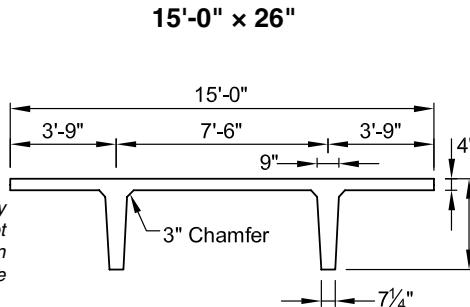


### **3.5 Pretopped Double-Tee Load Tables (cont.)**

## **Strand Pattern Designation**

Number of strand (20)  
 S = straight D = depressed  
 2 0 8 - D 1  
 Number of depression points  
 Diameter of strand in 16ths

Because these units are pretopped and are typically used in parking structures, safe loads shown do not include any superimposed dead loads. Loads shown are live load. Long-time cambers do not include live load.



Section Properties	
Normalweight	Lightweight
$A$ = 1078 in. <sup>2</sup>	1078 in. <sup>2</sup>
$I$ = 53,280 in. <sup>4</sup>	53,280 in. <sup>4</sup>
$y_b$ = 19.82 in.	19.82 in.
$y_t$ = 6.18 in.	6.18 in.
$S_b$ = 2688 in. <sup>3</sup>	2688 in. <sup>3</sup>
$S_t$ = 8618 in. <sup>3</sup>	8618 in. <sup>3</sup>
$s^6$ wt = 1122 lb/ft	861 lb/ft
$DL$ = 75 lb/ft <sup>2</sup>	57 lb/ft <sup>2</sup>
$V/S$ = 2.38 in.	2.38 in.

Key

194 – Safe superimposed service load, lb/ft<sup>2</sup>

## 0.2 – Estimated camber at erection, in.

#### 0.4 – Estimated long-time camber, in.

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

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

$\frac{1}{2}$ -in.-diameter regular strand

Check with regional producers for availability.

15DT26

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

## **Normalweight — No Topping**

Strand pattern	$y_s$ in.	Span, ft																										
		26	28	30	32	34	36	38	40	42	44	46	48	50	52	54	56	58	60	62	64	66	68	70	72	74	76	
88-S	7.00	194	159	132	109	90	74	61	49	40	31																	
		0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.1																	
		0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.2	0.1																	
128-S	5.83	175	150	129	111	95	82	70	60	51	43	36	29															
		0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.7	0.7	0.6	0.5	0.3															
		0.9	1.0	1.0	1.1	1.1	1.1	1.0	1.0	0.9	0.8	0.6	0.4															
168-S	5.69	191	167	146	128	112	99	87	76	66	58	50	43	37	31	26												
		1.2	1.2	1.3	1.3	1.4	1.4	1.4	1.4	1.4	1.3	1.2	1.1	0.9	0.7	0.5												
		1.6	1.7	1.7	1.8	1.9	1.9	1.9	1.9	1.9	1.8	1.6	1.4	1.2	0.9	0.6												
208-S	5.95	192	170	150	134	119	105	94	83	74	65	58	51	44	38	31	26											
		1.6	1.7	1.8	1.9	1.9	2.0	2.0	2.0	2.0	1.9	1.8	1.6	1.5	1.2	1.0												
		2.3	2.4	2.5	2.6	2.6	2.7	2.7	2.7	2.7	2.7	2.6	2.4	2.2	1.9	1.6	1.2											
248-S	6.42																								45	39	33	27
																									2.2	2.0	1.8	1.5
																									2.9	2.7	2.3	1.9

15LDT26

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

#### **Lightweight — No Topping**

Table 3: Care Superimposed Service Load, lb/ft <sup>2</sup> , and Gains, in.																Lightweight	No Topping									
Strand pattern	$y_s$ 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	72	74	76
88-S	7.00	172	145	122	103	87	74	63	53	44	37	30														
		0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.5	0.5	0.4	0.4														
		0.6	0.7	0.7	0.8	0.8	0.8	0.8	0.7	0.7	0.6	0.5														
128-S	5.83	188	163	142	124	109	95	83	73	64	56	49	42	36	31	27										
		1.1	1.2	1.3	1.3	1.4	1.5	1.5	1.5	1.5	1.5	1.4	1.4	1.2	1.1	0.9										
		1.5	1.6	1.7	1.8	1.9	2.0	2.0	2.1	2.1	2.0	2.0	1.8	1.7	1.4	1.2										
168-S	5.69	180	159	141	126	112	100	89	79	71	63	56	50	44	39	34	30	26								
		2.0	2.1	2.3	2.4	2.5	2.6	2.6	2.7	2.7	2.7	2.6	2.6	2.5	2.4	2.2	1.9	1.6								
		2.7	2.9	3.0	3.2	3.3	3.4	3.4	3.5	3.5	3.5	3.4	3.3	3.2	2.9	2.5	2.1									
208-S	5.95	119	107	96	86	77	69	61	55	49	44	40	36	32	28											
		3.4	3.6	3.7	3.7	3.8	3.8	3.8	3.8	3.8	3.7	3.6	3.5	3.3	3.1	2.8										
		4.6	4.8	4.9	5.0	5.0	5.0	4.9	4.9	4.9	4.8	4.7	4.5	4.3	4.0	3.6										
248-S	6.42																					50	46	42	38	
																						5.7	5.6	5.4	5.3	
																						7.1	6.8	6.5	6.2	

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.