



6.8 Panel Wall and Roof Panel Tables

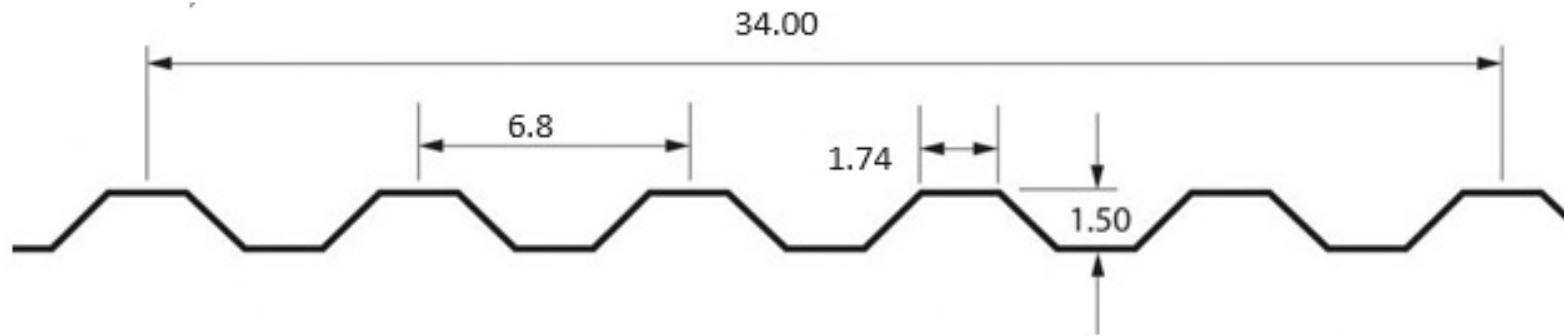


Table 1A – Section Properties and Flexural Resistance (Bare Panel)

Profile	Gage Number	Design Thickness (inches)	Weight (psf)	F _y (ksi)	S _{e+} (inch ³) per foot	S _{e-} (inch ³) per foot	ASD (Ω = 1.67)		I _{d+} (inch ⁴) per ft.	I _{d-} (inch ⁴) per ft.
							M _p /Ω (inch-lbs per ft)	M _n /Ω (inch-lbs per foot)		
1.5X6.8	29	0.0142	0.7	80	0.053	0.046	1921	1645	0.058	0.057
1.5X6.8	26	0.0187	0.9	80	0.090	0.076	3244	2730	0.084	0.082
1.5X6.8	24	0.0236	1.2	50	0.132	0.121	3939	3619	0.112	0.113
1.5X6.8	22	0.0296	1.4	50	0.179	0.163	5352	4883	0.145	0.147

Table 1A Notes:

1. All section properties and ASD flexural strengths are calculated in accordance with AISI S100-2012 and AISI S100-2016

Table 1B – Shear and Web Crippling (Bare Panel)

Profile	Gage Number	V _n /Ω (lbs per ft)	F _y (ksi)	Web Crippling (R _n /Ω), lbs/ft One Flange Loading End Bearing			Web Crippling (R _n /Ω), lbs/ft One Flange Loading Interior Bearing		
				1-1/2"	2"	3"	1-1/2"	2"	3"
1.5X6.8	29	391	80	157	175	204	231	253	291
1.5X6.8	26	803	80	263	291	338	393	429	491
1.5X6.8	24	1462	50	337	372	430	510	556	632
1.5X6.8	22	2390	50	511	562	647	784	850	961

Table 1B Notes:

1. All section properties and ASD flexural strengths are calculated in accordance with AISI S100-2012 and AISI S100-2016

Table 2 – 1.5X6.8 Panel (Bare Panel)

Table 2.1 1.5X6.8 Panel ASD Uniform Downward Loads (psf)

