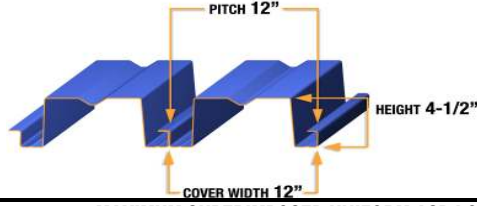


**SECTION PROPERTIES**  $f_y = 40 \text{ ksi}$

GAGE	Wd	I <sub>b</sub> (DEFLECTION)	Sp	Sn	Rbe			Rbi		Va
					4"	5"	6"	5"	6"	
20	3.14	2.962	1.099	1.181	588	638	684	1095	1164	1873
18	4.15	3.954	1.560	1.611	990	1071	1145	1815	1925	4230
16	5.23	4.982	2.005	2.030	1518	1638	1747	2757	2917	6732
14	6.53	6.215	2.531	2.531	2279	2453	2610	4113	4341	9688



ASD DESIGN		MAXIMUM SUPERIMPOSED UNIFORM ASD LOADS, psf											
Span	Load Combinations	SINGLE SPAN				DOUBLE SPAN				TRIPLE SPAN			
		GAGE											
		20	18	16	14	20	18	16	14	20	18	16	14
11'-0"	D+L (Strength)	104*	176*	260	328	72*	104*	139*	181*	84*	121*	162*	212*
	D+L (Deflection)	104	176	241	300	72	104	139	181	84	121	162	212
	L (Deflection)	96	130	164	204	72	104	139	181	84	121	162	212
12'-0"	D+L (Strength)	95*	161*	218	275	65*	93*	124*	161*	75*	109*	145*	189*
	D+L (Deflection)	95	146	184	230	65	93	124	161	75	109	145	189
	L (Deflection)	74	100	126	157	65	93	124	161	75	109	145	189
13'-0"	D+L (Strength)	87*	144	185	233	59*	84*	111*	144*	68*	98*	130*	169*
	D+L (Deflection)	84	114	144	179	59	84	111	144	68	98	130	169
	L (Deflection)	58	79	99	124	59	84	111	144	68	98	130	169
14'-0"	D+L (Strength)	81*	123	158	200	53*	76*	100*	130*	62*	89*	118*	153*
	D+L (Deflection)	67	90	114	142	53	76	100	130	62	89	118	153
	L (Deflection)	46	63	79	99	53	76	100	130	62	89	118	153
15'-0"	D+L (Strength)	75	107	137	173	48*	69*	91*	117*	57*	81*	107*	138*
	D+L (Deflection)	54	73	92	114	48	69	91	117	57	81	107	138
	L (Deflection)	38	51	65	81	48	69	91	117	57	81	107	138
16'-0"	D+L (Strength)	66	93	120	152	44*	63*	83*	107*	52*	74*	98*	126*
	D+L (Deflection)	44	59	75	93	44	63	83	107	52	74	98	126
	L (Deflection)	31	42	53	66	44	63	83	107	52	74	98	126
17'-0"	D+L (Strength)	58	82	106	134	41*	58*	76*	97*				
	D+L (Deflection)	36	49	61	77	41	58	76	97				
	L (Deflection)	26	35	44	55	41	58	76	97				
18'-0"	D+L (Strength)	51	73	94	118	38*	53*	70*	89*				
	D+L (Deflection)	30	40	51	63	38	53	70	89				
	L (Deflection)	22	30	37	47	38	53	70	89				
19'-0"	D+L (Strength)	46	65	84	106	35*	49*	64*	82*				
	D+L (Deflection)	25	34	42	53	35	49	64	82				
	L (Deflection)	19	25	32	40	35	49	64	82				
20'-0"	D+L (Strength)	41	58	75	95	32*	46*	60*	76*				
	D+L (Deflection)	21	28	36	44	32	46	60	76				
	L (Deflection)	16	22	27	34	32	46	60	76				
21'-0"	D+L (Strength)	37	52	68	85	30*	43*	55*	70*				
	D+L (Deflection)	17	22	28	35	30	43	55	70				
	L (Deflection)	14	19	24	29	30	43	55	70				
22'-0"	D+L (Strength)	33	47	61	77	28*	40*	51*	65*				
	D+L (Deflection)	13	18	23	28	28	40	51	65				
	L (Deflection)	12	16	20	26	28	39	49	62				
23'-0"	D+L (Strength)	30	43	55	70	26*	37*	48*	61*				
	D+L (Deflection)	11	14	18	23	26	37	48	61				
	L (Deflection)	10	14	18	22	26	34	43	54				
24'-0"	D+L (Strength)	27	39	50	64	25*	35*	45*	57*				
	D+L (Deflection)	8	11	14	18	25	34	42	53				
	L (Deflection)	8	11	14	18	23	30	38	47				

11'-0"	D+L (Strength)	104*	← Max. superimposed ASD dead + live load (psf) (governed by strength limitation)
	D+L (Deflection)	104	← Max. superimposed ASD dead + live load (psf) (governed by deflection limitation)
	L (Deflection)	96	← Max. superimposed ASD live load (psf) (governed by deflection limitation)

↑ Vertical load span (center to center spacing)

**Wd** Weight of deck (uncoated), psf

**I<sub>b</sub>** Moment of inertia for deflection per foot of deck width (in<sup>4</sup>)/ft

**Sp** Section modulus for positive bending per foot of deck width, (in<sup>3</sup>)/ft

**Sn** Section modulus for negative bending per foot of deck width, (in<sup>3</sup>)/ft

**Va** Allowable shear value per foot of deck width, plf

**Rbe** Allowable exterior web crippling value per foot of deck, plf

**Rbi** Allowable interior web crippling value per foot of deck, plf

**D** Uniform dead load, psf

**L** Uniform live load, psf

- Notes:**
- Bending strength based on allowable flexural stress of 24 ksi.
  - Loads marked with asterisk (\*) are governed by moment & shear, interior (6" bearing) and exterior (4" bearing) reactions (web crippling) or moment & reactions.
  - Deflection based on maximum dead + live load deflection of L/240 or 1 in. and on maximum live load deflection of L/360 or 1 in.
  - An upper limit of 400 psf has been applied to the loads.
  - Deck length over 45'-0" require inquiry and special accommodations. Please contact the Metal-Dek Group® for further information.

The section properties table is based on 2001 AISI's North American Specification for the Design of Cold-Formed Steel Structural Members (2004 Supplement). Acoustical profile is also available.