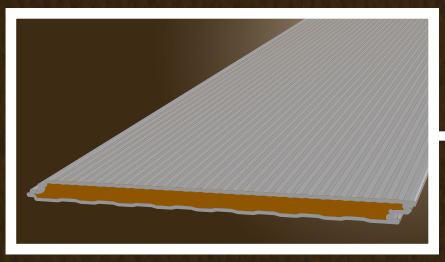
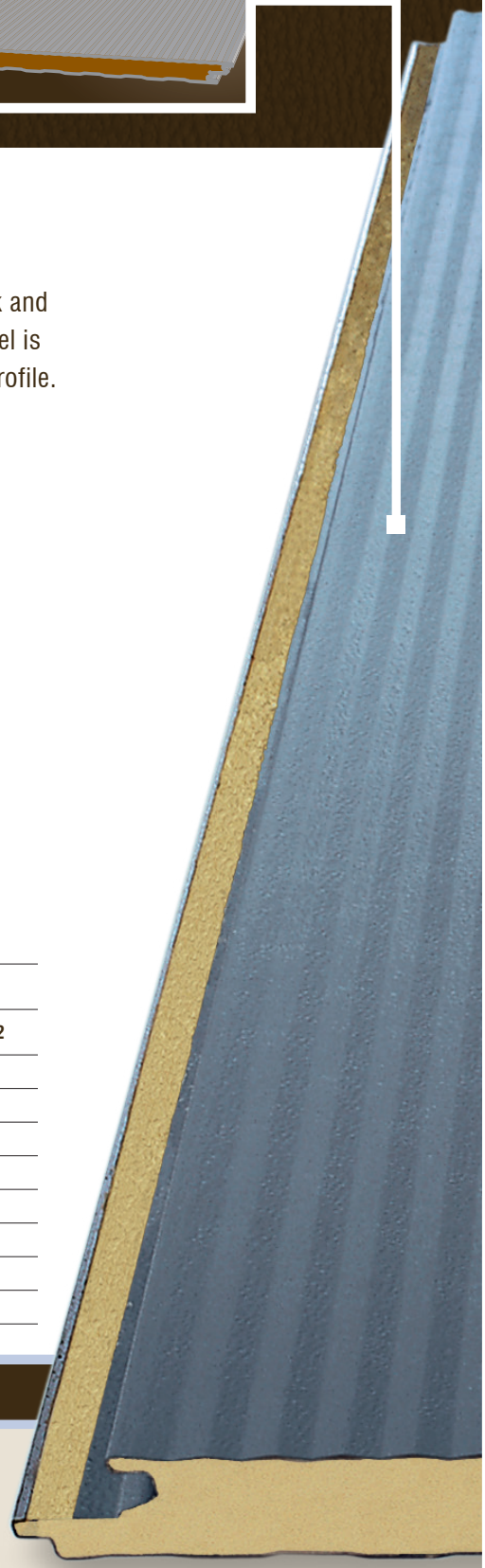
ESP II

Insulated Wall Panel





Description

The exterior skin of the ESP II is profiled with minor striations giving it a flat look and providing a linear appearance while blending with the panel side joints. This panel is an excellent alternative to typical flat wall panels. The interior skin has a Mesa profile.

Gauge

Exterior: 24 (standard) and 22 gauge
Interior: 26 (standard), 24 and 22 gauge

Length

Recommended maximum is 40'

Widths

42" (standard) and 36"

Surfaces

Exterior: Stucco-embossed
Interior: Stucco-embossed

Coatings

Signature® 200 Colors
Signature® 300 Colors

Accessories

Fasteners, sealants, brake-formed flashings, standard and custom trim

Joint Configuration

Concealed clips

Insulation Material

Non-CFC foamed-in-place polyisocyanurate foam 2.2 to 2.5 pcf density

Thicknesses

2" 2½" 3" 4"

R-value

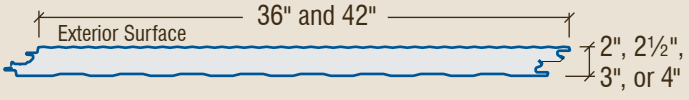
Up to 7.69 per inch of insulation

Panel Weights In Pounds Per Square Foot For 36" and 42" Wide Panels

PANEL WIDTH	THICKNESS	GAUGE (FASCIA/LINER)					
		24/26	22/26	24/24	22/24	24/22	22/22
36"	2	2.32	2.61	2.54	2.83	2.81	3.10
	2 ½	2.43	2.72	2.65	2.94	2.92	3.21
	3	2.54	2.83	2.76	3.05	3.03	3.32
	4	2.76	3.05	2.98	3.27	3.25	3.54
42"	2	2.29	2.57	2.51	2.79	2.78	3.06
	2 ½	2.40	2.68	2.62	2.90	2.89	3.17
	3	2.51	2.79	2.73	3.01	3.00	3.28
	4	2.73	3.01	2.95	3.23	3.22	3.50

Attributes and Advantages

1. The ESP II Panel utilizes concealed clips and eliminates thermal short circuits.
2. The standard exterior surface is Galvalume Plus® coated steel with Signature® 200 (silicone polyester) coating or Signature® 300 (Kynar 500®/Hylar 5000®) coating.
3. IMPs allow for fast assembly times and easy installation, resulting in reduced construction labor costs and earlier business starts.



