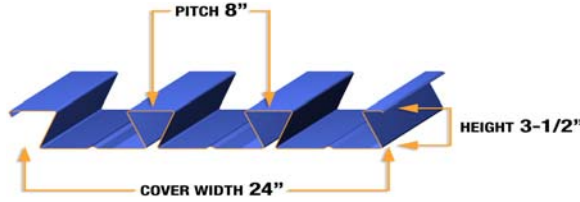


SECTION PROPERTIES fy = 40 ksi

GAGE	Wd	I _D (DEFLECTION)	Sp	Sn	Rbe			Rbi		Va
					2"	3"	4"	3"	4"	
20	3.33	1.959	0.767	0.820	1043	1195	1324	1954	2138	5501
18	4.40	2.664	1.109	1.190	1761	2006	2212	3264	3554	9644
16	5.54	3.394	1.504	1.540	2710	3070	3374	4990	5412	13477



LRFD DESIGN		MAXIMUM SUPERIMPOSED UNIFORM LRFD LOADS, psf								
Span	Load Combinations	SINGLE SPAN			DOUBLE SPAN			TRIPLE SPAN		
		GAGE								
		20	18	16	20	18	16	20	18	16
10'-0"	λ _D D+λ _L L (Strength)	190	276	374	167*	279*	377*	190*	318*	400*
	D+L (Deflection)	125	171	217	167	279	377	190	318	400
	L (Deflection)	86	117	149	167	279	358	162	220	280
11'-0"	λ _D D+λ _L L (Strength)	157	227	308	151*	240*	311*	173*	288*	389*
	D+L (Deflection)	93	127	162	151	240	311	173	243	310
	L (Deflection)	64	88	112	151	211	269	121	165	210
12'-0"	λ _D D+λ _L L (Strength)	131	190	258	138*	201*	261*	158*	251*	327*
	D+L (Deflection)	71	97	123	138	201	261	137	186	237
	L (Deflection)	50	67	86	119	162	207	93	127	162
13'-0"	λ _D D+λ _L L (Strength)	111	161	219	117*	171*	222*	145*	214*	278*
	D+L (Deflection)	55	75	96	117	171	222	107	146	186
	L (Deflection)	39	53	68	94	128	163	74	100	127
14'-0"	λ _D D+λ _L L (Strength)	95	138	188	101*	147*	191*	126*	184*	239*
	D+L (Deflection)	44	59	76	101	147	190	85	116	147
	L (Deflection)	31	42	54	75	102	130	59	80	102
15'-0"	λ _D D+λ _L L (Strength)	82	120	163	87*	128*	165*	109*	160*	208*
	D+L (Deflection)	35	47	60	87	120	153	68	93	119
	L (Deflection)	25	35	44	61	83	106	48	65	83
16'-0"	λ _D D+λ _L L (Strength)	72	104	142	76*	112*	145*	96*	140*	182*
	D+L (Deflection)	28	38	49	72	98	125	56	76	97
	L (Deflection)	21	28	36	50	69	87	39	54	68
17'-0"	λ _D D+λ _L L (Strength)	63	92	125	67*	98*	128*			
	D+L (Deflection)	23	31	40	60	81	104			
	L (Deflection)	17	24	30	42	57	73			
18'-0"	λ _D D+λ _L L (Strength)	56	81	111	60*	87*	113*			
	D+L (Deflection)	19	26	33	50	68	86			
	L (Deflection)	15	20	25	35	48	61			
19'-0"	λ _D D+λ _L L (Strength)	50	73	99	53*	78*	101*			
	D+L (Deflection)	15	21	27	42	57	73			
	L (Deflection)	13	17	22	30	41	52			
20'-0"	λ _D D+λ _L L (Strength)	45	65	89	48*	70*	90*			
	D+L (Deflection)	13	17	22	35	48	62			
	L (Deflection)	11	15	19	26	35	45			
21'-0"	λ _D D+λ _L L (Strength)	40	58	80	43*	63*	81*			
	D+L (Deflection)	10	14	17	29	39	50			
	L (Deflection)	9	13	16	22	30	39			
22'-0"	λ _D D+λ _L L (Strength)	36	53	72	39*	57*	74*			
	D+L (Deflection)	8	11	13	23	32	40			
	L (Deflection)	8	11	13	19	26	34			
23'-0"	λ _D D+λ _L L (Strength)	33	48	65	35*	51*	67*			
	D+L (Deflection)	6	8	10	19	26	33			
	L (Deflection)	6	8	10	17	23	29			

10'-0"	λ _D D+λ _L L (Strength)	190	← Max. superimposed factored LRFD dead + live load (psf) (governed by strength limitation)
	D+L (Deflection)	125	← Max. superimposed unfactored LRFD dead + live load (psf) (governed by deflection limitation)
	L (Deflection)	86	← Max. superimposed unfactored LRFD 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
- λ_D, λ_L Load factors for D & L loads to be applied by Engineer in accordance with Building Codes.
- Rbe Allowable exterior web crippling value per foot of deck, plf
- Rbi Allowable interior web crippling value per foot of deck, plf
- Va Allowable shear value per foot of deck width, plf
- D Uniform dead load, psf
- L Uniform live load, psf

- Notes:
- Bending strength based on flexural stress limit of 38 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.