
88-S	5.00		197	169	145	125	107	91	78	66	53	40	32	24												
	5.00		1.0	1.1	1.2	1.3	1.4	1.4	1.5	1.5	1.6	1.6	1.6	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
108-S	6.00				180	156	136	119	103	88	72	58	46	37	25	20										
	6.00				1.3	1.4	1.6	1.6	1.7	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
128-S	7.00					160	141	122	106	88	74	60	48	38	28	21										
	7.00					1.7	1.8	1.9	2.0	2.1	2.2	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
128-D1	11.67																86	73	61	49	38	31	25			
	3.25																2.5	2.5	2.6	2.6	2.7	2.7	2.6			
148-D1	12.86																									
	3.50																1.2	0.9	0.6	0.3	-0.2	-0.8	-1.5			

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.