

## ABOUT GREAT NORTHERN METAL CO.



Great Northern Metal Co. was founded in 2019 on honesty, integrity, and the idea that no project is too custom or complicated for high quality metal roofing and siding.

Drawing on over 25 years of experience in the steel and construction industries, we work hard to find solutions to bring your designs to life and take pride in providing you accurate information and out-of-the box thinking so your projects stand out.

We've built a brand you can trust because we put your needs first, and we've built our team with you in mind. We have experts in commercial, residential, and high end construction as well as veterans of the steel industry who have worked with metal roofing and siding for more than 15 years. Together, we've seen it all, and we are dedicated to finding the right solution for your design.

We understand no project is cookie-cutter, and our team of experts is ready to sit down with you and talk through all your options. Whether you're looking for a beautiful roof that will last a lifetime, or a unique accent that stands out, Great Northern Metal Co. is dedicated to finding you the best materials and providing the most reliable service for your project.

Whether you're designing a big commercial build that will house dozens of businesses, a dream home full of high-end touches and luxury, or replacing an asphalt roof with metal to protect your home and family - our team is here to help you. Our goal is to ensure you have the information you need to make your plans a reality. If we don't have the answers, we will find them.

Our strategic partnerships with American-made steel suppliers allow us to offer you unique materials that make your projects stand out. No matter the style, we have you covered. We know quality, and we demand the best from our partners so your roofing and siding will stand up to our harsh Montana weather and keep you protected from the elements, no matter what.

You can depend on Great Northern Metal Co. for excellent service, quality steel, and knowledgeable advice. We can't wait to help you with your next project.

Sheffield Metals International (SMI) is a proud supplier of coil and sheet products to Great Northern Metal Company.

## **AVAILABLE COLORS**

#### **Environmentally Smart Colors – Designed Energy Efficient**

RA COTTA	AGED COPPER	SOLAR WHITE 🕇	Sandstone 🕇	SURREY BEIGE
.ONIAL RED 🕇	PATINA GREEN	REGAL WHITE 🕇	ASH GRAY 🕇	Sierra tan 🛨
GAL RED 苯	HEMLOCK GREEN *	STONE WHITE	DOVE GRAY	MEDIUM BRONZE 🕂
RGUNDY <b>*</b>	HARTFORD GREEN 🛠 🕇	SLATE BLUE	SLATE GRAY 🕂	Mansard Brown 🕇
atte black 🕇	EVERGREEN 🕂	regal blue <b>* +</b>	CHARCOAL GRAY 💠	dark bronze 🕂
etallic Colors				Non-Painted
VER ≭	COPPER *	CHAMPAGNE *	PRE-WEATHERED * GALVALUME®	ACRYLIC COATED GALVALUME®
leathered Colo	rs			0.20.2002
ALV-TEN™ RAW ★	COPPER-TEN™ RAW ★	Cor-ten Azp® raw 🗱	-	VINTAGE®

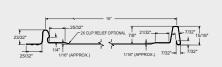
Colors shown are matched as accurately as possible, but may vary slightly from finished product. These rich and vibrant colors are produced with either Kynar 500° or Hylar 5000° resins, which provide superior color retention and allow Sheffield Metals to offer non-prorated coating warranties for most applications. Coating warranty varies for Regal Red, Matte Black, Copper, Champagne, Silver, and Pre-Weathered Galvalume. Steelscape's Vintage carries a 20 year Finish Warranty. Please contact your representative for more information.

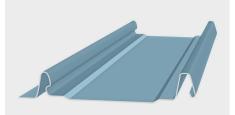
Galvalume® is a registered trademark of BIEC International Inc. 1 Hylar 5000® is a registered trademark of Solvay Solexis, Inc. 1 Kynar 500® is a registered trademark belonging to Arkema Inc. 1 Cor-Ten AZP® is a registered trademark and the USS in Circle, Weathered Metal Series™, Galv-Ten™, and Copper-Ten™ are trademarks of United States Steel Corporation. All trademarks are used under license of the United States Steel Corporation.



