



1. Product Name

■ MetalTech Metal Wall Panels

- Standing Seam
- Flat Lock Tile
- Sinusoidal Corrugated
- Trapezoidal Corrugated
- Reveal
- Shiplap

2. Manufacturer

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3. Product Description

Basic Use

Metal wall panels by MetalTech-USA are fabricated for interior and exterior wall cladding applications, as well as decorative wall design elements, and meet specific project requirements from a selection of architectural grade metals and a variety of finishing options.

Composition and Materials

Metal materials are available in various gauges from MetalTech-USA. Metal wall panels are manufactured to meet specific project requirements and fabricated from the following selection of materials:

- | | |
|----------------------------|-------------------|
| ■ elZinc ¹ | ■ Stainless steel |
| ■ Weathering steel | ■ Steel |
| ■ CopperPlus® ² | ■ Aluminum |
| ■ Copper | ■ Titanium |

¹ elZinc is a registered trademark of Asturiana de Laminados S.A.

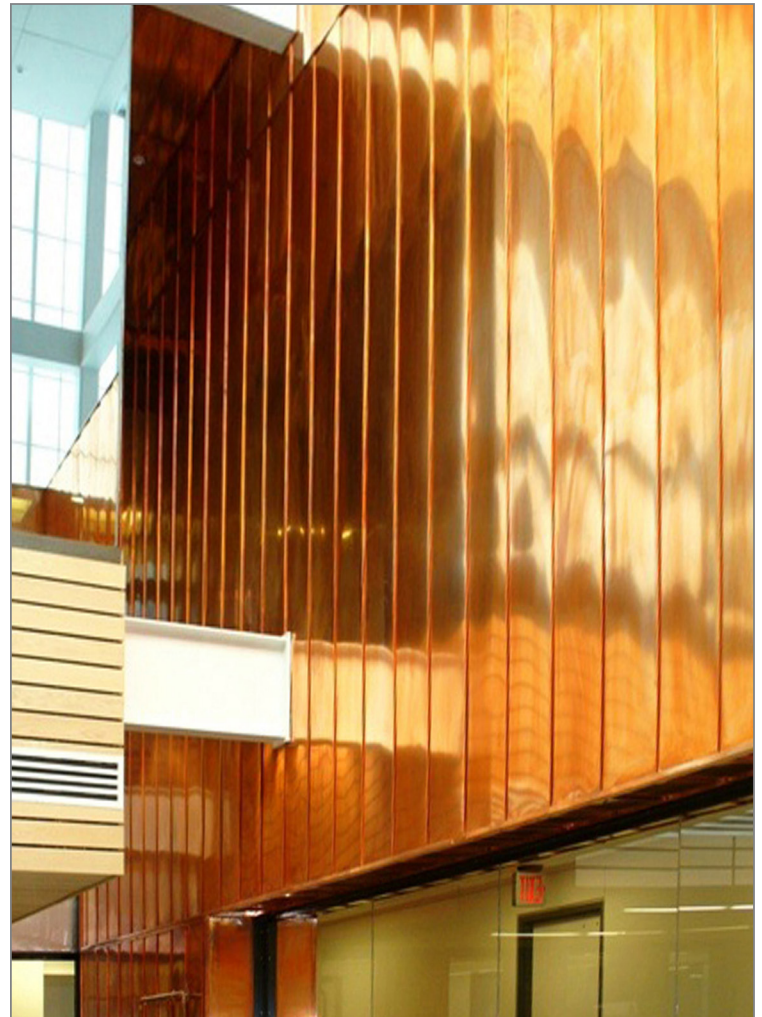
² CopperPlus, a copper-clad 403 stainless steel, is a registered trademark of Heyco Metals

Color(s), Finish(es)

Please see Table 1 for finishes. Perforated, PixArt and Prisma mechanical finishes are available on all metal types. Embossing is available with minimum quantity; please contact MetalTech-USA for more information.

Types

MetalTech-USA fabricates six types of wall panels, with each panel available in eight different materials and variety of finishes.



Standing Seam Panels

Standing Seam Panel Systems offer a variety of panel lengths and widths, making it possible to achieve even the most complicated, visionary design. The systems are manufactured with pre-profiled panels and complement both traditional and modern architectural design.

