



ROOFING SYSTEMS ON DEMAND

Your roofing system is in expert hands with New Castle Metal. We pride ourselves in our industry leading production time. By focusing strongly on site-formed panels, we are able to drastically reduce lead times to a matter of days, while reducing wasted material. Our strong partnership with Drexel Metals allows us to offer comprehensive engineering, technical knowledge and the best warranty in the industry, while continuing to offer responsive customer service.

Superior quality, on demand delivery and exceptional results from a trusted name in metal roofing systems.



Contents

Metals, Colors and Tech Support	3
Quality and Warranty Coverage	4
Protecting the Environment	5
Overview: Profiles	6
New Castle® Underlayment	15
ANSI/SPRI/FM 4435 ES-1 Perimeter Edge To Edge Systems	16
Metal Roofing, Wall, and Perimeter Edge Finishes	17
Standard Metal Options	18
Metals, Finishes and Considerations	19

WWW.NEWCASTLEMETAL.COM









HIGH-PERFORMANCE METALS IN A VARIETY OF COLORS

Drexel Metals offers a wide range of factory-formed and field-fabricated profiles in high-performance metals and finishes ideally suited for commercial, residential, restoration and custom applications. Metals include steel, Galvalume®, aluminum and copper. Choose from a palette of luxurious colors featuring architectural classics and premium hues. Three distinctive coating options are offered:

Fluropon® Finish – standard paint colors are produced by Sherwin Williams Industrial Coil Coating and contain a minimum of 70% PVDF (Kynar 500® and Hylar 5000®) base resin with ceramic pigments. All colors are formulated to ensure consistent appearance and quality.

Drexlume — mill-finished Galvalume with a two-sided, clear acrylic finish that simultaneously aids roll forming without the use of lubricants and eliminates unsightly handprints or stains resulting from handling and storage. The acrylic finish dissolves naturally over a period of time, and when left as is, allows for natural and even weathering.

SHERWIN-WILLIAMS. Coil Coatings





INDUSTRY-LEADING TECHNICAL SUPPORT

The right materials, the best results.

When you choose New Castle Metal,
you're getting more than just a
fabricated metal roofing system. You're
getting the expertise and industry
know-how of the New Castle Metals
design and technical team. With years of
training and experience in production,
testing, design, and installation, these
specialists have a proven track record
for achieving markedly superior results.
Through every step of your New Castle
Metal experience you can count on this
professional and friendly team.

ARCHITECTS AND DESIGNERS

Let our years of experience aid in your next project – transforming your inspiration and concepts into reality. Our specialized technical and design teams will help you select the right New Castle Metal products and achieve your goals on time and on budget with no call backs.

As an AIA CES Registered Provider, we proudly offer two registered AIA CES presentations to augment a better understanding of the products used in our industry:

- Sustainable Design Using Metal Roofing
- Making the Educated Choice – an Overview of Metal Roofing



Clear collaboration – the perfect balance of aesthetics and strength.



PREMIER QUALITY - TESTED AND PROVEN

SAFETY, WARRANTY PROTECTION AND ENVIRONMENTAL STEWARDSHIP

While our product offering is built to embrace every design and inspiration, safety and performance are paramount. From the mill to the job site, New Castle



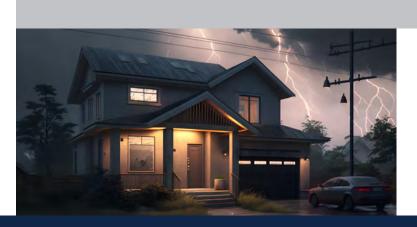
Metal strictly adheres to quality assurance programs that ensure installed products meet or exceed the most stringent code requirements in the country. Our products are tested to withstand gale to hurricane force winds, hail, fire, and wind-driven rain through independent testing and certification. For a complete list of testing and performance data, please call your New Castle Metal representative or visit www.newcastlemetal.com.





WARRANTY VALUE AND PROTECTION

We are pioneers when it comes to standing behind our products with meaningful warranties! New Castle Metal coils and flats are backed by Drexel Metals industry-leading warranty. Encompassing the total New Castle Metal system from the roof deck up and covers both materials and replacement labor if the installed painted product ever were to fail.











ENVIRONMENTAL VISION



Part of our responsibility as a manufacturer is to not only follow best environmental practices, but also strive to improve them.

As an ENERGY STAR listed partner, New Castle Metal is committed to earth-friendly packaging, freight consolidation, local manufacturing and minimal waste. We also use recycled materials for many of our roofing components, which are

ENERGY STAR PARTNER

100% recyclable at the end of their long, useful life.

Energy conservation is inherent in our product designs and applications,

including ventilation systems that reduce trapped heat in the summer and help prevent energy loss during cold winter months. We also utilize reflective pigments to reduce cooling costs, and offer photovoltaic roof systems that capture usable solar and heat energy. Working in collaboration with governing boards such as the U.S. DOE, we eagerly embrace the development of energy-saving solutions.

