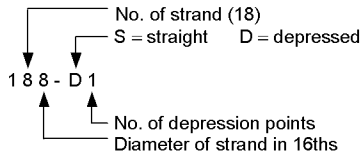


Strand Pattern Designation

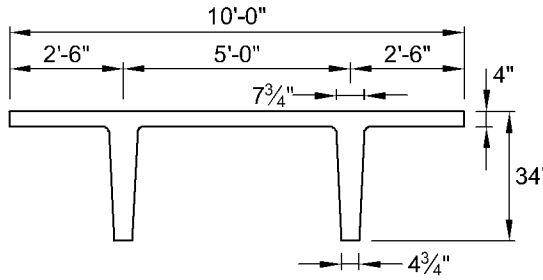


Because these units are pretopped and are typically used in parking structures, safe loads shown do not include any superimposed dead loads. Loads shown are live load. Long-time cambers do not include live load.

- Key**
 187 – Safe superimposed service load, psf
 0.8 – Estimated camber at erection, in.
 1.2 – Estimated long-time camber, in.

PRETOPPED DOUBLE TEE

10'-0" x 34"



$f'_c = 5,000 \text{ psi}$
 $f_{pu} = 270,000 \text{ psi}$

Section Properties
 Normal Weight Lightweight

A	= 855 in. ²	855 in. ²
I	= 80,780 in. ⁴	80,780 in. ⁴
y _b	= 25.07 in.	25.07 in.
y _t	= 8.93 in.	8.93 in.
S _b	= 3,222 in. ³	3,222 in. ³
S _t	= 9,046 in. ³	9,046 in. ³
wt	= 891 plf	683 plf
DL	= 89 psf	68 psf
V/S	= 2.32 in.	2.32 in.

10DT34

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

Normal Weight — No Topping

Strand Pattern	y _s (end) in. y _s (center) in.	Span, ft																													
		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				
128-S	7.00	187	166	147	130	115	102	90	79	70	61	53	46	40	34	28															
	7.00	0.8	0.9	0.9	0.9	0.9	0.9	0.9	0.8	0.7	0.7	0.6	0.4	0.3	0.1																
		1.2	1.2	1.2	1.3	1.3	1.3	1.2	1.2	1.1	1.0	0.9	0.7	0.5	0.3	0.1															
148-S	8.00	193	172	153	137	122	109	97	86	76	67	59	52	45	39	34	28														
	8.00	1.0	1.0	1.1	1.1	1.1	1.1	1.1	1.1	1.0	0.9	0.9	0.8	0.6	0.5	0.3	0.1														
		1.4	1.4	1.5	1.5	1.5	1.5	1.5	1.5	1.4	1.3	1.2	1.0	0.8	0.6	0.3	0.0														
168-S	9.00	194	174	156	139	125	112	100	90	80	71	63	56	49	43	37	32	27													
	9.00	1.2	1.2	1.2	1.3	1.3	1.3	1.3	1.2	1.2	1.1	1.0	0.9	0.8	0.6	0.4	0.2	0.0													
		1.6	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.6	1.5	1.4	1.2	1.0	0.8	0.5	0.2	-0.2													
188-S	10.00	192	172	155	139	125	113	101	91	82	73	65	58	51	45	39	33	27													
	10.00	1.3	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.3	1.2	1.1	1.0	0.9	0.7	0.5	0.3	0.0													
		1.8	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.7	1.5	1.3	1.1	0.8	0.5	0.2	-0.2													
188-D1	14.39	184	167	152	138	125	114	103	94	85	77	69	63	56	50	44	38	32	27												
	4.00	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.7	1.6	1.5	1.3	1.2	1.0	0.7	0.4	0.1	-0.3										
		2.4	2.5	2.5	2.5	2.5	2.5	2.5	2.4	2.3	2.2	2.1	1.9	1.7	1.5	1.2	0.8	0.4	-0.1	-0.6											
208-D1	15.50	188	172	156	143	130	119	107	96	86	78	71	65	59	53	47	41	35	30	25											
	4.25	2.0	2.1	2.1	2.2	2.2	2.2	2.1	2.1	2.0	1.9	1.8	1.6	1.4	1.2	1.0	0.7	0.4	0.0	-0.4											
		2.8	2.8	2.9	2.9	2.9	2.9	2.9	2.9	2.8	2.7	2.5	2.4	2.2	2.0	1.8	1.5	1.2	0.7	0.2	-0.3	-0.9									

10LDT34

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

Lightweight — No Topping

Strand Pattern	y _s (end) in. y _s (center) in.	Span, ft																																
		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	117	106	95	85	77	69	62	55	49	44	39	34	30	26															
	7.00	1.5	1.5	1.6	1.6	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.6	1.5	1.4	1.2	1.0	0.8	0.6															
		2.0	2.0	2.1	2.2	2.3	2.3	2.3	2.4	2.3	2.3	2.2	2.0	1.8	1.6	1.3	1.0	0.6																
148-S	8.00	188	169	152	137	124	112	102	92	83	75	68	61	55	49	44	39	35	31	27														
	8.00	1.8	1.8	1.9	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.0	2.0	1.9	1.8	1.6	1.4	1.2	1.0	0.7														
		2.4	2.5	2.5	2.6	2.7	2.8	2.8	2.8	2.8	2.7	2.7	2.6	2.4	2.2	1.9	1.5	1.2	0.7															
168-S	9.00	189	171	155	141	128	116	105	96	87	79	72	65	59	53	48	43	38	34	30	26													
	9.00	2.0	2.1	2.2	2.3	2.3	2.4	2.4	2.4	2.4	2.4	2.3	2.2	2.1	2.0	1.8	1.5	1.3	1.0	0.6														
		2.7	2.8	2.9	3.0	3.1	3.2	3.2	3.2	3.2	3.1	3.1	3.0	2.8	2.6	2.3	2.0	1.6	1.1	0.6														
188-S	10.00	188	170	155	141	128	117	107	97	89	81	73	67	61	55	50	45	40	36	32	28													
	10.00	2.3	2.4	2.5	2.5	2.6	2.7	2.7	2.7	2.7	2.7	2.6	2.6	2.5	2.3	2.2	2.0	1.7	1.5	1.1	0.8													
		3.1	3.2	3.3	3.4	3.4	3.5	3.5	3.6	3.6	3.5	3.5	3.4	3.2	3.1	2.9	2.6	2.2	1.8	1.3	0.8													
188-D1	14.39	200	183	167	154	141	129	119	109	101	92	83	76	69	62	56	52	48	44	40	37	33	30	26										
	4.00	3.0	3.1	3.3	3.4	3.5	3.6	3.6	3.6	3.6	3.6	3.6	3.5	3.4	3.2	3.1	2.9	2.6	2.4	2.1	1.7	1.3	0.9	0.3										
		4.1	4.2	4.4	4.5	4.6	4.7	4.7	4.7	4.7	4.7	4.6	4.5	4.4	4.2	3.9	3.6	3.4	3.1	2.8	2.4	2.0	1.5	0.8	0.0									
208-D1	15.50	187	172	158	146	134	123	113	103	94	86	78	71	65	58	53	48	44	41	37	34	31	29											
	4.25	3.5	3.7	3.8	3.9	4.0	4.1	4.2	4.2	4.2	4.2	4.1	4.0	3.8	3.7	3.4	3.2	2.9	2.6	2.3	1.9	1.4	0.9											
		4.8	4.9	5.1	5.2	5.3	5.4	5.4	5.4	5.4	5.4	5.3	5.1	4.9	4.7	4.4	4.0	3.7	3.3	2.9	2.5	2.0	1.4	0.8										

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.