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Panel Section Properties Per Foot Of Width

FASCIA/LINER GAUGE	PANEL THICKNESS	MOMENT OF INERTIA (in 4/ft)	FASCIA SECTION MODULUS (in 3/ft)	LINER SECTION MODULUS (in 3/ft)	CORE AREA (in 2/ft)
24/26	2	0.470	0.523	0.427	23.52
	2 ½	0.737	0.657	0.535	29.52
	3	1.065	0.791	0.644	35.52
	4	1.899	1.058	0.861	47.52

1. The above values are included for informational purposes. The use of these values is only applicable for a composite section analysis that includes effects from shear deformation of the foam as well as non-composite fascia effects.

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ESP II Wall Panel Allowable Load Chart (Allowable Loads in PSF)

PANEL DEPTH	SUPPORT CONDITION	LOAD TYPE	SUPPORT SPACING										
			3'	4'	5'	6'	7'	8'	9'	10'	11'	12'	13'
2"	1-Span	Live/Press[1]	195.65	137.15	98.66	73.19	55.53	42.90	33.67	26.80	21.60	17.61	14.52
	2-Span	Live/Press[1]	181.59	132.09	103.09	84.29	67.98	55.46	45.87	38.35	32.35	27.50	23.53
	3-Span and greater	Live/Press[1]	176.94	129.49	101.95	84.07	67.52	54.41	44.41	36.62	30.48	25.57	21.61
2 ½"	1-Span	Live/Press[1]	227.73	167.92	123.52	93.71	72.64	57.23	45.72	36.96	30.21	24.93	20.76
	2-Span	Live/Press[1]	214.37	156.30	122.01	99.65	84.07	69.62	58.28	49.32	42.11	36.22	31.34
	3-Span and greater	Live/Press[1]	208.79	152.61	119.91	98.70	83.86	69.23	57.37	48.01	40.51	34.43	29.45
3"	1-Span	Live/Press[1]	251.29	188.47	143.88	111.08	87.60	70.18	56.93	46.68	38.64	32.25	27.14
	2-Span	Live/Press[1]	239.19	174.88	136.66	111.60	94.06	81.18	68.82	58.79	50.67	43.99	38.42
	3-Span and greater	Live/Press[1]	233.20	170.41	133.72	109.88	93.24	80.98	68.52	58.03	49.54	42.57	36.80
4"	1-Span	Live/Press[1]	278.76	209.07	167.25	134.15	108.60	89.30	74.30	62.41	52.84	45.05	38.65
	2-Span	Live/Press[1]	269.67	198.32	155.51	127.17	107.17	92.40	81.09	71.98	62.90	55.37	49.05
	3-Span and greater	Live/Press[1]	263.96	193.26	151.51	124.25	105.17	91.14	80.41	71.94	62.81	54.95	48.33

1. Allowable values are based on a 42" wide panel with a 24 ga. fascia and a 26 ga. liner with 2- ¼ "-14 SDS and 1- HW-2320 clip at each supporting structural member.
2. Allowable values have been derived from tests conducted in accordance with the ASTM E72 and ASTM E1592 test specifications.
3. Allowable face buckling, shear and panel disengagement loads have been calculated using a 1.875 safety factor derived from test data scatter.
4. Allowable values include a deflection check using a limit of Spacing/240 based on 10-year wind pressures.
5. Pullout of the self-drilling screws from the supporting structural member **must be checked separately**.
6. Allowable loads are given for equally-spaced supports.
7. Fab-Lok®, where required, are to be installed in the following pattern:
   - 36" wide panel: Install through support structure into ribs of liner in contact with support member at 6" from each panel side with one at mid panel width.
   - 42" wide panel: Install through support structure into ribs of liner in contact with support member at 9" from each panel side with one at mid panel width.
8. This information is subject to change without notice. Please contact Star for most current information.

The engineering data contained herein is for the expressed use of customers and design professionals. Along with this data, it is recommended that the design professional have a copy of the most current version of the *North American Specification for the Design of Cold-Formed Steel Structural Members* published by the American Iron and Steel Institute to facilitate design. This specification contains the design criteria for cold-formed steel components. Along with the specification, the designer should reference the most current building code applicable to the project jobsite in order to determine environmental loads. If further information or guidance regarding cold-formed design practices is desired, please contact the manufacturer.

EFFECTIVE JUNE 1, 2011 | SUBJECT TO CHANGE WITHOUT NOTICE