Whether it's meeting a sustainable specification, contributing to LEED credits or green incentives, New Castle Metal is

Tax Break
For Painted Products

there to assist.

Receive a \$500 tax credit for making your home energy efficient.



NEWCASTLE



MAXIMIZING AESTHETICS WHILE MINIMIZING ENVIRONMENTAL IMPACT...

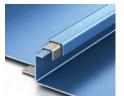


CONTRIBUTIONS TO LEED CREDITS INCLUDE:

- Heat Island Effect –
 Solar Reflectance
- Optimize Energy Performance
- Building Reuse
- Construction Waste Management
- Material Reuse
- Recycled Content
- On-Site Renewable Energy
- Innovation
- Water-Efficient Landscaping (Rain Harvesting)

OVERVIEW: PANEL PROFILES

NCM 100SS



This panel system features the time-tested tradition of historical standing seams. The seam method has proven successful for over 100 years.

NCM 150SS



Incorporating more than 100 years of proven performance, this standing seam panel features increased strength and durability.

NCM 200S



Our most tested commercial standing seam panel system. This panel can be installed over open framing, steel decking and plywood and is ideal for low to steep slope applications.

NCM 150SL



This architectural non-structural snap lock panel system is watertight and easy to install – the ideal choice for residential and light commercial applications.

NCM 450SL



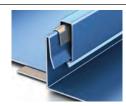
This panel is a stand-out choice with a continuous interlocking system and concealed fasteners and clips which make for easy installation.

NCM 550S



This snap lock panel system provides a highly water-resistant seam, along with a lower profile for a look that is unobtrusive.

NCM 675S



This structural snap lock panel system offers broad width seams as well as easy, fast installation while maintaining the strength to meet building codes.

NCM 100NS



This panel system features a fastener flange allowing for a quick and easy install. It is an ideal choice for steep slope residential applications.

NCM Cap Seam



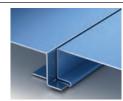
This panel system features slim seams and flat pans making it easy to install with minimal waste. Perfect for curved roofs, mansards and other steep slope applications.

NCM Snap-On Batten



The longtime favorite for the traditional bold look. Wide battens bring the visual appeal of the past together with the ease of modern day details.

NCM FW1 Flush



The flush, flat look with quick-to-install interlocking seams. The seamless look you desire for walls, soffits and equipment screens.



NCM 5V



Traditional, exposed fastener panel system that brings functionality and style to your home or project.

Bermuda Horizon



Horizontal installation and minimal depth create a quaint Bermuda style for use as a roof or wall panel.



PANEL OPTIONS

NEW CASTLE METAI

Curved Panels

We curve metal roof panels. Whether concave or convex, we can curve our products to your desired radius.

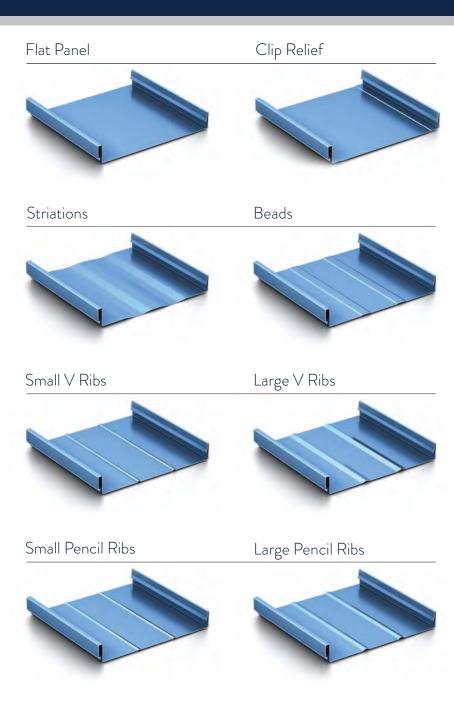


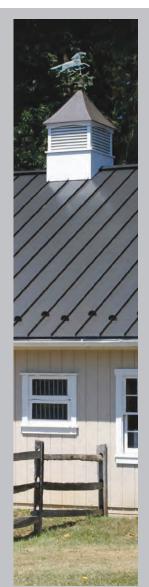
Curved panels Include:

- NCM 100SS
- NCM 150SS
- NCM 200S
- NCM Cap Seam



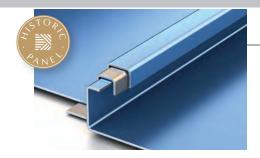
Perimeter Systems ES-1 Compliant and Certified, our perimeter edge systems are designed to meet building codes and keep your project looking consistent for years to come.





NCM 150SS PROFILE

Weather Tightness Warranty Approved!



