# Metal Finishes





## **Materials**

#### **Standard Wall and Ceiling Metals**

26 gauge stucco embossed Acrylume (Galvalume Plus, Galvalume)

The primary metal used for walk-in coolers by mid-continent and eastern state walk-in manufacturers. This material is a sheet of steel with a highly corrosion resistant coating of 55% aluminum, 43% zinc, and the balance silicone and iron that is applied using a continuous hot-dip coating process. A thin, hard acrylic coating is applied to improve rollformability, reduce staining and fingerprinting, and to maintain surface brightness longer after installation.

#### For more about the differences between Acrylume and Galvalume click here.

26 gauge bright G90 stucco embossed galvanized

The primary metal used for walk-in coolers by western state walk-in manufacturers. G90 designates the thickness of the hot-dipped galvanized coating on the underlying steel sheet. G90 represents 0.9 oz/ft2 as specified by ASTM Standard A653 and is equivalent to 0.45 oz/ft2 of about 0.76 mils (.00076") per side of the metal sheet. By comparison, a human hair is ~2.54 mils or more than three times as thick as the G90 coating. This thin coating is almost pure zinc and has sufficient ductility to withstand bending without damage.

26 gauge smooth Galvanized

This material is G90 galvanized steel without the stucco embossing.

.032" stucco embossed aluminum

This material is typically 3003 aluminum alloy which is a general use alloy commonly used in roofing, siding, containers, pipes, radiators, and of course walk-in coolers and freezers. It is considered a medium strength aluminum and is known for ease of bending and forming.

#### 22 gauge #4 finish 304 stainless steel

304 Stainless steel is the most common stainless steel. It has an excellent corrosion resistance as well as excellent forming and welding characteristics. It is used for a wide range of applications such as food handling and processing equipment, and architectural features.

Learn more about smooth, stucco embossed, and #4 finishes here.



#### Other Common Wall & Ceiling Metals

#### .040" aluminum

Some consultants specify this thicker aluminum to provide a walk-in with an aluminum finish that is more resistant to denting than the thinner .032" aluminum most commonly specified.

#### 26 gauge smooth bonderized (paint grip)

Bonderized steel is actually galvanized G90 that has been put through a phosphate bath and has a chromate layer applied leaving it ready to accept paint. The material has a dull gray finish and holds paint well. Moisture should be avoided prior to the application and full curing of the paint. This material scratches easily so should only be used when a paint overcoat will be applied.

#### 22 gauge smooth bonderized (paint grip)

This is the same material as the 26 gauge, just thicker. We recommend 22 gauge bonderized metal when the walk-in wall is to be tiled. The bonderized surface allows for better adhesion of the tile mortar. We recommend our integral foamed in place 3/4" thick wood backing beneath the bonderized metal in order to provide sufficient structural integrity to support the weight of the tile and mortar.

#### • Specialty stainless metal











Stainless steel is the hardest and toughest material we offer and these mechanical properties allow for a wide variety of finishes, textures, and patterns.

#### **Primary Floor Metals**

#### .063," .080," .100," .125" smooth aluminum

The aluminum we use in our floors is relatively soft which provides for a surface that is less slippery (safer) than other materials such as stainless steel and most floor tiles. The thinnest aluminum we use in our floors is .063". Many other walk-in manufacturers use thinner more damage prone .045" aluminum which is less than 50% thicker than our standard wall aluminum (.030" stucco embossed aluminum).

#### 18 and 16 gauge stainless steel

Stainless steel provides a brighter and higher end look to a walk-in floor with less slip resistance than our smooth aluminum floors.



#### • .100" aluminum diamond treadplate (DTP)

Aluminum DTP is polished and harder than our smooth aluminum floor material. We recommend DTP when a floor will see rugged use such as beer kegs. In certain jurisdictions, DTP is not acceptable by inspectors so please check with your local authorities prior to specifying DTP.

#### 16 gauge galvanized

Galvanized floors by themselves do not meet NSF sanitation requirements. They are provided as "tile-ready" floors that will have tile applied over the galvanized and an appropriate cove applied along the floor/wall interface.



### **Finishes**

#### Stucco embossed













Stucco embossed Galvalume, G90 galvanized, and aluminum are the most common materials for walk-in coolers. Stucco embossed material has a relief pattern that is made by passing mill finish metal through embossing rolls. This relief provides a surface which diffuses light reflectivity and glare resulting in a more presentable look. The embossed texture also results in a stronger more durable metal. The embossed texture varies from mill to mill. Arctic sources from multiple mills to ensure a constant and affordable supply of metal. We use embossed metal from the same supplier on a specific walk-in. However, the embossed texture may vary from walk-in to walk-in.