Visit www.metaltech-usa.com/standing-seam-panels.html for more information.

■ MetalTech offers four different Standing Seam Panel System profiles:

- Double lock
- Angle lock
- Snap lock
- Double angled lock
- Installed horizontally, vertically and diagonally
- Curved and tapered panels available
- Concave and convex curves produced with ease
- Consistent forming of panel edges and closing seams
- High degree of design freedom due to diverse panels sizes
- Design with distinct lines
- Concealed clip fasteners and mechanically seamed panel joints

Flat Lock Tiles

This profile, identified by flat tiles and overlapping seams, allows latitude in design capabilities by utilizing various sized tiles and manipulating the layout of the seam lines.

Visit www.metaltech-usa.com/flat-lock-tile.html for more information.

See Table 2 for dimensions.

- Installed diagonally, horizontally or vertically
- Available in four different shapes:
 - Rectangular
 - Square
 - Diamond
 - Rhomboid
- Perfect for curvilinear surfaces
- Quick and easy to install
- Factory-formed metal wall panel system with concealed fasteners

Sinusoidal Corrugate

The Sinusoidal Corrugated System is a back-ventilated curtain screen wall profile shaped in the form of waves. These systems are utilized in applications for their unique design capabilities, notably the variable exchange of light and shadow.

Visit <http://www.metaltech-usa.com/sinusoidal-corrugate1.html> for more information.

- Installed horizontally, vertically and diagonally
- Easy to install and maintain
- Wide range of available materials and colors
- Exposed or concealed fastening system available

Trapezoidal Corrugated Panels

The Trapezoidal Corrugated Systems are back-ventilated wall profiles more commonly known as the box corrugate. Trapezoidal Corrugate offers a more robust exchange of light and shadow than Sinusoidal profiles. These panels are customizable to design specifications.

Visit www.metaltech-usa.com/trapezoidal-corrugate.html for more information.

- Installed horizontally, vertically and diagonally
- Easy to install and maintain
- Unlimited perforation capabilities
- Exceptionally cost effective
- Wide range of available materials and colors
- Exposed and/or concealed fastening system

Reveal Panels

The Reveal Panel System has endless possibilities in regards to design. These systems have a variable reveal width ranging from 0–1 inch, thus providing flexibility for the designer with vertical and horizontal installation. Installation of the Reveal Panel is done from top to bottom and can be executed quickly. It can be combined horizontally and vertically.

Visit www.metaltech-usa.com/reveal-panel.html for more information.

- A 0-inch reveal panel is installed in soffits only
- Installed horizontally, diagonally or vertically
- Interlocking tongue and groove joints
- Contact manufacturer for sizes >1 inch
- Concealed fasteners
- Enhanced and accentuated facade design
- Variable face heights and width lengths for optimal design capabilities
- Wide range of available materials and colors

Shiplap Panels

The MT Shiplap Panel System is designed for high level facade projects. Buildings requiring intricate design or a staggered-like appearance benefit from this system because of its layered characteristics and shadowless joints. When exposed to light and shade, sharp contours appear because of the profile geometry of the Shiplap Panel System.

Visit www.metaltech-usa.com/shiplap-panel.html for more information.

- Installed horizontally and diagonally
- Interlocking joints
- Concealed fasteners
- Wide range of available materials and colors
- Unique cladding, reminiscent of wooden facades

Metal Wall Panel Accessories

- Metal flashing and trim
- Gutters and downspouts
- Metal furring, framing and fasteners, clips
- Drainage mat plus substrate underlayment

Metal Wall Panel Options

Metal materials are available in sheet and coil form for onsite fabrication by roll-forming or brake-forming.

Metal Wall Panel Product Limitations

Avoid contact between metals that are further apart on the galvanic scale.

To prevent corrosion, assure that rainwater runoff from copper surfaces never contacts zinc surfaces. Contact MetalTech-USA for additional questions.

4. Technical Data**Applicable Standards**

Please note not all materials and standards apply to every MetalTech-USA project. Contact MetalTech-USA for standards pertaining to your specific project.