Tested in accordance with:

UL 580 Wind Uplift (Class 90)

UL 2218 Class 4 Hail Impact

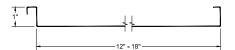
UL 790 Class A Fire Rating

UL Environmental -SRI Third-Party Verified

Quality materials and more than 100 years of successful design application govern the construction of our NCM 100SS 1" mechanically seamed metal roof system. Ideal for light commercial or residential applications, this smartly detailed profile can be curved for enhanced architectural appeal.

Installed as full-length panels with no end laps helps provide the ultimate in all-weather and watertight protection.

- · Available in 24ga Galvalume, 24ga Drexlume, 26ga Galvalume, .032" Aluminum, and 16 oz Copper and lead-coated Copper
- Widths: 12", 14", 16", 18", 19", 20" or 21"
- · Factory made or field rolled to exact lengths
- Can be installed over plywood substrates; New Castle® underlayment required under curved installations
- Minimum slope 2:12
- Available as curved panel







Tested in accordance with:

UL 580 Wind Uplift (Class 90)

TAS 125 Wind Uplift

UL 1897 Extended Phase Wind Uplift

UL 2218 Class 4 Hail Impact

UL 790 Class A Fire Rating

UL Environmental -SRI Third-Party Verified

ASTM E1646 Water Infiltration

TAS 100 Wind Driven Rain

ASTM E1680 Air Infiltration

ASTM E1886 Missile Impact

ASTM 2140 Static Pressure Water Head

Miami-Dade County Approved

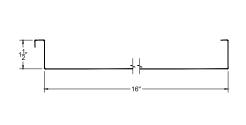
Florida Building Code Approved

Texas Department of Insurance Approved



Our NCM 150SS roof system will lend striking dimension to any architectural design. This versatile 1-1/2" mechanically seamed panel can be curved to a wide range of radiuses and applications from barrel roofs to conical shapes and more. Concealed fasteners and a floating clip system reduce the effect of thermal stresses on the panels, helping to maintain a beautifully smooth, uniform appearance despite fluctuations in temperature.

- · Available in 24ga Galvalume, 24ga Drexlume, 26ga Galvalume, .032" Aluminum; and 16 oz Copper and lead-coated Copper
- Widths: 12", 14", 16", 18", 19" or 20"
- · Factory made or field rolled to exact lengths
- Can be installed over solid substrates including plywood and metal decking w/PolyIso
- Minimum slope 2:12
- 3' radius minimum
- · Available as curved panel





Tested in accordance with:

UL 580 Wind Uplift (Class 90)

TAS 125 Wind Uplift

UL 1897 Extended Phase Wind Uplift

UL 2218 Class 4 Hail Impact

UL 790 Class A Fire Rating

UL Environmental – SRI Third-Party Verified

ASTM E1592 Uniform Static Air Pressure Uplift

ASTM E1646 Water Infiltration

TAS 100 Wind Driven Rain Test

ASTM E1680 Air Infiltration

ASTM E1886 Missile Impact

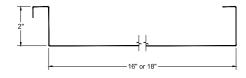
ASTM 2140 Static Pressure Water Head

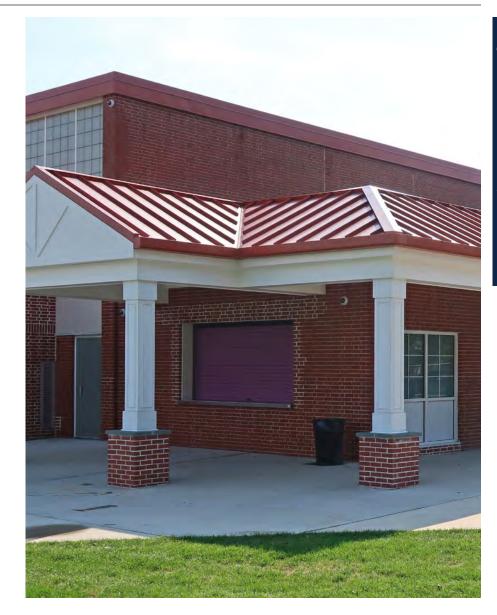
Miami-Dade County Approved

Florida Building Code Approved

Texas Department of Insurance Approved The versatility of the NCM 200S roof system makes it an ideal choice for low to steep slope applications. Performance-engineered to handle heavy-duty commercial and industrial projects, this 2" mechanically seamed structural metal roof system will meet or exceed most windload and government requirements from coast to coast. Concealed fasteners and floating clip systems reduce panel stress from changes in temperature and help maintain a smooth, uniform appearance. This product can also be curved for large barrel roofs or small canopies.

- Available in 24ga and 22ga Galvalume and Drexlume, .032" and .040"
 Aluminum, and 16 oz and 20 oz
 Copper, and 16 oz lead-coated Copper
- Widths: 12", 14", 16" or 18"
- Factory made or field rolled to exact lengths
- Can be installed over open frame steel purlins, plywood decking, and steel decking w/Polylso
- Minimum slope ½:12
- Optional machine- or field-applied side lap sealant
- · Available as curved panel





NCM 550S PROFILE

Weather Tightness Warranty Approved!



