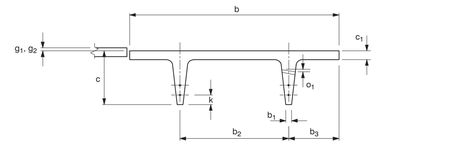
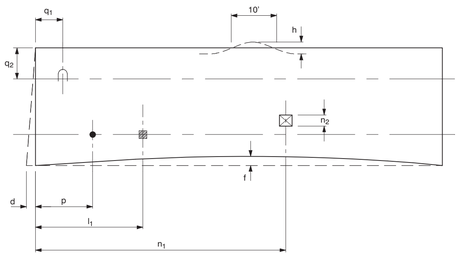
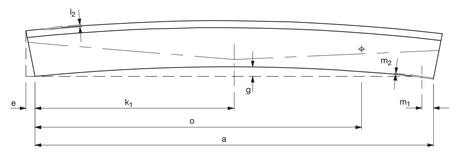
Fig. 10.6.1 Double Tees (Untopped & Pretopped)



Cross Section



Plan

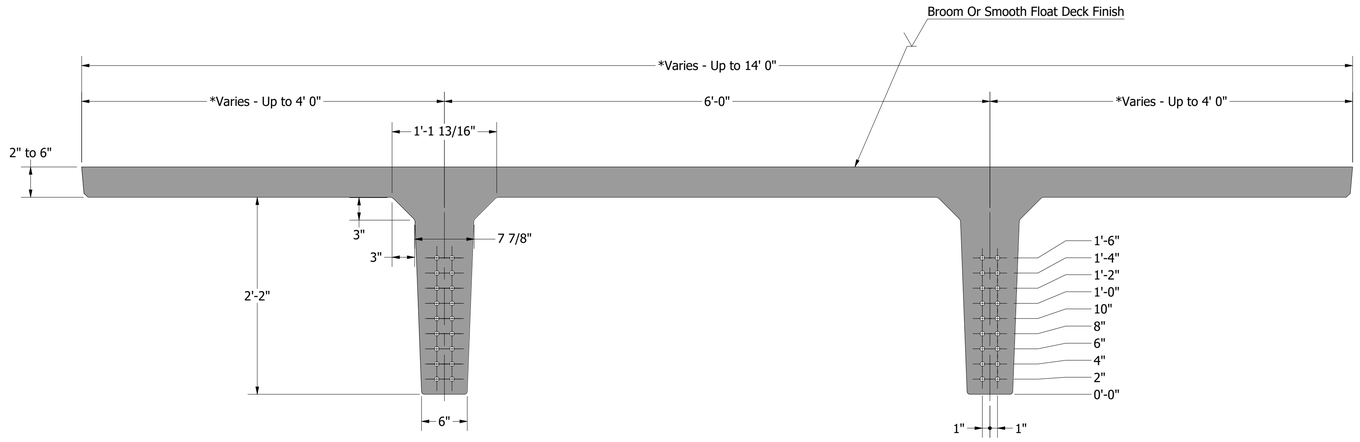


Elevation

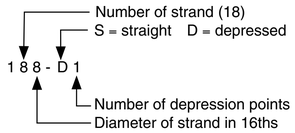
10.6 Double Tees (Untopped & Pretopped)

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., −1/8 in. [+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.



Strand Pattern Designation

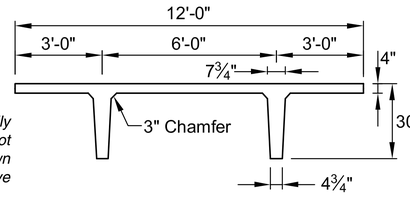


Because these units are pretopped and are typically used in parking structures, safe loads shown do not include any superimposed dead loads. Loads shown are live load. Long-time cambers do not include live load.

Key
158 – Safe superimposed service load, lb/ft²
0.8 – Estimated camber at erection, in.
1.1 – Estimated long-time camber, in.

Check with Taracon Precast for avalibility.

12'-0" × 30"



f'_c = 5000 psi

f_{pu} = 270,000 psi

1/2-in.-diameter regular strand

Section Properties

	Normalweight		Lightweight	
A =	928	in.²	928	in.²
I =	59,997	in.⁴	59,997	in.⁴
y_b =	22.94	in.	22.94	in.
y_t =	7.06	in.	7.06	in.
S_b =	2615	in.³	2615	in.³
S_t =	8498	in.³	8498	in.³
wt =	967	lb/ft	741	lb/ft
DL =	81	lb/ft²	62	lb/ft²
V/S =	2.30	in.	2.30	in.

12DT30

Table of safe superimposed service load, lb/ft², and cambers, in. **Normalweight — No Topping**

Strand pattern	y_s(end) y_s(center) in.	Span, ft																					
		40	42	44	46	48	50	52	54	56	58	60	62	64	66	68	70	72	74	76	78	80	82
128-S	7.00 7.00	158 0.8 1.1	138 0.8 1.2	120 0.9 1.2	105 0.9 1.2	91 0.9 1.2	79 0.9 1.2	69 0.8 1.1	59 0.8 1.1	51 0.7 1.0	43 0.6 0.8	37 0.5 0.6	30 0.4 0.4										
148-S	8.00 8.00	182 0.9 1.3	160 1.0 1.3	140 1.0 1.4	123 1.0 1.4	108 1.0 1.4	95 1.1 1.5	83 1.0 1.4	73 1.0 1.4	63 1.0 1.3	55 0.9 1.2	47 0.8 1.0	41 0.7 0.9	34 0.5 0.6	29 0.3 0.4								
168-S	9.00 9.00		178 1.1 1.5	157 1.1 1.5	139 1.2 1.6	122 1.2 1.6	108 1.2 1.6	95 1.2 1.6	84 1.2 1.6	74 1.1 1.6	65 1.1 1.5	57 1.0 1.3	49 0.9 1.2	42 0.8 1.0	36 0.6 0.7	31 0.4 0.4							
188-S	10.00 10.00		194 1.1 1.6	171 1.2 1.6	152 1.2 1.7	134 1.3 1.7	119 1.3 1.8	106 1.3 1.8	93 1.3 1.8	83 1.3 1.7	73 1.2 1.7	64 1.1 1.6	56 1.0 1.4	49 0.9 1.2	43 0.8 1.0	36 0.6 0.7	29 0.4 0.4						
188-D1	14.39 4.00					184 1.6 2.2	165 1.7 2.3	148 1.7 2.4	132 1.8 2.4	119 1.8 2.4	107 1.8 2.4	96 1.8 2.3	86 1.7 2.2	77 1.7 2.1	68 1.6 2.0	61 1.4 1.9	54 1.3 1.7	48 1.1 1.4	42 0.9 1.1	35 0.6 0.7	29 0.3 0.2		
208-D1	15.50 4.25							166 1.9 2.6	149 2.0 2.7	135 2.0 2.7	121 2.0 2.7	109 2.1 2.7	97 2.1 2.7	86 2.0 2.6	76 1.9 2.4	68 1.8 2.3	61 1.7 2.1	54 1.5 1.9	48 1.3 1.7	43 1.1 1.4	37 0.8 1.0	31 0.5 0.5	26 0.1 –0.1

TARACON
taraconprecast.com

DESCRIPTION:
26" DT - 12' Standard Width - Spans to 84'

DATE: 1/1/2021

PART:
53-26