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2022

**OPERATIONS AND MAINTENANCE ITEMS FOR DIVISION 7: STANDING SEAM ROOF, METAL WALL PANELS, METAL SOFFIT PANELS, RELATED SHEET METAL FLASHINGS:  
“UNPAINTED MILL FINISH GALVALUME PLUS® MATERIALS”**

These simple maintenance steps should be followed for the Division 7 Metal Cladding system to achieve the desired long life-cycle performance:

- 1) The Gutters should be cleaned at least once a year of any obstructions including accumulated leaves, pine needles and other debris that accumulate in the gutters.
- 2) The metal cladding system should not be walked on unless absolutely necessary for required building maintenance.
- 3) The metal system should be inspected at least once a year for any accumulated debris on the roof and such debris should be removed from the roof in a careful manner as to not scratch or damage the “Galvalume Plus”® finish on the roof. This accumulated debris includes but is not limited to: leaves, pine needles, any inanimate object thrown on the roof, such as stones, sticks, rocks or other items that will scratch or damage this “Galvalume Plus”® finish.
- 4) Under no circumstances should any “post-construction” items be attached to this metal cladding system such as signage, weather vanes, any equipment of any type, mechanical equipment of any type, or other items that would come in contact with this cladding system.
- 5) Any maintenance to this metal cladding system that involves repair, replacement or painting of the original installed metal cladding system should only be performed by a qualified, certified Roofing Subcontractor. Any repairs as needed over the life of this metal cladding system should not be attempted by any other subcontractor trade other than this Roofing or Sheet Metal Subcontractor. The Owner should not attempt to make these repairs with the Owner’s personnel. The Owner should not attempt to “field-paint” this material, as this will void the Warranty on the material.
- 6) Any repairs that become necessary to the original metal cladding system should be made with the same material as the original roof system. This material is 24 Gage thick U.S Gage Steel with “Galvalume Plus”®
- 7) If the Owner desires to wash the roof and soffit areas, care must be taken in washing the building cladding so as not to damage the installed metal cladding system. Pressure washing is NOT recommended in washing a building with this cladding, as too often the pressure washing causes damage to the metal cladding from the heavy pressure of the water pushed through this apparatus. See attached brief bulletin from United States Steel Corporation on field cleaning this metal.



United States Steel Corporation

# Technical Bulletin Construction

## ACRYLUME® COATED SHEET STEEL

TBP 2012.7

### PRODUCT DESCRIPTION

ACRYLUME<sup>®1</sup> is the trade name for an advanced sheet steel product having a highly corrosion resistant coating of 55% aluminum-zinc alloy followed by a state-of-the-art polymeric passivation system. This passivation system consists of an acrylic-based polymer resin system and inorganic corrosion inhibitors.

ACRYLUME<sup>®</sup> Coated Sheet Steel was developed to allow roll-forming without the need for additional lubrication. This product provides the added benefits of greater resistance to hand and foot printing and will weather more uniformly. For highly visible applications, ACRYLUME<sup>®</sup> Coated Sheet has limitations. Since the acrylic passivation system is a thin, temporary, clear coating, differences in base metal surface could be noticeable, particularly if panels from different coils get mixed prior to shipping or at the job site. Also, the clarity of the passivation system may have some variation from one production lot to the next. If uniform appearance is critical to the end user, then a painted product would offer the best solution.



ACRYLUME<sup>®</sup> Sheet can be roll-formed without use of oil

### PRODUCT ATTRIBUTES

ACRYLUME<sup>®</sup> Sheet Steel takes the superior performance attributes of GALVALUME<sup>®2</sup> Coated Sheet Steel and combines them with the additional benefits provided by the acrylic passivation system. A few of these additional benefits include:

#### Increased Resistance to Hand and/or Foot Marking

The barrier protection of the acrylic coating significantly reduces the hand and foot marking, or "fingerprinting," that can occur during installation. The acrylic resin system blocks the oils from the installer's hands from reacting with the surface of the metallic coating, resulting in a more aesthetically acceptable panel surface.

