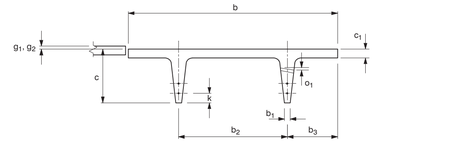
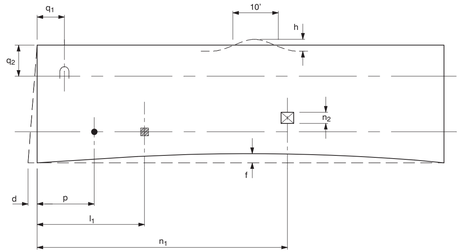
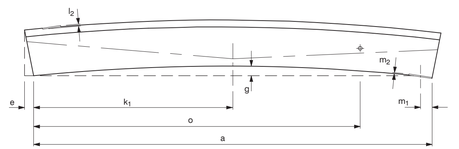
Fig. 10.6.1 Double Tees (Untopped & Pretopped)



Cross Section



Plan

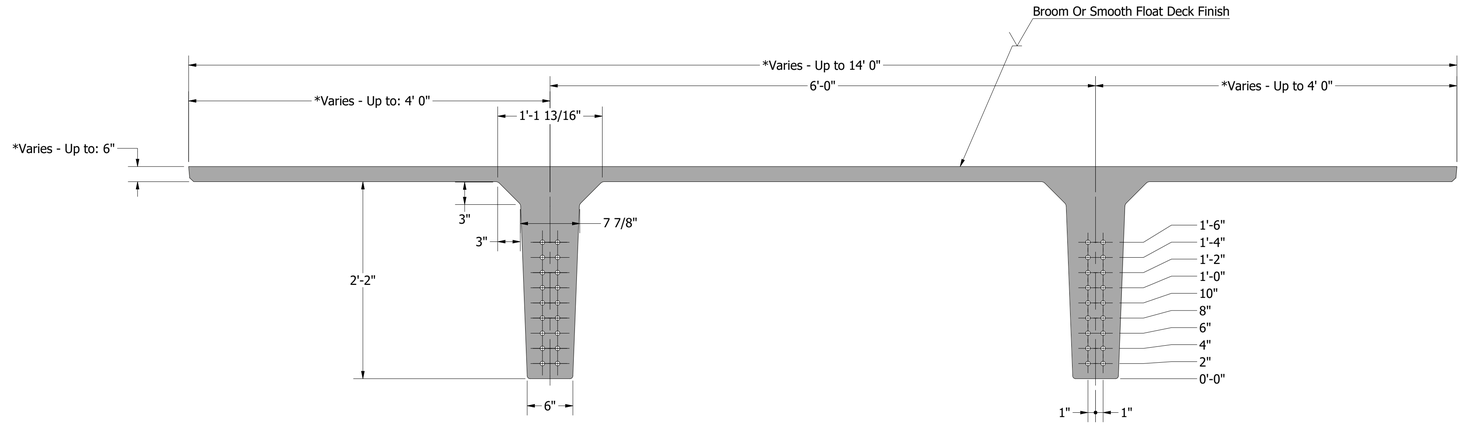


Elevation

10.6 Double Tees (Untopped & Pretopped)

a = Length ..... ±1 in. [±25 mm]
b = Width (overall) ..... ±¼ in. [±6 mm]
b_1 = Stem width ..... ±1/8 in. [±3 mm]
b_2 = Distance between stems ..... ±¼ in. [±6 mm]
b_3 = Stem to edge of top flange ..... ±¼ in. [±6 mm]
c = Depth (overall) ..... ±¼ in. [±6 mm]
c_1 = Flange thickness ..... +¼ in., −1/8in. [+6 mm, −3 mm]
d = Variation from specified plan end squareness or skew ..... ±1/8 in. per 12 in. width, ±½ in. maximum [±3 mm per 300 mm width, ±13 mm maximum]
e = Variation from specified elevation end squareness or skew:
24 in. [600 mm] or less depth ..... ±¼ in. [±6 mm]
Greater than 24 in. [600 mm] depth ..... ±1/8 in. per 12 in., ±½ in. maximum [±3 mm per 300 mm, ±13 mm maximum]
f = Sweep, for member length:
Up to 40 ft. [12 m] ..... ±¼ in. [±6 mm]
40 to 60 ft. [12 to 18 m] ..... ±3/8 in. [±10 mm]
Greater than 60 ft. [18 m] ..... ±½ in. [±13 mm]
g = Camber variation from design camber ..... ±¼ in. per 10 ft., ±¾ in. maximum [±6 mm per 3 m, ±19 mm maximum]
g_1 = Differential camber between adjacent untopped members of the same design to receive topping ..... ¼ in. per 10 ft., ¾ in. maximum [6 mm per 3 m, ±19 mm maximum]
g_2 = Differential camber between adjacent pretopped members of the same design ..... 1/8 in. per 10 ft., 3/8 in. maximum [3 mm per 3 m, ±10 mm maximum]
h = Local smoothness of any surface ..... ¼ in. in 10 ft. [6 mm in 3 m]
k = Location of strand:
Individual ..... ±¼ in. [±6 mm]
Bundled ..... ±½ in. [±13 mm]
k_1 = Location of harp points for harped strands from design location ... ±20 in. [±510 mm]
l_1 = Location of embedment ..... ±1 in. [±25 mm]
l_2 = Tipping and flushness of embedment ..... ±¼ in. [±6 mm]
m_1 = Location of bearing assembly ..... ±½ in. [±13 mm]
m_2 = Tipping and flushness of bearing assembly ..... ±1/8 in. [±3 mm]
n_1 = Location of blockout ..... ±1 in. [±25 mm]
n_2 = Size of blockouts ..... ±½ in. [±13 mm]
o = Location of sleeves cast in stems, in both horizontal and vertical plane ±1 in. [±25 mm]
