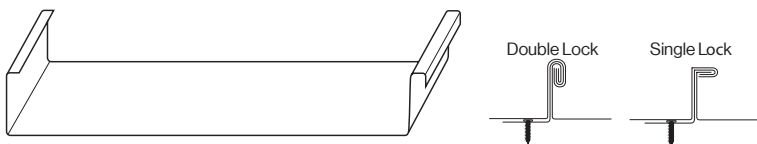


# Technical Information

## Concealed Fastening System



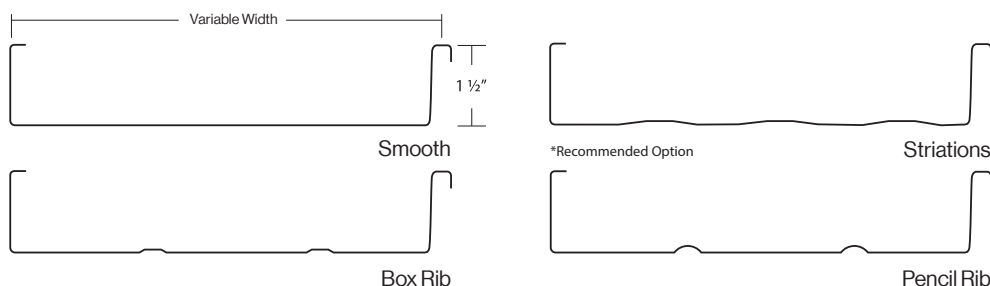
### DefenderX Series / Sure Lock ML150™



#### Product Highlights

The 1½" Sure Lock ML150™ Mechanical Lock Panel is a Architectural Standing Seam Metal Roof Panel that has all fasteners concealed for a sleek look and most importantly incredible strength and weather resistance. This Metal Roofing Panel provides a traditional look and utilizes mechanical seaming to enhance design needs. The 1½" Mechanical Lock Panel can be installed using an expansion/floating or fixed clip system. This panel can be single or double locked and is available in a variety of standard widths and colors, but can be customized to the needs that you are looking for. This panel can be rollformed on-site or at our facility in Rigby, Idaho. Rollforming on-site can help reduce shipping costs and damage to the panels in the shipping process.

#### On-Site Rollforming Available for this Panel



#### Product Specifications

<b>Applications:</b>	Roofing, Wall, Soffit, Fascia, Ceiling, Interior	<b>Thickness:</b>	24ga High Quality Grade D Steel (yield strength of 50,000 psi) (optional) 26ga, 22ga (Please inquire for more available thicknesses)
<b>Coverage:</b>	Standard Widths: 12 ½", 16 ½", 20 ½" (Custom Widths from 7" to 27 ½")	<b>Coatings:</b>	Fluoropon® by Sherwin-Williams® PVDF (Kynar 500® or Hylar 5000®) Fluoropon® by Sherwin-Williams® PVDF 3 Coat (Kynar 500® or Hylar 5000®) WeatherXL™ SMP by Sherwin-Williams® (Silicone Modified Polyester) Super Dynapon by Sherwin-Williams® (ceramic pigment polyester coating) AZ55 Galvalume® with Acrylic Coating
<b>Rib Heights:</b>	1½" Tall Standing Seam Rib	<b>Substrate:</b>	G90 Galvanized Grade D (yield strength of 50,000 psi) (optional) AZ50, AZ55 Galvalume®, G100 Galvanized (optional) Embossing Available
<b>Fastening System:</b>	Concealed Fastening System using Fixed or Expansion Clips (Seamer Required)	<b>Fielding Conditions:</b>	Oil Canning is inherent in all light gauge metal products & is not a cause for rejection. Visit <a href="http://www.briggssteel.com/oilcanning">www.briggssteel.com/oilcanning</a> for more information.
<b>Length(s):</b>	Maximum Length of 150' + Minimum Length of 3'0"	<b>Accessories:</b>	Trim, Custom Trim, Fasteners, Sealant, Closures, Venting, Pipe Flashings, Underlayment, Snow Retention, Polycarbonate Panels, Many Tools.
<b>Minimum Slope:</b>	½:12 Pitch or greater with thermally applied butyl sealant & recommended self-adhered underlayment covering entire substrate 3:12 Pitch or greater (optional: recommended thermally applied butyl sealant)	<b>More Details:</b>	For more information about this profile, please visit <a href="http://www.BriggsSteel.com">www.BriggsSteel.com</a>
<b>Substrate Install:</b>	Solid		
<b>Ribbing Options:</b>	Smooth, Striations, Box Ribs, Pencil Ribs		
<b>Curving:</b>	Curving Panels Available on-site or in facility. Curved Trim also Available.		



#### Materials Available

26ga, 24ga, 22ga Steel  
0.032" Aluminum  
16oz, 20oz Natural Copper  
0.7mm, 0.8mm Natural Zinc  
WeatherXL™ SMP by Sherwin-Williams®  
Fluoropon® by Sherwin-Williams® PVDF (Kynar 500®)  
Textured / Crinkle (Rawhide)  
Vintage®  
Western Rust  
Cor-Ten AZP® Raw  
Copper-Ten® Raw  
Galv-Ten® Raw  
Galvalume® (Acrylic Coating)  
Galvanized  
Electro-Galvanized  
Galvannealed  
Bonderized Weathering Steel  
ReziBond® Weathering Steel  
Cold Rolled Weathering Steel  
A606-4 (Corten) Weathering Steel  
Hammered Copper  
Stainless Steel  
Perforated  
(See Color Guide(s) for Many More Options)

#### Protective Film Available Upon Request

Note: For standard color selection, consult the current Briggs Steel Color Selection Guides. Custom colors are available upon request.

\*\*Actual coverage may vary slightly due to the characteristics of the steel.

\*Based on 29ga Grade E Steel (yield strength of 80,000 psi)

For more testing information please visit [www.briggssteel.com/resources/testing](http://www.briggssteel.com/resources/testing)

For more load table information, please contact Briggs Steel sales representative.

Live Load (PSF)	30"	36"	42"	48"	54"	60"
2 or More Spans	152	105	78	61	47	38
3 or More Spans	180	124	90	70	56	45

#### Testing

Meets Requirements for:  
UL 580 Class 90 & ASTM E1592 Uplift Resistance  
UL 2218 Class 4 Impact Resistance  
UL 263 & UL 790 Class A Fire Resistance  
ASTM E283 & ASTM E1680 Air Infiltration  
ASTM E331 & ASTM E1646 Water Penetration

#### Typical Fastener Spacing

- 24" on center max for 7 ¾" to 11 ¾" panel widths  
- 24" on center max for 12" to 15 ¾" panel widths  
- 18" on center max for 16" to 19 ¾" panel widths

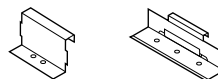
\*The above diagrams are the typical fastener pattern. However pattern & spacing may not be appropriate for all applications. Consult local building codes and/or professional engineer for alternative use.

Install This Direction →

← Prevailing Wind



#### Sure Lock ML150™ Clips



#### Seam Sealant



[www.BriggsSteel.com](http://www.BriggsSteel.com)

Phone: (208) 745-1500

Toll-Free: (877) 95-STEEL

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