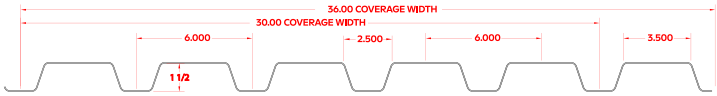
METAL DECKING SOLUTIONS

1.5 B-DECK G33



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	33	1.36	0.138	0.142	0.127	360	624	121	30.2	215	36.5
0.0295	22	33	1.66	0.173	0.185	0.165	530	933	191	47.6	344	58.5
0.0358	20	33	2.01	0.214	0.225	0.208	757	1347	289	72.3	527	89.6

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	4' 6"	73	66	60	50	50	38	43	30	37	24	32	20	28	16	25	14	22	11	20	10	18	8
	22	5' 8"	91	87	76	65	63	50	54	39	47	32	41	26	36	21	32	18	28	15	25	13	23	11
	20	7' 0"	113	109	93	82	78	63	67	50	58	40	50	32	44	27	39	22	35	19	31	16	28	14
2- SPAN Bas Steel Thickness (in.)	24	5' 7"	75	158	62	119	52	91	44	72	38	58	33	47	29	39	26	32	23	27	21	23	19	20
	22	7' 0"	98	206	81	155	68	119	58	94	50	75	43	61	38	50	34	42	30	35	27	30	24	26
	20	8' 8"	119	260	98	196	82	151	70	118	61	95	53	77	46	64	41	53	37	45	33	38	30	33
3- SPAN Bas Steel Thickness (in.)	24	5' 8"	94	125	77	94	65	72	55	57	48	46	42	37	37	31	32	25	29	21	26	18	23	16
	22	7' 1"	122	164	101	123	85	95	72	74	62	60	54	48	48	40	42	33	38	28	34	24	31	20
	20	8' 9"	148	206	123	155	103	119	88	94	76	75	66	61	58	50	51	42	46	35	41	30	37	26

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' 1"
22	1' 5"
20	1' 9"