Tested in accordance with:

UL 580 Wind Uplift (Class 90)

UL 2218 Class 4 Hail Impact

UL 263 Fire Certification

UL 790 Class A Fire Rating

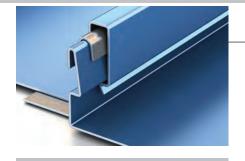
UL Environmental – SRI Third-Party Verified

Florida Building Code Approved



Installation ease with impeccable results makes our NCM 150SL roof system a standout choice. The 1-½" Snap Lock profile and NCM 150SL Clip create a continuous interlocking system that installs quickly, reducing labor costs. The concealed fastener and clip application also allow thermal expansion and contraction movement to help keep the beautiful finish straight and true.

- Available in 24ga Galvalume and 24ga Drexlume
- Widths: 16"
- Factory made or field rolled to exact lengths
- Can be installed over plywood substrates
- Minimum slope 3:12



Tested in accordance with:

UL 580 Wind Uplift (Class 90)

ASTM E283 Air Filtration Leakage

ASTM E331 84 Water Penetration

ASTM E1646 Water Infiltration

ASTM E1680 Air Infiltration

UL Environmental – SRI Third-Party Verified

UL 2218 Class 4 Hail Impact

A superior integral seam design and quick installation – that's the hallmark of the NCM 550S panel. This expertly crafted interlocking roof system

weathertight seam. The finished results deliver a substantial measure of quality and style that's certain to stand the test of time.

- Available in 24ga Galvalume,
 24ga Drexlume, .032" Aluminum
- · Widths: 12", 14", 16", 18" or 19"
- · Factory or site fabricated
- Can be installed over plywood substrates
- Minimum slope 3:12





Metal Roof Systems





Tested in accordance with:

UL 580 Wind Uplift (Class 90)

TAS 125 Wind Uplift

UL 1897 Extended Phase Wind Uplift

UL 2218 Class 4 Hail Impact

UL 790 Class A Fire Rating

UL Environmental – SRI Third-Party Verified

TAS 100 Wind Driven Rain

ASTM E1646 Water Infiltration

ASTM E1680 Air Infiltration ASTM

E1886 Missile Impact

Miami-Dade County Approved

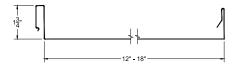
Florida Building Code Approved

Texas Department of Insurance Approved



The NCM 175S is distinctive for its broad width seam, impressive structural capabilities and easy Snap Lock installation. Featuring a 1-3/4" seam height, this continuous interlocking engineered roof system has a concealed fastener and clip application that allows thermal movement and requires no mechanical seaming to ensure weathertight integrity. The installation is simple and quick, yet it withstands extremely high design pressures and is approved for use on Weather Tightness Warranty projects.

- Available in 24ga and 22ga Galvalume, 24ga Drexlume, .032" and .040"
 Aluminum
- · Widths: 12", 14", 16" or 18"
- Factory made or site fabricated to exact lengths
- Can be installed over solid substrates, limited open frame applications, and over metal decking w/Polylso
- Minimum slope 2:12
- Optional machine- or field-applied side lap sealant





Tested in accordance with:

UL 580 Wind Uplift (Class 90)

UL 2218 Class 4 Hail Impact

UL 263 Fire Certification

UL 790 Class A Fire Rating

UL Environmental – SRI Third-Party Verified



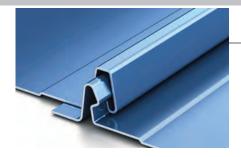
Installation ease with impeccable results makes our NCM 450SL roof system a standout choice. The 1-½" Snap Lock profile and NCM 450SL Clip create a continuous interlocking system that installs quickly, reducing labor costs. The concealed fastener and clip application also allow thermal expansion and contraction movement to help keep the beautiful finish straight and true.

- Available in Galvalume[®] 24ga,
 Drexlume[®] 24ga, Aluminum .032
- Width: 16"*
- *Drexel Metals design pressures, wind uplifts and test reports are for specific deck attachments, material gauges, clip spacing and panel widths)
- Factory made or field rolled to exact lengths Optional: striation, beads, pencil ribs
- Can be installed over plywood decking and Drexel Metals MetShield® underlayment
- Minimum slope 3:12, Minimum Roof
 Pitch: 3:12 low roof pitch



NCM 100NS PROFILE

NCM Cap Seam PROFILE



Tested in accordance with:

UL 580 Wind Uplift (Class 90)

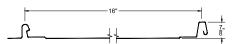
UL 2218 Class 4 Hail Impact

UL 263 Fire Certification

UL 790 Class A Fire Rating

UL Environmental – SRI Third-Party Verified

Florida Building Code Approved



Our NCM 100NS profile offers unlimited design potential with its sleek, crisp appearance and attractive shadow lines. Eliminating the need for metal roof clips, the concealed 1" self-locking Snap Lock system creates a powerfully protective seal. Versatile and refined, this easy-to-install metal roof delivers superior beauty, durability and strength while showcasing architectural details.

