

TYPE "SF" STANDARD FORM DECK
TYPE "SVF" STANDARD SLOT VENTED FORM DECK



SECTION PROPERTIES FY=60 KSI (GRADE 80)

DECK TYPE	DESIGN THICKNESS	WT PSF	I ^P IN. ⁴	I ^N IN. ⁴	S ^P IN. ³	S ^N IN. ³	M ^P /Ω IN.-LBS. PER FT.	M ^N /Ω IN.-LBS. PER FT.
28	.0149 IN.	.8	.011	.011	.033	.034	1003	1033
26	.0179 IN.	1.0	.013	.013	.043	.044	1289	1326
24	.0239 IN.	1.2	.018	.018	.061	.061	2182	2177
22	.0295 IN.	1.4	.022	.022	.074	.074	2667	2669

DECK-SPAN	DECK TYPE	DESIGN THICKNESS	DECK SUPPORT SPACING (FT. - IN.)						POUNDS PER SQUARE FOOT				
			2-0	2-06	3-0	3-06	4-0	4-06	5-0	5-06	6-0	6-06	7-0
SIMPLE	28	STRESS DOWNWARD	167	107	74	55	42	33	27	22	19	16	14
		DEFLECTION L/240	88	45	26	16	11	8	6	4	3	3	2
	26	STRESS DOWNWARD	215	137	95	70	54	42	34	28	24	20	18
		DEFLECTION L/240	107	55	32	20	13	9	7	5	4	3	3
	24	STRESS DOWNWARD	364	233	162	119	91	72	58	48	40	34	30
		DEFLECTION L/240	149	76	44	28	19	13	10	7	6	4	3
	22	STRESS DOWNWARD	445	285	198	145	111	88	71	59	49	42	36
		DEFLECTION L/240	184	94	54	34	23	16	12	9	7	5	4

DOUBLE	28	STRESS DOWNWARD	206	132	92	67	52	41	33	27	23	20	17
		DEFLECTION L/240	211	108	62	39	26	19	13	10	8	6	5
	26	STRESS DOWNWARD	265	169	118	86	66	52	42	35	29	25	22
		DEFLECTION L/240	258	132	76	48	32	23	17	12	10	8	6
	24	STRESS DOWNWARD	363	232	161	118	91	72	58	48	40	34	30
		DEFLECTION L/240	358	183	106	67	45	31	23	17	13	10	8
	22	STRESS DOWNWARD	445	285	198	145	111	88	71	59	49	42	36
		DEFLECTION L/240	443	227	131	83	55	39	28	21	16	13	10

TRIPLE	28	STRESS DOWNWARD	258	165	115	84	64	51	41	34	29	24	21
		DEFLECTION L/240	165	84	49	31	21	14	11	8	6	5	4
	26	STRESS DOWNWARD	331	212	147	108	83	65	53	44	37	31	27
		DEFLECTION L/240	202	103	60	38	25	18	13	10	7	6	5
	24	STRESS DOWNWARD	454	290	202	148	113	90	73	60	50	43	37
		DEFLECTION L/240	280	144	83	52	35	25	18	13	10	8	7
	22	STRESS DOWNWARD	556	356	247	182	139	110	89	74	62	53	45
		DEFLECTION L/240	346	177	103	65	43	30	22	17	13	10	8

LOAD TABLES AND SECTION PROPERTIES WERE GENERATED BY THE SDI.

* Type "SVF" shall be vented in lower flutes with a .5% open area. .75% and 1.5% open areas available upon request.

FOR LOADS THAT CAUSE L/120 DEFLECTION, MULTIPLY BY 2.0. FOR LOADS THAT CAUSE L/180 DEFLECTION, MULTIPLY BY 1.5. FOR LOADS THAT CAUSE L/360 DEFLECTION, MULTIPLY BY 0.667.

TYPE "SF" STANDARD FORM DECK

SLAB INFORMATION

Total Slab Depth, in	W.W.F	Mp	Mn	Theo. Concrete Volume	
				yd ³ /100ft ²	ft ³ /ft ²
2	6x6- W1.4 x W1.4	1.05	1.47	0.529	0.143
2.5	6x6- W1.4 x W1.4	1.42	1.85	0.689	0.186
3	6x6- W1.4 x W1.4	1.80	2.23	0.843	0.228
3.5	6x6- W2.0 x W2.0	6.09	4.72	0.997	0.269
4	6x6- W2.9 x W2.9	10.3	8.22	1.15	0.311
4.5	6x6- W4.0 x W4.0	16.2	13.2	1.23	0.332
5	6x6- W4.0 x W4.0	18.4	15.4	1.46	0.393