## **GNM 1.0" FF SNAPLOCK STANDING SEAM PANEL PROFILE**







#### **Panel Information**

Panel Type	Standing Seam
Panel Seam	SnapLock
Panel Width	16"
Seam Height	1.0"
Panel Material	22 ga—24 ga min
Panel Surface	Smooth / Embossed Optiona
Panel Clip	None
Minimum Slope	3/12
Substrate	Plywood

#### **Panel Testing**

Uplift Resistance	UL 90
Hail Rating	Class 4 Impact UL 2218
Fire Rating	UL Class A
Texas Department of Insurance Approval	RC-560

#### **Panel Notes**

With this 24 GA, 16" wide panel engineering, you may opt to use heavier gauge coil and narrower width panels. Fastener spacing will not change.

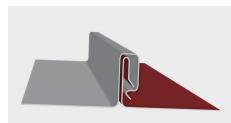
This panel uses a 20" coil. Maximum width coil of 24".

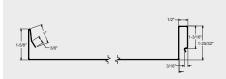
This panel uses 4-1/16" of material to form the panel.

If you take the square footage of the roof and multiply that by 1.25, the total will be the amount of coil needed to manufacture the panels.

This panel is NOT approved for Weathertight Warranties.

## **GNM 1.75" SNAPLOCK STANDING SEAM PANEL PROFILE**





Danol	Inform	ation
ranei		ation

Standing Seam
SnapLock
18" (Steel) / 16" (Aluminum)
1.75"
22 ga—24 ga min, .040
Smooth / Embossed Optional
Required Per Engineering
2/12
Plywood, B-Deck, B-Deck w/ISO

#### Panel Testing

Tunet resting	
Uplift Resistance	UL 580, UL 1897, UL 90
Air Infiltration	ASTM E 1680
Water Penetration	ASTM E 1646
Hail Rating	Class 4 Impact UL 2218
Fire Rating	UL Class A
Texas Department of Insurance Approval	RC-387*, RC-388*, RC-389*
FBC Non-HVHZ Approval	FL18316*

#### **Panel Notes**

With this panel engineering, you may opt to use heavier gauge coil and narrower width panels. Clip spacing will not change.

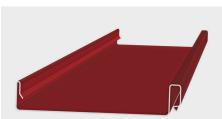
This panel uses a 24" coil (Steel) / 22" coil (Aluminum).

This panel uses 6-1/8" of material to form the panel.

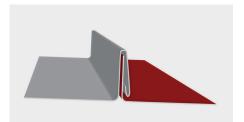
If you take the square footage of the roof and multiply that by 1.34, the total will be the amount coil needed to manufacture the panels.

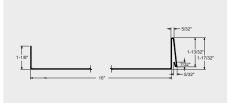
This panel is approved for Weathertight Warranties.

\* Available in steel only.



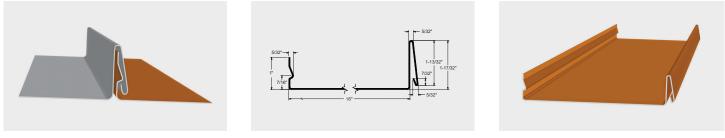
## GNM 1.5" SNAPLOCK 450/450 SL STANDING SEAM PANEL PROFILE







GNM 1.5" SL 450



GNM 1.5" SL 450 SL

#### **Panel Information**

Panel Type	Standing Seam
Panel Seam	SnapLock
Panel Width	16"
Seam Height	1.5"
Panel Material	22 ga—24 ga min
Panel Surface	Smooth / Embossed Optional
Panel Clip	Required Per Engineering
Minimum Slope	3/12
Substrate	Plywood

#### **Panel Testing**

Uplift Resistance	UL 90
Hail Rating	Class 4 Impact UL 2218
Fire Rating	UL Class A
Texas Department of Insurance Approval	RC-564, RC-561

#### **Panel Notes**

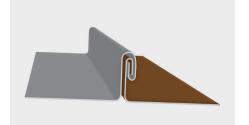
With this 24 GA, 16" wide panel engineering, you may opt to use heavier gauge coil and narrower width panels. Clip spacing will not change. This panel uses a 20" coil.