- Available in 24ga Galvalume, 24ga Drexlume, 26ga Galvalume and .032" Aluminum
- · Widths: 16"
- Factory made or field rolled to exact lengths
- Can be installed over plywood substrates
- Minimum slope 3:12

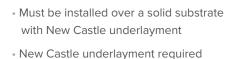


Tested in accordance with:

UL 580 Class 90 Uplift

Classic yet versatile, our Cap Seam roof is ideal for a wide range of projects, especially those including curved applications. The low profile 1" cap with the flat pan effortlessly accommodates detailing at hips and valleys, and can be curved as tight as a 3' radius. A quick and easy installation is inherent in this premium quality roof system.

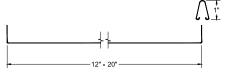
- Available in 24ga Galvalume, 24ga
 Drexlume, .032" Aluminum, 16 oz
 Copper and lead-coated Copper
- Seam heights: 1", 1-1/2"
- Widths: 12", 14", 16", 18", 19" or 20"
- Factory or site fabricated



- Minimum slope 3:12
- Concave and convex curves

under curved installations

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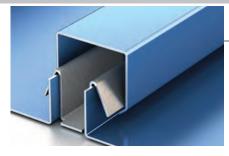






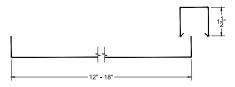
NCM Snap-On Batten PROFILE

NCM FW1 Flush PROFILE



Distinctive in its powerful profile design, the NCM Snap-On Batten roof system beautifully accentuates the architectural appeal of mansards, fascias and other solid substrate with a slope that exceeds 3:12. The ample 1-1/2" batten provides added dimension with bold shadow lines, while the heavy-duty construction delivers outstanding performance and protection. Quick snap-on battens ensure ease of installation.

- Available in 24ga Galvalume, 24ga Drexlume, .032" Aluminum
- Seams: 1-1/2" x 1-1/2"
- Widths: 12", 16" and 18"
- Easy roof-to-fascia transition
- · Must be installed over a solid substrate with New Castle underlayment

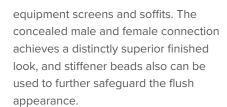




Tested in accordance with: ASTM E1592 Uplift Pressure ASTM E283 Air Filtration Leakage **ASTM E331 Water Penetration**

From subtle elegance to modern sophistication, the smooth, uniform appearance of NCM FW1 Flush panel is certain to please. This expertly crafted profile is ideally suited for a wide range of applications, included fascias, walls,

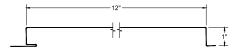




NEWCASTLE

- Available in 24ga and 22ga Galvalume, 24ga Drexlume, .032" and . 040" Aluminum
- · Panel depth: 1"
- · Widths: 12" Minimum: 20" Maximum
- · Open frame installation or solid sheeting
- Optional lancing for ventilation (24ga and .032" only)

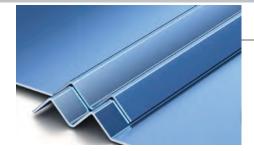






corcoran

Bermuda Horizon PROFILE



Tested in accordance with:

UL 580 Wind Uplift (Class 90)

UL 2218 Class 4 Hail Impact

UL 263 Fire Certification

UL 790 Class A Fire Rating

UL Environmental – SRI Third-Party Verified

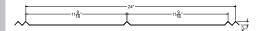
Miami-Dade County Approved

Texas Dept. of Insurance Approved

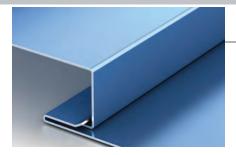
Florida Building Code Approved

Featuring an authentic "Key West" aesthetic, this traditional roof system is a longtime favorite for its functionality and style. The generous 24" panel span, %8" rib height and exposed fastener design together achieve an attractive finish that will stand up strong to harsh weather year after year.

- Available in 26ga and 24ga Drexlume in select colors
- Can be installed over plywood substrate
- Minimum slope: 2:12









Simplistic beauty is defined by our Bermuda Horizon profile. This horizontal roof and wall panel system features a 12" exposure and a dramatic shadow line that perfectly conveys the welcoming ambiance of Bermudastyle architecture. The shingle lapped interlocking seams not only provide aesthetic appeal, they deliver superior water-resistance on walls or roof applications with a slope as low as 4:12. Bermuda Horizon can be installed over vertical framing, thus eliminating the need for additional hat channel framing.

- Available in 24ga and 22ga
 Galvalume, 24ga Drexlume, .032" and .040" Aluminum, and 16 oz and 20 oz
 Copper, and 16 oz
 lead-coated Copper
- Seam heights: 1" or 1-1/2"
- Width: 12"
- Factory made
- Can be installed over solid substrate or vertical framing; underlayment required
- Minimum slope 4:12



NEW CASTLE UNDERLAYMENT - HIGH-TEMP AND SYNTHETIC

Weather Tightness Warranty Approved!



