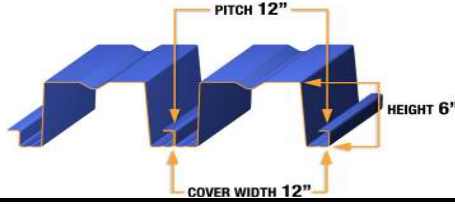


SECTION PROPERTIES $f_y = 40 \text{ ksi}$

GAGE	Wd	I _b (DEFLECTION)	Sp	Sn	Rbe			Rbi		Va
					4"	5"	6"	5"	6"	
20	3.49	5.701	1.563	1.727	552	600	642	1087	1156	1393
18	4.61	7.651	2.309	2.322	940	1018	1087	1803	1913	3240
16	5.82	9.642	2.974	3.011	1452	1567	1671	2741	2900	6519
14	7.26	12.028	3.755	3.755	2193	2360	2512	4092	4319	10505



ASD DESIGN		MAXIMUM SUPERIMPOSED UNIFORM ASD LOADS, psf											
Span	Load Combinations	SINGLE SPAN				DOUBLE SPAN				TRIPLE SPAN			
		20	18	16	14	20	18	16	14	20	18	16	14
15'-0"	D+L (Strength)	70*	121*	188*	260	56*	80*	108*	142*	64*	93*	126*	166*
	D+L (Deflection)	70	121	182	227	56	80	108	142	64	93	126	166
	L (Deflection)	70	99	125	156	56	80	108	142	64	93	126	166
16'-0"	D+L (Strength)	66*	113*	176*	227	51*	74*	99*	130*	59*	86*	116*	152*
	D+L (Deflection)	66	113	149	186	51	74	99	130	59	86	116	152
	L (Deflection)	60	81	103	129	51	74	99	130	59	86	116	152
17'-0"	D+L (Strength)	61*	106*	159	201	47*	68*	92*	119*				
	D+L (Deflection)	61	97	123	153	47	68	92	119				
	L (Deflection)	50	68	86	107	47	68	92	119				
18'-0"	D+L (Strength)	58*	100*	141	178	44*	63*	85*	110*				
	D+L (Deflection)	58	81	103	128	44	63	85	110				
	L (Deflection)	42	57	72	90	44	63	85	110				
19'-0"	D+L (Strength)	55*	94*	126	159	41*	58*	78*	102*				
	D+L (Deflection)	50	68	86	108	41	58	78	102				
	L (Deflection)	36	49	62	77	41	58	78	102				
20'-0"	D+L (Strength)	52*	88	113	143	38*	54*	73*	95*				
	D+L (Deflection)	43	58	73	91	38	54	73	95				
	L (Deflection)	31	42	53	66	38	54	73	95				
21'-0"	D+L (Strength)	49*	79	102	129	36*	51*	68*	88*				
	D+L (Deflection)	35	47	59	74	36	51	68	88				
	L (Deflection)	27	36	46	57	36	51	68	88				
22'-0"	D+L (Strength)	47*	72	92	117	33*	48*	64*	82*				
	D+L (Deflection)	28	38	48	60	33	48	64	82				
	L (Deflection)	23	31	40	49	33	48	64	82				
23'-0"	D+L (Strength)	44	65	84	106	31*	45*	60*	77*				
	D+L (Deflection)	23	31	39	49	31	45	60	77				
	L (Deflection)	20	27	35	43	31	45	60	77				
24'-0"	D+L (Strength)	40	60	77	97	30*	42*	56*	72*				
	D+L (Deflection)	19	26	32	40	30	42	56	72				
	L (Deflection)	18	24	31	38	30	42	56	72				
25'-0"	D+L (Strength)	37	54	70	89								
	D+L (Deflection)	15	21	27	33								
	L (Deflection)	15	21	27	33								
26'-0"	D+L (Strength)	34	50	65	82								
	D+L (Deflection)	13	17	22	27								
	L (Deflection)	13	17	22	27								
27'-0"	D+L (Strength)	31	46	59	75								
	D+L (Deflection)	10	14	18	22								
	L (Deflection)	10	14	18	22								
28'-0"	D+L (Strength)	28	43	55	69								
	D+L (Deflection)	9	12	15	18								
	L (Deflection)	9	12	15	18								

15'-0"	D+L (Strength)	70*	← Max. superimposed ASD dead + live load (psf) (governed by strength limitation)
	D+L (Deflection)	70	← Max. superimposed ASD dead + live load (psf) (governed by deflection limitation)
	L (Deflection)	70	← Max. superimposed ASD live load (psf) (governed by deflection limitation)

↑ Vertical load span (center to center spacing)

- Wd** Weight of deck (uncoated), psf
- I_b** Moment of inertia for deflection per foot of deck width (in⁴/ft)
- Sp** Section modulus for positive bending per foot of deck width, (in³/ft)
- Sn** Section modulus for negative bending per foot of deck width, (in³/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.