#### Smooth

Smooth metal may have either a mill finish or be polished. Smooth polished stainless steel is a common offering for walk-ins in higher end food service and medical applications. We also offer smooth finishes for Galvalume, G90 galvanized, and aluminum yet provide the disclaimer that these materials when smooth may have an undesirable oil-canning appearance. Oil-canning is the appearance of a series of standing waves or bumps and hollows along the length of the walk-in wall or ceiling. Oil-canning is an unavoidable and unpredictable phenomenon with these types of smooth materials.

#### #4 finish



Walk-in walls and ceilings that are stainless steel will have a #4 brushed finish. Brushing the stainless produces a distinct look with a muted luster and a pattern of fine parallel lines. The appearance is decorative without being overly reflective. The finish is created by sanding the stainless steel in one direction with a sanding belt. #4 finish stainless steel is very common in the food service industry and in building facades.

Fun Fact: The DeLorean DMC-12 time machine in the movie Back to the Future is made of #4 finish stainless steel.



#### Textured













#### **View More**

For the most discerning projects we offer deep-textured, three dimensional engineered metal. In addition to the beauty deep-texturing offers, the process also adds strength, impact resistance, and the ability to hide scratches.

#### Painted

















**View More** 

A large selection of color options are stocked by our metal suppliers for ready availability to provide you with a breathtaking walk-in.

Arctic is able to match almost any color under the rainbow. Just supply a paint sample and you will be well on your way to a walk-in that matches the décor of your prestigious project.

#### Vinyl Clad Metal













**View More** 

In addition to a wide variety of paint options, Arctic offers dozens of laminate coatings options. Laminate coatings offer a variety of textures and patterns to mimic natural materials such as wood grain, fine European leather, and polished rock.

<sup>\*</sup>Disclaimer: The pricing and availability of special metal finishes depend on volume needs. Please consult your project coordinator to get an accurate quote and current lead times.



## What is the difference between Acrylume and Galvalume?

Galvalume is a registered trademark of BIEC International. Galvalume is the trade name for a sheet steel product having a highly corrosion resistant coating of 55% aluminum, 43% zinc, and the balance silicon and iron. The coating is applied using a continuous hot-dip coating process. The metallic coating on Galvalume sheet steel combines the galvanic corrosion protection of zinc with the passivating barrier protection of aluminum. U.S. Steel, the trademark owner of Acrylume is one of the licensees with rights to use the Galvalume trademark.

Acrylume is a registered trademark of U.S. Steel for Galvalume coated with an acrylic resin that creates a thin, hard acrylic coating on the surface of the Galvalume. The acrylic coating improves rollformability without the use of oils, reduces staining during transportation and storage, reduces fingerprinting and footprinting during installation, and maintains a surface brightness longer after installation

Much of the Galvalume material produced today has an acrylic resin applied much like Acrylume. However, the U.S. Steel trademark prevents using the Acrylume trademark by others and these Galvalume + acrylic resin metal sheet products are often simply marketed as Galvalume Plus. Arctic sources metal from multiple steel mills in order to insure a constant and affordable supply. At times we source Acrylume while at other times we source Galvalume Plus with acrylic resin. For simplicity and to reduce confusion, we refer to both materials as Acrylume.













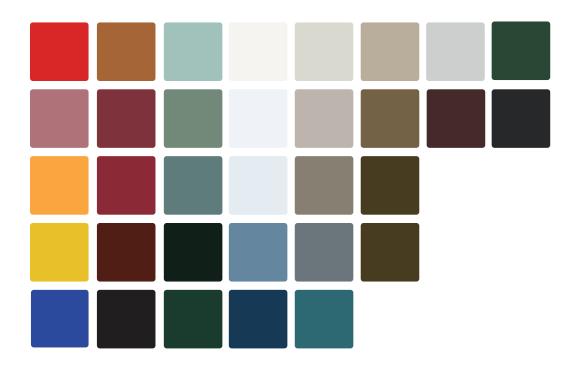




## **Textured Finishes**



## **Painted Finishes**





## Vinyl Clad Metal

#### **Standard Stock**



#### **Weather Kote Exterior**



#### **Custom Colors**





## Vinyl Clad Metal

#### **Custom Colors Continued**

