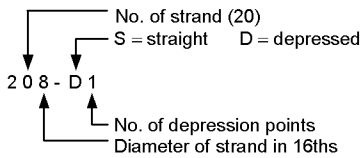


**Strand Pattern Designation**



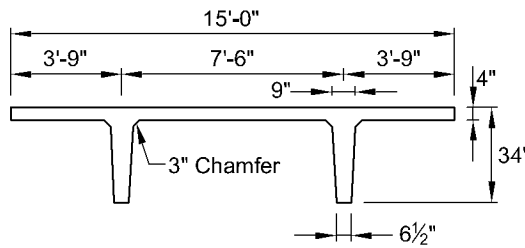
Because these units are pretopped and are typically used in parking structures, safe loads shown do not include any superimposed dead loads. Loads shown are live load. Long-time cambers do not include live load.

**Key**

- 174 – Safe superimposed service load, psf
- 0.3 – Estimated camber at erection, in.
- 0.4 – Estimated long-time camber, in.

**PRETOPPED  
DOUBLE TEE**

**15'-0" x 34"**



$f'_c = 5,000$  psi  
 $f_{pu} = 270,000$  psi  
 Special Strand

**Section Properties**

	Normal Weight	Lightweight
A =	1185 in. <sup>2</sup>	1185 in. <sup>2</sup>
I =	109621 in. <sup>4</sup>	109621 in. <sup>4</sup>
y <sub>b</sub> =	25.65 in.	25.65 in.
y <sub>t</sub> =	8.35 in.	8.35 in.
S <sub>b</sub> =	4274 in. <sup>3</sup>	4274 in. <sup>3</sup>
S <sub>t</sub> =	13121 in. <sup>3</sup>	13121 in. <sup>3</sup>
wt =	1234 plf	946 plf
DL =	82 psf	63 psf
V/S =	2.45 in.	2.45 in.

**15DT34**

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

**Normal Weight – No Topping**

Strand Pat-tern	y <sub>s</sub> (end) in. y <sub>s</sub> (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	78	80	82	84	86	88		
88-S	7.00	174	147	124	105	89	75	63	52	43	35	27																				
	7.00	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.1	0.1																				
		0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.2	0.2	0.1																				
128-S	5.83			198	173	151	132	116	101	89	77	67	58	50	43	36	30															
	5.83			0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.5	0.4	0.3															
				0.8	0.9	0.9	0.9	1.0	1.0	1.0	0.9	0.9	0.8	0.7	0.6	0.5	0.3															
168-S	5.69					197	175	156	139	124	110	98	87	77	69	61	53	47	41	35	30	25										
	5.69					1.1	1.1	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.1	1.1	1.0	0.8	0.7	0.5	0.3											
						1.4	1.5	1.6	1.6	1.7	1.7	1.7	1.7	1.7	1.6	1.5	1.4	1.3	1.1	0.9	0.6	0.3										
208-S	5.95									185	167	150	135	122	110	99	89	80	72	64	57	51	45	40	35	30	25					
	5.95									1.6	1.6	1.7	1.8	1.8	1.8	1.8	1.8	1.8	1.7	1.7	1.6	1.4	1.3	1.1	0.8	0.6						
										2.2	2.3	2.3	2.4	2.4	2.4	2.5	2.5	2.5	2.4	2.4	2.3	2.1	1.9	1.6	1.3	1.0	0.6					
248-S	6.42																				105	95	86	78	71	64	57	52	46	40	34	29
	6.42																				2.4	2.4	2.4	2.4	2.3	2.3	2.2	2.1	1.9	1.7	1.5	1.2
																					3.2	3.2	3.2	3.2	3.1	3.0	2.9	2.8	2.6	2.3	1.9	1.5

**15LDT34**

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

**Lightweight – No Topping**

Strand Pat-tern	y <sub>s</sub> (end) in. y <sub>s</sub> (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	78	80	82	84	86	88	90
88-S	7.00	188	161	139	120	103	89	77	67	57	49	42	35	30																	
	7.00	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.3																		
		0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.6	0.5	0.4																	
128-S	5.83			187	166	147	130	116	103	92	81	72	64	57	50	44	39	34	29	25											
	5.83			1.0	1.1	1.2	1.2	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.2	1.1	1.0	0.8	0.7												
				1.4	1.5	1.6	1.7	1.7	1.8	1.8	1.8	1.9	1.8	1.8	1.7	1.6	1.5	1.3	1.1	0.8											
168-S	5.69					189	170	153	138	125	112	102	92	83	75	68	61	55	49	44	39	35	31	27							
	5.69					1.8	1.9	2.0	2.1	2.2	2.2	2.3	2.3	2.4	2.4	2.4	2.3	2.3	2.2	2.1	2.0	1.8	1.6	1.4							
						2.5	2.6	2.7	2.8	2.9	3.0	3.0	3.1	3.1	3.2	3.2	3.1	3.1	3.0	2.9	2.7	2.4	2.1	1.8							
208-S	5.95									200	181	164	150	136	124	113	103	94	86	79	72	65	60	54	49	45	40	36	32	29	26
	5.95									2.6	2.7	2.8	3.0	3.1	3.2	3.3	3.4	3.4	3.5	3.5	3.5	3.4	3.3	3.2	3.0	2.9	2.6	2.3	1.9		
										3.5	3.7	3.9	4.0	4.2	4.3	4.4	4.5	4.5	4.5	4.5	4.5	4.5	4.4	4.3	4.2	4.0	3.8	3.4	3.0	2.4	
248-S	6.42																														
	6.42																														

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.