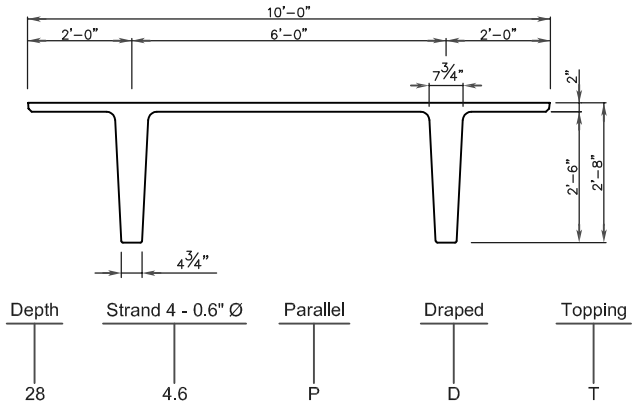


Prestressed Concrete 32" x 10' DOUBLE TEE (NO TOPPING)

PHYSICAL PROPERTIES

A = 615 in. ²	S _b = 2,718 in. ³
I = 59,720 in. ⁴	St = 5,957 in. ³
Y _b = 21.98 in.	Wt. = 641 PLF
Y _t = 10.02 in.	Wt. = 64 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
32 - 4.6 P	6,076	110	95	82	71	61	53	45	38																
32 - 6.6 P	8,768					110	98	87	77	68	60	53	46	41	35										
32 - 8.6 P	11,228									112	101	90	81	73	66	59	53	47	42	37					
32 - 10.6 P	13,458										118	107	97	88	80	73	66	60	54	49	44	39			
32 - 12.6 P	15,456											119	108	98	89	81	74	67	60	54	49	44	39		
32 - 14.6 D	20,323															123	113	104	95	88	80	74	68	62	57
32 - 16.6 D	22,893																	117	108	99	92	85	78	72	66
32 - 18.6 D	25,390																			110	102	94	87	81	75