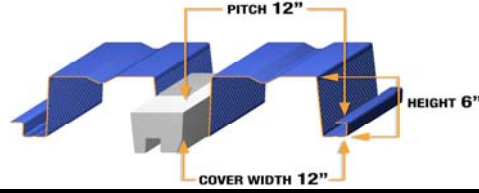


SECTION PROPERTIES

fy=40 ksi

GAGE	Wd	I _b (DEFLECTION)	Sp	Sn	Rbe			Rbi			Va
					4"	5"	6"	4"	5"	6"	
20	3.23	5.196	1.396	1.546	703	720	735	1094	1178	1254	2118
18	4.28	6.992	2.092	2.165	1321	1348	1374	1812	1944	2064	4925
16	5.39	8.815	2.693	2.728	2200	2242	2280	2750	2942	3115	9909
14	6.73	11.002	3.404	3.404	3355	3611	3676	4103	4376	4622	15968



LRFD DESIGN		MAXIMUM SUPERIMPOSED UNIFORM LRFD LOADS (psf)											
Span	Load Combinations	SINGLE SPAN				DOUBLE SPAN				TRIPLE SPAN			
		GAGE											
		20	18	16	14	20	18	16	14	20	18	16	14
15' - 0"	λ _p D+λ _L (Strength)	90*	171*	287*	375	63*	105*	160*	238*	72*	120*	182*	272*
	D+L (Deflection)	90	131	166	207	63	105	160	238	72	120	182	272
	L (Deflection)	67	90	114	143	63	105	160	238	72	120	182	269
16' - 0"	λ _p D+λ _L (Strength)	84*	160*	260	329	59*	98*	149*	223*	67*	112*	171*	255*
	D+L (Deflection)	79	107	136	170	59	98	149	223	67	112	171	255
	L (Deflection)	55	74	94	118	59	98	149	223	67	112	171	222
17' - 0"	λ _p D+λ _L (Strength)	79*	150*	230	290	55*	92*	140*	209*				
	D+L (Deflection)	65	89	112	140	55	92	140	209				
	L (Deflection)	46	62	79	98	55	92	140	209				
18' - 0"	λ _p D+λ _L (Strength)	74*	142*	204	258	52*	87*	132*	197*				
	D+L (Deflection)	55	74	94	117	52	87	132	197				
	L (Deflection)	39	52	66	83	52	87	132	197				
19' - 0"	λ _p D+λ _L (Strength)	70*	134*	183	231	49*	82*	125*	187*				
	D+L (Deflection)	46	62	79	99	49	82	125	187				
	L (Deflection)	33	44	56	70	49	82	125	169				
20' - 0"	λ _p D+λ _L (Strength)	66*	127*	164	207	46*	77*	118*	177*				
	D+L (Deflection)	39	53	67	84	46	77	118	177				
	L (Deflection)	28	38	48	60	46	77	116	145				
21' - 0"	λ _p D+λ _L (Strength)	63*	115	148	187	44*	73*	112*	168*				
	D+L (Deflection)	31	43	54	68	44	73	112	168				
	L (Deflection)	24	33	42	52	44	73	100	125				
22' - 0"	λ _p D+λ _L (Strength)	60*	104	134	170	42*	70*	107*	160*				
	D+L (Deflection)	26	35	44	55	42	70	107	142				
	L (Deflection)	21	29	36	45	42	69	87	109				
23' - 0"	λ _p D+λ _L (Strength)	57*	95	122	155	40*	67*	102*	153*				
	D+L (Deflection)	21	28	36	45	40	67	94	118				
	L (Deflection)	18	25	32	40	40	61	76	95				
24' - 0"	λ _p D+λ _L (Strength)	55*	87	112	142	38*	64*	97*	140*				
	D+L (Deflection)	17	23	29	37	38	62	79	98				
	L (Deflection)	16	22	28	35	38	53	67	84				
25' - 0"	λ _p D+λ _L (Strength)	52*	80	103	130								
	D+L (Deflection)	14	19	24	30								
	L (Deflection)	14	19	24	30								
26' - 0"	λ _p D+λ _L (Strength)	48	73	94	119								
	D+L (Deflection)	12	16	20	25								
	L (Deflection)	12	16	20	25								
27' - 0"	λ _p D+λ _L (Strength)	45	68	87	110								
	D+L (Deflection)	9	13	16	20								
	L (Deflection)	9	13	16	20								
28' - 0"	λ _p D+λ _L (Strength)	41	62	81	102								
	D+L (Deflection)	8	11	13	17								
	L (Deflection)	8	11	13	17								

15' - 0"	λ _p D+λ _L (Strength)	90*	← Max. superimposed factored LRFD dead + live load (psf) (governed by strength limitation)
	D+L (Deflection)	90	← Max. superimposed unfactored LRFD dead + live load (psf) (governed by deflection limitation of L/240 or 1")
	L (Deflection)	67	← Max. superimposed unfactored LRFD 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 | Rbe | Allowable exterior web crippling value per foot of deck width, pif |
| I _b | Moment of inertia for deflection per foot of deck width, (in ⁴)/ft | Rbi | Allowable interior web crippling value per foot of deck width, pif |
| Sp | Section modulus for positive bending per foot of deck width, (in ³)/ft | Va | Allowable shear value per foot of deck width, pif |
| Sn | Section modulus for negative bending per foot of deck width, (in ³)/ft | D | Uniform dead load, psf |
| λ _D , λ _L | Load factors for D & L loads to be applied by Engineer in accordance with Building Codes. | L | Uniform live load, psf |

- Notes:
- Bending strength based on allowable flexural stress of 38 ksi.
 - Loads marked with asterisk (*) are governed by moment & shear, interior (6" bearing) and exterior (4" bearing) reactions (web crippling) or applied moment & reactions.
 - 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).