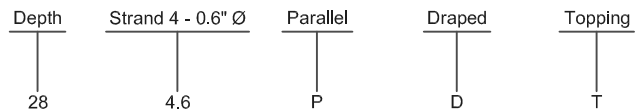
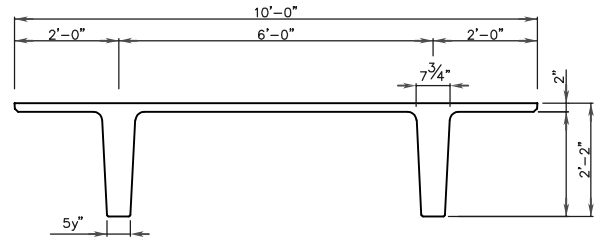


Prestressed Concrete 26" x 10' DOUBLE TEE (NO TOPPING)

PHYSICAL PROPERTIES

A = 554 in. ²	S _b = 1,967 in. ³
I = 35,484 in. ⁴	St = 4,460 in. ³
Y _b = 18.04 in.	Wt. = 578 PLF
Y _t = 7.96 in.	Wt. = 58 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)																							
		40	42	44	46	48	50	52	54	56	58	60	62	64	66	68	70	72	74	76	78	80	82	84	86
26 - 4.6 P	4,811	81	70	60	51	43	36																		
26 - 6.6 P	6,870		118	104	91	80	71	62	54	47	41	36													
26 - 8.6 P	8,697				127	113	101	90	80	72	64	57	50	45	39										
26 - 10.6 P	10,294						128	115	103	93	84	75	68	61	55	49	43	38							
26 - 12.6 P	11,659								121	109	98	88	79	71	64	57	51	45	40	35					
26 - 14.6 D	15,894											125	114	104	95	86	79	72	65	60	54	49	44	40	36
26 - 16.6 D	17,831												126	116	106	97	89	81	75	68	62	57	52	47	43
26 - 18.6 D	19,695													127	116	107	98	90	82	76	70	64	59	54	49