

DOUBLE TEE

TYPE "A" LOAD TABLE

8DT 20+2

Table of safe superimposed live load (psf)

Normal Weight Concrete

2" Normal Weight Topping

8'-0" x 20" Double Tee

Strand Pattern	Span, ft																	
	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50	52	54	56
48-S	187*	148*	117*	92*	73*	57*	43*	32*										
68-S			184*	151*	123*	101*	83*	67*	54*	43*	34*	25*						
88-S			206*	169*	139*	115*	95*	79*	64*	52*	41*	29						
68-D1				199*	166*	139*	116*	97*	81*	67*	55*	45*	36*	28*				
88-D1							162*	138*	118*	100*	86*	73*	61*	51*	41	32		
108-D1															61	50	40	31

Dead Load	f_t																		
	f_b																		
100 pcf Live Load	f_t																		
	f_b																		
a																			
	180	215	252	293	336	382	432	484	539	598	659	723	790	861	934	1010	1089	1172	
	-487	-580	-681	-790	-907	-1032	-1165	-1306	-1455	-1612	-1778	-1951	-2133	-2322	-2520	-2725	-2939	-3161	
	0.064	0.090	0.124	0.167	0.221	0.286	0.364	0.457	0.568	0.697	0.847	1.021	1.219	1.446	1.702	1.991	2.316	2.678	
	15	18	21	24	28	32	36	40	45	50	55	60	66	72	78	84	91	98	
	-70	-83	-98	-114	-131	-149	-168	-188	-210	-233	-257	-282	-303	-335	-364	-394	-424	-457	
	0.007	0.010	0.014	0.019	0.025	0.032	0.041	0.052	0.065	0.079	0.096	0.116	0.139	0.165	0.194	0.227	0.264	0.305	

*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 22% loss) (precast section)

f_b = bottom fiber stress, psi (after assumed 22% loss)

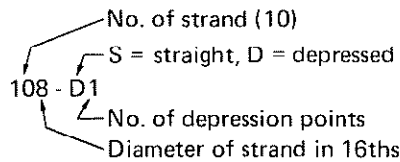
a = center deflection, in.

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

l = span (ft)

M_U = ult. moment capacity, in.-kips

Strand Pattern Designation

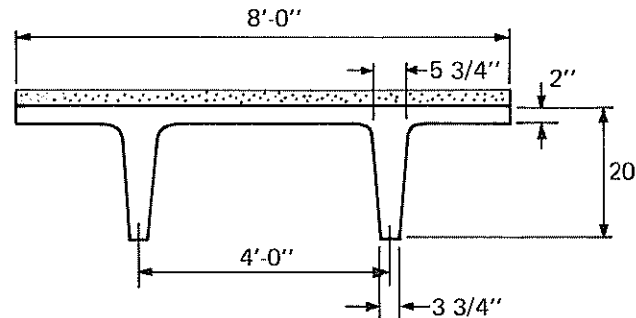


Section Properties

- I = 16,935 in.⁴
- y_b = 16.45 in.
- y_t = 5.55 in.
- Z_b = 1029 in.³
- Z_t = 3051 in.³
- wt = 578 plf
- 72 psf

See preceding page for untopped section properties.

Strand Pattern	Eccentricity in.		Prestress alone				α	M_U
			end		center			
	end	ctr	f_t	f_b	f_t	f_b		
48-S	9.59	9.59	-124	1255	-124	1255	0.399	2438
68-S	8.59	8.59	-128	1725	-128	1725	0.536	3368
88-S	6.09	6.09	23	1775	23	1775	0.506	3662
68-D1	8.59	12.09	-128	1725	-332	2276	0.681	4148
88-D1	6.09	11.84	23	1775	-424	2982	0.825	5237
108-D1	4.59	11.59	175	1826	-505	3662	0.962	6241



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