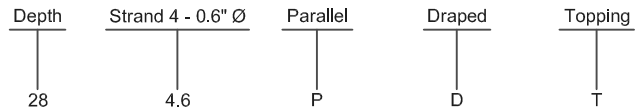
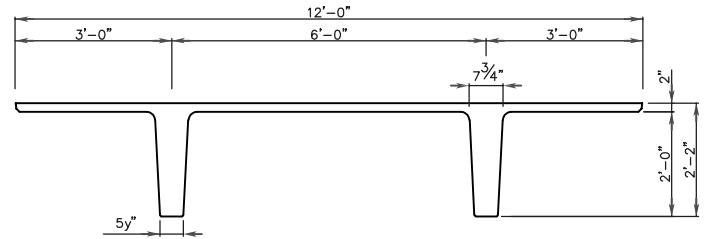


Prestressed Concrete 26" x 12' DOUBLE TEE (NO TOPPING)

PHYSICAL PROPERTIES

A = 602 in. ²	S _b = 2,024 in. ³
I = 37,638 in. ⁴	St = 5,085 in. ³
Y _b = 18.60 in.	Wt. = 627 PLF
Y _t = 7.40 in.	Wt. = 52 PSF



DESIGN DATA

1. Precast Strength @ release = 3,500 PSI.
2. Precast Strength @ release for draped tees = 4,500 PSI.
3. Precast Strength @ 28 days = 6,000 PSI
4. Precast Density = 145 PCF
5. Strand = 0.6" Ø 270K Lo-Relaxation.
6. Maximum moment capacity is critical at midspan for parallel strands and is critical near 0.4 span for draped strands.
7. Maximum bottom tensile stress is $12\sqrt{f_c} = 930$ PSI
8. Flexural capacity is based on stress/strain strand relationships.
9. All superimposed load is treated as live load in the flexural strength analysis. To determine the allowable live load if the amount of superimposed dead load is known use the following conversion method...

$$\text{Allowable Live Load} = \frac{(1.6)(\text{Load Table Value}) - (1.2)(\text{Superimposed Dead Load})}{1.6}$$

10. If the above conversion is used then allowable stress limits must be checked so they are not exceeded.
11. Deflection limits were not considered when determining allowable loads in this table.

ALLOWABLE SUPERIMPOSED LIVE LOADS (psf)

Section	Ø Mn (in. Kips)	SPAN (FEET)																								
		38	40	42	44	46	48	50	52	54	56	58	60	62	64	66	68	70	72	74	76	78	80	82	84	
26 - 4.6 P	4,818	76	65	55	47	39																				
26 - 6.6 P	6,885	126	110	96	84	73	64	56	49	42	37															
26 - 8.6 P	9,568				117	103	92	81	72	64	57	50	44	39												
26 - 10.6 P	10,336						116	104	93	83	75	67	60	54	48	43	38									
26 - 12.6 P	11,720								111	100	90	81	73	65	58	52	46	41	36							
26 - 14.6 D	15,997											114	104	94	86	78	71	65	59	53	49	44	39			
26 - 16.6 D	17,938												115	105	96	88	80	73	67	61	56	51	46	42	38	
26 - 18.6 D	19,820													115	105	97	88	81	74	68	62	57	52	48	43	