



Trusted Metal Solutions

Product Guide



About Carlisle Metal Products

Carlisle Metal Products is a division of Carlisle Construction Materials, a leading manufacturer of commercial construction products.

The same engineering and innovation Carlisle brought to the commercial single-ply industry is now being offered to the metal roofing industry with our unique and innovative standing seam metal program.

Our product offerings include:

- 34 engineered metal roofing assemblies – galvalume and aluminum
- Weathertight warranty programs with approved certified contractors
- Highly experienced technical and architectural services department
- Roofing underlayments and insulation
- Fasteners, clips and accessories including the CMP Kynar® Paint Pen
- Building-integrated solar roof systems
- Certified installer program
- All code approvals, including Miami-Dade NOA
- Specification substitution requests
- Timely RFQ fulfillment with pictometry available

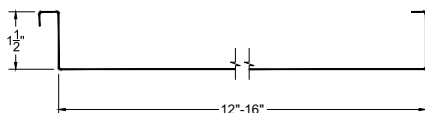
Trusted Metal Solutions

- Over 50 certified on-site manufacturers of metal roofing
- Comprehensive training and certification for manufacturers
- Flat sheets available for shop-formed trim
- Highest quality roll forming equipment
- Quality assurance program
- Quicker lead times with timely service
- Elimination of freight/packaging costs and in-transit damage



Metal Profiles

CM 150SS Profile



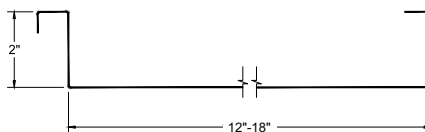
Our CM 150SS roof system will lend striking dimension to any architectural design. This versatile 1-1/2" mechanically seamed panel can be curved to a wide range of radiuses and applications – from barrel roofs to conical shapes and more. Concealed fasteners and a floating clip system reduce the effect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

- Available in 22ga Galvalume, 24ga Galvalume, 24ga Drexlume, 26ga Galvalume, .032" aluminum; and 16 oz copper and lead-coated copper
- Widths: 12" - 16"
- Factory made or field rolled to exact lengths
- Can be installed over solid substrates including plywood and metal decking with 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 E1646 Water Infiltration
TAS 100 Wind Driven Rain
ASTM E1680 Air Infiltration
ASTM E1886 Missile Impact
ASTM 2140 Static Pressure
Water Head
ASTM E1592 Uniform Static Air
Pressure Uplift
Miami-Dade County Approved
Florida Building Code Approved
Texas Department of Insurance
Approved

CM 200S Profile



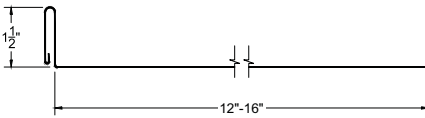
The versatility of the CM 200S roof system makes it an ideal choice for low to steep slope applications. Performance-engineered to handle heavy-duty commercial and industrial projects, this 2" mechanically seamed structural metal roof system will meet or exceed most windload and government requirements 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" - 18"
- Factory made or field rolled to exact lengths
- Can be installed over open frame steel purlins, plywood decking, and steel decking with polyiso
- Minimum slope 1/2:12
- Optional machine- or field-applied side lap sealant
- 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

CM 150SL Profile



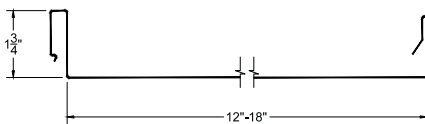
Installation ease with impeccable results makes our CM 150SL roof system a standout choice. The 1-½" Snap Lock profile and CM 150SL Clip create a continuous interlocking system that installs quickly, reducing labor costs. The concealed fastener and clip application also allow thermal expansion and contraction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

- Available in 24ga Galvalume and 24ga Drexlume
- Widths: 12" - 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)
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

