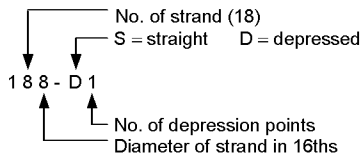


**Strand Pattern Designation**



Safe loads shown include dead load of 10 psf for untopped members and 15 psf for topped members. Remainder is live load. Long-time cambers include superimposed dead load but do not include live load.

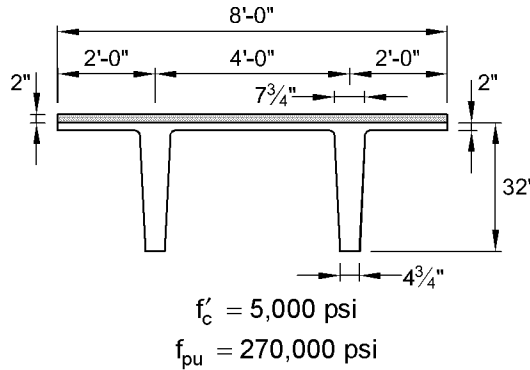
**Key**

- 186 – Safe superimposed service load, psf
- 2.0 – Estimated camber at erection, in.
- 2.4 – Estimated long-time camber, in.

**DOUBLE TEE**

**8'-0" x 32"**

**Lightweight Concrete**



**Section Properties**

	Untopped	Topped
A	567 in. <sup>2</sup>	—
I	55,464 in. <sup>4</sup>	77,675 in. <sup>4</sup>
y <sub>b</sub>	21.21 in.	24.52 in.
y <sub>t</sub>	10.79 in.	9.48 in.
S <sub>b</sub>	2,615 in. <sup>3</sup>	3,167 in. <sup>3</sup>
S <sub>t</sub>	5,140 in. <sup>3</sup>	8,195 in. <sup>3</sup>
wt	453 plf	653 plf
DL	57 psf	82 psf
V/S	1.79 in.	

**8LDT32**

**Table of safe superimposed service load (psf) and cambers (in.)**

**No Topping**

Strand Pattern	y <sub>s</sub> (end) in. y <sub>s</sub> (center) in.	Span, ft																																																												
		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	104																																	
128-S	7.00	186	169	154	140	128	117	107	98	90	82	75	69	63	58	53	48	44	40	36	31	28																																								
	7.00	2.0	2.1	2.1	2.2	2.3	2.3	2.3	2.4	2.4	2.3	2.3	2.2	2.1	2.0	1.9	1.7	1.5	1.2	0.9	0.6	0.2	2.4	2.5	2.6	2.6	2.6	2.6	2.6	2.5	2.4	2.3	2.1	1.9	1.6	1.3	0.9	0.4	-0.2	-0.8	-1.4	-2.2																				
148-S	8.00	193	176	161	147	134	123	113	104	95	87	80	74	68	62	57	52	47	43	38	34	30	26																																							
	8.00	2.3	2.4	2.5	2.6	2.6	2.7	2.7	2.8	2.8	2.7	2.7	2.7	2.6	2.5	2.3	2.1	1.9	1.7	1.4	1.0	0.6	0.2	2.9	2.9	3.0	3.0	3.0	3.1	3.0	2.9	2.8	2.7	2.5	2.3	2.0	1.7	1.3	0.8	0.3	-0.4	-1.1	-1.8	-2.7																		
168-S	9.00	192	175	159	145	132	120	111	102	94	86	79	73	67	62	57	52	48	44	39	35	31	28																																							
	9.00	2.6	2.7	2.8	2.9	3.0	3.0	3.0	3.1	3.1	3.0	3.1	3.1	3.0	2.9	2.8	2.7	2.6	2.4	2.2	1.9	1.6	1.2	0.8	0.4	3.2	3.3	3.3	3.4	3.4	3.4	3.3	3.2	3.1	2.9	2.7	2.5	2.2	1.8	1.4	1.0	0.4	-0.2	-1.0	-1.8	-2.7																
188-S	10.00	185	168	154	140	128	117	107	99	91	84	77	71	65	60	55	51	47	43	39	35	31	28																																							
	10.00	2.8	2.9	3.0	3.1	3.1	3.2	3.2	3.2	3.2	3.2	3.2	3.1	3.0	2.8	2.7	2.5	2.2	1.9	1.6	1.2	0.8	0.3	3.4	3.5	3.5	3.6	3.6	3.5	3.5	3.4	3.3	3.1	2.9	2.7	2.4	2.1	1.7	1.2	0.7	0.2	-0.5	-1.3	-2.1	-3.1																	
188-D1	14.39																	172	158	146	134	124	114	105	97	90	83	76	70	64	59	54	49	46	43	40	37	34																								
	4.00																	4.1	4.3	4.4	4.5	4.6	4.7	4.8	4.8	4.8	4.8	4.7	4.6	4.4	4.2	4.0	3.7	3.4	3.0	2.7	2.2	1.7	5.0	5.1	5.2	5.2	5.2	5.2	5.2	5.1	5.0	4.8	4.5	4.2	3.8	3.4	2.8	2.2	1.5	0.9	0.2	-0.6	-1.4	-2.3		
208-D1	15.50																																	117	108	100	92	85	79	73	67	62	57	52	48	43	40	37														
	4.25																																	5.2	5.2	5.3	5.3	5.3	5.3	5.2	5.1	4.9	4.7	4.4	4.0	3.7	3.3	2.8	5.7	5.7	5.5	5.3	5.1	4.8	4.5	4.0	3.5	2.9	2.2	1.4	0.5	-0.3

