

DOUBLE TEE

TYPE "A" LOAD TABLE

8DT 18+2

Table of safe superimposed live load (psf)

Normal Weight Concrete 2" Normal Weight Topping 8'-0" x 18" Double Tee

Strand Pattern	Span, ft														
	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50
28-S	75*	54*	37*	24*											
48-S	159*	124*	97*	76*	59*	45*	33*								
68-S		191*	154*	125*	101*	82*	66*	53*	41*	32*					
68-D1			173*	143*		119*	99*	82*	67*	55*	45*	36*	26		
88-D1									99*	84*	70*	59*	47	36	27

Dead Load	f _t f _b a	Span, ft														
		22	24	26	28	30	32	34	36	38	40	42	44	46	48	50
100 plf Live Load	f _t	206	245	287	333	383	436	492	552	615	681	751	824	901	981	1064
	f _b	-578	-688	-807	-936	-1075	-1223	-1381	-1548	-1725	-1912	-2108	-2313	-2528	-2753	-2987
	a	0.083	0.118	0.162	0.218	0.287	0.372	0.474	0.596	0.739	0.908	1.103	1.329	1.588	1.882	2.216
100 plf Live Load	f _t	17	20	23	27	31	36	40	45	50	56	62	68	74	81	88
	f _b	-85	-101	-119	-138	-158	-180	-203	-228	-254	-282	-311	-341	-373	-406	-440
	a	0.010	0.014	0.019	0.025	0.033	0.043	0.055	0.069	0.086	0.105	0.128	0.154	0.184	0.218	0.257

*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)

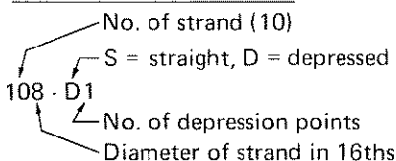
a = center deflection, in.

0.001 l² α = initial center camber, in. (after assumed 10% loss)

l = span (ft)

M_u = ult. moment capacity, in.-kips

Strand Pattern Designation

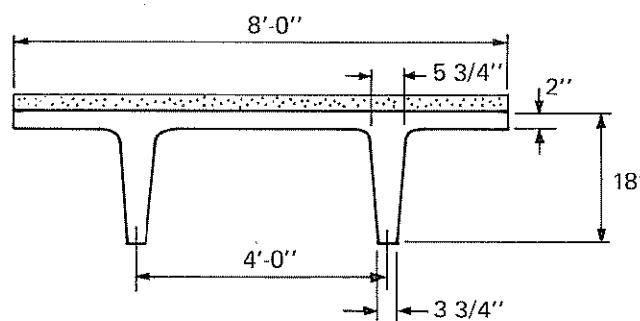


Section Properties

- I = 12,759 in.⁴
- Y_b = 15.00 in.
- Y_t = 5.00 in.
- Z_b = 851 in.³
- Z_t = 2552 in.³
- wt = 558 plf
- 70 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		
28-S	11.27	11.27	-127	857	-127	857	0.317	1316
48-S	8.27	8.27	-117	1327	-117	1327	0.465	2141
68-S	7.27	7.27	-107	1798	-107	1798	0.613	2922
68-D1	7.27	10.77	-107	1798	-348	2474	0.810	3694
88-D1	4.77	10.52	86	1753	-441	3235	0.967	4618



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2" Normal Weight Topping
8'-0" x 18" Double Tee

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