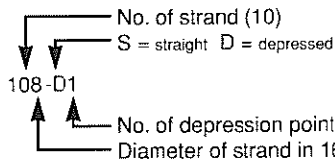


Strand Pattern Designation



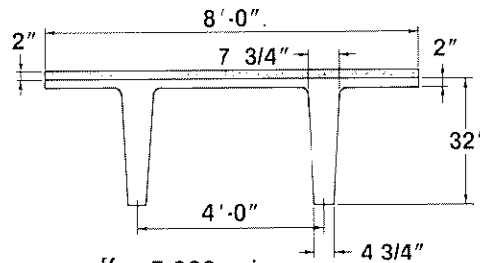
Safe loads shown include dead load of 10 psf for untopped members and 15 psf for topped members. Remainder is live load. Long-time cambers include superimposed dead load but do not include live load.

Key

- 186 — Safe superimposed service load, psf
- 1.4 — Estimated camber at erection, in.
- 1.8 — 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_e =	21.21 in.	23.66 in.
y_t =	10.79 in.	10.34 in.
Z_b =	2,615 in. ³	3,038 in. ³
Z_t =	5,140 in. ³	6,952 in. ³
wt =	591 plf	791 plf
	74 psf	99 psf
V/S =	1.79 in.	

8DT32

Table of safe superimposed service load (psf) and cambers

No Topping

Strand Pattern	e_e e_c	Span, ft.																							
		50	52	54	56	58	60	62	64	66	68	70	72	74	76	78	80	82	84	86	88	90	92	94	
128-D1	12.04	186	167	151	136	123	111	100	90	82	73	66	59	53	47	42									
	17.96	1.4	1.4	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.4	1.4	1.3	1.1	1.0	0.8									
148-D1	9.71		197	179	162	147	134	121	110	100	91	83	75	68	61	55	49	44							
	17.71		1.6	1.7	1.7	1.8	1.8	1.8	1.8	1.8	1.8	1.7	1.7	1.6	1.5	1.3	1.1	0.9							
168-D1	8.21				188	171	156	142	130	119	108	99	90	82	75	68	62	56	51	46					
	17.46				1.9	2.0	2.0	2.1	2.1	2.1	2.2	2.1	2.1	2.0	1.9	1.8	1.7	1.5	1.3	1.1					
188-D1	6.82						177	162	149	136	125	115	105	96	88	81	74	67	62	56	51				
	17.21						2.2	2.3	2.3	2.4	2.4	2.4	2.4	2.4	2.3	2.3	2.2	2.0	1.8	1.6	1.4				
208-D1	5.71												130	119	110	101	93	85	78	72	66	60	55	50	
	16.96												2.6	2.7	2.7	2.6	2.6	2.5	2.4	2.3	2.1	1.9	1.7	1.4	
228-D1	4.80																							52	
	16.71																							0.1	

8DT32 + 2

Table of safe superimposed service load (psf) and cambers

2" Normal Weight Topping

Strand Pattern	e_e e_c	Span, ft.																						
		44	46	48	50	52	54	56	58	60	62	64	66	68	70	72	74	76	78	80				
108-D1	15.31	204	180	159	140	124	109	96	84	73	64	55	47											
	18.21	1.0	1.1	1.1	1.2	1.2	1.2	1.3	1.3	1.2	1.2	1.2	1.2	1.1										
128-D1	12.04		202	180	151	143	128	114	101	90	79	70	61											
	17.96		1.3	1.4	1.4	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.4										
148-D1	9.71				192	173	155	139	125	112	100	89	80	71	63									
	17.71				1.6	1.7	1.7	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.7								
168-D1	8.21						182	164	148	134	121	109	98	88	79	70								
	17.46						1.9	2.0	2.0	2.1	2.1	2.1	2.2	2.1	2.1	2.0								
188-D1	6.82									170	154	140	127	115	104	94	85	76	68					
	17.21									2.2	2.3	2.3	2.4	2.4	2.4	2.4	2.4	2.3	2.3					
208-D1	5.71																							
	16.96																							

Strength based on strain compatibility; bottom tension limited to $12\sqrt{f'_c}$; see pages 2-3-2-6 for explanation. Shaded values require release strengths higher than 3500 psi.