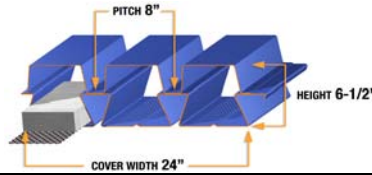


SECTION PROPERTIES  $F_y = 40$  ksi

GAGE	Wd	$I_b$ (deflection)	Sp	Sn	Rbe			Rbi		Va
					2"	3"	4"	3"	4"	
20/20	5.54	8.518	1.552	2.105	1043	1195	1324	1954	2138	5501
18/18	7.35	11.785	2.435	3.056	1761	2006	2212	3264	3554	9644
16/16	9.28	15.238	3.478	4.171	2710	3070	3374	4990	5412	13477



LRFD DESIGN		MAXIMUM SUPERIMPOSED UNIFORM LOADS, psf								
Span	Load Combinations	SINGLE SPAN			DOUBLE SPAN			TRIPLE SPAN		
		20/20	18/18	16/16	20/20	18/18	16/16	20/20	18/18	16/16
13' - 0"	$\lambda_p D + \lambda_L L$ (Strength)	154	262	400	125*	210*	322*	143*	240*	367*
	D+L (Deflection)	154	262	400	125	210	322	143	240	367
	L (Deflection)	152	215	282	125	210	322	143	240	367
14' - 0"	$\lambda_p D + \lambda_L L$ (Strength)	142	243	376	116*	194*	298*	132*	222*	340*
	D+L (Deflection)	142	243	330	116	194	298	132	222	340
	L (Deflection)	122	172	226	116	194	298	132	222	340
15' - 0"	$\lambda_p D + \lambda_L L$ (Strength)	132	226	350	107*	181*	278*	123*	207*	317*
	D+L (Deflection)	132	203	266	107	181	278	123	207	317
	L (Deflection)	99	140	184	107	181	278	123	207	317
16' - 0"	$\lambda_p D + \lambda_L L$ (Strength)	124	211	328	100*	169*	259*			
	D+L (Deflection)	117	166	218	100	169	259			
	L (Deflection)	81	115	151	100	169	259			
17' - 0"	$\lambda_p D + \lambda_L L$ (Strength)	116	198	294	94*	158*	244*			
	D+L (Deflection)	96	137	180	94	158	244			
	L (Deflection)	68	96	126	94	158	244			
18' - 0"	$\lambda_p D + \lambda_L L$ (Strength)	109	182	261	88*	149*	229*			
	D+L (Deflection)	80	114	150	88	149	229			
	L (Deflection)	57	81	106	88	149	229			
19' - 0"	$\lambda_p D + \lambda_L L$ (Strength)	102	162	233	83*	141*	217*			
	D+L (Deflection)	67	96	126	83	141	217			
	L (Deflection)	49	69	90	83	141	217			
20' - 0"	$\lambda_p D + \lambda_L L$ (Strength)	92	145	209	79*	133*	205*			
	D+L (Deflection)	57	81	107	79	133	205			
	L (Deflection)	42	59	78	79	133	201			
21' - 0"	$\lambda_p D + \lambda_L L$ (Strength)	82	131	189	75*	127*	195*			
	D+L (Deflection)	46	65	86	75	127	195			
	L (Deflection)	36	51	67	75	127	173			
22' - 0"	$\lambda_p D + \lambda_L L$ (Strength)	75	119	171	71*	120*	186*			
	D+L (Deflection)	37	53	70	71	120	186			
	L (Deflection)	31	44	58	71	117	151			
23' - 0"	$\lambda_p D + \lambda_L L$ (Strength)	68	108	155	68*	115*	177*			
	D+L (Deflection)	30	43	57	68	115	163			
	L (Deflection)	27	39	51	68	102	132			
24' - 0"	$\lambda_p D + \lambda_L L$ (Strength)	62	145	209						
	D+L (Deflection)	25	81	107						
	L (Deflection)	24	59	78						
25' - 0"	$\lambda_p D + \lambda_L L$ (Strength)	56	131	189						
	D+L (Deflection)	20	65	86						
	L (Deflection)	20	51	67						
26' - 0"	$\lambda_p D + \lambda_L L$ (Strength)	51	119	171						
	D+L (Deflection)	16	53	70						
	L (Deflection)	16	44	58						

Contact Metal-Dek Group® for information on Versa-Wedge® Hanging Devices

13' - 0"	$\lambda_p D + \lambda_L L$ (Strength)	154	← Max. superimposed ASD dead + live load (psf) (governed by strength limitations)
	D+L (Deflection)	154	← Max. superimposed ASD dead + live load (psf) (governed by deflection limitations)
	L (Deflection)	152	← Max. superimposed ASD live load (psf) (governed by deflection limitations)

Chord span (horizontal distance between supports)

Wd	Weight of deck (uncoated), psf	Rbe	Allowable exterior web crippling value per foot of deck, plf
$I_b$	Moment of inertia for deflection per foot of deck width, (in <sup>4</sup> )/ft	Rbi	Allowable interior web crippling value per foot of deck, plf
Sp	Section modulus for positive bending per foot of deck width, (in <sup>3</sup> )/ft	D	Uniform dead load, psf
Sn	Section modulus for negative bending per foot of deck width, (in <sup>3</sup> )/ft	L	Uniform live load, psf
Va	Allowable shear value per foot of deck width, plf		
$\lambda_p, \lambda_L$	Load factors for dead and live loads, respectively, to be applied by Engineer in accordance with Building Codes		

- 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.
  - 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.