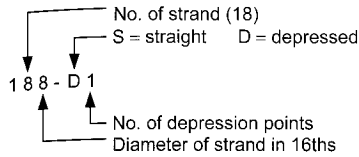


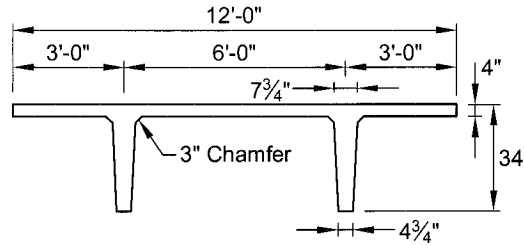
Strand Pattern Designation



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
 193 – Safe superimposed service load, psf
 0.7 – Estimated camber at erection, in.
 1.0 – Estimated long-time camber, in.

**PRETOPPED
DOUBLE TEE**
12'-0" x 34"



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

Section Properties
Normal Weight Lightweight

A =	978 in. ²	978 in. ²
I =	86,072 in. ⁴	86,072 in. ⁴
y _b =	25.77 in.	25.77 in.
y _t =	8.23 in.	8.23 in.
S _b =	3,340 in. ³	3,340 in. ³
S _t =	10,458 in. ³	10,458 in. ³
wt =	1,019 plf	781 plf
DL =	85 psf	65 psf
V/S =	2.39 in.	2.39 in.

12DT34

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																								
		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
128-S	7.00	193	169	149	131	115	101	88	77	67	59	51	43	37	31	25										
	7.00	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.7	0.7	0.6	0.5	0.4	0.3	0.2										
		1.0	1.0	1.1	1.1	1.1	1.1	1.1	1.1	1.0	0.9	0.8	0.7	0.5	0.4	0.1										
148-S	8.00	197	174	154	136	120	107	94	83	73	64	56	49	42	36	30	25									
	8.00	0.9	0.9	0.9	1.0	1.0	1.0	1.0	1.0	0.9	0.9	0.8	0.7	0.6	0.5	0.3	0.1									
		1.2	1.2	1.3	1.3	1.4	1.4	1.4	1.3	1.3	1.2	1.1	1.0	0.8	0.6	0.4	0.1									
168-S	9.00	197	174	155	138	123	109	97	86	76	67	59	52	45	39	34	28									
	9.00	1.0	1.0	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.0	0.9	0.7	0.6	0.4	0.2									
		1.4	1.4	1.5	1.5	1.6	1.6	1.6	1.6	1.5	1.5	1.4	1.3	1.1	1.0	0.8	0.5	0.2								
188-S	10.00	192	171	153	137	122	109	97	87	77	69	61	53	47	41	35	30									
	10.00	1.1	1.2	1.2	1.3	1.3	1.3	1.3	1.3	1.2	1.2	1.1	1.1	1.0	0.8	0.7	0.5	0.3								
		1.6	1.6	1.7	1.7	1.7	1.8	1.7	1.7	1.7	1.6	1.4	1.3	1.1	0.8	0.6	0.3									
188-D1	14.39						180	162	147	132	119	108	97	88	79	71	63	57	50	45	39	34	28			
	4.00						1.6	1.6	1.7	1.7	1.7	1.7	1.6	1.6	1.5	1.5	1.4	1.2	1.1	0.9	0.6	0.4	0.1			
							2.1	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.0	1.9	1.8	1.6	1.4	1.1	0.7	0.3	-0.1			
208-D1	15.50						183	166	150	136	123	112	101	92	82	74	67	61	55	49	43	37	31	26		
	4.25						1.8	1.8	1.9	1.9	2.0	2.0	1.9	1.8	1.7	1.6	1.5	1.3	1.1	0.9	0.6	0.3	-0.1			
							2.4	2.5	2.6	2.6	2.6	2.6	2.5	2.4	2.3	2.2	2.1	1.9	1.7	1.4	1.1	0.7	0.2	-0.3		

12LDT34

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																										
		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
128-S	7.00	184	164	146	130	116	103	92	82	73	65	58	52	46	40	35	31	26										
	7.00	1.2	1.3	1.4	1.4	1.5	1.5	1.5	1.5	1.5	1.5	1.4	1.4	1.2	1.1	0.9	0.7											
		1.6	1.7	1.8	1.9	2.0	2.0	2.1	2.1	2.1	2.1	2.0	2.0	1.8	1.7	1.5	1.2	0.9										
148-S	8.00	189	169	151	135	121	109	98	88	79	71	64	57	51	45	40	35	31	27									
	8.00	1.5	1.6	1.6	1.7	1.8	1.8	1.9	1.9	1.9	1.9	1.8	1.8	1.7	1.6	1.5	1.3	1.1	0.9									
		2.0	2.1	2.2	2.3	2.4	2.4	2.5	2.5	2.5	2.5	2.4	2.3	2.2	2.0	1.7	1.4	1.1										
168-S	9.00	189	170	153	137	124	112	101	91	82	74	67	60	54	48	43	38	34	30	26								
	9.00	1.8	1.8	1.9	2.0	2.1	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	0.9								
		2.3	2.5	2.6	2.6	2.7	2.8	2.9	2.9	2.9	2.9	2.8	2.7	2.6	2.4	2.1	1.8	1.5	1.0									
188-S	10.00	186	168	152	137	124	112	102	92	83	76	68	62	56	50	45	40	36	32	28								
	10.00	2.0	2.1	2.2	2.2	2.3	2.4	2.4	2.4	2.4	2.4	2.4	2.3	2.3	2.1	2.0	1.8	1.6	1.3	1.0								
		2.7	2.8	2.9	3.0	3.1	3.1	3.2	3.2	3.2	3.2	3.1	3.0	2.9	2.7	2.4	2.1	1.7	1.2									
188-D1	14.39						195	177	161	147	134	123	112	103	94	86	78	71	64	57	53	48	44	40	36	33	29	25
	4.00						2.6	2.7	2.8	3.0	3.1	3.2	3.2	3.2	3.2	3.1	3.0	2.9	2.7	2.6	2.4	2.1	1.8	1.5	1.1	0.6		
							3.5	3.7	3.8	3.9	4.1	4.2	4.2	4.2	4.2	4.1	4.0	3.9	3.7	3.5	3.3	3.1	2.9	2.6	2.2	1.8	1.2	0.5
208-D1	15.50						198	180	165	151	138	127	116	107	98	89	80	73	66	59	53	48	44	41	37	34	31	28
	4.25						2.9	3.1	3.2	3.3	3.4	3.6	3.6	3.7	3.8	3.8	3.7	3.7	3.6	3.4	3.3	3.1	2.9	2.6	2.3	2.0	1.6	1.2
							4.0	4.2	4.3	4.5	4.6	4.7	4.8	4.8	4.9	4.8	4.7	4.6	4.4	4.2	3.9	3.6	3.4	3.0	2.7	2.3	1.8	1.2

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.