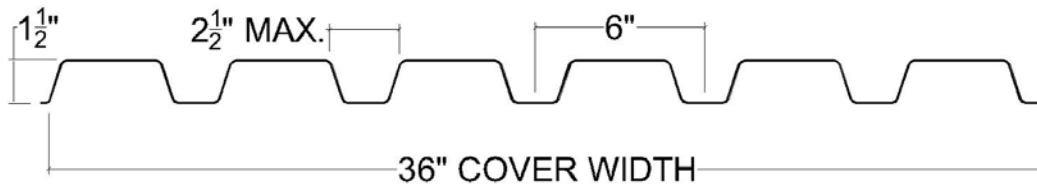


**TYPE "EF" EXTRA DUTY FORM DECK
TYPE "EVF" EXTRA DUTY SLOT VENTED FORM DECK**



SECTION PROPERTIES FY=60 (GRADE 80)

ASD ($\Omega=1.67$)

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.
24	.0295 IN.	1.3	.117	.134	.123	.126	4411	4528
22	.0358 IN.	1.6	.149	.171	.166	.166	5956	5958
20	.0474 IN.	2.0	.189	.213	.220	.213	7904	7647
18	.0598 IN.	2.6	.263	.292	.298	.302	10719	10850

DECK-SPAN	DECK TYPE	DESIGN THICKNESS	DECK SUPPORT SPACING (FT. - IN.)						POUNDS PER SQUARE FOOT				
			5-0	5-6	6-0	6-6	7-0	7-6	8-0	8-6	9-0	9-6	10-0
SIMPLE	24	STRESS DOWNWARD	118	97	82	70	60	52	46	41	36	33	29
		DEFLECTION L/240	61	46	36	28	22	18	15	12	11	9	8
	22	STRESS DOWNWARD	159	131	110	94	81	71	62	55	49	44	40
		DEFLECTION L/240	78	59	45	36	29	23	19	16	13	11	10
	20	STRESS DOWNWARD	211	174	146	125	108	94	82	73	65	58	53
		DEFLECTION L/240	99	75	57	45	36	29	24	20	17	14	12
	18	STRESS DOWNWARD	286	236	198	169	146	127	112	99	88	79	71
		DEFLECTION L/240	138	104	80	63	50	41	34	28	24	20	17

DOUBLE	24	STRESS DOWNWARD	121	100	84	71	62	54	47	42	37	33	30
		DEFLECTION L/240	148	111	86	67	54	44	36	30	25	22	18
	22	STRESS DOWNWARD	159	131	110	94	81	71	62	55	49	44	40
		DEFLECTION L/240	188	141	109	86	69	56	46	38	32	27	24
	20	STRESS DOWNWARD	204	169	142	121	104	91	80	71	63	56	51
		DEFLECTION L/240	239	179	138	109	87	71	58	49	41	35	30
	18	STRESS DOWNWARD	289	239	201	171	148	129	113	100	89	80	72
		DEFLECTION L/240	333	250	193	152	121	99	81	68	57	49	42

TRIPLE	24	STRESS DOWNWARD	151	125	105	89	77	67	59	52	47	42	38
		DEFLECTION L/240	116	87	67	53	42	34	28	24	20	17	14
	22	STRESS DOWNWARD	199	164	138	118	101	88	78	69	61	55	50
		DEFLECTION L/240	147	111	85	67	54	44	36	30	25	21	18
	20	STRESS DOWNWARD	255	211	177	151	130	113	100	88	79	71	64
		DEFLECTION L/240	187	140	108	85	68	55	46	38	32	27	23
	18	STRESS DOWNWARD	362	299	251	214	185	161	141	125	112	100	90
		DEFLECTION L/240	261	196	151	119	95	77	64	53	45	38	33

LOAD TABLES AND SECTION PROPERTIES WERE GENERATED BY THE SDI. Standard Cover Width is 36". 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 "EF" EXTRA FORM DECK

MAXIMUM CONSTRUCTION CLEAR SPANS

SLAB INFORMATION

Total Slab Depth, inches	W.W.F	Mp	Mn	Theo. Concrete Volume	
				yd ³ /100ft ²	ft ³ /ft ²
3.5	6x6- W2.9 x W2.9	5.79	7.19	0.774	0.209
4	6x6- W2.9 x W2.9	7.35	8.75	0.929	0.251
4.5	6x6- W2.9 x W2.9	8.92	10.32	1.08	0.292
5	6x6- W4.0 x W4.0	14.3	15.90	1.24	0.334
5.5	6x6- W4.0 x W4.0	16.5	18.06	1.39	0.376
6	6x6- W4.0 x W4.0	18.6	20.22	1.55	0.417
6.5	6x6- W4.0 x W4.0	20.8	22.38	1.70	0.459