CM 175S Profile



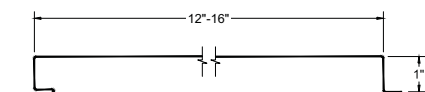
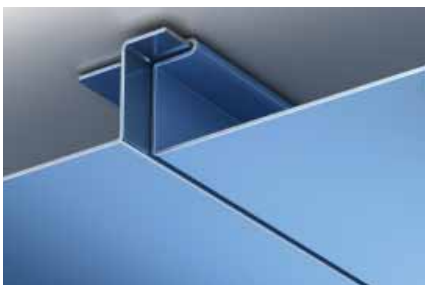
The CM 175S is distinctive for its broad width seam, impressive structural capabilities and easy Snap Lock installation. Featuring a 1-¾" seam height, this continuous interlocking engineered roof system has a concealed fastener and clip application that allows thermal movement and requires no mechanical 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" - 18"
- Factory made or site fabricated to exact lengths
- Can be installed over solid substrates, limited open frame applications, and over metal decking with polyiso
- Minimum slope 2:12
- Optional machine- or field-applied side lap sealant

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
ASTM E1592 Uniform Static Air Pressure Uplift
Miami-Dade County Approved
Florida Building Code Approved
Texas Department of Insurance Approved

CM FW1 Flush Profile



From subtle elegance to modern sophistication, the smooth, uniform appearance of CM FW1 Flush panel is certain to please. This expertly crafted profile is ideally suited for a wide range of applications, included fascias, walls, equipment screens and soffits. The concealed male and female connection achieves a distinctly superior finished look, and stiffener beads also can be used to further safeguard the flush appearance.

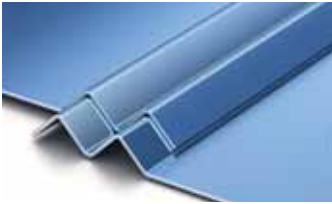
- Available in 24ga and 22ga Galvalume, 24ga Drexlume, .032" and .040" aluminum
- Panel depth: 1"
- Width: 12" - 16"
- Open frame installation or solid sheeting
- Optional lancing for ventilation (24ga and .032" only)

Tested in accordance with:

ASTM E1592 Uplift Pressure
ASTM E283 Air Filtration Leakage
ASTM E331 Water Penetration

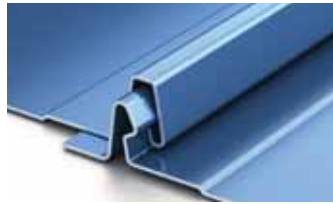
Other Available Metal Profiles (only factory formed)

CM 5V



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

CM 100NS



Features a fastener flange allowing for a quick and easy install. Ideal for steep slope applications.

CM 100SS



Features the time-tested tradition of historical standing seams.

CM 550S



Snap lock panel system provides a highly water-resistant seam, along with a lower profile.

CM Cap Seam



Features slim seams and flat pans making it easy to install with minimal waste.

CM Snap-On Batten



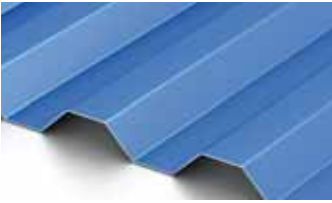
Wide battens bring the visual appeal of the past together with the ease of modern day details.

Bermuda Horizon



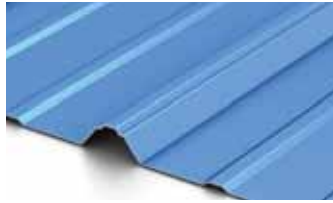
Horizontal installation and minimal depth create a quaint Bermuda style for use as a roof or wall panel.

CM 7.2



A classic design with a bold look that can be used for almost any exterior or interior use.

CM R-36



Features deep channels between the major ribs to provide ample drainage, ideal for low slope applications.

CM Corrugated



Versatile and economical with an exposed fastener panel that can be used for almost any exterior or interior use.

