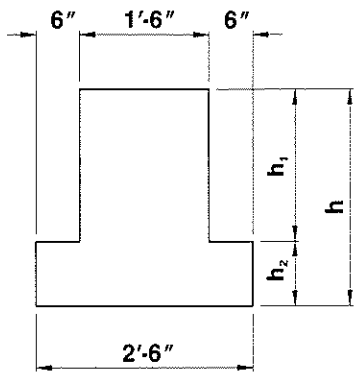


INVERTED TEE BEAMS



$f'_c = 5,000$ psi
 $f_{pu} = 270,000$ psi
 ½ in. diameter
 low-relaxation strand

Normal Weight Concrete

Section Properties								
Designation	h (in.)	h ₁ /h ₂ (in.)	A (in. ²)	I (in. ⁴)	y _b (in.)	Z _b (in. ³)	Z _t (in. ³)	wt (plf)
30IT20	20	12/8	456	15,240	8.74	1,744	1,354	475
30IT24	24	12/12	576	26,352	10.50	2,510	1,952	600
30IT28	28	16/12	648	41,824	12.22	3,423	2,650	675
30IT32	32	20/12	720	62,400	14.00	4,457	3,467	750
30IT36	36	24/12	792	88,678	15.82	5,605	4,394	825
30IT40	40	24/16	912	121,923	17.47	6,979	5,412	950
30IT44	44	28/16	984	162,161	19.27	8,415	6,557	1,025
30IT48	48	32/16	1,056	210,199	21.09	9,967	7,811	1,100
30IT52	52	36/16	1,128	266,627	22.94	11,623	9,175	1,175
30IT56	56	40/16	1,200	332,032	24.80	13,388	10,642	1,250
30IT60	60	44/16	1,272	406,997	26.68	15,255	12,215	1,325

1. Check local area for availability of other sizes.
2. Safe loads shown include 50% dead load and 50% live load. 800 psi top tension has been allowed, therefore additional top reinforcement is required.
3. Safe loads can be significantly increased by use of structural composite topping.

Key

- 8,428 — Safe superimposed service load, plf
- 0.4 — Estimated camber at erection, in.
- 0.2 — Estimated long-time camber, in.

Table of safe superimposed service load (plf) and cambers

Designation	No. Strand	e	Span, ft.																
			18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50
30IT20	14	6.65	8,428 0.4 0.2	6,736 0.5 0.2	5,485 0.6 0.2	4,533 0.7 0.3	3,792 0.9 0.3	3,204 1.0 0.3	2,730 1.1 0.3	2,342 1.2 0.3	2,020 1.3 0.3	1,751 1.4 0.3	1,523 1.4 0.3	1,332 1.5 0.3	1,167 1.6 0.3	1,024 1.6 0.2			
30IT24	17	7.67		9,736 0.4 0.2	7,942 0.5 0.2	6,578 0.6 0.2	5,516 0.7 0.2	4,673 0.8 0.3	3,994 0.9 0.3	3,437 1.0 0.3	2,976 1.1 0.3	2,592 1.2 0.3	2,269 1.2 0.3	1,993 1.3 0.3	1,755 1.4 0.2	1,550 1.4 0.2	1,370 1.5 0.2	1,212 1.5 0.1	1,073 1.5 0.0
30IT28	20	9.06				9,087 0.6 0.2	7,643 0.7 0.2	6,497 0.8 0.3	5,573 0.9 0.3	4,816 1.0 0.3	4,189 1.1 0.3	3,664 1.2 0.3	3,219 1.2 0.3	2,839 1.3 0.3	2,513 1.4 0.3	2,334 1.4 0.3	1,990 1.5 0.3	1,776 1.5 0.3	1,588 1.5 0.2
30IT32	23	10.50						8,647 0.7 0.2	7,436 0.8 0.3	6,445 0.9 0.3	5,623 1.0 0.3	4,935 1.1 0.4	4,352 1.2 0.4	3,855 1.2 0.4	3,426 1.3 0.4	3,055 1.4 0.4	2,732 1.4 0.4	2,448 1.5 0.4	2,201 1.5 0.3
30IT36	24	12.32							9,492 0.7 0.2	8,243 0.8 0.3	7,207 0.9 0.3	6,340 1.0 0.3	5,605 1.1 0.3	4,978 1.1 0.3	4,439 1.2 0.3	3,971 1.3 0.3	3,563 1.3 0.3	3,205 1.3 0.3	2,892 1.4 0.3
30IT40	30	12.92								9,077 0.8 0.3	7,994 0.8 0.3	7,077 0.9 0.3	6,295 1.0 0.4	5,621 1.1 0.4	5,037 1.2 0.4	4,528 1.2 0.4	4,081 1.3 0.4	3,687 1.4 0.4	
30IT44	30	14.73									9,659 0.7 0.3	8,564 0.8 0.3	7,629 0.9 0.3	6,825 1.0 0.3	6,127 1.1 0.3	5,519 1.1 0.3	4,985 1.1 0.3	4,514 1.2 0.3	
30IT48	33	16.17										9,222 0.8 0.3	8,262 0.9 0.3	7,431 1.0 0.3	6,705 1.1 0.3	6,068 1.1 0.3	5,506 1.1 0.3		
30IT52	36	17.62											9,836 0.9 0.3	8,858 0.9 0.3	8,004 1.0 0.3	7,255 1.1 0.3	6,594 1.1 0.4		
30IT56	39	19.06													9,407 1.0 0.3	8,538 1.0 0.4	7,770 1.1 0.4		
30IT60	42	20.49															9,917 1.0 0.3	9,036 1.0 0.4	