MAXIMUM CONSTRUCTION CLEAR SPAN

Total Slab Depth	Deck	NW Concrete N=9 145 PCF			LW Concrete N=14 115 PCF		
		1 Span	2 Span	3 Span	1 Span	2 Span	3 Span
2 (t=1.50) NW 23 PSF LW 19 PSF	28	1-11	2-4	2-5	2-0	2-5	2-5
	26	2-5	2-11	2-11	2-6	3-0	3-0
	24	3-9	4-6	4-7	3-11	4-8	4-9
	22	4-5	5-3	5-4	4-7	5-6	5-7
2.5 (t=2.00) NW 29 PSF LW 23 PSF	28	1-11	2-3	2-4	1-11	2-4	2-5
	26	2-4	2-10	2-10	2-5	2-11	2-11
	24	3-7	4-3	4-4	3-9	4-6	4-7
	22	4-1	5-0	5-1	4-5	5-3	5-4
3 (t=2.50) NW 35 PSF LW 28 PSF	28	1-10	2-2	2-3	1-11	2-3	2-4
	26	3-1	3-8	3-9	3-4	3-11	4-0
	24	3-5	4-1	4-2	3-7	4-4	4-5
	22	3-10	4-9	4-10	4-1	5-1	5-1
3.5 (t=3.00) NW 41 PSF LW 33 PSF	28	1-9	2-2	2-2	1-10	2-3	2-3
	26	2-2	2-8	2-8	2-3	2-9	2-9
	24	3-4	3-11	4-0	3-6	4-2	4-3
	22	3-8	4-7	4-8	3-11	4-10	4-11
4 (t=3.50) NW 47 PSF LW 38 PSF	28	1-9	2-1	2-1	1-10	2-2	2-2
	26	2-2	2-7	2-7	2-3	2-8	2-8
	24	3-3	3-10	3-10	3-5	4-0	4-1
	22	3-6	4-5	4-6	3-9	4-8	4-9
4.5 (t=4.00) NW 53 PSF LW 42 PSF	28	1-9	2-1	2-1	1-9	2-2	2-2
	26	2-1	2-6	2-6	2-2	2-7	2-8
	24	3-1	3-8	3-9	3-4	3-11	4-0
	22	3-4	4-3	4-4	3-7	4-7	4-7

REINFORCED CONCRETE SLAB ALLOWABLE LOADS

Slab Depth	Reinforcement		Superimposed Uniform Load (psf) – 3 Span Condition												
			Clear Span (ft-in.)												
	W.W.F	As	2-0	2-6	3-0	3-6	4-0	4-6	5-0	5-6	6-0	6-6	7-0	7-6	8-0
2 (t=1.50)	6x6- W1.4 x W1.4	0.028	205	131	91	67	51	40	33	27	23	19	17	15	13
	6x6- W2.0 x W2.0	0.040	288	184	128	94	72	57	46	38	32	27	23	20	18
	6x6- W2.9 x W2.9	0.058	*	260	181	133	102	80	65	54	45	38	33	29	25
2.5 (t=2.00)	6x6- W1.4 x W1.4	0.028	272	174	121	89	68	54	43	36	30	26	22	19	17
	6x6- W2.0 x W2.0	0.040	385	246	171	126	96	76	62	51	43	36	31	27	24
	6x6- W2.9 x W2.9	0.058	*	352	244	179	137	109	88	73	61	52	45	39	34
3 (t=2.50)	6x6- W1.4 x W1.4	0.028	327	210	146	107	82	65	52	43	36	31	27	23	20
	6x6- W2.0 x W2.0	0.040	*	297	206	152	116	92	74	61	52	44	38	33	29
	6x6- W2.9 x W2.9	0.058	*	*	295	217	166	131	106	88	74	63	54	47	42
3.5 (t=3.00)	6x6- W2.0 x W2.0	0.040	*	*	309	227	174	137	111	92	77	66	57	49	43
	6x6- W2.9 x W2.9	0.058	*	*	*	319	245	193	157	129	109	93	80	70	61
	6x6- W4.0 x W4.0	0.080	*	*	*	*	326	258	209	172	145	123	106	93	82
4 (t=3.50)	6x6- W2.9 x W2.9	0.058	*	*	*	395	302	239	193	160	134	114	99	86	76
	6x6- W4.0 x W4.0	0.080	*	*	*	*	*	320	259	214	180	154	132	115	101
	4x4- W2.9 x W2.9	0.087	*	*	*	*	*	354	287	237	199	170	146	128	112
4.5 (t=4.00)	6x6- W4.0 x W4.0	0.080	*	*	*	*	*	383	310	256	215	184	158	138	121
	4x4- W2.9 x W2.9	0.087	*	*	*	*	*	*	342	283	238	202	175	152	134
	4x4- W4.0 x W4.0	0.120	*	*	*	*	*	*	*	380	319	272	234	204	179
5 (t=4.50)	6x6- W4.0 x W4.0	0.080	*	*	*	*	*	*	361	298	251	214	184	161	141
	4x4- W2.9 x W2.9	0.087	*	*	*	*	*	*	397	328	276	235	203	177	155
	4x4- W4.0 x W4.0	0.120	*	*	*	*	*	*	*	*	372	317	273	238	209

WEB CRIPPLING AND SHEAR HAVE NOT BEEN ACCOUNTED FOR ON THESE TABLES. REQUIRED BEARING SHOULD BE DETERMINED BASED ON SPECIFIC SPAN CONDITIONS.

* INDICATES LIVE LOADS IN EXCESS OF 400 P.S.F

*The design stress for Grade 80 is 0.75 times the 80 ksi due to the low ductility of the steel.

SHEAR AND WEB CRIPPLING (BARE DECK) TYPE SF STANDARD FROM FY 60 KSI

DECK TYPE	V ^N / _Ω LBS PER FT	WEB CRIPPLING (R ^N / _Ω), LBS/FT. ONE FLANGE LOADING END BEARING			WEB CRIPPLING (R ^N / _Ω), LBS/FT. ONE FLANGE LOADING INTERIOR BEARING		
		1-5"	2"	3"	1.5"	2"	3"
28	1348	592	658	768	747	820	942
26	1621	824	912	1061	1070	1170	1339
24	2154	1383	1525	1763	1869	2035	2313
22	2647	2015	2215	2550	2793	3030	3427

ALL SECTION PROPERTIES AND ASD FLEXURAL STRENGTHS ARE CALCULATED IN ACCORDANCE WITH ANSI/SDI C-2017, ANSI/SDI NC-2017, ANSI/SDI SD-2022 AND AISI S100-2012 AND AISI S100-2016