o_1 = Skew of sleeve ends, vertical or horizontal, end to end* ..... ±½ in. [±25 mm]
p = Location of inserts for structural connections ..... ±½ in. [±13 mm]
q_1 = Location of handling device parallel to length of member ..... ±6 in. [±150 mm]
q_2 = Location of handling device transverse to length of member ..... ±1 in. [±25 mm]

* If skew tolerance of sleeves cast in stems is important for the function or other reason, it should be treated as a special project tolerance.



Section Properties

A =	670.00	In^2
I =	49,802.00	In^4
Y_b =	19.70	In
Y_t =	8.30	In
S_b =	2,532.00	In^3
S_t =	5,979.00	In^3
wt =	58.00	Lb/ft^2
dl =	698.00	Lb/ft
v/s =	1.74	-

A =	-	In^2
I =	82,341.00	In^4
Y_b =	24.30	In
Y_t =	7.70	In
S_b =	3,393.00	In^3
S_t =	10,647.00	In^3
wt =	108.00	Lb/ft^2
dl =	1,298.00	Lb/ft
v/s =	-	-

TABLE OF SUPERIMPOSED SERVICE LIVE LOAD CAPACITY, LB/FT^2, AND CAMBERS, IN.

12DT28
NO TOPPING

STRAND PATTERN	Y_s IN	SPAN, FT																				
		36	38	40	42	44	46	48	50	52	54	56	58	60	62	64	66	68	70	72	74
89.6-S	3.00	221	192	168	148	132	115	103	90	80	70	62	55	48	42						
		0.4	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5						
		1.0	1.0	1.1	1.2	1.2	1.3	1.3	1.3	1.4	1.4	1.3	1.3	1.3	1.2						
129.6-S	4.00				222	198	178	160	144	130	118	107	97	88	79	72	65	59	53	48	43
					0.7	0.8	0.8	0.9	0.9	1.0	1.0	1.0	1.0	1.1	1.1	1.1	1.1	1.1	1.0	1.0	1.0
					1.6	1.7	1.8	1.9	2.0	2.1	2.2	2.3	2.3	2.3	2.4	2.4	2.4	2.3	2.3	2.2	2.1

TABLE OF SUPERIMPOSED SERVICE LIVE LOAD CAPACITY, LB/FT^2, AND CAMBERS, IN.

12DT28+4
4" NORMAL WEIGHT TOPPING

STRAND PATTERN	Y_s IN	SPAN, FT														
		36	38	40	42	44	46	48	50	52	54	56	58	60	62	64
89.6-S	3.38	218	184	155	130	108	90	74	60	47	35					
		0.4	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6					
		0.8	0.8	0.9	0.9	1.0	1.0	1.1	1.1	1.1	1.1					
129.6-S	6.38				231	201	174	152	133	114	99	85	74	61	50	42
					0.7	0.8	0.8	0.9	0.9	1.0	1.0	1.0	1.1	1.1	1.1	1.1
					1.3	1.4	1.5	1.6	1.6	1.7	1.8	1.8	1.8	1.9	1.9	1.9

STRENGTH IS BASED ON STRAIN COMPATIBILITY; BOTTOM TENSION IS LIMITED TO $12(fc')^{-0.5}$
SHADED VALUES REQUIRE RELEASE STRENGTHS HIGHER THAN 3500 PSI AND LOWER THAN 4500 PSI

TARACON
taraconprecast.com

DESCRIPTION:
26" DT- 6' Stem Spacing - 12' Standard Width

DATE: 1/1/2021

PART:
53-0626