Best-in-class New Castle ice and water underlayment protects the roof structure from water seepage caused by ice dams and wind-driven rain. Designed specifically for high-temperature applications of metal roof installations, it will resist temperatures up to 250°F without degradation of the adhesive, and self-seals around roofing nails, screws and clips used to install the primary roofing system. This high-tensile strength underlayment is a 40 mil SBS modified bitumen with a UV-resistant. anti-slip polyethylene woven top facer and is required under all New Castle Metal roof warranted systems.

- Applications: new construction, re-roofing, all metal roofing, edges, valley, ridges and critical areas
- Self-adhesive; split-release film provides easier, faster installation
- · Skid resistant during installation
- Exposed rubberized asphalt bead along the membrane edge ensures watertightness of lap seams
- UL Classified
- ICC-ES ESR #2206
- 2009 International Building Code
- State of Florida Approved
 Product# FL16342.1

Physical Properties:

Surface: white film
Thickness: 40 mils
Roll size 3' x 66.7'
Coverage: 177 sq ft
Shipping weight: 39 lbs
Rolls per pallet: 36

Performance Properties	Test Method	Typical Values
Tensile Strength	ASTM D412	550 psi
Permeance	ASTM E96	0.01 perms
Low Temperature Flexibility	ASTM D1970	no cracking or delamination
Peel Adhesion	ASTM D903	4 lbs/inch width

Test Data is based on average results and should not be considered or interpreted as minimum or maximum values. Values are typical data and not limiting.



New Castle Synthetic roof underlayment is among the safest, strongest and best-performing roof underlayments on the market. Woven of heavyweight polymer fabric, New Castle Synthetic offers superior strength and durability, water resistance, a wrinkle-free surface. and resistance to UV-breakdown. The textured woven fabric surface provides dynamic traction and is ideal for steep slopes in a variety of weather conditions. New Castle Synthetic is rated for commercial and residential applications using \%" roofing nails and is an ideal roof underlayment for asphalt shingles, metal, tile, slate and a variety of other sloped roofing materials.

- 35-Year Warranty
- Up to 6 month UV exposure
- Use ¾" roofing nails

Physical Properties:

7
Surface: light gray film
Thickness: 12 mils
Roll size: 4' x 250'
Coverage: 931 sq ft
Shipping weight: 32 lbs
Rolls per pallet: 36

Code and Standards:

ASTM D226, Type II	
ICC-ES AC 207	
CSA A 123.3	
ASTM E108/UL790 Assembly – Class	Α
CSA A 220.1	

Performance Properties	Test Method	Typical Values
Tensile Strength	ASTM D146-04 (lb/in)	MD113 CD100
Tear Resistance	ASTM D1922-00 (g)	MD >3200
		CD > 3200
Rupture Resistance	ASTM D346202	87
Bench Puncture	ICC AC-08	Pass
Long Term Sag	ICC AC-08	Pass
Liquid Water Transmission	ASTM D4869-02	Pass
Ultra Violet Aging	ICC AC 207	Pass
Accelerated Aging	ICC AC 207	Pass

ANSI/SPRI/FM 4435 ES-1 PERIMETER EDGE TO EDGE SYSTEMS

ANSI/SPRI/FM 4435 ES-1

Compliant and Certified

From the highest wind resistance to lighter duty, our perimeter systems have you covered. New Castle Metal perimeter edge-to-edge and ES-1 compliant systems are built weather-tough with premium quality, heavy-gauge materials and a fully supporting anchor chair that will meet the strictest of standards. The anchor chair is manufactured in continuous lengths or segmented, depending on profile, and pre-punched, taking the guesswork out of cleat spacing. This unique design offers a markedly superior installation that's quick and easy. Our line of edge metal is precision-engineered to provide maximum wind resistance and eliminate roof edge blow off.

Standard sizes and options include;

- Coping widths of 4" to 32"
- Face dimensions of 3" to 11.5"
- · Radius Edge
- · Riveted or Welded Miters
- Custom color options to match wall design
- Extruded cleat availability in various sizes.
- Painted cover offered in 22ga, 24ga steel, .032, .040, .050
 & .063 aluminum.





We offer a full line of edge

terminations, including coping

snap-on fascias, snap-on gravel

stops and standard gravel stops. Suitable for most roof systems

(single ply, modified bitumen or

BUR Flat Roof Systems).

For complete information about warranty options, please call your New Castle Metal representative.