This panel uses 4-1/8" of material to form the panel.

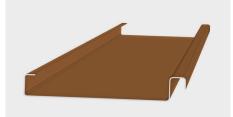
If you take the square footage of the roof and multiply that by 1.25, the total will be the amount coil needed to manufacture the panels.

This panel is approved for Weathertight Warranties.

## **GNM 1.0" MECHANICAL SEAM PANEL PROFILE**







#### **Panel Information**

Panel Type	Standing Seam	
Panel Seam	Mechanical	
Panel Width	17"	
Seam Height	1.0"	
Panel Material 22 ga—24 ga min		
Panel Surface Smooth / Embossed Optional		
Minimum Slope	3/12	

#### **Panel Notes**

This panel uses a 20" coil. Maximum width coil of 20".

This panel uses 3" of material to form the panel.

If you take the square footage of the roof and multiply that by 1.18, the total will be the amount coil needed to manufacture the panels.

Suitable for zinc and copper.

## **GNM 1.5" MECHANICAL SEAM PANEL PROFILE**



# 

#### **Panel Information**

Panel Type	Standing Seam
Panel Seam	Mechanical
Panel Width	16"
Seam Height	1.5"
Panel Material 22 ga—24 ga min, .032	
Panel Surface	Smooth / Embossed Optional
Panel Clip	Required Per Engineering
Minimum Slope	2/12
Substrate	Plywood, B-Deck, B-Deck w/ISO

#### Panel Testing

Uplift Resistance	UL 580, UL 1897, UL 90
Air Infiltration	ASTM E 1680
Water Penetration	ASTM E 1646
Water Submersion	ASTM E 2140*
Hail Rating	Class 4 Impact UL 2218
Fire Rating	UL Class A
Texas Department of Insurance Approval	RC-386*, RC-395*, RC-397*
FBC Non-HVHZ Approval	FL18316*

#### **Panel Notes**

With this panel engineering, you may opt to use heavier gauge coil and narrower width panels. Clip spacing will not change.

For slopes lower than a 2/12 roof pitch, contact SMI Technical Department for further installation direction and requirements.

This panel uses a 20" coil. Maximum width coil of 20".

This panel uses 4" of material to form the panel.

If you take the square footage of the roof and multiply that by 1.25, the total will be the amount coil needed to manufacture the panels.

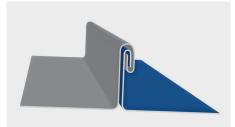
This panel is approved for Weathertight Warranties.

\* Available in steel only.



## **GNM 2.0" MECHANICAL SEAM PANEL PROFILE**

**Panel Information** 





Panel Type	Standing Seam
i unet i ype	Standing Scall
Panel Seam	Mechanical
Panel Width	18" (Steel) / 16" (Aluminum)
Seam Height	2.0"
Panel Material	22 ga—24 ga min, .040
Panel Surface	Smooth / Embossed Optional
Panel Clip	Required Per Engineering
Minimum Slope	.5/12 (Steel) / 2/12 (Aluminum)
Substrate	Open Framing*, Plywood, B-Deck, B-Deck w/ISO

Uplift Resistance	ASTM E1592*, UL 580, UL 1897, UL 90
Air Infiltration	ASTM E 1680
Water Penetration	ASTM E 1646
Water Submersion	ASTM E 2140*
Foot Traffic	FM 4471*
Hail Rating	Class 4 Impact UL 2218
Fire Rating	UL Class A
Texas Department of Insurance Approval	RC-383*, RC-384*, RC-385*, RC-390*
FBC Non-HVHZ Approval	FL18316*

**Danol Tosting** 

#### **Panel Notes**

With this panel engineering, you may opt to use heavier gauge coil and narrower width panels. Clip spacing will not change.

For slopes lower than a 2/12 roof pitch, install sealant per ASTM E 2140.

