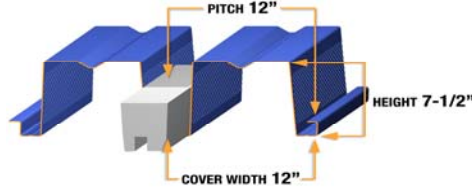


SECTION PROPERTIES

fy=40 ksi

GAGE	Wd	I <sub>D</sub> (DEFLECTION)	Sp	Sn	Rbe			Rbi			Va
					4"	5"	6"	4"	5"	6"	
20	3.52	8.437	1.702	1.900	422	432	441	734	790	841	1109
18	4.66	11.421	2.754	2.722	807	824	840	1216	1304	1385	2578
16	5.87	14.454	3.568	3.616	1360	1385	1409	1846	1974	2091	5185
14	7.33	18.042	4.512	4.512	2117	2256	2291	2754	2937	3103	10126



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
17' - 0"	D+L (Strength)	46*	90*	154*	242*	36*	60*	83*	110*				
	D+L (Deflection)	46	90	154	234	36	60	83	110				
	L (Deflection)	46	90	129	161	36	60	83	110				
18' - 0"	D+L (Strength)	43*	85*	145*	215	34*	56*	77*	102*				
	D+L (Deflection)	43	85	145	196	34	56	77	102				
	L (Deflection)	43	85	108	135	34	56	77	102				
19' - 0"	D+L (Strength)	41*	80*	137*	193	32*	52*	72*	95*				
	D+L (Deflection)	41	80	132	165	32	52	72	95				
	L (Deflection)	41	73	92	115	32	52	72	95				
20' - 0"	D+L (Strength)	39*	76*	130*	173	30*	49*	67*	89*				
	D+L (Deflection)	39	76	113	141	30	49	67	89				
	L (Deflection)	39	62	79	99	30	49	67	89				
21' - 0"	D+L (Strength)	37*	72*	124	156	29*	46*	63*	83*				
	D+L (Deflection)	37	72	92	114	29	46	63	83				
	L (Deflection)	37	54	68	85	29	46	63	83				
22' - 0"	D+L (Strength)	35*	69*	112	142	27*	43*	59*	78*				
	D+L (Deflection)	35	59	75	94	27	43	59	78				
	L (Deflection)	35	47	59	74	27	43	59	78				
23' - 0"	D+L (Strength)	33*	66*	102	129	26*	41*	56*	73*				
	D+L (Deflection)	33	49	62	77	26	41	56	73				
	L (Deflection)	30	41	52	65	26	41	56	73				
24' - 0"	D+L (Strength)	32*	63*	93	118	25*	38*	53*	69*				
	D+L (Deflection)	30	41	51	64	25	38	53	69				
	L (Deflection)	27	36	46	57	25	38	53	69				
25' - 0"	D+L (Strength)	30*	60*	85	108								
	D+L (Deflection)	25	34	43	53								
	L (Deflection)	24	32	40	51								
26' - 0"	D+L (Strength)	29*	57*	79	99								
	D+L (Deflection)	21	28	36	45								
	L (Deflection)	21	28	36	45								
27' - 0"	D+L (Strength)	28*	55*	72	92								
	D+L (Deflection)	17	24	30	37								
	L (Deflection)	17	24	30	37								
28' - 0"	D+L (Strength)	27*	52	67	85								
	D+L (Deflection)	15	20	25	31								
	L (Deflection)	15	20	25	31								
29' - 0"	D+L (Strength)	26*	48	62	79								
	D+L (Deflection)	12	17	21	26								
	L (Deflection)	12	17	21	26								
30' - 0"	D+L (Strength)	25*	44	58	73								
	D+L (Deflection)	10	14	18	22								
	L (Deflection)	10	14	18	22								

17' - 0"	D+L (Strength)	46*	← Max. superimposed ASD dead + live load (psf) (governed by strength limitation)
	D+L (Deflection)	46	← Max. superimposed ASD dead + live load (psf) (governed by deflection limitation of L/240 or 1")
	L (Deflection)	46	← Max. superimposed ASD live load (psf) (governed by deflection limitation of L/360 or 1")

Vertical load span (center to center spacing)

- Wd Weight of deck (uncoated), psf
- I<sub>D</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, pif
- Rbe Allowable exterior web crippling value per foot of deck width, pif
- Rbi Allowable interior web crippling value per foot of deck width, pif
- D Uniform dead load, psf
- L Uniform live load, psf

Notes: 1. Bending strength based on allowable flexural stress of 24 ksi.  
 2. Loads marked with asterisk (\*) are governed by moment & shear, interior (6" bearing) and exterior (4" bearing) reactions (web crippling) or applied moment & reactions.  
 3. An upper limit of 400 psf has been applied to the loads.  
 4. 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).