METAL ROOFING, WALL, AND PERIMETER EDGE FINISHES



STANDARD METALS OPTIONS

Flat Stock				
TYPE	AVAILABLE SIZES	THICKNESS/GAUGE/WEIGHT	STOCK FINISHES	SPECIAL ORDER OPTIONS
Rhienzinc	39.4" x 10'	7mm	Graphite Gray & Rheinzinc	8mm thickness
Copper Sheets	3' x 8' & 3' x 10'	16oz & 20oz	X	4' x 8' & 4' x 10'
Lead Coated Copper	3' x 8' & 3' x 10'	16oz & 20oz	X	
Freedom Gray	3' x 8' & 3' x 10'	16oz & 20oz	X	
UnaClad Kynar	4' x 8' & 4' x 10'	.032; .040; .050	Almond; Mansard Brown Sierra Tan; Slate Gray Stone White; Terracotta Bone White; Dark Bronze Cityscape	Ask for color chart to see additional colors and thicknesses/ substrates available.
PAC-clad Kynar	4' x 8' & 4' x 10'	.032; .040; .050	Bone White; Almond Dark Bronze ; Mansard Brown Sierra Tan; Stone White	Ask for color chart to see additional colors and thicknesses/ substrates available.
New Castle Kynar	4' × 10'	.032; .040	Bone White; Sierra Tan Sandstone; Regal White Dark Bronze; Medium Bronze Bright Silver Pre-Weathered Galvalumeand Forest Green; Charcoal Gray Dove Gray; Metallic Copper Matte Black; Slate Gray	Ask for color chart to see additional colors thicknesses/ substrates available.
Painted Aluminum Baked on Enamel)	4' x 8' & 4' x 10'	.025; .032; .040; .050	Bronze over White; Matte Black over White White over White	
Mill Finish Aluminum	4' x 8' & 4' x 10'	.025; .032; .040; .050	X	
Anodized Aluminum	4' x 8' & 4' x 10'	.032; .040; .050	Clear Anodized	Colored Anodized
Galvanized Steel	4' x 8' & 4' x 10'	26ga; 24ga; 22ga; 18ga	X	
Stainless Steel	4' x 8' & 4' x 10'	26ga; 24ga; 22ga	X	304-2b; Polished
Rolled Metal				
TYPE	AVAILABLE SIZES	THICKNESS/GAUGE/WEIGHT	STOCK FINISHES	SPECIAL ORDER OPTIONS
Copper	18" ; 20"; 24"	16oz & 20oz	X	
_ead Coated Copper	18" & 20"	16oz	X	20oz and custom sizes
_ead sheet/rolls	Various sizes	2.5lbs; 3lbs; 4lbs	X	
New Castle Kynar	20"	.032	See colors listed above	Ask for color chart to see additional colors and thicknesses/ substrates available
TPO/PVC Coated Met	al			
TYPE	AVAILABLE SIZES	THICKNESS/GAUGE/WEIGHT	STOCK FINISHES	SPECIAL ORDER OPTIONS
Firestone; Johns Manville; GAF; Sarnafil	4' x 10'	24ga	White & Gray	

METALS, FINISHES AND CONSIDERATIONS



FINISHES. The resin system in New Castle Metal high-performance finish Fluropon® is made up of 70% Kynar 500® or Hylar 5000® resin. The carbon/fluorine bond, which gives Kynar 500® or Hylar 5000® resinbased coatings their stubborn resistance to chalking and erosion as well as their resistance to harsh airborne industrial and atmospheric pollutants, is one of the strongest chemical bonds on the market.

New Castle Metal paint finishes include:

Fluropon®

New Castle Metal standard colors are produced by Sherwin Williams Industrial Coil Coating and contain a minimum of 70% PVDF base resin with ceramic pigments. All colors are formulated to ensure consistent appearance and quality. The Fluropon® system is applied over Sherwin Williams Industrial Coil Coating polyester primer in a minimum thickness of 0.2 mil and can be applied to either Galvalume HD Galvanized or Aluminum substrates. All topcoats are a minimum of 0.8 mil of the Fluropon® color choice. The reverse side is primer and a washcoat of 0.5 mil total dry film thickness.

Drexlume³

New Castle Metal offers a mill-finished Galvalume with a two-sided, clear acrylic finish that simultaneously aids roll forming without the use of lubricants and eliminates unsightly handprints or stains resulting from handling and storage. The acrylic finish dissolves naturally over a period of time, and when left as it is, allows for natural and even weathering.

MATERIAL. Aluminum is produced to meet ASTM B209 and is offered in 3105 or 3003 alloys. Our Galvalume is produced to meet ASTM A792. These products are tension leveled to produce the flattest product possible. Oil canning is an inherent trait of thin gauge metals. Copper, Falzinc, stainless steel, and terne-coated stainless are also available. Please contact us for more information.

ACCESSORIES. All New Castle Metal trims, clips, and custom-formed products are produced with CNC accuracy. This ensures that the lengths, angles, and dimensions are produced to exact specification. If you choose to fabricate your own trims, a full line of flat sheets is in stock. A flat sheet size of 48" x 120" with vinyl protection is standard. A wide range of clips is stocked to ensure proper attachment for your specific requirements.

