

## 24 GA 7.2 METAL DECK GRADE 50

SECTION PROPERTIES				TOP IN COMPRESSION (NEG)			BOTTOM IN COMPRESSION (POS)		
Fy	E	Weight	V <sub>a</sub>	I <sub>x</sub>	S <sub>x</sub>	M <sub>a</sub>	I <sub>x</sub>	S <sub>x</sub>	M <sub>a</sub>
(KSI)	(KSI)	(PSF)	(kip/ft.)	(in. <sup>4</sup> /ft.)	(in. <sup>3</sup> /ft.)	(kip-in./ft.)	(in. <sup>4</sup> /ft.)	(in. <sup>3</sup> /ft.)	(kip-in./ft.)
50	29000	1.420	1.624	0.121	0.135	4.05	0.121	0.135	4.06

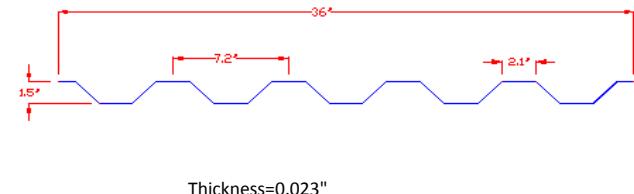
1. V<sub>a</sub> is the allowable shear.

3. M<sub>a</sub> is the allowable bending moment

2. I<sub>x</sub> is for deflection determination.

4. all values are for one foot of panel with.

3. S<sub>x</sub> is for bending.



ALLOWABLE UNIFORM LOADS (PSF)																
		Span In Feet														
Span Type	Load Type	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10
Single	Positive Wind	301	221	169	134	108	89	75	64	55	48	42	37	33	30	27
	Negative Wind	300	220	169	133	108	89	75	64	55	48	42	37	33	30	27
	Live	301	221	169	134	108	89	75	64	55	48	42	37	33	30	27
	Deflection(L/180)	385	242	162	114	83	62	48	38	30	25	20	17	14	12	10
	Deflection(L/240)	289	182	122	86	62	47	36	28	23	18	15	13	11	9	8
2 Span	Positive Wind	537	395	302	239	193	160	134	114	99	86	76	67	60	54	48
	Negative Wind	536	394	301	238	193	159	134	114	98	86	75	67	60	53	48
	Live	537	395	302	239	193	160	134	114	99	86	76	67	60	54	48
	Deflection(L/180)	929	585	392	275	201	151	116	91	73	59	49	41	34	29	25
	Deflection(L/240)	696	439	294	206	150	113	87	68	55	45	37	31	26	22	19
3 Span	Positive Wind	376	276	211	167	135	112	94	80	69	60	53	47	42	37	34
	Negative Wind	375	276	211	167	135	112	94	80	69	60	53	47	42	37	34
	Live	376	276	211	167	135	112	94	80	69	60	53	47	42	37	34
	Deflection(L/180)	727	458	307	215	157	118	91	71	57	47	38	32	27	23	20
	Deflection(L/240)	545	343	230	161	118	88	68	54	43	35	29	24	20	17	15
4 Span	Positive Wind	351	258	198	156	126	105	88	75	65	56	49	44	39	35	32
	Negative Wind	350	257	197	156	126	104	88	75	64	56	49	44	39	35	32
	Live	351	258	198	156	126	105	88	75	65	56	49	44	39	35	32
	Deflection(L/180)	771	486	325	229	167	125	96	76	61	49	41	34	29	24	21
	Deflection(L/240)	579	364	244	171	125	94	72	57	46	37	31	25	21	18	16

Note:

- Allowable uniform loads are based upon equal span lengths.
- Positive Wind is wind pressure and is NOT increased by 33 1/3%.
- Negative Wind is wind suction or uplift and is NOT increased by 33 1/3%.
- Live is the allowable live or snow load.
- Deflection (L/180) is the allowable load that limits the panel's deflection to L/180 while under positive or live load.
- Deflection (L/240) is the allowable load that limits the panel's deflection to L/240 while under positive or live load.
- The weight of the panel has NOT been deducted from the allowable loads.