



SECTION PROPERTIES (Per Foot of Width)

Base Steel Thickness (in.)	GAGE	Yield Stress (ksi)	Weight G90 (psf)	Sec. Modulus		Deflection Moment of Inertia L_{sd} (in ⁴)	Web Crippling Loads		Web Crippling Data			
				S_{pos} (in ³)	S_{neg} (in ³)		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	50	1.36	0.134	0.128	0.142	545	945	183	45.7	326	55.3
0.0295	22	50	1.66	0.175	0.169	0.177	803	1414	289	72.2	521	88.6
0.0358	20	50	2.01	0.223	0.209	0.214	1147	2041	438	109	798	136

ALLOWABLE UNIFORMLY DISTRIBUTED LOADS (psf)

Span Length (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	6' 7"	107	75	88	56	74	43	63	34	54	27	47	22	42	18	37	15	33	13	30	11	27	9
	22	8' 8"	140	93	116	70	97	54	83	42	71	34	62	27	55	23	48	19	43	16	39	14	35	12
	20	11' 1"	178	112	147	84	124	65	105	51	91	41	79	33	70	27	62	23	55	19	49	16	45	14
2- SPAN Bas Steel Thickness (in.)	24	8' 2"	102	178	85	133	71	103	61	81	52	65	45	53	40	43	35	36	32	30	28	26	26	22
	22	10' 9"	135	221	112	166	94	128	80	101	69	81	60	65	53	54	47	45	42	38	37	32	34	28
	20	13' 8"	167	267	138	201	116	155	99	122	85	97	74	79	65	65	58	54	51	46	46	39	42	33
3- SPAN Bas Steel Thickness (in.)	24	8' 3"	128	141	106	106	89	81	76	64	65	51	57	42	50	34	44	29	39	24	35	21	32	18
	22	10' 11"	169	175	140	132	117	101	100	80	86	64	75	52	66	43	58	36	52	30	47	26	42	22
	20	13' 11"	208	212	172	159	145	123	123	96	106	77	93	63	81	52	72	43	64	36	58	31	52	26

Notes:

- Based on ASTM A 653 structural steel.
- Values in row "S" are based on strength.
- Values in row "D" are based on deflection of SPAN LENGTH/240.
- P_e = Allowable end web crippling load based on N = 1.5 in.
- P_i = Allowable interior web crippling load based on N = 3.0 in.
- Web crippling not included in strength calculations. See Example.
- If bearing lengths are less than specified, see Example for use of web crippling data.
- MAX CO. SPAN = Maximum construction span based on 200 lb concentrated load per foot of deck (ANSI/SDI RD-2017).
- CANTIL. SPAN = Maximum construction cantilever span based on Eq. 2.4.3 of (ANSI/SDI RD-2017).
- Allowable Strength Design (ASD) principles were used in accordance with AISI S100-16.

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GAGE	CANTILEVER SPAN
24	1' 6"
22	2' 0"
20	2' 5"