American Architectural Manufacturers Association (AAMA)

- AAMA 61-98—Voluntary Specification for Anodized Architectural Aluminum

Table 1—Metal Wall Panel Technical Information

Material Type	Applicable Standards	Material Thickness (Weight)	Materials Warranty	Finishes	
elZinc (zinc-titanium)	ASTM B69-13	0.7 mm (24 gauge/0.028") (1.03 lb./ft. ²) 0.8 mm (22 gauge/0.032") (1.18 lb./ft. ²) 1 mm (20 gauge/0.04") (1.48 lb./ft. ²) 1.2 mm (18 gauge/0.05") (1.77 lb./ft. ²) 1.5 mm (16 gauge/0.06") (2.21 lb./ft. ²)	20 years limited	elZinc Natural® elZinc Slate® elZinc Graphite®	elZinc Rainbow® Colors Blue Black Green Brown Red Gold
Copper	ASTM B370	16 oz. (0.021") (1 lb./ft. ²) 20 oz. (0.028") (1.25 lb./ft. ²)	50 years	Mill finish Custom*	
CopperPlus (copper-clad stainless)	ASTM B506	0.016" (0.6612 lb./ft. ²) (≈ 16 oz. Copper) 0.0216" (0.8927 lb./ft. ²) (≈ 20 oz. Copper)	25 years	Mill finish Custom*	
Stainless Steel (304/316)	ASTM A240 AMS 5524 § ASME SA240 AMS 5513**	24 gauge (0.0235") (0.987 lb./ft. ²) 22 gauge (0.0293") (1.231 lb./ft. ²) 20 gauge (0.0355") (1.491 lb./ft. ²) 18 gauge (0.0480") (2.016 lb./ft. ²)	Finish warranty available	Mill finish 2B 2D	#3/#4 Polish Bright Annealed Custom*
High Strength Weathering Steel	ASTM A606, Type 4	18 gauge (0.045") (2 lb./ft. ²) 20 gauge (0.034") (1.5 lb./ft. ²) 22 gauge (0.028") (1.25 lb./ft. ²)	No warranty	Mill finish Custom*	
Aluminum (3003)	ASTM B209 (Additional industry ratings per aluminum application)	0.025" (0.356 lb./ft. ²) 0.032" (0.456 lb./ft. ²) 0.04" (0.57 lb./ft. ²) 0.05" (0.713 lb./ft. ²) 0.063" (0.898 lb./ft. ²) 0.08" (1.139 lb./ft. ²) 0.125" (1.782 lb./ft. ²)	Finish warranty available	Mill finish	Painted Custom*
Aluminum (5005)		0.04" (0.565 lb./ft. ²) 0.05" (0.706 lb./ft. ²) 0.063" (0.889 lb./ft. ²) 0.08" (1.127 lb./ft. ²) 0.125" (1.764 lb./ft. ²)		Anodized	
Titanium	ASTM B-265, Grade 2	0.4 mm (0.016") (0.376 lb./ft. ²) 0.5 mm (0.02") (0.469 lb./ft. ²) 0.6 mm (0.024") (0.562 lb./ft. ²)	100 years	Mill finish: G1 Blue Nitto #224 PVC film Custom*	
Steel	Varies per steel selected	24 gauge (0.0239") (1 lb./ft. ²) 22 gauge (0.0299") (1.25 lb./ft. ²) 20 gauge (0.0359") (1.50 lb./ft. ²) 18 gauge (0.0478") (2 lb./ft. ²)	Finish warranty available	Mill finish Painted Custom*	
* Indicates custom finishes; consult with MetalTech-USA for more information		** 304 stainless only		§ Applies to stainless 316	

Table 2—Panel Type Technical Information

Panel Type	Panel size/range (W × L × D**)	Installation Directions
Standing Seam	6–24" × 3–52' × 1" or 1½" (15–61 × 91–1585 × 2.5 or 3.8 cm)	Horizontally, diagonally, vertically
Flat Lock	6–24" × 6–120" (15–61 × 15.24–365.76 cm)	Horizontally, diagonally, vertically
Sinusoidal Corrugated	24–40½" × 4–20' × ⅞" (61–103 × 122–609 × 2.2 cm)	Horizontally, diagonally, vertically
Trapezoidal Corrugated	6–40½" × 1–20' × ⅜–6" * (15–103 × 30.48–609 × 1–15 cm)*	Horizontally, diagonally, vertically
Reveal	6–13" × 3–12' × 1" (15–33 × 91.44–365.76 × 2.5 cm)	Horizontally, diagonally, vertically
Shiplap	8⅞–13⅞" × 3–12' × 1¼" (21–33 × 91.44–365.76 × 3.2 cm)	Horizontally
*The angle of the folds is customizable		**Depends upon the material type and the thickness of the material

