PRESTRESS CONCRETE, INC.

LOAD SPAN TABLES

16" Floor Double Tees 10 FT Wide

Transformed Composite Section Properties	WIDTH	A (in2)	Yt (in)	Yb (in)	I (in4)	St (in3)	Sb (in3)	Wt (plf)	Wt (psf)
	10'	604	4.53	13.47	11,352	3,152	692	634	63.4

TABLE OF SAFE SUPERIMPOSED SERVICE LOADS (psf)

DESIGN SPAN IN FEET

Strand Pattern	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46
2D1	133	95	68	48	33	21	12	4								
4D1	299	226	174	136	107	84	66	51								
6D1				220	177	144	115	91	71	54	40					
8D1							154	123	99	79	63	49	37			
10D1								165	135	110	89	72	57	45		
12D1								211	175	146	121	100	82	67	54	42

TABLE OF ESTIMATE CAMBERS (in)

DESIGN SPAN IN FEET

Strand Pattern	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46
2D1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1								
4D1	0.3	0.4	0.4	0.5	0.5	0.6	0.6	0.7								
6D1				0.7	0.8	0.9	1.0	1.0	1.1	1.1	1.2					
8D1							1.2	1.3	1.5	1.5	1.6	1.6	1.7			
10D1								1.7	1.8	2.0	2.1	2.2	2.3	2.4		
12D1								2.0	2.3	2.5	2.7	2.9	3.0	3.2	3.3	3.4

24" Floor Double Tees 12 FT Wide

Transformed Composite Section Properties	WIDTH	A (in2)	Yt (in)	Yb (in)	I (in4)	St (in3)	Sb (in3)	Wt (plf)	Wt (psf)
	12'	823	6.88	19.12	41,561	9,250	2,207	908	75.67

TABLE OF SAFE SUPERIMPOSED SERVICE LOADS (psf)

DESIGN SPAN IN FEET

Strand Pattern	34	36	38	40	42	44	46	48	50	52	54	56	58	60	62	64
4D1	42	32	23	15	8											
8D1				72	60	50	41	33	25							
11D1							64	54	44	34						
12D1								70	58	48	38	30				
14D1								86	73	62	51	42	34	26		
16D1								98	84	71	60	50	41	33	26	
18D1								113	97	83	71	61	51	43	35	28

TABLE OF ESTIMATE CAMBERS (in)

DESIGN SPAN IN FEET

Strand Pattern	34	36	38	40	42	44	46	48	50	52	54	56	58	60	62	64
4D1	0.4	0.3	0.3	0.3	0.3											
8D1				1.0	1.0	1.0	1.0	1.0	0.9							
11D1							1.5	1.5	1.5	1.5						
12D1								1.8	1.8	1.9	1.9	1.8				
14D1								2.1	2.2	2.2	2.3	2.3	2.3	2.3		
16D1								2.3	2.4	2.5	2.5	2.6	2.6	2.6	2.5	
18D1								2.6	2.7	2.8	2.9	2.9	3.0	3.0	3.0	3.0

PRESTRESS CONCRETE, INC.

LOAD SPAN TABLES

16" Roof Double Tees 10 FT Wide

Transformed Composite Section Properties	WIDTH	A (in2)	Yt (in)	Yb (in)	I (in4)	St (in3)	Sb (in3)	Wt (plf)	Wt (psf)
	10'	394	4.04	11.96	8,278	2,047	692	394	39.4

TABLE OF SAFE SUPERIMPOSED SERVICE LOADS (psf)

DESIGN SPAN IN FEET

Strand Pattern	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50
2D1+2	71	54	40	30												
4D1+2			106	86	70	57	46	38	30							
6D1+2					115	96	81	68	58	49	41	34	29			
8D1+2							113	96	83	71	61	53	45	39	33	
10D1+2							147	127	110	96	83	72	63	55	48	42
12D1+2							183	159	139	121	107	93	81	71	62	54

TABLE OF ESTIMATE CAMBERS (in)

