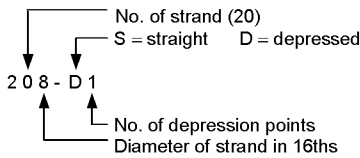


Strand Pattern Designation



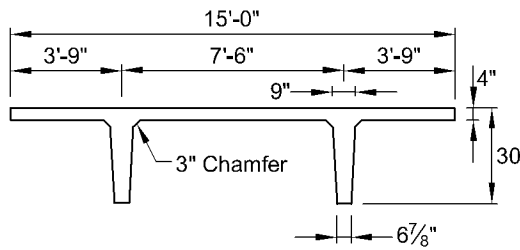
Because these units are pretopped and are typically used in parking structures, safe loads shown do not include any superimposed dead loads. Loads shown are live load. Long-time cambers do not include live load.

Key

- 169 – 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 30"



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

Section Properties

	Normal Weight	Lightweight
A =	1133 in. ²	1133 in. ²
I =	78625 in. ⁴	78625 in. ⁴
y _b =	22.75 in.	22.75 in.
y _t =	7.25 in.	7.25 in.
S _b =	3457 in. ³	3457 in. ³
S _t =	10838 in. ³	10838 in. ³
wt =	1180 plf	905 plf
DL =	79 psf	60 psf
V/S =	2.42 in.	2.42 in.

15DT30

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																											
		30	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	
88-S	7.00	169	141	118	99	83	69	57	47	38	30																		
	7.00	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.1																		
		0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.2	0.1																		
128-S	5.83				189	164	142	123	107	93	81	70	60	51	44	37	30												
	5.83				0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.6	0.5	0.4	0.3												
					0.9	0.9	1.0	1.0	1.0	1.0	1.0	1.0	0.9	0.8	0.7	0.6	0.4												
168-S	5.69								184	163	144	127	113	100	88	78	68	60	53	46	39	34	29						
	5.69								1.1	1.2	1.2	1.3	1.3	1.3	1.3	1.3	1.2	1.1	1.0	0.9	0.8	0.6							
									1.5	1.6	1.7	1.7	1.8	1.8	1.8	1.8	1.8	1.7	1.5	1.4	1.2	1.0	0.7						
208-S	5.95											190	170	152	136	122	109	98	87	78	70	62	55	49	43	37	32	26	
	5.95											1.6	1.7	1.8	1.8	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.6	1.5	1.3	1.1	0.8		
												2.2	2.3	2.4	2.5	2.5	2.6	2.6	2.6	2.6	2.6	2.6	2.5	2.4	2.2	2.0	1.7	1.3	0.9
248-S	6.42																												
	6.42																												

15LDT30

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																												
		30	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-S	7.00	183	155	132	113	97	83	71	61	52	44	37	31	25																
	7.00	0.4	0.5	0.5	0.5	0.5	0.6	0.6	0.5	0.5	0.5	0.4	0.3	0.2																
		0.6	0.7	0.7	0.7	0.8	0.8	0.8	0.7	0.7	0.6	0.6	0.4	0.3																
128-S	5.83																													
	5.83																													
168-S	5.69																													
	5.69																													
208-S	5.95																													
	5.95																													
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.