

LARR 24921

TABLE 1

PANELS					TOPS/CEILINGS										WALLS											
FINISH	SKIN THICKNESS	PANEL THICKNESS	DEAD LOAD PSF	R VALUE	INDOOR	OUTDOOR										INDOOR	OUTDOOR									
					Defl L/180	Includes 2 PSF for Membrane or Standing Seam Roof Design based on deflection criteria: L/240										Defl L/180	ASCE 7-05/10 EXP. C, ≤15' OAH 3sec Gusts Design based on deflection criteria: L/180									
					LIVE LOADS – PSF										LIVE LOADS – PSF											
					10	20	30	40	50	60	70	80	90	100	5	85 MPH 110 MPH	90 MPH 115 MPH	95 MPH 120 MPH	100 MPH 130 MPH	110 MPH 140 MPH	115 MPH 150 MPH	125 MPH 160 MPH	140 MPH 180 MPH	155 MPH 200 MPH		
WOOD FRAME					2.2-POUND DENSITY										Fc=18psi											
ALUM	0.032"	2½"	2.0	20	12'-6"	Do not use 2 1/2" panels outdoors										15'-2"	Do not use 2 1/2" panels outdoors									
		3½"	3.0	28	15'-6"	10'-10"	9'-7"	8'-9"	8'-1"	7'-7"	7'-3"	6'-11"	6'-7"	6'-3"	20'-2"	13'-11"	13'-4"	12'-8"	12'-0"	11'-1"	10'-6"	9'-9"	8'-7"	7'-7"		
		4"	3.5	32	17'-7"	14'-4"	11'-9"	10'-2"	9'-1"	8'-3"	7'-7"	7'-1"	6'-8"	6'-4"	22'-6"	15'-0"	14'-4"	13'-8"	13'-0"	12'-4"	11'-9"	11'-0"	9'-11"	8'-11"		
		5"	4.0	40	20'-9"	14'-10"	13'-2"	12'-1"	11'-3"	10'-7"	10'-1"	9'-7"	9'-3"	8'-7"	26'-0"*	18'-9"	17'-11"	17'-0"	16'-1"	15'-5"	14'-8"	13'-8"	12'-2"	10'-9"		
GALV	26 ga.	2½"	2.5	20	13'-8"	Do not use 2 1/2" panels outdoors										16'-7"	Do not use 2 1/2" panels outdoors									
		3½"	3.5	28	17'-6"	13'-3"	11'-1"	9'-9"	8'-10"	8'-2"	7'-7"	7'-2"	6'-9"	6'-5"	22'-10"	15'-5"	14'-9"	14'-1"	13'-6"	12'-8"	12'-1"	11'-5"	10'-6"	9'-8"		
		4"	4.0	32	19'-3"	13'-8"	12'-1"	10'-11"	10'-0"	9'-3"	8'-7"	8'-0"	7'-6"	7'-1"	23'-6"	16'-3"	15'-8"	15'-0"	14'-5"	13'-6"	13'-0"	12'-4"	11'-4"	10'-7"		
		5"	4.5	40	22'-9"	16'-5"	14'-6"	13'-2"	12'-0"	11'-2"	10'-4"	9'-8"	9'-1"	8'-7"	26'-0"*	18'-11"	18'-4"	17'-9"	17'-1"	16'-2"	15'-7"	14'-10"	13'-7"	12'-6"		
20 ga.	5"	5.5	40	26'-0"*	18'-6"	15'-8"	13'-11"	12'-8"	11'-9"	11'-0"	10'-5"	9'-11"	9'-5"	26'-0"*	26'-0"	24'-11"	22'-7"	20'-0"	15'-11"	15'-9"	15'-7"	15'-2"	14'-8"			
INSULFRAME/HIGH DENSITY RAIL (HDR)					2.2-POUND DENSITY										Fc=18psi											
ALUM	0.032"	3½"	3.0	28	14'-7"	10'-2"	8'-11"	8'-0"	7'-4"	6'-10"	6'-5"	5'-8"	5'-5"	5'-2"	19'-5"	13'-2"	12'-6"	11'-10"	11'-3"	10'-3"	10'-1"	9'-4"	8'-3"	7'-3"		
		4"	3.5	32	16'-2"	13'-5"	10'-9"	9'-1"	8'-0"	7'-3"	6'-7"	6'-1"	5'-9"	5'-4"	19'-9"	13'-3"	12'-8"	12'-1"	11'-7"	10'-10"	10'-4"	9'-9"	8'-11"	8'-3"		
		5"	4.0	40	19'-4"	13'-10"	12'-2"	11'-0"	10'-1"	9'-5"	8'-11"	7'-10"	7'-6"	7'-2"	25'-8"	17'-0"	16'-2"	15'-3"	14'-4"	14'-3"	13'-5"	12'-5"	10'-10"	9'-5"		
GALV	26 ga.	3½"	3.5	28	16'-7"	12'-8"	10'-10"	9'-6"	8'-5"	7'-7"	6'-10"	6'-2"	5'-7"	5'-1"	22'-0"	14'-11"	14'-2"	13'-6"	12'-10"	11'-11"	11'-4"	10'-8"	9'-7"	8'-9"		
		4"	4.0	32	18'-1"	12'-6"	10'-11"	9'-9"	8'-9"	8'-0"	7'-4"	6'-10"	6'-4"	5'-10"	22'-3"	16'-1"	15'-7"	14'-11"	14'-4"	13'-5"	12'-11"	12'-2"	10'-11"	9'-10"		
		5"	4.5	40	21'-0"	15'-0"	13'-2"	11'-9"	10'-9"	9'-10"	9'-1"	8'-5"	7'-11"	7'-4"	26'-0"*	17'-6"	16'-11"	16'-2"	15'-6"	14'-6"	13'-10"	13'-0"	11'-8"	10'-6"		
20 ga.	5"	5.5	40	23'-6"	17'-11"	15'-4"	13'-5"	12'-3"	11'-1"	10'-2"	9'-4"	8'-7"	8'-0"	26'-0"*	21'-2"	20'-2"	19'-2"	18'-3"	16'-11"	16'-1"	15'-1"	13'-8"	12'-2"			

