

BattenLok®HS



FEATURE

BENEFIT

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|--|---|
| 1 Fewer exposed fasteners (80% less) than traditional side lap panels | 1 Superior weathertightness and enhanced appearance. |
| 2 Roof runs without end lap panels may be erected from either direction. | 2 Facilitates installation. |
| 3 Air infiltration and water penetration tests under ASTM E283 and E331 methods performed on side lap panels | 3 Specifiers prefer minimal air infiltration and water penetration |
| 4 UL 90 | 4 Reduced insurance costs |
| 5 Panel has striations and embossing available. | 5 Minimizes oil canning |
| 6 Standard factory applied mastic applied to inside of female leg | 6 Ensures watertight fit and facilitates installation |
| 7 Swaged end laps | 7 Facilitates installation and enhances appearance |
| 8 Vertical leg | 8 Superior transition to hip, valleys and roof openings |
| 9 Allows architectural design flexibility | 9 Creates economical weather-tight designed buildings |
| 10 Roof to wall transition. | 10 Provides a trimless eave |
| 11 Tall or short floating clips or fixed clips are available | 11 Allows for better roof expansion and contraction, improves weathertightness and provides for variations in insulation thicknesses. |
| 12 Thermal blocks | 12 Improved energy efficiency |
| 13 Panels are available in Signature® 200 and 300 Energy Star® paint. | 13 25-year finish warranty. |



PRODUCT DESCRIPTION

Description:

A unique feature of this panel is a vertical leg that is a side joint that is mechanically seamed with an electric seamer for a weathertight finish. This panel features concealed clips and easy to handle 16" wide panels custom cut to the desired length. This panel can be installed directly over purlins or bar joists.

Gauge:

24 (Standard) with 22 Gauge available on request

Lengths:

Maximum 55' (Standard), other lengths are available as special requests

Dimensions:

16' wide by 2" high (other widths available as special order)

Panel Attachment:

A choice of concealed fastening clips is available for this panel system including UL rated clips. Low and High clips are available which are fixed or floating. Floating clips accommodate thermal movement.

Finish:

Galvalume Plus® and Signature® Series.

Usage:

This panel is a structural panel that spans up to five feet on purlins, or can be used as an architectural panel over solid deck. This flat part of the panel is designed with striations or striations with pencil ribs as an option to minimize oil-canning. It is in compliance with many industry codes.

Limitations:

Recommended for roof slopes of 1/2:12 or greater. Oil canning is not a reason for rejection. Panel does not brace secondary.

ALLOWABLE UNIFORM LOADS IN POUNDS PER SQUARE FOOT

24 GAUGE (FY = 50 KSI)

SPAN TYPE	LOAD TYPE	SPAN IN FEET						
		2.5	3.0	3.5	4.0	4.5	5.0	5.5
SINGLE	LIVE	162.0	135.0	115.7	101.3	90.0	74.0	61.1
2-SPAN	LIVE	162.0	128.1	94.1	72.1	56.9	46.1	38.1
3-SPAN	LIVE	162.0	135.0	115.7	90.1	71.2	57.6	47.6
4-SPAN	LIVE	162.0	135.0	109.8	84.1	66.5	53.8	44.5

22 GAUGE (FY = 50 KSI)

SPAN TYPE	LOAD TYPE	SPAN IN FEET						
		2.5	3.0	3.5	4.0	4.5	5.0	5.5
SINGLE	LIVE	233.4	194.5	166.7	145.9	123.0	99.7	82.4
2-SPAN	LIVE	233.4	184.6	135.6	103.8	82.1	66.5	54.9
3-SPAN	LIVE	233.4	194.5	166.7	129.8	102.6	83.1	68.7
4-SPAN	LIVE	233.4	194.5	158.3	121.2	95.8	77.6	64.1

SECTION PROPERTIES

PANEL GAUGE	Fy (ksi)	WEIGHT (psf)	NEGATIVE BENDING			POSITIVE BENDING		
			Ixe (in. ⁴ /ft.)	Sxe (in. ³ /ft.)	Maxo (kip-in.)	Ixe (in. ⁴ /ft.)	Sxe (in. ³ /ft.)	Maxo (kip-in.)
24	50	1.29	0.0644	0.0578	1.7294	0.1517	0.0926	2.7736
22	50	1.65	0.0902	0.0832	2.4923	0.2033	0.1248	3.7370

The 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 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.

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ENERGY STAR® is a registered trademark of the U.S. Environmental Protection Agency.

GALVALUME® is a registered trademark of BIEC International, Inc.

Signature® is a registered trademark of the NCI Group.

NOTES:

- 1 Allowable loads are based on uniform span lengths and $F_y = 50$ ksi.
- 2 LIVE LOAD is limited by bending, shear, combined shear and bending.
- 3 Above loads consider a maximum deflection ratio of $L/180$.
- 4 The weight of the panel has not been deducted from the allowable loads.
- 5 THE ABOVE LOADS ARE NOT FOR USE WHEN DESIGNING PANELS TO RESIST WIND UPLIFT.
- 6 Please contact manufacturer or manufacturer's website for most current allowable wind uplift loads.
- 7 The use of any field seaming machine other than that provided by the manufacturer may damage the panels, void all warranties and will void all data.

NOTES:

- 1 All calculations for the properties of **BattenLok®HS** panels are calculated in accordance with the 2001 edition of the *North American Specification For Design of Cold-Formed Steel Structural Members*.
- 2 **Ixe** is for deflection determination.
- 3 **Sxe** is for bending.
- 4 **Maxo** is allowable bending moment.
- 5 All values are for one foot of panel width.



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Southern Region | P.O. Drawer 911, 2400 Highway 45 North, Columbus, MS 39703 | 662-328-6722

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<http://www.cecobuildings.com>

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