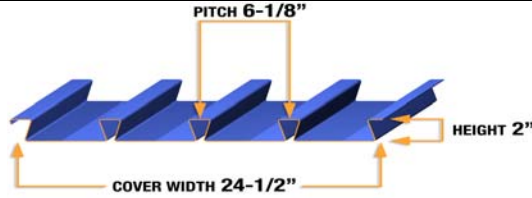


SECTION PROPERTIES $f_y = 40$ ksi

GAGE	Wd	I_D (DEFLECTION)	Sp	Sn	Rbe			Rbi		Va
					2"	3"	4"	3"	4"	
22	2.22	0.409	0.289	0.268	712	820	910	1271	1395	2949
20	2.69	0.497	0.363	0.337	1013	1162	1287	1811	1981	3562
18	3.56	0.661	0.485	0.462	1688	1923	2121	3020	3289	4676
16	4.48	0.836	0.617	0.598	2574	2915	3204	4613	5003	5844



ASD DESIGN		MAXIMUM SUPERIMPOSED UNIFORM ASD LOADS, psf											
Span	Load Combinations	SINGLE SPAN				DOUBLE SPAN				TRIPLE SPAN			
		GAGE											
		22	20	18	16	22	20	18	16	22	20	18	16
8'-6"	D+L (Strength)	62	78	104	132	54*	67*	91*	118*	64*	80*	109*	141*
	D+L (Deflection)	41	50	67	85	54	67	91	118	64	80	109	141
	L (Deflection)	29	35	47	60	54	67	91	118	55	67	89	112
9'-0"	D+L (Strength)	55	69	92	117	49*	61*	83*	107*	58*	73*	100*	129*
	D+L (Deflection)	35	42	56	71	49	61	83	107	58	73	100	129
	L (Deflection)	25	30	40	50	49	61	83	107	46	56	75	95
9'-6"	D+L (Strength)	49	62	82	105	45*	56*	77*	98*	54*	67*	92*	118*
	D+L (Deflection)	29	35	47	60	45	56	77	98	54	67	92	116
	L (Deflection)	21	25	34	43	45	56	77	98	39	48	64	80
10'-0"	D+L (Strength)	44	55	74	94	41*	51*	70*	90*	50*	62*	85*	109*
	D+L (Deflection)	25	30	40	50	41	51	70	90	48	59	78	99
	L (Deflection)	18	22	29	37	41	51	70	88	34	41	55	69
10'-6"	D+L (Strength)	40	50	67	85	37*	46*	63*	82*	46*	57*	78*	100*
	D+L (Deflection)	21	26	34	43	37	46	63	82	41	50	67	85
	L (Deflection)	15	19	25	32	37	45	60	76	29	35	47	60
11'-0"	D+L (Strength)	36	45	61	77	33*	42*	57*	74*	42*	53*	72*	93*
	D+L (Deflection)	18	22	29	37	33	42	57	74	36	44	58	73
	L (Deflection)	13	16	22	28	32	39	52	66	25	31	41	52
11'-6"	D+L (Strength)	33	41	55	70	30*	38*	52*	68*	38*	48*	66*	85*
	D+L (Deflection)	15	19	25	32	30	38	52	68	31	38	50	64
	L (Deflection)	12	14	19	24	28	34	46	58	22	27	36	45
12'-0"	D+L (Strength)	30	38	50	64	28*	35*	48*	62*	35*	44*	60*	78*
	D+L (Deflection)	13	16	22	27	28	35	48	62	27	33	44	55
	L (Deflection)	10	13	17	21	25	30	40	51	19	24	32	40
12'-6"	D+L (Strength)	27	34	46	59	25*	32*	44*	57*	32*	40*	55*	72*
	D+L (Deflection)	12	14	19	24	25	32	44	57	24	29	38	48
	L (Deflection)	9	11	15	19	22	27	36	45	17	21	28	35
13'-0"	D+L (Strength)	25	32	42	54	23*	29*	40*	52*	29*	37*	51*	66*
	D+L (Deflection)	10	12	16	21	23	29	40	52	21	25	34	43
	L (Deflection)	8	10	13	17	20	24	32	40	15	19	25	31
13'-6"	D+L (Strength)	23	29	39	50	21*	27*	37*	48*	27*	34*	47*	61*
	D+L (Deflection)	9	11	14	18	21	27	37	48	18	22	30	38
	L (Deflection)	7	9	12	15	17	21	28	36	14	17	22	28
14'-0"	D+L (Strength)	21	27	36	46	20*	25*	34*	44*	25*	32*	43*	56*
	D+L (Deflection)	8	9	12	16	20	25	34	44	16	20	26	33
	L (Deflection)	7	8	11	13	16	19	25	32	12	15	20	25
14'-6"	D+L (Strength)	20	25	33	42	18*	23*	32*	41*	23*	29*	40*	52*
	D+L (Deflection)	7	8	11	14	18	23	31	39	14	17	23	29
	L (Deflection)	6	7	9	12	14	17	23	29	11	13	18	23
15'-0"	D+L (Strength)	18	23	31	39	17*	21*	29*	38*	22*	27*	37*	49*
	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"	D+L (Strength)	62	← Max. superimposed ASD dead + live load (psf) (governed by strength limitation)
	D+L (Deflection)	41	← Max. superimposed ASD dead + live load (psf) (governed by deflection limitation)
	L (Deflection)	29	← 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 (in^4/ft)
- Sp Section modulus for positive bending per foot of deck width, (in^3/ft)
- Sn Section modulus for negative bending per foot of deck width, (in^3/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.