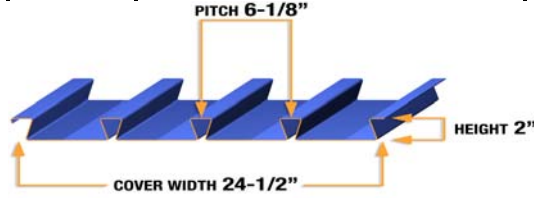


SECTION PROPERTIES $f_y = 40 \text{ ksi}$

GAGE	Wd	I _D (DEFLECTION)	Sp	Sn	Rbe			Rbi		Va
					2"	3"	4"	3"	4"	
22	2.22	0.409	0.289	0.268	1089	1254	1393	1891	2076	4482
20	2.69	0.497	0.363	0.337	1550	1777	1969	2693	2947	5414
18	3.56	0.661	0.485	0.462	2583	2942	3245	4493	4892	7107
16	4.48	0.836	0.617	0.598	3937	4461	4902	6862	7441	8884



LRFD DESIGN		MAXIMUM SUPERIMPOSED UNIFORM LRFD LOADS, psf											
Span	Load Combinations	SINGLE SPAN				DOUBLE SPAN				TRIPLE SPAN			
		22	20	18	16	22	20	18	16	22	20	18	16
8'-6"	$\lambda_D D + \lambda_L L$ (Strength)	99	124	166	211	91*	114*	157*	203*	114*	143*	196*	254*
	D+L (Deflection)	41	50	67	85	91	114	157	203	80	97	130	164
	L (Deflection)	29	35	47	60	70	85	113	143	55	67	89	112
9'-0"	$\lambda_D D + \lambda_L L$ (Strength)	88	110	147	188	81*	101*	139*	180*	101*	127*	175*	226*
	D+L (Deflection)	35	42	56	71	81	101	139	177	67	82	109	137
	L (Deflection)	25	30	40	50	59	72	96	121	46	56	75	95
9'-6"	$\lambda_D D + \lambda_L L$ (Strength)	79	99	132	168	72*	91*	125*	162*	91*	114*	156*	203*
	D+L (Deflection)	29	35	47	60	72	89	118	150	57	69	92	116
	L (Deflection)	21	25	34	43	50	61	81	103	39	48	64	80
10'-0"	$\lambda_D D + \lambda_L L$ (Strength)	71	89	119	151	65*	82*	112*	145*	82*	103*	141*	183*
	D+L (Deflection)	25	30	40	50	62	76	101	128	48	59	78	99
	L (Deflection)	18	22	29	37	43	52	70	88	34	41	55	69
10'-6"	$\lambda_D D + \lambda_L L$ (Strength)	64	80	107	136	59*	74*	101*	131*	74*	93*	127*	165*
	D+L (Deflection)	21	26	34	43	54	65	87	110	41	50	67	85
	L (Deflection)	15	19	25	32	37	45	60	76	29	35	47	60
11'-0"	$\lambda_D D + \lambda_L L$ (Strength)	58	73	97	124	53*	67*	92*	119*	67*	84*	116*	150*
	D+L (Deflection)	18	22	29	37	46	56	75	95	36	44	58	73
	L (Deflection)	13	16	22	28	32	39	52	66	25	31	41	52
11'-6"	$\lambda_D D + \lambda_L L$ (Strength)	53	66	89	113	49*	61*	84*	109*	61*	77*	106*	137*
	D+L (Deflection)	15	19	25	32	40	49	65	82	31	38	50	64
	L (Deflection)	12	14	19	24	28	34	46	58	22	27	36	45
12'-0"	$\lambda_D D + \lambda_L L$ (Strength)	48	61	81	103	44*	56*	77*	99*	56*	70*	97*	125*
	D+L (Deflection)	13	16	22	27	35	43	57	72	27	33	44	55
	L (Deflection)	10	13	17	21	25	30	40	51	19	24	32	40
12'-6"	$\lambda_D D + \lambda_L L$ (Strength)	44	56	74	95	41*	51*	70*	91*	52*	65*	89*	115*
	D+L (Deflection)	12	14	19	24	31	38	50	63	24	29	38	48
	L (Deflection)	9	11	15	19	22	27	36	45	17	21	28	35
13'-0"	$\lambda_D D + \lambda_L L$ (Strength)	41	51	68	87	37*	47*	65*	84*	47*	60*	82*	106*
	D+L (Deflection)	10	12	16	21	27	33	44	56	21	25	34	43
	L (Deflection)	8	10	13	17	20	24	32	40	15	19	25	31
13'-6"	$\lambda_D D + \lambda_L L$ (Strength)	38	47	63	80	35*	43*	60*	78*	44*	55*	76*	98*
	D+L (Deflection)	9	11	14	18	24	29	39	49	18	22	30	38
	L (Deflection)	7	9	12	15	17	21	28	36	14	17	22	28
14'-0"	$\lambda_D D + \lambda_L L$ (Strength)	35	44	58	74	32*	40*	55*	72*	41*	51*	70*	91*
	D+L (Deflection)	8	9	12	16	21	26	35	44	16	20	26	33
	L (Deflection)	7	8	11	13	16	19	25	32	12	15	20	25
14'-6"	$\lambda_D D + \lambda_L L$ (Strength)	32	40	54	69	30*	37*	51*	67*	38*	47*	65*	84*
	D+L (Deflection)	7	8	11	14	19	23	31	39	14	17	23	29
	L (Deflection)	6	7	9	12	14	17	23	29	11	13	18	23
15'-0"	$\lambda_D D + \lambda_L L$ (Strength)	30	38	50	64	27*	35*	48*	62*	35*	44*	61*	79*
	D+L (Deflection)	6	7	9	12	17	21	27	35	13	16	21	26
	L (Deflection)	5	6	9	11	13	16	21	26	10	12	16	20

8'-6"	$\lambda_D D + \lambda_L L$ (Strength)	99	← Max. superimposed factored LRFD dead + live load (psf) (governed by strength limitation)
	D+L (Deflection)	41	← Max. superimposed unfactored LRFD dead + live load (psf) (governed by deflection limitation)
	L (Deflection)	29	← 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: 1. Bending strength based on flexural stress limit of 38 ksi.
2. Loads marked with asterisk (*) are governed by moment & shear, interior reactions (web crippling) or applied moment & reactions assuming 4" of interior bearing.
3. 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.
4. An upper limit of 400 psf has been applied to the loads.
5. 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.