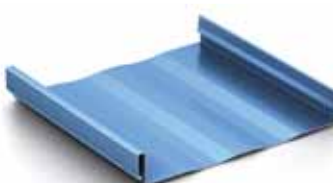


Panel Options

Flat Panel



Striations



Beads



Curved Panels

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

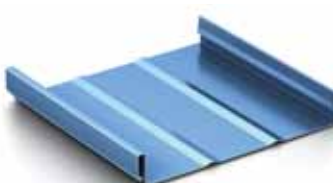
Curved panels Include:

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

Small V Ribs



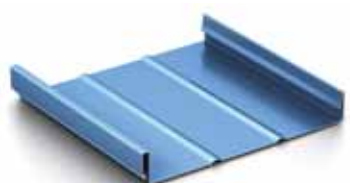
Large V Ribs



Small Pencil Ribs



Large Pencil Ribs



Carlisle Metal Products Roof Underlayments

Both WIP 300HT and WIP 403HR are high-tensile strength rubberized asphalt underlayments specifically designed to withstand temperatures up to 250°F. They are ideal for use under metal including copper, zinc, galvalume and aluminum. Available in black or white, these underlayments are skid-resistant and provide superior protection against wind-driven rain and ice dams.



WIP 300HT

- Protects the roof structure from water seepage caused by ice dams and wind-driven rains
- Resists temperatures up to 250°F without degradation of the adhesive
- Seals around roofing nails, staples and screws

WIP 403HR

- Protects the roof structure from water seepage caused by ice dams and wind-driven rains
- Resist temperatures up to 250°F without degradation of the adhesive
- Ideal for high elevation applications

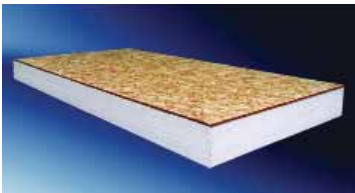
Carlisle Metal Products Insulation and Nailboards

Carlisle Metal Products insulation products are available in both closed-cell polyisocyanurate foam and EPS (expanded polystyrene). Panels can be bonded with paper or coated glass facers on both sides or on one side, with the other side laminated to OSB or plywood CDX panels to provide a nailable substrate as shown. Insulation panels are available in both 4' x 4' and 4' x 8' board sizes and thicknesses up to 4". Nailboards are available in 4' x 8' size.



HP-NB Polyiso

- A superior combination of high-insulating properties and a resilient OSB surface, ideal for high-traffic roof installations
- Higher wind uplift performance
- Composite of insulation and cover board saves handling and installation labor



InsulLam™

- No thermal drift, so the product is eligible for a 20-year thermal performance warranty
- Does not readily absorb moisture
- Recognized by the International Code Council Evaluation Service (ICC-ES) and has numerous UL and FM approvals

Carlisle Metal Products Accessories



- High-performance sealants
- High-bonding butyl tapes
- Wide variety of metal clips and fasteners
- Metal roofing tools including electric and manual seamers
- Pipe boots and other custom flashing
- Full line of single-ply membranes and accessories for hybrid installations

Metals, Finishes and Considerations

Finishes

The resin system in Carlisle Metal Products high-performance finish Trinar is made up of 70% Kynar 500® or Hylar 5000® resin. The carbon/fluorine bond, which gives Kynar 500 or Hylar 5000 resin-based 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.

Carlisle Metal Products paint finishes include:

Trinar (Fluoropolymer)

Carlisle Metal Products standard colors are produced by AkzoNobel and contain a minimum of 70% PVDF base resin with ceramic pigments. All colors are formulated to ensure consistent appearance and quality. The Trinar system is applied over AkzoNobel 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 Trinar color choice. The reverse side is primer and a washcoat of 0.5 mil total dry film thickness.

Drexlume

Carlisle Metal Products 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, Galvalume, stainless steel, and terne-coated stainless are also available. Please contact us for more information.

