

# SINGLE TEE

## TYPE "A" LOAD TABLE

**10ST 48**

Table of safe superimposed live load (psf)

Normal Weight Concrete

No Topping

10'-0" x 48" Single Tee

Strand Pattern	Span, ft																							
	66	68	70	72	74	76	78	80	82	84	86	88	90	92	94	96	98	100	102	104	106	108	110	
128-S	76*	68*	60*	53*	47*	41*	35*																	
148-S	88*	79*	71*	63*	56*	50*	44*	39*																
128-D1	109*	98*	89*	81*	73*	65*	59*	52*	47*	41*	36*	32*												
148-D1				102*	93*	85*	77*	70*	63*	57*	52*	46*	41*	37*										
168-D1						102*	94*	86*	78*	71*	65*	59*	53*	48*	43*	39*								
188-D1								101*	93*	85*	78*	72*	66*	60*	55*	50*	45*	40*						
208-D1									99*	92*	84*	78*	71*	66*	60*	55*	50*	46*	41*					
228-D1										104*	97*	89*	83*	76*	70*	65*	60*	54	49	44	40			
248-D1												101*	93*	87*	80*	74*	68	63	57	52	47	42		
Dead Load	$f_t$	403	428	454	480	507	535	563	593	623	653	685	717	750	784	818	853	889	926	964	1002	1041	1080	1121
	$f_b$	-1108	-1176	-1247	-1319	-1393	-1470	-1548	-1629	-1711	-1796	-1882	-1971	-2061	-2154	-2249	-2345	-2444	-2545	-2648	-2753	-2859	-2968	-3079
	a	0.574	0.647	0.726	0.813	0.907	1.009	1.120	1.239	1.368	1.506	1.655	1.814	1.985	2.167	2.362	2.569	2.790	3.026	3.274	3.539	3.819	4.116	4.429
100 plf Live Load	$f_t$	49	52	55	58	62	65	69	72	76	80	84	88	92	96	100	104	109	113	118	122	127	132	137
	$f_b$	-136	-144	-153	-161	-171	-180	-190	-199	-210	-220	-231	-241	-253	-264	-276	-287	-300	-312	-325	-337	-351	-364	-377
	a	0.059	0.066	0.075	0.083	0.093	0.104	0.115	0.127	0.140	0.155	0.170	0.186	0.204	0.223	0.243	0.264	0.287	0.311	0.336	0.363	0.392	0.423	0.455

\*Capacity governed by ultimate strength

Values below heavy line require release strengths higher than 3500 psi

$f_c = 5000$  psi

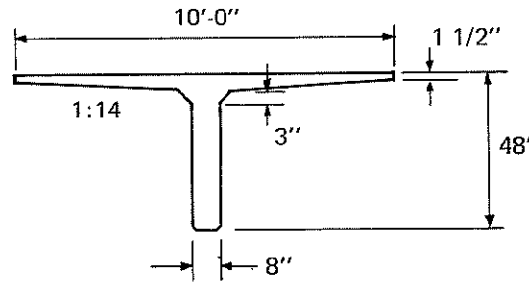
$f_{pu} = 270,000$  psi

**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**

- No. of strand (10)
- S = straight, D = depressed
- 108 - D1
- No. of depression points
- Diameter of strand in 16ths



**Section Properties**

- A = 782 in.<sup>2</sup>
- I = 168,968 in.<sup>4</sup>
- $y_b$  = 35.19 in.
- $y_t$  = 12.81 in.
- $Z_b$  = 4802 in.<sup>3</sup>
- $Z_t$  = 13,190 in.<sup>3</sup>
- wt = 815 plf
- 81 psf

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No Topping  
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