DESIGN SPAN IN FEET

Strand Pattern	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50
2D1+2	0.2	0.2	0.1	0.1												
4D1+2			0.5	0.6	0.6	0.6	0.6	0.6	0.5							
6D1+2					1.0	1.0	1.1	1.1	1.1	1.1	1.1	1.0	0.9			
8D1+2							1.4	1.5	1.6	1.7	1.7	1.7	1.7	1.6	1.4	
10D1+2							1.9	2.0	2.1	2.3	2.4	2.4	2.5	2.5	2.5	2.4
12D1+2							2.3	2.5	2.7	2.9	3.1	3.3	3.4	3.6	3.6	3.6

24" Roof Double Tees 12 FT Wide

Transformed Composite Section Properties	WIDTH	A (in2)	Yt (in)	Yb (in)	I (in4)	St (in3)	Sb (in3)	Wt (plf)	Wt (psf)
	12'	583	6.93	17.07	31,997	4,616	1,875	607	50.65

TABLE OF SAFE SUPERIMPOSED SERVICE LOADS (psf)

DESIGN SPAN IN FEET

Strand Pattern	34	36	38	40	42	44	46	48	50	52	54	56	58	60	62	64	66	68
4D1+2	53	43	34	27	21													
8D1+2				80	69	60	51	44	37									
10D1+2							73	64	56	49	42	37	32	27				
12D1+2								80	71	63	55	49	43	37	33	28	24	
14D1+2								98	87	77	69	61	55	48	43	38	33	
16D1+2								110	99	88	79	70	63	56	50	44	39	35
18D1+2								125	111	99	88	79	71	64	57	51	46	41

TABLE OF ESTIMATE CAMBERS (in)

DESIGN SPAN IN FEET

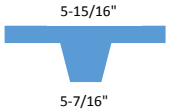
Strand Pattern	34	36	38	40	42	44	46	48	50	52	54	56	58	60	62	64	66	68
4D1	0.2	0.2	0.2	0.1	0.1													
8D1				0.8	0.8	0.8	0.8	0.8	0.7									
11D1							1.3	1.3	1.3	1.2	1.2	1.1	1.0	0.9				
12D1								1.6	1.6	1.6	1.6	1.6	1.5	1.4	1.3	1.1	0.9	
14D1								1.9	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.8	1.6	
16D1								2.1	2.2	2.3	2.3	2.3	2.3	2.3	2.2	2.1	2.0	1.9
18D1								2.4	2.5	2.6	2.6	2.7	2.7	2.7	2.7	2.7	2.6	2.5

PRESTRESS CONCRETE, INC.

LOAD SPAN TABLES

JOIST SECTION PROPERTIES

A In^2	I In^4	Sb In^3	St In^3	Yb In	Yt In	Wt. p/f
45.5	242.5			4.06	3.94	45.5



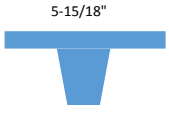
8" JOIST WITH 3" COMPOSITE SLAB (P.S.F.)

DESIGN SPAN (Feet)

JOIST SPACING	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	SYSTEM WEIGHT (P.S.F)
2'-6"			290	268	246	224	202	180	166	153	140	128	116	106	96	86	75	65	55
3'-6"	245	228	210	193	176	159	142	125	117	109	101	93	85	78	71	64	57	50	50
4'-6"	180	166	158	144	132	121	110	100	93	86	78	70	62	57	52	48			47
5'-6"	145	135	125	115	105	95	85	75	70	65	60	55	50						45
6'-6"	118	109	100	82	84	76	68	60	55	50	45								44

JOIST SECTION PROPERTIES

A In^2	I In^4	Sb In^3	St In^3	Yb In	Yt In	Wt. p/f
66.8	799.8			6.14	5.87	66.8



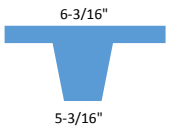
12" JOIST WITH 4-1/2" COMPOSITE SLAB (P.S.F.)