This panel uses a 24" coil (Steel) / 22" coil (Aluminum).

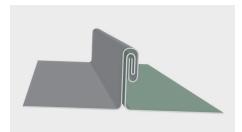
This panel uses 5-13/16" of material to form the panel.

If you take the square footage of the roof and multiply that by 1.34, the total will be the amount coil needed to manufacture the panels.

This panel is approved for Weathertight Warranties.

\* Available in steel only.

## **GNM 2.0" MECHANICAL SEAM (ARMCO) PANEL PROFILE**



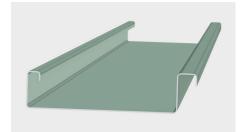
#### **Panel Information**

Panel Type	Standing Seam
Panel Seam	Mechanical
Panel Width	16"
Seam Height	2.0"
Panel Material	22 ga—24 ga min
Panel Surface	Smooth / Embossed Optional
Panel Clip	Required for Engineering
Minimum Slope	3/12
Substrate	Open Framing, B-Deck w/ISO



#### **Panel Testing**

Uplift Resistance UL 90	
Hail Rating	Class 4 Impact UL 2218
Fire Rating	UL Class A



#### **Panel Notes**

With this 24 GA, 16" wide panel engineering, you may opt to use heavier gauge coil and narrower width panels. Clip spacing will not change.

This panel uses a 22" coil.

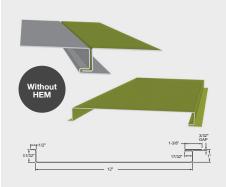
This panel uses 6-1/8" of material to form the panel.

If you take the square footage of the roof and multiply that by 1.375, the total will be the amount of coil needed to manufacture the panels.

This panel is approved for Weathertight Warranties.



## **GNM 1.0" FWP FLUSH WALL & SOFFIT PANEL PROFILE**

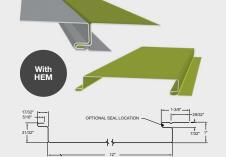


#### **Panel Information**

Panel Type	Wall / Soffit
Panel Width	12"
Seam Height	1.0"
Panel Material	22 ga—24 ga min
Panel Surface	Smooth / Embossed Optional

#### **Panel Testing**

Uplift Resistance	ASTM E 1592, UL 90
Air Infiltration	ASTM E 283
Water Penetration	ASTM E 331



#### Panel Notes

This panel uses a 16" coil.

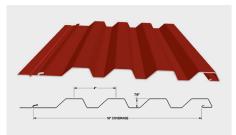
This panel uses 4" of material to form the panel.

If you take the square footage of the wall and multiply that by 1.25, the total will be the amount coil needed to manufacture the panels.

Perforation opening size .50 [12.7] X .12 [3.0] = .06 Sq. In. [38.7 sq. mm.]

Net Free Area / 12 inch = .06 Sq. In. X 51.25 = 3.08 Sq. In. [Net Free Area 1304.8mm = 38.7 sq. mm X 51.25 = 1983 sq. mm]

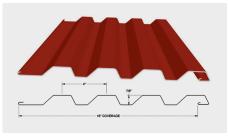
### WAV WALL PANEL PROFILE



WAV-16-4F

#### **Panel Information**

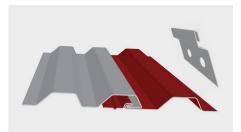
Panel Type	Wall
Rib Height	7/8"
Seam Height	1.0"
Panel Material	22 ga—24 ga min
Panel Surface	Smooth / Embossed Optional



WAV-16-4C

#### **Panel Testing**

Structural Performance	ASTM E 330
Air Infiltration	ASTM E 283
Water Penetration	ASTM E 331



WAV PANEL & CLIP

#### **Panel Notes**

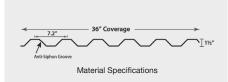
The **WAV-16-4F** uses 24 or 22 Ga. with a 24" wide stretch out for a finished panel width of 16". The concept here is similar to that of a fastener flange. When using this option, we recommend that panel lengths stay at 25' or less. The SMI WAV with Flange (F) was tested in accordance with ASTM E 330 and ASTM E 283 / E 331 standards.

