

DOUBLE TEE

TYPE "A" LOAD TABLE

8LDT 24+2

Table of safe superimposed live load (psf)

Lightweight Concrete

2" Normal Weight Topping

8'-0" x 24" Double Tee

Strand Pattern	Span, ft																							
	26	28	30	32	34	36	38	40	42	44	46	48	50	52	54	56	58	60	62	64	66	68	70	
48-S	166*	136*	111*	91*	75*	61*	49*	39*	30*															
68-S		203*	170*	143*	120*	101*	86*	72*	60*	50*	41*	33*	27*											
88-S			185*	158*	135*	116*	99*	85*	72*	62*	52*	44*	37*	30*										
68-D1				187*	160*	137*	117*	100*	86*	74*	63*	53*	45*	37*	31*	25*								
88-D1						192*	167*	145*	127*	111*	97*	84*	74*	64*	55*	48*	41*	35*	27					
108-D1													98*	87*	76*	67*	59*	51	43		35	28		
128-D1																						42	35	28
Dead Load	f_t	172	199	229	260	294	330	367	407	449	493	539	586	636	688	742	798	856	917	979	1043	1109	1177	1248
	f_b	-431	-499	-573	-653	-737	-826	-920	-1020	-1124	-1234	-1349	-1469	-1594	-1724	-1859	-1999	-2145	-2295	-2451	-2612	-2778	-2948	-3124
	a	0.099	0.133	0.176	0.228	0.290	0.365	0.453	0.556	0.676	0.814	0.972	1.153	1.357	1.588	1.896	2.135	2.457	2.814	3.208	3.643	4.120	4.643	5.213
100 plf Live Load	f_t	13	15	18	20	23	26	29	32	35	39	43	46	50	55	59	63	68	73	78	83	88	94	99
	f_b	-67	-78	-90	-102	-115	-129	-144	-160	-176	-194	-212	-230	-250	-270	-292	-314	-337	-360	-385	-410	-436	-463	-491
	a	0.012	0.016	0.021	0.027	0.035	0.044	0.055	0.067	0.081	0.098	0.117	0.139	0.164	0.191	0.223	0.258	0.296	0.339	0.387	0.439	0.497	0.560	0.629

*Capacity governed by ultimate strength

Values below heavy line require release strengths higher than 3500 psi

$f_c = 5000$ psi

$f_{pu} = 270,000$ psi

Notation

f_t = top fiber stress, psi (after assumed 25% loss) (precast section)

f_b = bottom fiber stress, psi (after assumed 25% loss)

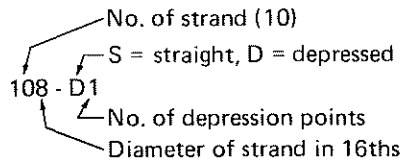
a = center deflection, in.

$0.001 l^2 \alpha$ = initial center camber, in. (after assumed 10% loss)

l = span (ft)

M_u = ult. moment capacity, in.-kips

Strand Pattern Designation

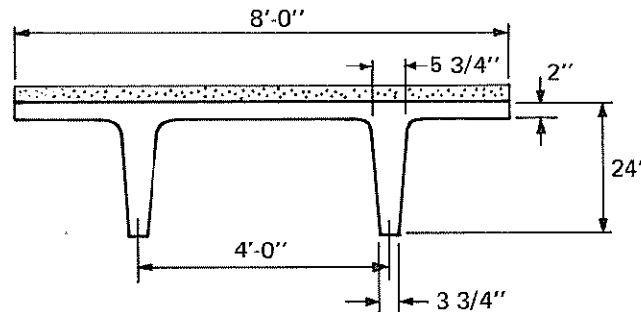


Section Properties

- $I = 29,853$ in.⁴
- $Y_b = 19.94$ in.
- $Y_t = 6.06$ in.
- $Z_b = 1497$ in.³
- $Z_t = 4926$ in.³
- $wt = 520$ plf
- 65 psf

See preceding page for untopped section properties.

Strand Pattern	Eccentricity in.		Prestress alone					M_u
			end		center		α	
	end	ctr	f_t	f_b	f_t	f_b		
48-S	12.15	12.15	-127	1078	-127	1078	0.451	3033
68-S	10.48	10.48	-120	1440	-120	1440	0.584	4111
88-S	9.15	9.15	-85	1731	-85	1731	0.679	4997
68-D1	10.48	14.65	-120	1440	-297	1883	0.738	5040
88-D1	9.15	14.40	-85	1731	-383	2476	0.939	6505
108-D1	6.75	14.15	63	1738	-461	3050	1.084	7755
128-D1	5.15	13.90	211	1745	-532	3607	1.223	8931



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2" Normal Weight Topping
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