DESIGN SPAN (Feet)

JOIST SPACING	20	22	24	26	28	30	31	32	33	34	35	36	37	38	39	40	42	44	SYSTEM WEIGHT (P.S.F)
2'-6"					268	220	204	188	173	160	146	136	126	116	107	98	84	70	64
3'-6"				257	212	170	158	146	135	126	118	110	103	96	89	82	70	58	56
4'-6"	299	266	238	195	161	139	129	120	111	102	94	88	82	76	70	64	52		51
5'-6"	245	216	190	154	126	102	92	85	78	71	64	60	56	53	50	46			49
6'-6"	163	148	134	125	101	81	72	65	60	55	50	47	45						47

JOIST SECTION PROPERTIES

A In^2	I In^4	Sb In^3	St In^3	Yb In	Yt In	Wt. p/f
91	1936.3			8.23	7.77	91



16" JOIST WITH 4-1/2" COMPOSITE SLAB (P.S.F.)

DESIGN SPAN (Feet)

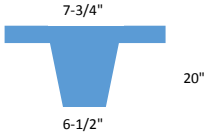
JOIST SPACING	26	28	30	32	34	36	38	40	42	44	46	48	50	51	52	53	54	55	SYSTEM WEIGHT (P.S.F)
3'-6 1/4"			328	279	238	203	174	150	132	116	100	88	76	71	66	61	56	52	63
4'-6 1/4"			255	215	182	154	131	114	102	90	80	70	60	58	56	54	52	50	57
5'-6 1/4"	260	232	206	172	145	121	102	87	77	67	59	54	50						54
6'-6 1/4"	217	193	171	142	118	98	81	68	60	52									52

PRESTRESS CONCRETE, INC.

LOAD SPAN TABLES

JOIST SECTION PROPERTIES

A In^2	I In^4	Sb In^3	St In^3	Yb In	Yt In	Wt. p/f
119.6	4357			10.33	9.67	119.6



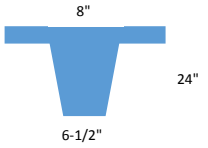
20" JOIST WITH 4-1/2" COMPOSITE SLAB (P.S.F.)

DESIGN SPAN (Feet)

JOIST SPACING	36	38	40	42	44	46	48	50	52	54	56	58	60	62	64	66	68	70	SYSTEM WEIGHT (P.S.F)
4'-8"	290	250	220	185	165	150	130	120	105	90	80								91
5'-8"	230	200	175	150	130	120	105	90	80	70	60								85
6'-8"	190	170	145	125	110	95	85	75	65	55									81
7'-8"	165	140	120	100	90	80	65	55	50										78
8'-8"	150	130	110	95	80	70	60	55											76

JOIST SECTION PROPERTIES

A In^2	I In^4	Sb In^3	St In^3	Yb In	Yt In	Wt. p/f
174	8322.2			12.42	11.58	174



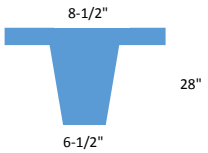
24" JOIST WITH 4-1/2" COMPOSITE SLAB (P.S.F.)

DESIGN SPAN (Feet)

JOIST SPACING	40	42	44	46	48	50	52	54	56	58	60	62	64	66	68	70	72	74	SYSTEM WEIGHT (P.S.F)
4'-8"	310	294	278	262	237	212	186	168	150	132	118	105	92	82	72	62	55	50	84
5'-8"	235	222	209	195	182	170	158	145	132	122	110	98	86	77	68	60	52		78
6'-8"	192	179	168	158	148	138	128	116	105	94	86	78	70	64	58	52			73
7'-8"	166	156	146	136	124	113	102	94	86	78	70	63	56	50					70
8'-8"	138	130	122	114	106	98	90	81	73	65	57	50							68

JOIST SECTION PROPERTIES

A In^2	I In^4	Sb In^3	St In^3	Yb In	Yt In	Wt. p/f
207	13459			14.55	13.45	206



28" JOIST WITH 4-1/2" COMPOSITE SLAB (P.S.F.)

DESIGN SPAN (Feet)

JOIST SPACING	54	56	58	60	62	64	66	68	70	72	74	76	78	80	82	84	86	88	SYSTEM WEIGHT (P.S.F)
4'-8"	230	218	198	178	162	148	137	119	109	97	88								92
5'-8"	215	180	162	146	131	117	105	94	86	76	68								86
6'-8"	165	148	128	119	104	95	84	73	67	60	53								81
7'-8"	135	120	108	93	86	76	68	59	52										78
8'-8"	115	103	90	78	70	62	54												76