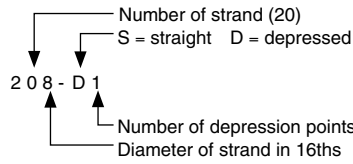


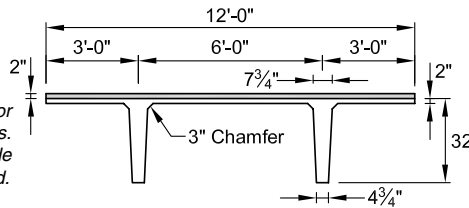
3.4 Double-Tee Load Tables (cont.)

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.

12'-0" x 32" Lightweight Concrete



Section Properties
No Topping 2 in. Topping

A	= 690 in. ²	—
I	= 64,620 in. ⁴	88,305 in. ⁴
y _b	= 22.75 in.	26.08 in.
y _t	= 9.25 in.	7.92 in.
S _b	= 2840 in. ³	3385 in. ³
S _t	= 6985 in. ³	11,149 in. ³
wt	= 551 lb/ft	851 lb/ft
DL	= 46 lb/ft ²	71 lb/ft ²
V/S	= 1.70 in.	

Key

- 181 – Safe superimposed service load, lb/ft²
- 1.5 – Estimated camber at erection, in.
- 2.0 – Estimated long-time camber, in.

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

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

1/2-in.-diameter regular strand

Check with regional producers for availability.

12LDT32

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

No Topping

Strand pattern	y _s (end) y _s (center) in.	Span, ft																																		
		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	92	94	96	98	100	102				
128-S	7.00	181	162	145	131	118	106	96	87	79	71	64	58	53	48	43	39	35	31	28																
	7.00	1.5	1.6	1.6	1.7	1.8	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.8	1.7	1.5	1.3															
148-S	8.00	185	166	150	135	122	111	101	92	83	76	69	63	57	52	47	43	39	35	32	29	26														
	8.00	1.7	1.9	2.0	2.0	2.1	2.2	2.3	2.3	2.4	2.4	2.4	2.4	2.4	2.4	2.3	2.2	2.1	1.9	1.7	1.5	1.2														
168-S	9.00	184	166	151	137	124	113	103	94	86	78	72	66	60	55	50	46	42	38	34	31	28	25													
	9.00	2.0	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.7	2.7	2.7	2.7	2.7	2.6	2.5	2.4	2.2	2.0	1.8	1.5	1.2														
188-S	10.00	200	181	164	149	135	123	113	103	94	86	79	72	66	60	55	51	46	42	38	35	32	29	26												
	10.00	2.1	2.2	2.3	2.4	2.6	2.7	2.7	2.8	2.9	2.9	3.0	3.0	3.0	2.9	2.9	2.8	2.7	2.5	2.4	2.2	1.9	1.6	1.3												
208-D1	15.50																																			
	4.25																																			
228-D1	16.41																																			
	4.50																																			

12LDT32 + 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																																			
		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											
128-S	7.00	177	157	139	123	109	97	86	76	68	60	53	46	40	35	30	25																				
	7.00	1.5	1.6	1.6	1.7	1.8	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.8																			
148-S	8.00	181	161	144	128	115	102	92	82	73	65	58	51	45	39	33	27																				
	8.00	1.7	1.9	2.0	2.0	2.1	2.2	2.3	2.3	2.4	2.4	2.4	2.4	2.4	2.4	2.3	2.2																				
168-S	9.00	181	162	145	130	117	105	94	84	76	67	59	51	44	38	32	27																				
	9.00	2.0	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.6	2.5																			
188-S	10.00	198	177	159	143	129	116	105	94	83	73	64	56	49	42	36	30	25																			
	10.00	2.1	2.2	2.3	2.4	2.6	2.7	2.7	2.8	2.9	2.9	3.0	3.0	3.0	2.9	2.9	2.8	2.7																			
208-D1	15.50																																				
	4.25																																				
228-D1	16.41																																				
	4.50																																				

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.