**8LDT32 + 2**

**Table of safe superimposed service load (psf) and cambers (in.)**

**2 in. Normal Weight Topping**

Strand Pattern	y <sub>s</sub> (end) in. y <sub>s</sub> (center) in.	Span, ft																																																									
		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																																	
128-S	7.00	183	165	149	134	121	109	99	89	81	73	64	56	49	42	35	29																																										
	7.00	2.0	2.1	2.1	2.2	2.3	2.3	2.3	2.4	2.4	2.3	2.3	2.2	2.2	2.0	1.9	1.7	1.8	1.8	1.7	1.7	1.6	1.5	1.3	1.1	0.9	0.6	0.3	-0.1	-0.6	-1.1	-1.7	-2.4																										
148-S	8.00	190	172	156	141	128	115	103	92	82	73	65	57	50	44	38	32	26																																									
	8.00	2.3	2.4	2.5	2.6	2.6	2.7	2.7	2.8	2.8	2.8	2.7	2.7	2.6	2.5	2.3	2.1	1.9	2.1	2.1	2.0	2.0	1.9	1.7	1.6	1.4	1.1	0.8	0.4	0.0	-0.5	-1.0	-1.6	-2.3	-3.1																								
168-S	9.00	192	174	156	139	124	112	100	90	80	72	64	56	50	43	38	32	27																																									
	9.00	2.6	2.7	2.8	2.9	3.0	3.0	3.0	3.1	3.1	3.1	3.0	2.9	2.9	2.7	2.6	2.4	2.2	2.3	2.3	2.3	2.2	2.0	1.9	1.7	1.4	1.2	0.8	0.4	0.0	-0.6	-1.1	-1.8	-2.5	-3.4																								
188-S	10.00	186	167	149	134	120	107	96	86	77	69	61	54	48	42	36	31	26																																									
	10.00	2.8	2.9	3.0	3.1	3.1	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.1	3.0	2.8	2.7	2.5	2.2	2.4	2.4	2.3	2.2	2.0	1.8	1.6	1.3	1.0	0.6	0.2	-0.3	-0.9	-1.5	-2.3	-3.1	-4.0																							
188-D1	14.39																	171	155	140	127	115	104	93	84	75	67	59	52	46	39	34	29	25																									
	4.00																	4.1	4.3	4.4	4.5	4.6	4.7	4.8	4.8	4.8	4.8	4.8	4.7	4.6	4.4	4.2	4.0	3.7	3.4	3.4	3.3	3.2	3.0	2.8	2.5	2.2	1.8	1.3	0.8	0.1	-0.6	-1.5	-2.4	-3.5	-4.5	-5.6							
208-D1	15.50																																	107	96	87	78	70	62	55	49	43	37	31	26														
	4.25																																	5.2	5.2	5.3	5.3	5.3	5.3	5.2	5.1	4.9	4.7	4.4	4.0	3.7	3.3	2.8	2.8	2.4	2.0	1.5	0.9	0.3	-0.4	-1.3	-2.2	-3.3	-4.5

Strength is based on strain compatibility; bottom tension is limited to  $12\sqrt{f'_c}$ ; see pages 2-7 through 2-10 for explanation. Shaded values require release strengths higher than 3500 psi.