

# DOUBLE TEE

## TYPE "A" LOAD TABLE

**8DT 20**

Table of safe superimposed live load (psf) Normal Weight Concrete No Topping 8'-0" x 20" Double Tee

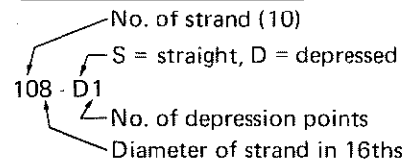
Strand Pattern	Span, ft																			
	28	30	32	34	36	38	40	42	44	46	48	50	52	54	56	58	60	62	64	
48-S	97*	79*	65*	53*	43*	34*	27*													
68-S			104*	88*	74*	62*	53*	44*	37*	30*	24*									
88-S				97*	82*	69*	59*	50*	42*	35*	29*									
68-D1					103*	89*	76*	66*	56*	48*	41*	35*	29*	24*						
88-D1							107*	93*	81*	71*	62*	54*	47*	41*	35*	30*	25*			
108-D1												72*	64*	56*	50*	44*	38*	33	28	
Dead Load	$f_t$	191	220	250	282	316	353	391	431	473	517	563	611	661	712	766	822	880	939	1001
	$f_b$	-516	-593	-675	-762	-854	-952	-1054	-1163	-1276	-1395	-1519	-1648	-1782	-1922	-2067	-2217	-2373	-2534	-2700
100 plf Live Load	$f_t$	50	58	66	74	83	93	103	114	125	136	148	161	174	188	202	217	232	248	264
	$f_b$	-136	-156	-178	-201	-225	-251	-278	-307	-337	-368	-401	-435	-471	-508	-546	-586	-627	-670	-714
	$a$	0.026	0.034	0.044	0.056	0.070	0.087	0.107	0.130	0.157	0.187	0.222	0.261	0.306	0.356	0.411	0.473	0.542	0.618	0.702

\*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**

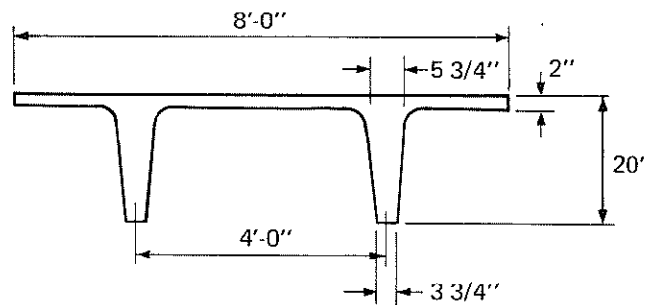
- $f_t$  = top fiber stress, psi (after assumed 22% loss)
- $f_b$  = bottom fiber stress, psi (after assumed 22% loss)
- $a$  = center deflection, in.
- $0.001 l^2 \alpha$  = initial center camber, in. (after assumed 10% loss)
- $l$  = span (ft)
- $M_U$  = ult. moment capacity, in.-kips

**Strand Pattern Designation**



**Section Properties**

- $A$  = 363 in.<sup>2</sup>
- $I$  = 12,551 in.<sup>4</sup>
- $Y_b$  = 14.59 in.
- $Y_t$  = 5.41 in.
- $Z_b$  = 860 in.<sup>3</sup>
- $Z_t$  = 2320 in.<sup>3</sup>
- wt = 378 plf
- 47 psf



**Normal Weight Concrete**  
**No Topping**  
**8'-0" x 20" Double Tee**  
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