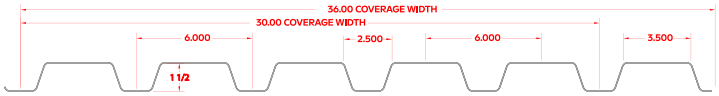
METAL DECKING SOLUTIONS

1.5 B-DECK G80



SECTION PROPERTIES (Per Foot of Width)

				Sec. Modulus		Deflection Moment of Inertia	Web Crippling Loads		Web Crippling Data			
				Midspan	Support							
Base Steel Thickness (in.)	GAGE	Yield Stress (ksi)	Weight G90 (psf)	S_{pos} (in^3)	S_{neg} (in^3)	I_{xd} (in^4)	N = 1.5" P_e (lb)	N = 3" P_i (lb)	P_{e1} End (lb)	P_{e2} End (lb)	P_{i1} Interior (lb)	P_{i2} Interior (lb)
0.0239	24	80	1.36	0.123	0.130	0.112	654	1134	219	54.8	391	66.4
0.0295	22	80	1.66	0.166	0.170	0.152	964	1697	346	86.6	625	106
0.0358	20	80	2.01	0.207	0.218	0.195	1376	2449	526	131	958	163

ALLOWABLE UNIFORMLY DISTRIBUTED LOADS (psf)

Span Lenght (ft.)		MAX CO. CANTILEVER SPAN (ft-in.)	5.0		5.5		6.0		6.5		7.0		7.5		8.0		8.5		9.0		9.5		10.0	
			S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D
1- SPAN Bas Steel Thickness (in.)	24	7' 4"	118	59	98	44	82	34	70	27	60	21	53	17	46	14	41	12	36	10	33	9	30	7
	22	9' 11"	159	80	131	60	110	46	94	36	81	29	71	24	62	19	55	16	49	14	44	12	40	10
	20	12' 4"	198	102	164	77	137	59	117	47	101	37	88	30	77	25	68	21	61	18	55	15	49	13
2- SPAN Bas Steel Thickness (in.)	24	9' 1"	124	140	103	105	86	81	74	64	63	51	55	41	49	34	43	28	38	24	34	20	31	17
	22	12' 2"	163	190	135	142	113	110	97	86	83	69	73	56	64	46	56	39	50	33	45	28	41	24
	20	15' 2"	209	243	173	183	145	141	124	111	107	89	93	72	82	59	72	50	64	42	58	35	52	30
3- SPAN Bas Steel Thickness (in.)	24	9' 2"	156	111	129	83	108	64	92	50	79	40	69	33	61	27	54	23	48	19	43	16	39	14
	22	12' 5"	204	150	169	113	142	87	121	68	104	55	91	45	80	37	71	31	63	26	57	22	51	19
	20	15' 5"	261	193	216	145	181	112	154	88	133	70	116	57	102	47	90	39	81	33	72	28	65	24

Notes:

1 Based on ASTM A 653 structural steel.
2 Values in row "S" are based on strength.
3 Values in row "D" are based on deflection of SPAN LENGTH/240.
4 Pe = Allowable end web crippling load based on N = 1.5 in.
5 Pi = Allowable interior web crippling load based on N = 3.0 in.
6 Web crippling not included in strength calculations. See Example.
7 If bearing lengths are less than specified, see Example for use of web crippling data.
8 MAX CO. SPAN = Maximum construction span based on 200 lb concentrated load per foot of deck (ANSI/SDI RD-2017).
9 CANTIL. SPAN = Maximum construction cantilever span based on Eq. 2.4.3 of (ANSI/SDI RD-2017).
10 Allowable Strength Design (ASD) principles were used in accordance with AISI S100-16.
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GAGE	CANTILEVER SPAN
24	1' 10"
22	2' 4"
20	3' 0"