The **WAV-16-4C** uses 24 or 22 Ga. with a 22-1/8" wide stretch out for a finished panel width of 16". This panel uses a clip or a cleat (C) that allows for expansion and contraction of the wall system. The SMI WAV was tested in accordance with ASTM E 330 and ASTM E 283 / E 331 standards.

The WAV profile is well-suited for a variety of architectural market segments, including retail, hospitality, residential mixed-use, independent living, sports centers, municipal and interior design.

## 7.2 BOX PANEL





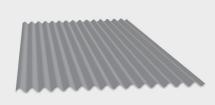
#### **Panel Information**

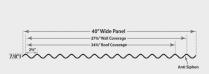
Available Gauges	22 GA, 24 GA, & 26 GA
Weight	5.00 lbs / LnFt (22), 4.00 lbs / LnFt (24), 3.00 lbs / LnFt (26)
Substrate	AZ-50, Grade D, 50,000 ksi
Available Materials	Painted, Galvalume®, ReziBond®, Cor-Ten™, Cold Roll, 16 & 20 oz Copper
Paint Systems	Sherwin Williams PVDF Fluropon, Kynar 500° / Hylar 5000°
Warranties	Paint - 40 Year / Substrate - 25.5 Year
Minimum Slope	1:12 with Bead Seal and Stitch Screws installed 1'0" up the panel at side laps

#### **Roof Application**

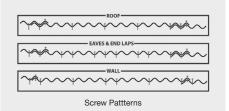
Screws are to be installed no more than 3'6" up the panel. Predrilling is recommended to ensure water tightness. It is recommended to use Bead Seal between every panel at the side lap with Stitched Screws installed every 1'0" up the panel. Any slope below a 4:12 must use Bead Seal and Stitch Screws.

## 7/8" CORRUGATED PANEL





Material Specifications



#### **Panel Information**

Available Gauges	22 GA & 24 GA
Weight	5.00 lbs / LnFt (22), 4.00 lbs / LnFt (24)
Substrate	AZ-50, Grade D, 50,000 ksi
Available Materials	Painted, Galvalume®, ReziBond®, Cor-Ten™, 16 & 20 oz Copper
Paint Systems	Sherwin Williams PVDF Fluropon, Kynar 500° / Hylar 5000°
Warranties	Paint - 40 Year / Substrate - 25.5 Year
Minimum Slope	2:12 with Bead Seal and Stitch Screws installed 1'0" up the panel at side laps

#### **Fastener Guide**

#10 Woodfast screws are designed for use with dimensional lumber

#14 Wafer screws are designed for use with plywood sheeting, OSB, and wafer wood (7/16" minimum thickness)

#12 Tek Screws are designed to be used with structural steel up to 3/16" thickness

#### **Roof Application**

#### **Panel Testing**

UL 580 Wind Uplift (Class 90), UL 2218 Class 4 Hail Impact, UL 790 Class A Fire Rating

#### Wall Application

Screws are to be installed no more than 3'6" up the panel. Predrilling is recommended to ensure water tightness.

Screws are to be installed no more than 3'6" up the panel. Predrilling is recommended to ensure water tightness. It is recommended to use Bead Seal between every panel at the side lap with Stitched Screws installed every 1'0" up the panel. Any slope below a 4:12 must use Bead Seal and Stitch Screws.