Accessories

All Carlisle Metal Products 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

Carlisle Metal Products 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. Carlisle Metal Products 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 offered exclusively through our DM-ARM Authorized Fabricators and Carlisle Metal Products Certified Installers:

- 35-year non-prorated PVDF paint warranty with a 25-year Galvalume Substrate Warranty
- 35-year non-prorated PVDF paint and 30-year Aluminum Substrate Warranty
- 20-year non-prorated International PVDF Paint Warranty
- 25-year non-prorated Drexlume (Acrylic Coated Galvalume) Warranty

Testing And Ratings

Many Carlisle Metal Products products are rated for water and air infiltration. Load spans and engineering reports and test certifications can be verified by registered engineers. Carlisle Metal Products 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

The CM 175S panels are limited to 2:12 slope, but can be installed over open framing. For lower slope applications, the CM 150SS and CM 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 WIP 300HT, a self-adhering, rubberized asphalt sheet membrane, will allow for a watertight installation, particularly in low slope and curved applications. WIP 300HT should also be considered where ice and water backup could occur, such as eaves and valleys. When installing Carlisle Metal Products products and accessories, refer to our architectural details to ensure proper sheet metal and roofing practices.

Oil Canning

Carlisle Metal Products 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 Carlisle Metal Products 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.



Certified Installer Program

A Carlisle Metal Products roof is the first line of defense between nature and your customer's most valuable assets and most cherished belongings. Carlisle Metal Products Roof Systems meet the most stringent building code requirements in the nation, able to withstand gale- and hurricane-force winds, hail, fire, and wind-driven rain. As architectural designs become more involved, the knowledge and skills of the installer become more important. Carlisle Metal Products has developed this Certified Installer Program to ensure the maximum performance of our products.

Warranties

Warranties are only as strong as the company that stands behind them. From materials to installation, no one offers owners more responsive and reliable warranty protection than Carlisle Metal Products. Our long history in the single-ply commercial roofing industry has given Carlisle a leadership position when it comes to performance and warranties. We are committed to the products we manufacture and sell, and just like our industry-leading single-ply Total System Warranties, Carlisle Metal Products' Weathertight Limited Warranties are the best in their class.

Paint and Substrate Warranties

- 35-Year Non Pro-rated Kynar® Paint Limited Warranty with a 25-Year Galvalume® Substrate Limited Warranty
- 35-Year Non Pro-rated Kynar® Paint Limited Warranty and 30-Year Aluminum Substrate Limited Warranty
- 20-Year Non Pro-rated International Kynar® Paint Limited Warranty
- 25-Year Non Pro-rated Drexlume™ (Acrylic Coated Galvalume®) Limited Warranty

*Please contact your Carlisle Metal Products representative when installing our products in high-salt environments.

Weathertight Limited Warranty Program

- **Weathertight limited warranties that truly protect the owner** – Carlisle Metal Products warranties are fully transferable to a future owner.
- **Weathertight limited warranties that fit your budget** – Single-Source Weathertight Warranties are available in many different options to fit your budget:
 - 5-year Weathertight Limited Warranty
 - 10-year Weathertight Limited Warranty including no dollar limit warranties
 - 15-year Weathertight Limited Warranty including no dollar limit warranties
 - 20-year Weathertight Limited Warranty including no dollar limit warranties

NOTE: Longer-term warranties are available upon request and after project review.



P.O. Box 7000 / Carlisle, PA 17013 / Phone: 800.479.6832 / Fax: 717.245.7053 / www.carlislemetalproducts.com

Carlisle is a trademark of Carlisle. InsulLam is a trademark of Insulfoam. Kynar is a registered trademark of Arkema, Inc. GALVALUME is a trademark of BIEC International Inc. Drexlume is a trademark of Drexel Metals, Inc.
REPRINT CODE: 606018 – "Carlisle Metal Products Brochure" – 09.16.14 © 2014 Carlisle.