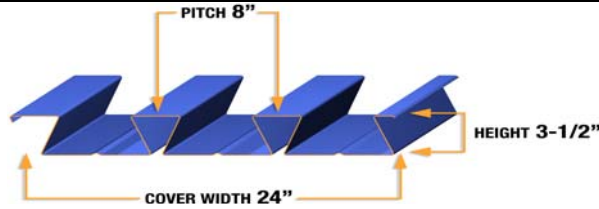


SECTION PROPERTIES

fy = 40 ksi

GAGE	Wd	I _D (DEFLECTION)	Sp	Sn	Rbe			Rbi		Va
					2"	3"	4"	3"	4"	
20	3.33	1.959	0.767	0.820	681	781	865	1313	1437	3619
18	4.40	2.664	1.109	1.190	1151	1311	1446	2194	2390	6345
16	5.54	3.394	1.504	1.540	1771	2007	2205	3355	3638	8867



ASD DESIGN		MAXIMUM SUPERIMPOSED UNIFORM ASD LOADS, psf								
Span	Load Combinations	SINGLE SPAN			DOUBLE SPAN			TRIPLE SPAN		
		20	18	16	20	18	16	20	18	16
10'-0"	D+L (Strength)	119	173	235	78*	114*	152*	91*	134*	179*
	D+L (Deflection)	119	171	217	78	114	152	91	134	179
	L (Deflection)	86	117	149	78	114	152	91	134	179
11'-0"	D+L (Strength)	98	142	193	69*	100*	133*	81*	118*	156*
	D+L (Deflection)	93	127	162	69	100	133	81	118	156
	L (Deflection)	64	88	112	69	100	133	81	118	156
12'-0"	D+L (Strength)	82	119	162	61*	88*	117*	72*	104*	138*
	D+L (Deflection)	71	97	123	61	88	117	72	104	138
	L (Deflection)	50	67	86	61	88	117	72	104	138
13'-0"	D+L (Strength)	69	101	137	54*	79*	104*	64*	93*	123*
	D+L (Deflection)	55	75	96	54	79	104	64	93	123
	L (Deflection)	39	53	68	54	79	104	64	93	123
14'-0"	D+L (Strength)	59	86	117	49*	71*	93*	58*	84*	110*
	D+L (Deflection)	44	59	76	49	71	93	58	84	110
	L (Deflection)	31	42	54	49	71	93	58	80	102
15'-0"	D+L (Strength)	51	74	101	44*	64*	84*	52*	76*	100*
	D+L (Deflection)	35	47	60	44	64	84	52	76	100
	L (Deflection)	25	35	44	44	64	84	48	65	83
16'-0"	D+L (Strength)	45	65	88	40*	58*	76*	47*	69*	90*
	D+L (Deflection)	28	38	49	40	58	76	47	69	90
	L (Deflection)	21	28	36	40	58	76	39	54	68
17'-0"	D+L (Strength)	39	57	78	36*	53*	69*			
	D+L (Deflection)	23	31	40	36	53	69			
	L (Deflection)	17	24	30	36	53	69			
18'-0"	D+L (Strength)	35	50	69	33*	48*	63*			
	D+L (Deflection)	19	26	33	33	48	63			
	L (Deflection)	15	20	25	33	48	61			
19'-0"	D+L (Strength)	31	45	61	31*	44*	58*			
	D+L (Deflection)	15	21	27	31	44	58			
	L (Deflection)	13	17	22	30	41	52			
20'-0"	D+L (Strength)	27	40	55	28*	41*	53*			
	D+L (Deflection)	13	17	22	28	41	53			
	L (Deflection)	11	15	19	26	35	45			
21'-0"	D+L (Strength)	24	36	49	26*	38*	49*			
	D+L (Deflection)	10	14	17	26	38	49			
	L (Deflection)	9	13	16	22	30	39			
22'-0"	D+L (Strength)	22	32	44	24*	35*	45*			
	D+L (Deflection)	8	11	13	23	32	40			
	L (Deflection)	8	11	13	19	26	34			
23'-0"	D+L (Strength)	20	29	40	21*	31*	41*			
	D+L (Deflection)	6	8	10	19	26	33			
	L (Deflection)	6	8	10	17	23	29			

10'-0"	D+L (Strength)	119
	D+L (Deflection)	119
	L (Deflection)	86

← Max. superimposed ASD dead + live load (psf) (governed by strength limitation)
 ← Max. superimposed ASD dead + live load (psf) (governed by deflection limitation)
 ← Max. superimposed ASD live load (psf) (governed by deflection limitation)
 ← Vertical load span (center to center spacing)

Wd Weight of deck (uncoated), psf

I_D 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 reactions (web crippling) or applied moment & reactions assuming 4" of interior bearing.
 - 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.