Wind speeds given in the table are for V_{ASD} and for V_{ULT} as required by the applicable building code edition (2009/2012+)

*MAX SPAN IS BASED ON MANUFACTURING LIMITATION.



8.3.17

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	Panel Span Chart	Date:	August 2, 1992
		Rev:	August 3, 2017

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KPS Global

Racking Shear - Based on PFS Load Test Report # 05-37A Maximum

Allowable Shear Load of Wood Framed Panels

Height to Width Ratio	Allowable Shear PLF
4 To 1	160
3 To 1	161
2 To 1	179
1 ½ To 1	246
1 To 1	333
½ To 1	646

KPS Global

Compressive Load - Based on PFS Test Report # 05-37B

Maximum Allowable Vertical Load of Wood Framed Panels

Panel Thickness (Inches)	Panel Height (Feet)	Allowable Vertical Load (PLF)
3 ½	12	2080
3 ½	17	1946
3 ½	22	1033
5	16	2779
5	21	1582
5	26	1037

KPS Global

Racking Shear - Based on PFS Load Test Report # 05-37A

Maximum Allowable Shear Load of Insul-Frame Panels

Height to Width Ratio	Allowable Shear PLF
4 To 1	56
3 To 1	65
2 To 1	88
1 ½ To 1	108
1 To 1	136
½ To 1	208

KPS Global

Compressive Load - Based on PFS Test Report # 05-37B

Maximum Allowable Vertical Load of Insul-Frame Panels

Panel Thickness (Inches)	Panel Height (Feet)	Allowable Vertical Load (PLF)
3 ½	12	920
3 ½	17	714
3 ½	22	603
5	16	1048
5	21	800
5	26	623

