

Double-Lok®



FEATURE

- 1 Concealed fastening system eliminates panel penetration except at end laps and panel ends which are connected by a compression joint.
- 2 Factory notched at both ends with pre-punched holes
- 3 End laps feature a 16 gauge backup plate with pre-punched holes.
- 4 Fewer exposed fasteners (by 80%) than traditional side lap panels
- 5 Air infiltration and water penetration tests under ASTM E283 and E331 methods performed on side lap panels
- 6 Signature® 200 series
- 7 Signature® 300 option
- 8 Tall or short clips
- 9 Panel side laps feature a factory applied sealant.
- 10 UL 90 and FM rated
- 11 Optional product and weather-tightness warranties

BENEFIT

- 1 Assurance of a weathertight building envelope
- 2 Field installation efficiency is maximized with installation allowed from either end of building or on both sides simultaneously.
- 3 Allows solid connection at end laps plus proper fastener spacing. Pre-punched holes improve installation; assure proper panel placement.
- 4 Increased weathertightness
- 5 Assures specifiers of minimal air infiltration and water penetration
- 6 Highly durable silicone polyester paint system with excellent color and gloss retention in addition to superior chalk resistance
- 7 Fluoropolymer paint system offering the ultimate in color retention and superior resistance to chalking, chemical and UV degradation
- 8 Maximizes insulation systems options including 1" thermal spacers at the purlins
- 9 Facilitates weathertight construction and ease of installation
- 10 Lower insurance costs
- 11 Adds to customer confidence



PRODUCT DESCRIPTION

Description:

A metal standing seam roofing product attached to sub-framing using a variety of concealed, interlocking clips that provide for minimum panel penetrations. This panel can be used on new construction as well as retrofit on existing structures. The panel design provides a high degree of weathertightness.

Gauge:

24 (Standard) with 22 available on request

Lengths:

55' maximum is standard but longer lengths available by special request

Dimensions:

24", 18" and 12" coverage by 3" deep

Fasteners:

Concealed fastening system with floating clips. The clips are available as floating or fixed. Two different clip heights are available to allow for insulation.

Finish:

Galvalume Plus® and Signature®

Usage:

New and retrofit applications.

Limitations:

Panel does not brace secondary. Recommended for roof slopes of 1/4:12 or greater. When using the fixed clip we recommend for double slope buildings 200' wide or less and single slope buildings 100' wide or less. (May vary upon extreme weather conditions.) Oil-canning is not a reason for rejection.

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	204.0	170.0	145.7	127.5	113.3	102.0	86.2
2-SPAN	LIVE	204.0	170.0	145.7	123.4	97.5	79.0	65.3
3-SPAN	LIVE	204.0	170.0	145.7	127.5	113.3	98.7	81.6
4-SPAN	LIVE	204.0	170.0	145.7	127.5	113.3	92.2	76.2

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	296.9	247.5	212.1	185.6	165.0	136.3	112.7
2-SPAN	LIVE	296.9	247.5	212.1	173.9	137.4	111.3	92.0
3-SPAN	LIVE	296.9	247.5	212.1	185.6	165.0	139.1	115.0
4-SPAN	LIVE	296.9	247.5	212.1	185.6	160.4	129.9	107.4

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	1.23	0.1507	0.0989	2.9619	0.3224	0.1307	3.9132
22	50	1.56	0.2059	0.1394	4.1747	0.4205	0.1708	5.112

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.

Double-Lok® is a registered trademark of the NCI Group.
 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 Fy = 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 equipment or accessories including but not limited to clips, fasteners, and support plates (eave, backup, rake, etc.) other than those provided by the manufacturer may damage the panels, void all warranties and will void all data.

NOTES:

- 1 All calculations for the properties of **Double-Lok®** 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.