Span Cond.	Gage Number	4'-00"	4'-06"	5'-00"	5'-06"	6'-00"	6'-06"	7'-00"	7'-06"	8'-00"	8'-06"	9'-00"
Single	29	80	63	51	42	36	30	26	23	20	18	16
	26	135	107	86	71	60	51	44	38	34	30	27
	24	164	130	105	87	73	62	54	47	41	36	32
	22	223	176	143	118	99	84	73	63	56	49	44
Double	29	69	54	44	36	30	26	22	19	17	15	14
	26	114	90	73	60	51	43	37	32	28	25	22
	24	151	119	97	80	67	57	49	43	38	33	30
	22	203	161	130	108	90	77	66	58	51	45	40
Triple	29	86	68	55	45	38	32	28	24	21	19	17
	26	142	112	91	75	63	54	46	40	36	31	28
	24	189	149	121	100	84	71	62	54	47	42	37
	22	254	201	163	135	113	96	83	72	64	56	50

Table 2.2 1.5X6.8 Panel ASD Uniform Upward Loads (psf)

Span Cond.	Gage Number	4'-00"	4'-06"	5'-00"	5'-06"	6'-00"	6'-06"	7'-00"	7'-06"	8'-00"	8'-06"	9'-00"
Single	29	69	54	44	36	30	26	22	19	17	15	14
	26	114	90	73	60	51	43	37	32	28	25	22
	24	151	119	97	80	67	57	49	43	38	33	30
	22	203	161	130	108	90	77	66	58	51	45	40
Double	29	80	63	51	42	36	30	26	23	20	18	16
	26	135	107	86	71	60	51	44	38	34	30	27
	24	164	130	105	87	73	62	54	47	41	36	32
	22	223	176	143	118	99	84	73	63	56	49	44
Triple	29	100	79	64	53	44	38	33	28	25	22	20
	26	169	133	108	89	75	64	55	48	42	37	33
	24	205	162	131	109	91	78	67	58	51	45	41
	22	279	220	178	147	124	106	91	79	70	62	55

Tables 2.1 and 2.2 Notes:

1. All section properties and ASD uniform loads are calculated in accordance with AISI S100-2012 and AISI S100-2016.
2. Loads shown in tables are uniformly distributed superimposed loads in psf. Span length assumes center-to-center spacing of supports. Tabulated loads shall not be increased by assuming clear span dimensions.

3. Bending Moment formulae used for flexural stress limitations are:

$$\text{Simple and Two Span} \quad M = \frac{wl^2}{8}$$

$$\text{Three Span or More} \quad M = \frac{wl^2}{10}$$

4. Web crippling and shear have not been accounted for in these tables. Required bearing should be determined based on specific span conditions.

Table 2.3 1.5X6.8 Panel Uniform Service Load that Causes L/180 Deflection (psf)

Span Cond.	Gage Number	4'-00"	4'-06"	5'-00"	5'-06"	6'-00"	6'-06"	7'-00"	7'-06"	8'-00"	8'-06"	9'-00"
Single	29	78	54	40	30	23	18	14	12	10	8	7
	26	112	78	57	43	33	26	21	17	14	12	10
	24	154	108	79	59	46	36	29	23	19	16	14
	22	198	139	101	76	59	46	37	30	25	21	17
Double	29	187	131	96	72	55	44	35	28	23	19	16
	26	269	189	138	103	80	63	50	41	34	28	24
	24	370	260	190	142	110	86	69	56	46	39	33
	22	477	335	244	183	141	111	89	72	60	50	42
Triple	29	146	103	75	56	43	34	27	22	18	15	13
	26	210	148	108	81	62	49	39	32	26	22	18
	24	290	204	148	112	86	68	54	44	36	30	25
	22	373	262	191	143	111	87	70	57	47	39	33

Table 2.3 Notes:

- For loads that cause L/60 Deflection, multiply by 2.0. For loads that cause L/120 Deflection, multiply by 1.5. For loads that cause L/240 Deflection, multiply by 0.75. For loads that cause L/360 Deflection, multiply by 0.50.