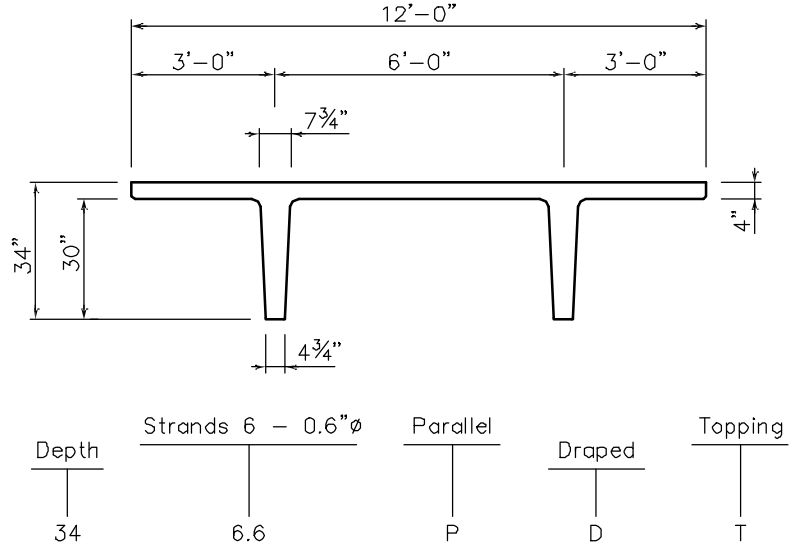


Prestressed Concrete 34"x12' Double Tee (PRETOPPED)

PHYSICAL PROPERTIES	
Precast	
A = 951 in. ²	S _b = 3300 in. ³
I = 85,053 in. ⁴	S _t = 10,335 in. ³
Y _b = 25.77 in.	Wt. = 991 PLF
Y _t = 8.23 in.	Wt. = 83 PSF



DESIGN DATA

1. Precast strength @ RELEASE = 3000 PSI. (min.)
2. Precast strength @ 28 days = 6000 PSI.
3. Precast Density = 150 PCF
4. Strand = 0.6" ϕ 270k LO-relaxation.
5. Maximum bottom tensile stress is $12\sqrt{f'_c} = 930$ PSI.
6. All superimposed load is treated as live load in the flexural strength analysis.
7. Flexural capacity is based on stress/strain strand relationships.
8. Maximum moment capacity is critical at midspan for parallel strands and is critical near 0.4 span for draped strands.

Table of Safe Superimposed Loads (lbs. per sq. ft.)																						
Section	ϕM_n (in. Kips)	Span in Feet																				
		52	54	56	58	60	62	64	66	68	70	72	74	76	78	80	82	84	86	88	90	92
34-6.6 P	9,405	46	37	30																		
34-8.6 P	12,117	78	67	58	49	42	35															
34-10.6 P	14,586	108	95	83	73	64	56	48	41	35												
34-12.6 P	16,796	134	120	106	95	84	74	66	58	50	44	38	32									
34-14.6 D	21,450	191	173	156	141	127	114	103	93	84	75	67	60	53	47	42	36	31				
34-16.6 D	24,293	225	204	185	168	152	138	126	114	104	94	85	77	69	62	56	50	44	39	34	30	
34-18.6 D	26,938			212	193	176	160	146	134	122	111	101	92	83	75	67	60	55	51	45	40	36

This table is for simple spans and uniform loads. Design data for any of these span-load conditions is available on request. Individual designs may be furnished to satisfy unusual conditions of heavy loads, concentrated loads, cantilevers, flange or stem openings and narrow widths.



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