

BattenLok® HS

Standing Seam Roof System

A unique feature of the BattenLok® HS panel is a vertical leg side joint that is mechanically seamed with an electric seamer for a weathertight finish. This panel features concealed clips and easy to handle 16" or 12" wide panels custom cut to the desired length. BattenLok® HS can be installed directly over purlins or bar joists. It does not require a solid substructure for support. This roof system has several different UL® 90 construction numbers.

Gauge

24 gauge (standard)
22 gauge

Length

Maximum 50' (standard), other lengths are available as special requests

Dimensions

16" (standard) or 12" wide by 2" high

Finish

Galvalume Plus®
Signature® 200 Colors
Signature® 300 Colors

Fasteners

A choice of concealed fastening clips is available for this panel system including UL® rated clips. These clips hold the panel firmly in place without unsightly exposed fasteners. Each clip system offers the ability to accommodate thermal movement.

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 panel is designed with striations as an option to minimize oil-canning. It is designed to meet the ever-changing specifications and other industry codes.

Limitations

Recommended for roof slopes of ½:12 or greater. Oil canning is not a reason for rejection.

Attributes

1. Factory applied mastic inside of female leg of panel is standard
2. Swaged end laps
3. Heavier gauges, striation and embossing (optional)
4. Roof runs without end lap panels may be erected from either direction
5. Roof to wall transition
6. 80% less exposed fasteners than traditional side lap panels and all-fasteners are long life
7. The side lap has been tested for air infiltration and water penetration under ASTM E283 and E331 methods
8. Vertical Leg
9. Insulated with thermal blocks
10. High or low floating clips available
11. High or low fixed clips available
12. Panel available in Signature® 300 and Signature® 200 Colors
13. UL® 90
14. Panel has striations

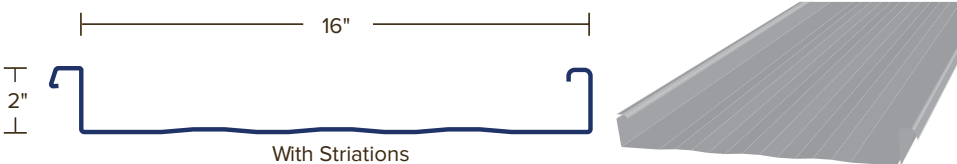
Advantages

1. Insures watertightness and easier erection
2. Improves erection and enhances watertightness
3. Minimizes oil canning
4. Flexible and convenient erection
5. Creates a trimless eave
6. Increases weathertightness and improves appearance
7. Minimizes air infiltration and water penetration and enhances acceptability among specifiers
8. Better transition to hip, valleys, and roof openings
9. High energy efficiency system
10. Allows roof to expand and contract maximizing weathertightness
11. Provides of varying insulation thickness
12. 25 year finish warranty
13. Reduces insurance costs
14. Helps with oil canning

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BattenLok® HS - Measurements



BattenLok® HS Panel 16" - Section Properties

Panel Gauge	Fy (KSI)	Weight (PSF)	NEGATIVE BENDING			POSTIVE 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

Allowable Uniform Loads in Pounds Per Square Foot - 16" Panels

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

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 November 3, 2004. Subject to change without notice. BattenLok® is a registered trademark of the NCI Group. Galvalume Plus® is a registered trademark of BIEC International, Inc. Signature® is a registered trademark of the NCI Group.

Properties 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.

Allowable Uniform Loads Notes:

1. Allowable loads are based on uniform span lengths and Fy = 50 ksi.
2. **Live Load** is limited by bending, shear, combined shear and bending.
3. Allowable 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 allowable uniform 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.

NOTE: For 12" panel information, please contact Ferro.