

ROOF LOAD SPAN TABLES

PRODUCT: Insulated Roof Panel
SERIES: Skyline

PROFILE: Mesa
GAUGE: 26ga or heavier
FINISHED: Smooth

Panel Thickness	Design Criteria	Allowable Loads (PSF)						
		2'	3'	4'	5'	6'	7'	8'
2" Thick	Bending/Shear	192	128	96	77	64	49	38
	Deflection (L/240)	58	53	48	43	36	29	24
	Connection	65	44	33	26	22	19	16
3" Thick	Bending/Shear	192	128	96	77	64	49	38
	Deflection (L/240)	58	53	48	43	36	29	24
	Connection	65	44	33	26	22	19	16
4" Thick	Bending/Shear	291	224	168	134	112	96	84
	Deflection (L/240)	98	95	92	90	76	63	53
	Connection	65	44	33	26	22	19	16
5" Thick	Bending/Shear	317	286	215	172	143	123	107
	Deflection (L/240)	108	102	96	90	83	70	58
	Connection	65	44	33	26	22	19	16
6" Thick	Bending/Shear	349	312	248	199	166	142	124
	Deflection (L/240)	110	110	109	109	108	92	77
	Connection	65	44	33	26	22	19	16

TABLE NOTES:

- 1) Allowable loads were derived from tests conducted in accordance with ASTM E1592 and ASTM E72.
- 2) Allowable loads are calculated with a factor of safety of 2.0 for bending and shear.
- 3) Connection strengths reflect a standard fastener pattern - (2) 1/4" - 14 self drilling screw into minimum 14ga substrate. Other substrates must be designed separately.
- 4) Fastener capacity is based on manufacturer pullout/pullover data and are calculated with a safety factor of 3.0.
- 5) Allowable loads assume a minimum bearing of 2".
- 6) Thermal Effects were not considered in analysis.
- 7) The structural capacity of the supporting members were not considered.

WALL LOAD SPAN TABLES

PRODUCT: Insulated Wall Panel
SERIES: Edge, Horizon

PROFILE: Mesa or Smooth
GAUGE: 26ga or heavier
FINISHED: Embossed or Smooth

Panel Thickness	Design Criteria	Allowable Loads (PSF)										
		4'	5'	6'	7'	8'	9'	10'	11'	12'	13'	14'
2" Thick (See Table Note #3)	Bending/Shear	93	59	41	30	23	18	15	12	10		
	Deflection (L/180)	47	41	33	27	22	19	16	14	12		
	Connection	42	35	33	26	22	19	16	15	13		
3" Thick	Bending/Shear	126	101	84	68	52	41	33	27	23		
	Deflection (L/180)	94	77	68	58	34	32	29	19	17		
	Connection	57	45	38	33	29	25	23	20	19		
4" Thick	Bending/Shear	168	134	112	84	64	51	41	34	29	24	21
	Deflection (L/180)	110	101	92	79	67	57	49	42	37	32	29
	Connection	57	45	38	33	29	25	23	20	19	17	16
5" Thick	Bending/Shear	168	134	112	84	64	51	41	34	29	24	21
	Deflection (L/180)	110	101	92	79	67	57	49	42	37	32	29
	Connection	57	45	38	33	29	25	23	20	19	17	16
6" Thick	Bending/Shear	168	134	112	84	64	51	41	34	29	24	21
	Deflection (L/180)	110	101	92	79	67	57	49	42	37	32	29
	Connection	57	45	38	33	29	25	23	20	19	17	16

TABLE NOTES:

- 1) Allowable loads were derived from tests conducted in accordance with ASTM E1592 and ASTM E72.
- 2) Allowable loads are calculated with a factor of safety of 2.0 for bending and shear.
- 3) Connection strengths reflect a standard fastener pattern - (2) 1/4" - 14 self drilling screw into minimum 14ga substrate. Other substrates must be designed separately. 2" wall panel utilize a flat clip. All other thicknesses utilize an angle clip.
- 4) Fastener capacity is based on manufacturer pullout/pullover data and are calculated with a safety factor of 3.0.
- 5) Allowable loads assume a minimum bearing of 2".
- 6) Thermal Effects were not considered in analysis.
- 7) The structural capacity of the supporting members were not considered.
- 8) Bending/Shear and Deflection for 5" and 6" panels based on 4" capacity.

PANEL WEIGHTS & LENGTHS TABLE

Edge Wall Panel

Width: 42"

Exterior Facing Gauge: 22ga

Exterior Facing Profile: Flat Smooth or Light Embossed

Insulation Thickness: 2", 3", 4", 5", 6"

Interior Facing Gauge: 22ga, 24ga, 26ga

Interior Facing Profile: Mesa Smooth or Mesa Light Embossed

Horizon Wall Panel

Width: 42"

Exterior Facing Gauge: 22ga, 24ga, 26ga

Exterior Facing Profile: Mesa Smooth or Light Embossed

Insulation Thickness: 2", 3", 4", 5", 6"

Interior Facing Gauge: 22ga, 24ga, 26ga

Interior Facing Profile: Mesa Smooth or Mesa Light Embossed

Skyline Roof Panel

Width: 42"

Exterior Facing Gauge: 22ga, 24ga, 26ga

Exterior Facing Profile: Mesa Smooth or Light Embossed

Insulation Thickness: 2", 3", 4", 5", 6"

Interior Facing Gauge: 22ga, 24ga, 26ga

Interior Facing Profile: Mesa Smooth or Mesa Light Embossed

Panel Weights (PSF)										
Panel Thickness (in.)	Panel Width (in.)	Steel Gauge (Facer/Liner)								
		26/26	24/26	22/26	26/24	24/24	22/24	26/22	24/22	22/22
2	42	2.23	2.48	2.73	2.48	2.73	2.98	2.73	2.98	3.23
3	42	2.44	2.69	2.94	2.69	2.94	3.19	2.94	3.19	3.44
4	42	2.65	2.90	3.15	2.90	3.15	3.40	3.15	3.40	3.65
5	42	2.85	3.10	3.35	3.10	3.35	3.60	3.35	3.60	3.85
6	42	3.06	3.31	3.56	3.31	3.56	3.81	3.56	3.81	4.06

Maximum Length based on colour (ft)										
Panel Thickness (in.)	Panel Width (in.)	Edge 22ga Wall*			Horizon 26ga/26ga Wall			Skyline 24ga/26ga Roof		
		Light	Medium	Dark	Light	Medium	Dark	Light	Medium	Dark
2	42	25'	25'	20'	38'	25'	16'	47'	36'	24'
3	42	30'	30'	20'	45'	35'	25'	50'	38'	30'
4	42	30'	30'	25'	50'	38'	28'	52'	41'	32'
5	42	32'	30'	25'	52'	41'	30'	52'	44'	34'
6	42	32'	30'	25'	52'	44'	32'	52'	47'	36'

*Smooth or Embossed

Light = Regal White

Medium = Sierra Tan, Parchment, Silver Metallic

Dark = All others

Based on 5' support spacing for walls & 4' support spacing for roofs

*Smooth or Embossed

Subject to change without notice. Please refer to www.artspaninc.com/imp/ for current information.