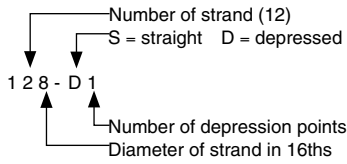


3.4 Double-Tee Load Tables

3

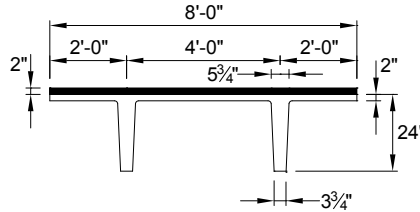
Strand Pattern Designation



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
 186 – Safe superimposed service load, lb/ft²
 0.7 – Estimated camber at erection, in.
 0.9 – Estimated long-time camber, in.

8'-0" x 24"
 Normalweight Concrete



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

Section Properties
 No Topping 2 in. Topping

A	= 401 in. ²	–
I	= 20,985 in. ⁴	27,720 in. ⁴
y_b	= 17.15 in.	19.27 in.
y_t	= 6.85 in.	6.73 in.
S_b	= 1224 in. ³	1439 in. ³
S_t	= 3064 in. ³	4119 in. ³
wt	= 418 lb/ft	618 lb/ft
DL	= 52 lb/ft ²	77 lb/ft ²
V/S	= 1.41 in.	

Check with regional producers for availability.

8DT24

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

No Topping

Strand pattern	y_s (end) y_s (center) in.	Span, ft																											
		32	34	36	38	40	42	44	46	48	50	52	54	56	58	60	62	64	66	68	70	72	74	76					
68-S	4.00	186	161	140	122	106	93	81	71	62	55	48	42	36	31	27													
	4.00	0.7	0.8	0.8	0.9	0.9	1.0	1.0	1.0	1.0	1.0	0.9	0.8	0.7	0.6	0.5													
		0.9	1.0	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.0	0.9	0.8	0.6	0.4	0.1	-0.2												
88-S	5.00			185	162	143	126	112	99	88	78	70	62	55	49	43	38	33	29										
	5.00			1.1	1.2	1.3	1.3	1.4	1.4	1.5	1.5	1.5	1.4	1.4	1.4	1.3	1.1	1.0	0.8										
				1.4	1.5	1.6	1.6	1.7	1.7	1.7	1.7	1.6	1.5	1.4	1.2	0.9	0.6	0.3	-0.2										
108-S	6.00					197	174	155	138	123	110	98	88	79	71	64	57	51	45	39	34	29							
	6.00					1.4	1.5	1.6	1.7	1.7	1.8	1.9	1.9	1.9	1.9	1.9	1.8	1.7	1.5	1.3	1.1								
						1.8	1.9	2.0	2.1	2.1	2.1	2.1	2.1	2.0	1.9	1.8	1.6	1.3	0.9	0.5	0.0								
128-S	7.00							159	142	128	114	101	90	81	73	66	59	53	47	42	37	32	27						
	7.00							1.8	1.9	2.0	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.1	2.0	1.9	1.7	1.5	1.2						
								2.3	2.4	2.4	2.5	2.5	2.4	2.4	2.3	2.2	2.1	1.8	1.6	1.2	0.8	0.3	-0.3						
128-D1	11.67													114	103	92	83	74	66	59	53	48	43	39	35				
	3.25													2.5	2.6	2.6	2.7	2.7	2.6	2.6	2.5	2.3	2.1	1.9	1.6				
														2.9	2.9	2.9	2.8	2.6	2.4	2.2	1.8	1.5	1.1	0.6	0.0				
148-D1	12.86																			71	64	58	52	46	42				
	3.50																			3.1	3.1	3.0	2.9	2.7	2.5				
																				3.0	2.7	2.4	2.0	1.6	1.1				

8DT24 + 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																											
		28	30	32	34	36	38	40	42	44	46	48	50	52	54	56	58	60	62	64	66	68	70						
48-S	3.00	169	141	117	97	81	67	55	45	36	29																		
	3.00	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4																		
		0.4	0.4	0.4	0.4	0.3	0.3	0.2	0.0	-0.1	-0.3																		
68-S	4.00			189	161	138	118	101	87	74	64	54	45	38	30														
	4.00			0.7	0.8	0.8	0.9	0.9	1.0	1.0	1.0	1.0	1.0	0.9	0.8														
				0.7	0.8	0.8	0.7	0.7	0.6	0.6	0.4	0.2	0.0	-0.3	-0.6														
88-S	5.00					188	163	142	124	108	94	82	71	62	52	42	33												
	5.00					1.1	1.1	1.3	1.3	1.4	1.4	1.5	1.5	1.5	1.4	1.4													
						1.1	1.2	1.1	1.1	1.1	1.0	0.9	0.7	0.5	0.3	-0.1	-0.5												
108-S	6.00							176	155	136	120	104	90	77	66	56	47	39	31										
	6.00							1.5	1.6	1.7	1.7	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.8										
								1.4	1.4	1.4	1.4	1.3	1.2	1.0	0.8	0.6	0.3	-0.1	-0.6										
128-S	7.00									160	140	121	104	90	77	67	57	48	41	33	27								
	7.00									1.8	1.9	2.0	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.1	2.0								
										1.6	1.6	1.6	1.5	1.3	1.1	0.9	0.6	0.3	-0.1	-0.6	-1.1								
128-D1	11.67														105	91	79	68	58	49	40	34	28						
	3.25														2.5	2.6	2.6	2.7	2.7	2.6	2.6	2.5	2.3						
															1.6	1.4	1.1	0.8	0.4	0.0	-0.6	-1.2	-1.8						

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.