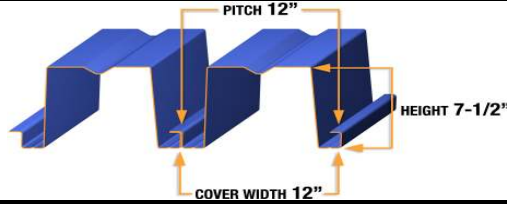


**SECTION PROPERTIES**  $f_y = 40 \text{ ksi}$

GAGE	Wd	I <sub>b</sub> (DEFLECTION)	Sp	Sn	Rbe			Rbi		Va
					4"	5"	6"	5"	6"	
20	3.83	9.435	1.961	2.178	521	565	606	1080	1148	1109
18	5.07	12.745	3.108	3.111	896	970	1037	1793	1902	2578
16	6.39	16.125	4.022	4.073	1394	1505	1605	2727	2886	5185
14	7.98	20.118	5.079	5.079	2117	2279	2425	4074	4300	10126



ASD DESIGN		MAXIMUM SUPERIMPOSED UNIFORM ASD LOADS, psf											
Span	Load Combinations	SINGLE SPAN				DOUBLE SPAN				TRIPLE SPAN			
		GAGE				GAGE				GAGE			
		20	18	16	14	20	18	16	14	20	18	16	14
17'-0"	D+L (Strength)	57*	100*	158*	241*	50*	75*	103*	136*				
	D+L (Deflection)	57	100	158	241	50	75	103	136				
	L (Deflection)	57	100	144	179	50	75	103	136				
18'-0"	D+L (Strength)	54*	95*	149*	227*	47*	70*	96*	126*				
	D+L (Deflection)	54	95	149	219	47	70	96	126				
	L (Deflection)	54	95	121	151	47	70	96	126				
19'-0"	D+L (Strength)	51*	89*	140*	215*	44*	65*	89*	117*				
	D+L (Deflection)	51	89	140	185	44	65	89	117				
	L (Deflection)	51	81	103	128	44	65	89	117				
20'-0"	D+L (Strength)	48*	85*	133*	195	41*	61*	83*	109*				
	D+L (Deflection)	48	85	126	157	41	61	83	109				
	L (Deflection)	48	70	88	110	41	61	83	109				
21'-0"	D+L (Strength)	46*	80*	126*	176	39*	57*	78*	102*				
	D+L (Deflection)	46	80	102	128	39	57	78	102				
	L (Deflection)	45	60	76	95	39	57	78	102				
22'-0"	D+L (Strength)	44*	76*	120*	160	36*	54*	73*	95*				
	D+L (Deflection)	44	66	84	105	36	54	73	95				
	L (Deflection)	39	52	66	83	36	54	73	95				
23'-0"	D+L (Strength)	41*	73*	115*	146	34*	51*	69*	90*				
	D+L (Deflection)	40	55	69	86	34	51	69	90				
	L (Deflection)	34	46	58	72	34	51	69	90				
24'-0"	D+L (Strength)	40*	70*	105	133	32*	48*	65*	84*				
	D+L (Deflection)	34	45	57	72	32	48	65	84				
	L (Deflection)	30	40	51	64	32	48	65	84				
25'-0"	D+L (Strength)	38*	67*	97	122								
	D+L (Deflection)	28	38	48	60								
	L (Deflection)	26	36	45	56								
26'-0"	D+L (Strength)	36*	64*	89	112								
	D+L (Deflection)	23	32	40	50								
	L (Deflection)	23	32	40	50								
27'-0"	D+L (Strength)	35*	61*	82	103								
	D+L (Deflection)	19	26	33	42								
	L (Deflection)	19	26	33	42								
28'-0"	D+L (Strength)	33*	58	76	96								
	D+L (Deflection)	16	22	28	35								
	L (Deflection)	16	22	28	35								
29'-0"	D+L (Strength)	32*	54	70	89								
	D+L (Deflection)	14	19	24	29								
	L (Deflection)	14	19	24	29								
30'-0"	D+L (Strength)	31*	50	65	82								
	D+L (Deflection)	11	16	20	25								
	L (Deflection)	11	16	20	25								

17'-0"	D+L (Strength)	57*	← Max. superimposed ASD dead + live load (psf) (governed by strength limitation)
	D+L (Deflection)	57	← Max. superimposed ASD dead + live load (psf) (governed by deflection limitation)
	L (Deflection)	57	← 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.