

1.5 BR-DECK G40





SECTION PROPERTIES (Per Foot of Width)

				Sec. M Midspan	odulus Support	Deflection Moment of Inertia	Web Cripp	ling Loads	Web Crippling Data						
Base Steel Thickness (in.)	GAGE	Yield Stress (ksi)	Weight G90 (psf)	S _{pos} (in³)	S _{neg} (in ³)	L _{xd} (in ⁴)	N = 1.5" P _e (lb)	N = 3" P _i (lb)	P _{e1} End (lb)	P _{e2} End (lb)	P _{il} Interior (lb)	P _{i2} Interior (lb)			
0.0239	24	40	1.36	0.138	0.134	0.143	436	756	146	36.6	260	44.3			
0.0295	22	40	1.66	0.181	0.171	0.177	643	1131	231	57.7	417	70.9			
0.0358	20	40	2.01	0.225	0.212	0.214	917	1633	350	87.6	639	109			

ALLOWABLE UNIFORMLY DISTRIBUTED LOADS (psf)

Span Lenght (ft.)		MAX CO. CANTILEVER SPAN (ff-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 Steel Thickness (in.)	24	5' 6"	88	75	73	57	61	44	52	34	45	27	39	22	34	18	31	15	27	13	24	11	22	9
	22	7' 2"	115	93	95	70	80	54	68	42	59	34	51	27	45	23	40	19	36	16	32	14	29	12
1- Si Steel Th	20	9' 0"	144	112	119	84	100	65	85	51	73	41	64	33	56	27	50	23	44	19	40	16	36	14
Bas 9																								
(in.)	24	6' 9"	86	179	71	135	60	104	51	82	44	65	38	53	34	44	30	36	26	31	24	26	21	22
2- SPAN el Thickness (in.)	22	8' 10"	109	221	90	166	76	128	65	101	56	81	49	65	43	54	38	45	34	38	30	32	27	28
2- SI Steel Th	20	11' 0"	135	267	112	201	94	155	80	122	69	97	60	79	53	65	47	54	42	46	37	39	34	33
Bass																								
s (in.)	24	6' 10"	107	142	89	107	75	82	63	65	55	52	48	42	42	35	37	29	33	24	30	21	27	18
3- SPAN Steel Thickness (in.)	22	9' 0"	137	175	113	132	95	101	81	80	70	64	61	52	53	43	47	36	42	30	38	26	34	22
3-S Steel Th	20	11' 2"	169	212	140	159	117	123	100	96	86	77	75	63	66	52	58	43	52	36	47	31	42	26
Bas																								

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.
- ${\it 7} \ \ \hbox{If bearing lengths are less than specified, see Example for use of web crippling data}.$
- 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.

GAGE	SPAN
24	1' 3"
22	1' 7"
20	2' 0"

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