- AAMA 620—High Performance Organic Coatings on Coil Coated Architectural Aluminum Substrates
- AAMA 621—High Performance Organic Coatings on Coil Coated Architectural Hot Dipped Galvanized (HDG) and Zinc-Aluminum Coated Steel Substrates
- AAMA 2605—Performance Requirements and Test Procedures for Superior Performing Organic Coatings on Aluminum Extrusions and Panels

American Society of Mechanical Engineers (ASME)

- ASME SA240—Standard Specification for Chromium and Chromium-Nickel Stainless Steel Plate, Sheet and Strip for Pressure Vessels and for General Applications

American Society for Testing and Materials ASTM

- ASTM A167—Stainless and Heat-Resisting Chromium-Nickel
- ASTM A240—Standard Specification for Chromium and Chromium-Nickel Stainless Steel Plate, Sheet and Strip for Pressure Vessels
- ASTM A653/A653M-13—Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process
- ASTM A463/A463M-10—Standard Specification for Steel Sheet, Aluminum-Coated, by the Hot-Dip Process
- ASTM A1008/A1008M-13—Standard Specification for Steel, Sheet, Cold-Rolled, Carbon, Structural, High-Strength Low-Alloy, High-Strength Low-Alloy with Improved Formability, Solution Hardened and Bake Hardenable
- ASTM B32—Solder Metal
- ASTM B69—Architectural Rolled Zinc, Types 1 and 2, Standard Specification for Rolled Zinc
- ASTM B117-11—Standard Practice for Operating Salt Spray (Fog) Apparatus
- ASTM B137-95(2009)—Standard Test Method for Measurement of Coating Mass Per Unit Area on Anodically Coated Aluminum
- ASTM B209—Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate
- ASTM B265-13A—Standard Specification for Titanium and Titanium Alloy Strip, Sheet and Plate
- ASTM B370—Standard Specification for Copper Sheet and Strip for Building Construction
- ASTM B506—Specification for Copper-Clad Stainless Steel Sheet and Strip for Building Construction
- ASTM B523/B523M-12a—Standard Specification for Seamless and Welded Zirconium and Zirconium Alloy Tubes
- ASTM B680 - 80(2009)—Standard Test Method for Seal Quality of Anodic Coatings on Aluminum by Acid Dissolution
- ASTM D173—Bitumen-Saturated Cotton Fabrics Used in Roofing and Waterproofing
- ASTM D412—Vulcanized Rubber and Thermoplastic Elastomers-Tension

- ASTM D1187—Asphalt Base Emulsions for Use as Protective Coatings for Metal
- ASTM D1308-02(2013)—Standard Test Method for Effect of Household Chemicals on Clear and Pigmented Organic Finishes
- ASTM D1475-13—Standard Test Method for Density of Liquid Coatings, Inks and Related Products
- ASTM D1784—Rigid Poly (Vinyl Chloride) (PVC) Compounds and Chlorinated Poly (Vinyl Chloride) (CPVC) Compounds
- ASTM D2244 - 11—Standard Practice for Calculation of Color Tolerances and Color Differences from Instrumentally Measured Color Coordinates
- ASTM D2247-11—Standard Practice for Testing Water Resistance of Coatings in 100 % Relative Humidity
- ASTM D2369-10e1—Standard Test Method for Volatile Content of Coatings
- ASTM D2697-03(2008)—Standard Test Method for Volume Nonvolatile Matter in Clear or Pigmented Coatings
- ASTM D2794-93(2010)—Standard Test Method for Resistance of Organic Coatings to the Effects of Rapid Deformation (Impact)