EAVES & END LAPS type Sealant (for roof only) ROOF & WALL Type Sealant (for roof only) Screw Pattterns

#### **Fastener Guide**

#10 Woodfast screws are designed for use with dimensional lumber

#14 Wafer screws are designed for use with plywood sheeting, OSB, and wafer wood (7/16" minimum thickness)

#12 Tek Screws are designed to be used with structural steel up to 3/16" thickness

#### **Panel Testing**

UL 580 Wind Uplift (Class 90), UL 2218 Class 4 Hail Impact, UL 790 Class A Fire Rating

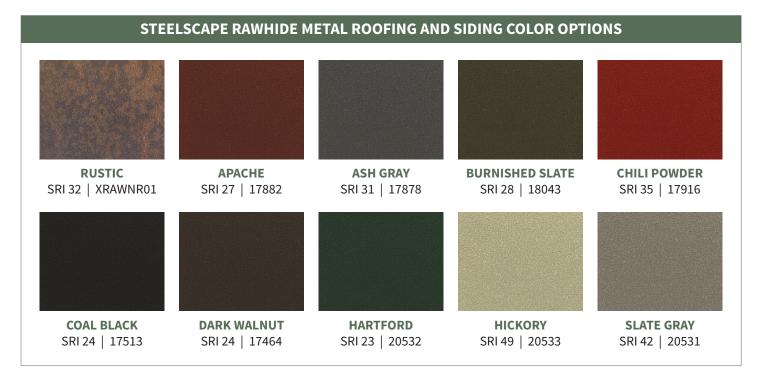
#### Wall Application

Screws are to be installed no more than 3'6" up the panel. Predrilling is recommended to ensure water tightness.

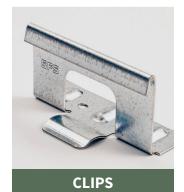
## **STEELSCAPE RAWHIDE**



Textured surfaces offer many visual benefits included added depth and light dissipating properties. Steelscape's Rawhide is a textured painted product that deploys micro-crinkle technology to reduce sheen and glare, typically associated with painted metal products. This provides an appealing texture up close and a solid, uniform color when viewed from afar. As the crinkle impacts the way light is reflected, the result is a duller, less reflective finish. This product can be used in a broad range of applications seeking to reduce sheen and glare. This includes commercial siding projects in urban environments, standing seam roofing seeking to integrate with the broader neighborhood, or corrugated applications for wainscoting. The glare reducing properties of Rawhide are best deployed on flat surfaces making it ideal for wall applications such as concealed fastened siding project. Rawhide offers both a modern color palette and proven product performance to make it ideal for any project. Rawhide won't collect dirt and grow mold and is supported by a robust 30 year finish warranty. For additional protection, Rawhide is available over ZINCALUME<sup>®</sup> steel which offers superior corrosion performance and a 25 and a half year corrosion warranty.



## **ACCESSORIES & COMPONENTS**

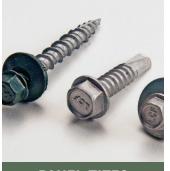


We stock a full line of roofing clips for engineered and nonengineered applications. Offerings for New Tech Machinery profiles as well as a number of other panel machines are available. Clips come in a variety of gauges in either galvanized or stainless steel.



#### **CLIP SCREWS**

We stock a full line of metal roofing fasteners including low profile clip screws and pancake heads in a variety of lengths. We can also provide specially coated and stainless steel for other challenging applications.



#### PANEL-TITES

We stock Panel-Tites® in a variety of lengths for exposed fasteners for both wood and metal applications in our full line of 30+ finishes.



#### POP RIVETS

We stock #43 stainless steel rivets in mill finish as well as 30+ colors painted to match our metal roofing finishes.



#### UNDERLAYMENTS

We stock the full line of Sharkskin synthetic roof underlayments. Sharkskin offers a variety of premium products that were made by a roofer for roofers. Sharkskin Ultra and Ultra SA are approved underlayments for Sheffield Metals' Weathertight Warranty program.



We proudly stock NovaFlex Metal Roof Sealant in over 25 colors. NovaFlex is a premium

silicone-based sealant designed specifically for metal roofing. NovaFlex is approved for Weathertight Warranties.



We've partnered with S-5!, the industry leader and innovator, to distribute their attachment systems for snow retention, utility solutions and solar mounting. S-5! can provide a non-penetrating engineered solution for standing seam metal roofing system accessories.



#### Great Northern Metal Company

242 Durston Road Suite B Bozeman, MT 59718 (406) 624-0435 greatnorthernmetalco.com