FIELD FABRICATION. New Castle Metal is one of the few manufacturers capable of providing both factory and field fabrication of its complete line of products. Field fabrication will produce a quality product as good or better than one manufactured in the plant. When panel lengths exceed 50', the chances of damage during shipping and rooftop staging are great. Site fabrication eliminates product damage, shortages, and excess waste. All panels can be cut to exact field conditions and do not require extensive crating. Site fabrication will also allow for precise sizing of rake panels, which ensures a watertight condition. Most importantly, site fabrication eliminates all end laps, the number one cause of metal roof leaks. New Castle

Metals recommends, where possible, that no end laps occur. With field fabrication, panel lengths up to 200' are possible.

WARRANTY. High-performance metal roofing products are available in Galvalume and Aluminum. Be sure to ask about our Gold Standard Warranty.

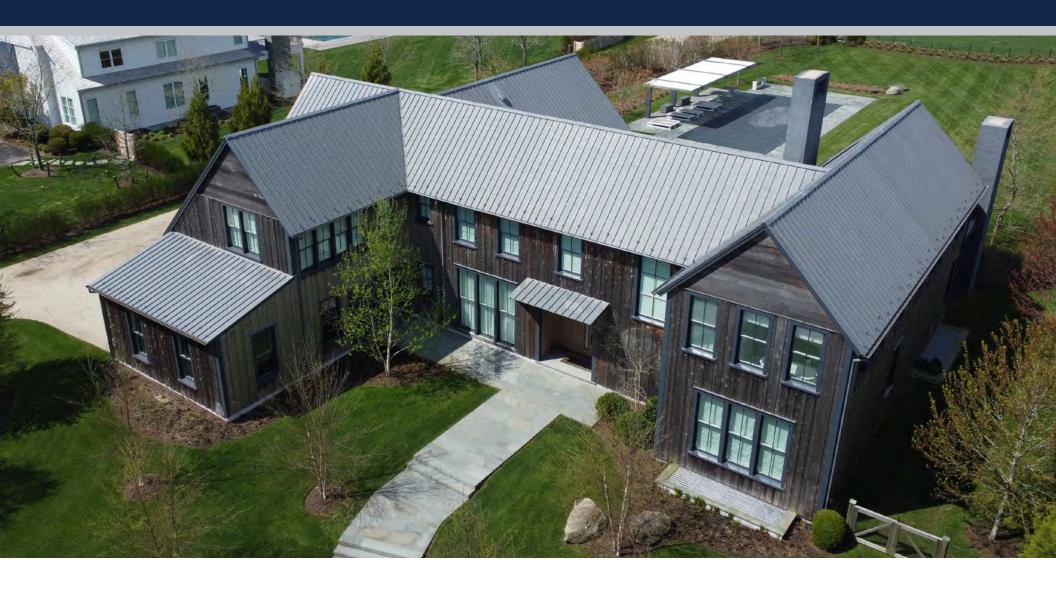
- 35-year non-prorated PVDF paint warranty with a 20-year Galvalume Substrate Warranty
- 35-year non-prorated PVDF paint and 25year Aluminum Substrate Warranty
- 20-year non-prorated International PVDF Paint Warranty
- 25-year non-prorated Drexlume (Acrylic Coated Galvalume) Warranty

TESTING AND RATINGS. Many New
Castle Metal products are rated for
water and air infiltration. Load spans and
engineering reports and test certifications
can be verified by registered engineers.
New Castle Metal system assemblies
and construction details vary and not all
assemblies have been tested. Please
contact our technical staff to answer your
specific questions concerning your project
or our products.

CONSIDERATIONS. NCM Cap Seam, NCM 100NS and NCM Snap-On Batten panels must be installed with a minimum of 3:12 slope over solid substrate with New Castle underlayment. NCM 175S and NCM 550S panels are limited to 3:12 slope, but can be installed over open framing. For lower slope applications, the NCM 150SS and NCM 200S are the

choice. Panels longer than 30' need to utilize sliding or non-restricting clips.
Contact our technical department for proper clip spacing. The use of New
Castle, a self-adhering, rubberized asphalt sheet membrane, will allow for a watertight installation, particularly in low slope and curved applications. New
Castle HT Underlayments should also be considered where ice and water backup could occur, such as eaves and valleys.
When installing New Castle Metal products and accessories, refer to our architectural details to ensure proper sheet metal and roofing practices.

OIL CANNING. New Castle Metal utilizes top quality materials specifically designed for roll forming applications. Oil canning is naturally inherent in sheet metal, appearing as waviness in the flat portions of the sheet. All New Castle Metal products are tension leveled to help minimize excessive oil canning. Oil canning is not grounds for rejection. There are a few ways to help minimize this appearance, such as specifying narrower panels, utilizing stiffener ribs or striations, and ensuring the roof deck is plumb and level.





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