- ASTM D3278-96(2011)—Standard Test Methods for Flash Point of Liquids by Small Scale Closed-Cup Apparatus
- ASTM D3359-09e2—Standard Test Methods for Measuring Adhesion by Tape Test
- ASTM D3363-05(2011)e2—Standard Test Method for Film Hardness by Pencil Test
- ASTM D3656—Insect Screening and Louver Cloth Woven from Vinyl-Coated Glass Yarns
- ASTM D4145-10—Standard Test Method for Coating Flexibility of Prepainted Sheet
- ASTM D4212-10—Standard Test Method for Viscosity by Dip-Type Viscosity Cups
- ASTM D4214-07—Standard Test Methods for Evaluating the Degree of Chalking of Exterior Paint Films
- ASTM D4585/D4585M-13—Standard Practice for Testing Water Resistance of Coatings Using Controlled Condensation
- ASTM D4586—Asphalt wall Cement, Asbestos Free
- ASTM D523—Standard Test Method for Specular Gloss
- ASTM D5402-06(2011)—Standard Practice for Assessing the Solvent Resistance of Organic Coatings Using Solvent Rubs
- ASTM D870-09—Standard Practice for Testing Water Resistance of Coatings Using Water Immersion

- ASTM D968-05(2010)—Standard Test Methods for Abrasion Resistance of Organic Coatings by Falling Abrasive
- ASTM E84-13a—Standard Test Method for Surface Burning Characteristics of Building Materials
- ASTM G87-02(2013)—Standard Practice for Conducting Moist SO₂ Tests
- ASTM G154-12a—Standard Practice for Operating Fluorescent Ultraviolet (UV) Lamp Apparatus for Exposure of Nonmetallic Materials

American National Standards Institute (ANSI/SPRI)

- ANSI ES-1—Wind Design Standard for Edge Systems Used with Low Slope Roofing Systems
- NSF/ANSI 51-2012—Food equipment materials

Florida Product Approval

- TAS 125—Standard Requirements for Metal Roofing System

Society of Automobile Engineers (SAE)

- SAE AMS5507—Steel, Corrosion And Heat-Resistant, Sheet, Strip and Plate 17Cr–13Ni–2.5Mo (316L) Solution Heat Treated
- SAE AMS 5511—Steel, Corrosion-Resistant, Sheet, Strip and Plate 19Cr - 9.5Ni (304L) Solution Heat Treated



- SAE AMS 5524—Steel, Corrosion And Heat-Resistant, Sheet, Strip And Plate 18Cr–13Ni–2.5Mo (SAE 30316) Solution Heat Treated
- SAE J1960—Accelerated Exposure of Automotive Exterior Materials Using a Controlled Irradiance Water-Cooled Xenon Arc Apparatus (Canceled: Jan 2008)

Underwriters Laboratories (UL)

- UL 580—Uplift Resistance of Wall Assemblies
- UL 1897—Standard for Uplift Tests for Wall Covering Systems

5. Installation

MetalTech-USA provides standard and appropriate preparation, installation and maintenance instructions on a per project basis to provide the most accurate and complete documentation.

6. Availability and Cost

Please contact MetalTech-USA for availability and pricing information.

7. Warranty

MetalTech-USA offers a two-year workmanship warranty on systems. Materials warranties will differ.

Panels that are properly installed on an approved project by a certified installer may be warranted for finish performance and weather-tightness to meet specific project requirements.

Complete warranty terms and conditions are available from MetalTech-USA upon request.

MetalTech-USA EcoChoice™ Promise 25 Year Limited Sealed Seam Warranty. Please contact MetalTech for warranty requirements.

8. Maintenance Instructions

Metal wall systems manufactured by MetalTech-USA are normally maintenance free; however, an annual inspection is recommended to verify proper drainage, integrity of flashing and sealants and overall condition of wall system.

MetalTech-USA will provide standard and appropriate preparation, installation and maintenance instructions on a per-project basis to provide the most accurate and complete documentation.

9. Technical Services

MetalTech-USA offers technical assistance for application issues and maintains a team of factory trained installation professionals.

Detailed information, product literature, test results, project lists, assistance preparing project specifications and arrangements for installation supervision are available upon contacting MetalTech-USA.

Project-specific engineering reports, shop drawings, tool rental/purchase and site inspections available from MetalTech.

10. Filing Systems

- CMD
- Manu-Spec®
- Additional product information is available from the manufacturer upon request ↪