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
3.5 (t=2.00) 31 PSF N/W 23 PSF LW	24	6-0	7-1	7-2	6-6	7-9	7-10
	22	7-6	8-9	8-11	8-2	9-7	9-9
	20	8-1	10-0	10-4	8-11	10-11	11-3
	18	9-1	11-11	12-4	10-0	13-0	13-5
4 (t=2.50) 37 PSF N/W 28 PSF LW	24	5-9	6-9	6-10	6-2	7-4	7-5
	22	7-1	8-3	8-5	7-8	9-1	9-2
	20	7-8	9-5	9-9	8-5	10-4	10-8
	18	8-6	11-3	11-8	9-4	12-3	12-8
4.5 (t=3.00) 43 PSF N/W 33 PSF LW	24	5-6	6-5	6-6	5-11	7-0	7-1
	22	6-6	7-11	8-2	7-1	8-9	9-1
	20	7-3	9-0	9-4	7-11	9-10	10-2
	18	8-1	10-9	11-1	8-10	11-8	12-1
5 (t=3.50) 49 PSF N/W 37 PSF LW	24	5-3	6-2	6-3	5-9	6-9	6-10
	22	6-5	7-6	7-7	7-1	8-3	8-5
	20	7-0	8-7	8-11	7-8	9-5	9-9
	18	7-9	10-3	10-7	8-6	11-3	11-8
5.5 (t=4.00) 55 PSF N/W 42 PSF LW	24	5-1	5-11	6-0	5-6	6-6	6-7
	22	6-2	7-3	7-4	6-9	7-11	8-0
	20	6-8	8-3	8-6	7-4	9-1	9-4
	18	7-6	9-10	10-2	8-2	10-10	11-2
6 (t=4.50) 61 PSF N/W 46 PSF LW	24	4-11	5-9	5-10	5-4	6-4	6-5
	22	6-0	7-0	7-1	6-7	7-8	7-10
	20	6-6	7-11	8-2	7-1	8-9	9-1
	18	7-3	9-5	9-9	7-11	10-6	10-10

REINFORCED CONCRETE SLAB ALLOWABLE LOADS

Slab Depth	Reinforcement		Superimposed Uniform Load (PSF) – 3 Span Condition												
			Clear Span (ft-in.)												
	W.W.F	As	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0
3.5 (t=2.50)	6x6- W2.9 x W2.9	0.058	264	209	169	140	117	100	86	75	66	58	52	47	42
	6x6- W4.0 x W4.0	0.080	346	274	222	183	154	131	113	99	87	77	68	61	55
4 (t=3.00)	6x6- W2.9 x W2.9	0.058	322	254	206	170	143	122	105	92	80	71	64	57	51
	6x6- W4.0 x W4.0	0.080	*	336	273	225	189	161	139	121	106	94	84	75	68
	4x4- W2.9 x W2.9	0.087	*	370	300	248	208	177	153	133	117	104	92	83	75
4.5 (t=3.50)	6x6- W2.9 x W2.9	0.058	379	300	243	201	169	144	124	108	95	84	75	67	61
	6x6- W4.0 x W4.0	0.080	*	399	323	267	225	191	165	144	126	112	100	90	81
	4x4- W2.9 x W2.9	0.087	*	*	355	293	246	210	181	158	139	123	110	98	89
5 (t=4.00)	6x6- W4.0 x W4.0	0.080	*	*	374	309	260	221	191	166	146	129	115	104	94
	4x4- W2.9 x W2.9	0.087	*	*	*	339	285	243	209	182	160	142	127	114	103
	4x4- W4.0 x W4.0	0.120	*	*	*	*	377	322	277	242	212	188	168	151	136
5.5 (t=4.50)	6x6- W4.0 x W4.0	0.080	*	*	*	351	295	251	217	189	166	147	131	118	106
	4x4- W2.9 x W2.9	0.087	*	*	*	385	323	275	237	207	182	161	144	129	116
	4x4- W4.0 x W4.0	0.120	*	*	*	*	*	367	316	275	242	214	191	172	155
6 (t=5.00)	6x6- W4.0 x W4.0	0.080	*	*	*	393	330	282	243	211	186	165	147	132	119
	4x4- W2.9 x W2.9	0.087	*	*	*	*	362	308	266	231	203	180	161	144	130
	4x4- W4.0 x W4.0	0.120	*	*	*	*	*	355	309	272	241	215	193	174	
6.5 (t=5.50)	6x6- W4.0 x W4.0	0.080	*	*	*	*	366	312	269	234	206	182	163	146	132
	4x4- W2.9 x W2.9	0.087	*	*	*	*	*	341	294	256	225	199	178	160	144
	4x4- W4.0 x W4.0	0.120	*	*	*	*	*	*	394	343	302	267	238	214	193

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 “EF, EVF” FLOOR DECK FY=60 KSI (GRADE 80)

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”
24	2153	676	745	862	987	1075	1222
22	2985	995	1093	1259	1478	1603	1813
20	3715	1418	1553	1781	2136	2309	2599
18	4886	2367	2582	2941	3635	3910	4371

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