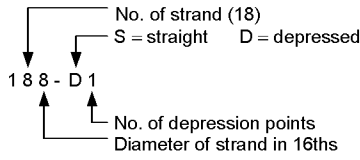


Strand Pattern Designation



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.

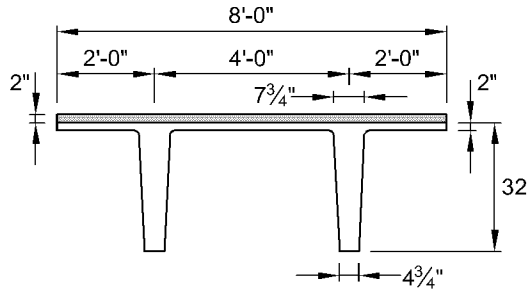
Key

- 192 – Safe superimposed service load, psf
- 1.1 – Estimated camber at erection, in.
- 1.4 – Estimated long-time camber, in.

DOUBLE TEE

8'-0" x 32"

Normal Weight Concrete



$f'_c = 5,000$ psi

$f_{pu} = 270,000$ psi

Section Properties

Untopped Topped

A =	567 in. ²	—
I =	55,464 in. ⁴	71,886 in. ⁴
y_b =	21.21 in.	23.66 in.
y_t =	10.79 in.	10.34 in.
S_b =	2,615 in. ³	3,038 in. ³
S_t =	5,140 in. ³	6,952 in. ³
wt =	591 plf	791 plf
DL =	74 psf	99 psf
V/S =	1.79 in.	

8DT32

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

No Topping

Strand Pattern	$y_s(\text{end})$ in. $y_s(\text{center})$ in.	Span, ft																												
		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	104
128-S	7.00	192	173	156	141	127	115	104	94	85	77	69	62	56	50	44	38	33	28											
	7.00	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.1	1.1	1.0	0.9	0.7	0.6	0.4	0.2	0.0	-0.3											
148-S	8.00	199	180	163	148	134	122	111	101	92	83	75	68	60	53	47	41	35	30	25										
	8.00	1.3	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.3	1.2	1.1	1.0	0.8	0.6	0.4	0.1	-0.1	-0.5										
168-S	9.00	182	165	151	137	124	113	103	93	85	76	68	61	54	48	42	36	31	26											
	9.00	1.5	1.6	1.6	1.6	1.6	1.6	1.6	1.5	1.4	1.3	1.2	1.1	0.9	0.7	0.5	0.2	-0.1	-0.4											
188-S	10.00	192	175	159	144	131	120	109	99	90	82	74	67	60	53	47	41	36	31	26										
	10.00	1.6	1.6	1.7	1.7	1.7	1.7	1.7	1.6	1.6	1.5	1.4	1.2	1.1	0.9	0.7	0.4	0.1	-0.2	-0.6										
188-D1	14.39							193	176	160	146	134	122	111	101	92	84	77	71	65	59	54	50	45	40	35	31	27		
	4.00							2.3	2.4	2.4	2.5	2.5	2.5	2.5	2.4	2.4	2.3	2.1	2.0	1.8	1.6	1.4	1.1	0.8	0.4	0.0	-0.4	-0.9		
208-D1	15.50							2.9	2.9	2.9	2.9	2.8	2.8	2.7	2.5	2.3	2.0	1.8	1.5	1.1	0.7	0.3	-0.2	-0.8	-1.5	-2.2	-3.1	-4.0		
	4.25																													

8DT32 + 2

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

2 in. Normal Weight Topping

Strand Pattern	$y_s(\text{end})$ in. $y_s(\text{center})$ 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	270	240	214	190	170	152	136	121	108	97	86	76	67	56	47	38	30											
	7.00	1.0	1.0	1.1	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.1	1.1	1.0	0.9	0.7	0.6												
148-S	7.00	289	259	232	208	187	168	152	137	123	111	100	88	77	66	57	47	39	31										
	7.00	1.3	1.4	1.4	1.5	1.5	1.6	1.6	1.7	1.7	1.7	1.7	1.6	1.6	1.5	1.4	1.3	1.2	1.0										
168-S	8.00	288	259	233	210	190	171	155	138	124	110	98	87	76	67	57	49	40	33	25									
	8.00	1.4	1.5	1.6	1.7	1.7	1.8	1.8	1.8	1.9	1.9	1.9	1.8	1.8	1.7	1.6	1.5	1.3	1.2	1.0									
188-S	9.00	282	254	230	208	186	166	148	133	119	106	94	83	74	65	56	48	40	32	25									
	9.00	1.6	1.6	1.7	1.8	1.8	1.9	1.9	2.0	2.0	2.0	2.0	1.9	1.9	1.8	1.7	1.6	1.4	1.2	1.0									
188-D1	14.39							233	213	194	175	157	141	126	113	100	89	78	69	61	54	47	41	35	30				
	4.00							2.2	2.2	2.3	2.4	2.4	2.5	2.5	2.5	2.5	2.4	2.4	2.3	2.2	2.0	1.8	1.6	1.4	1.1				
208-D1	15.50							2.1	2.0	2.0	1.9	1.8	1.7	1.5	1.3	1.1	0.8	0.4	0.0	-0.5	-1.0	-1.5	-2.1	-2.8	-3.6				
	4.25																												

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.