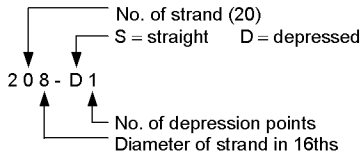


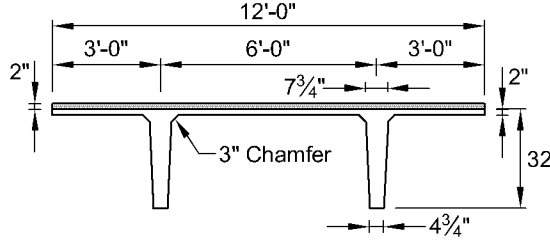
Strand Pattern Designation



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

DOUBLE TEE
12'-0" x 32"
Normal Weight Concrete



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

Section Properties
 Untopped Topped

A =	690 in. ²	—
I =	64,620 in. ⁴	82,413 in. ⁴
y _b =	22.75 in.	25.50 in.
y _t =	9.25 in.	8.75 in.
S _b =	2,840 in. ³	3,232 in. ³
S _t =	6,986 in. ³	9,696 in. ³
wt =	719 plf	1,019 plf
DL =	60 psf	85 psf
V/S =	1.70 in.	

12DT32

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

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	90	92	94	96	
128-S	7.00	193	171	151	135	120	107	96	85	76	68	61	54	48	42	37	33	28													
	7.00	0.8	0.9	0.9	1.0	1.0	1.0	1.1	1.1	1.1	1.0	1.0	1.0	0.9	0.8	0.7	0.6	0.4													
		1.2	1.2	1.3	1.4	1.4	1.4	1.5	1.5	1.5	1.4	1.4	1.3	1.2	1.1	0.9	0.7	0.5													
148-S	8.00	196	174	156	139	125	112	101	90	81	73	65	59	52	47	42	37	33	29												
	8.00	1.0	1.1	1.1	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												
		1.4	1.5	1.5	1.6	1.7	1.7	1.7	1.7	1.7	1.7	1.6	1.5	1.4	1.2	1.0	0.7	0.5													
168-S	9.00	194	174	156	140	126	114	103	93	84	75	68	61	55	49	44	40	35	31	27											
	9.00	1.2	1.2	1.3	1.3	1.4	1.4	1.4	1.4	1.4	1.4	1.3	1.3	1.2	1.0	0.9	0.7	0.5	0.3												
		1.6	1.7	1.8	1.8	1.9	1.9	1.9	2.0	2.0	1.9	1.9	1.8	1.7	1.6	1.4	1.1	0.9	0.6	0.2											
188-S	10.00	189	170	153	138	125	113	102	93	84	76	69	62	56	51	46	40	35	31	26											
	10.00	1.3	1.4	1.4	1.5	1.5	1.5	1.6	1.6	1.6	1.5	1.5	1.4	1.3	1.2	1.1	0.9	0.7	0.5	0.3											
		1.8	1.8	1.9	2.0	2.0	2.1	2.1	2.1	2.1	2.0	1.9	1.8	1.6	1.4	1.2	0.9	0.6	0.2												
208-D1	15.50																														
	4.25																														
228-D1	16.41																														
	4.50																														

12DT32 + 2

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

2 in. Normal Weight 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						
128-S	7.00	190	167	146	128	113	99	87	76	66	57	49	42	36	30															
	7.00	0.8	0.9	0.9	1.0	1.0	1.0	1.1	1.1	1.1	1.0	1.0	1.0	0.9	0.8															
		0.9	1.0	1.0	1.0	1.0	1.0	0.9	0.9	0.8	0.7	0.5	0.3	0.1	-0.2															
148-S	8.00	194	171	151	133	118	104	92	81	71	62	54	47	40	32															
	8.00	1.0	1.1	1.1	1.2	1.2	1.2	1.3	1.3	1.3	1.3	1.2	1.2	1.1	1.0															
		1.1	1.1	1.2	1.2	1.2	1.1	1.1	1.0	0.9	0.8	0.7	0.5	0.2	-0.1															
168-S	9.00	192	170	151	135	120	106	94	84	74	65	56	48	39	32															
	9.00	1.2	1.2	1.3	1.3	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.3	1.3	1.2															
		1.3	1.3	1.3	1.3	1.3	1.3	1.2	1.1	1.0	0.9	0.7	0.5	0.3	0.0															
188-S	10.00																													
	10.00																													
208-D1	15.50																													
	4.25																													
228-D1	16.41																													
	4.50																													

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.