<sup>1</sup> ACRYLUME<sup>®</sup> is a registered trademark of United States Steel Corporation

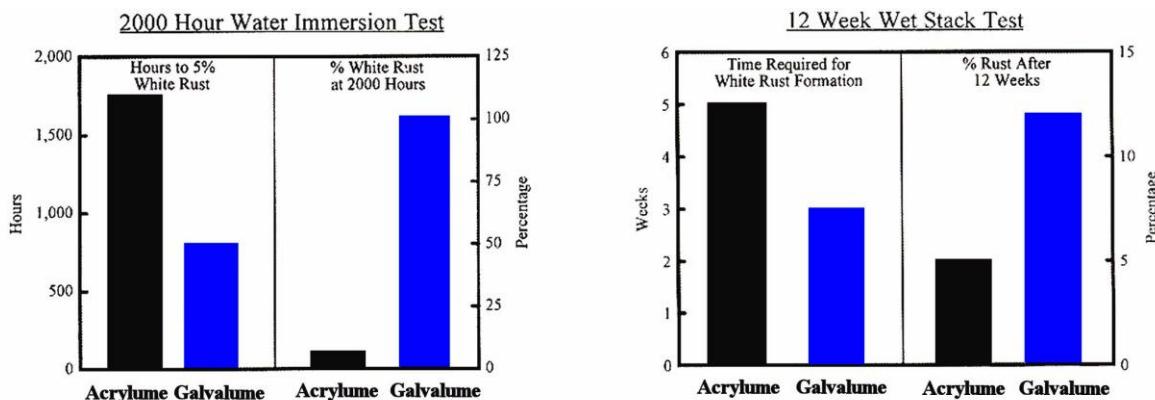
<sup>2</sup> GALVALUME<sup>®</sup> is an internationally registered trademark of BIEC International, Inc. and some of its licensed producers

## Increased Formability

GALVALUME® Coated Sheet Steel has been traditionally produced with a mill-applied vanishing oil, especially for bare applications. The vanishing oil furnished some transit corrosion protection, but its main purpose was to provide lubricity for roll forming operations. For difficult forming applications, like standing seam roofing (SSR), additional oil was often needed to successfully manufacture the panel. However, ACRYLUME® Coated Sheet Steel has been specifically designed to eliminate the need for oiling at the mill or at the roll former. ACRYLUME® Coated Sheet Steel has been successfully roll formed on some of the toughest SSR profiles in the industry without the need for any additional lubrication.

## Increased Corrosion Resistance

The combination of the acrylic-based polymer resin system and the inorganic corrosion inhibitor provide ACRYLUME® Coated Sheet Steel with superior corrosion resistance in both transit corrosion and differential weathering after panel installation. The barrier properties of the passivation system provide increased protection during shipment and construction. The acrylic based coating is very thin and may be weathered away over time.



## ACRYLUME® COATED SHEET STEEL - FREQUENTLY ASKED QUESTIONS

- **Does ACRYLUME® Coated Sheet Steel have a warranty?**

ACRYLUME® Coated Sheet Steel is covered by the same warranty that currently exists for GALVALUME® Coated Sheet Steel.

- **Is ACRYLUME® Coated Sheet Steel incompatible with any other building materials?**

ACRYLUME® Coated Sheet Steel is incompatible with a few common building materials, which include contact with lead, graphite, copper and treated or wet lumber.

- **What are the frictional characteristics of ACRYLUME® Coated Sheet Steel?**

The coefficient of friction of ACRYLUME® Coated Sheet Steel is similar to that of our prepainted GALVALUME® Coated Sheet Steel and galvanized products. The same precautions should therefore be taken during erection as are taken with other prepainted products.

- **How Should ACRYLUME® Coated Sheet Steel be cleaned after project completion?**

ACRYLUME® Coated Sheet Steel is best cleaned by using water or a mild, non-abrasive cleaning solution with water. It should not be cleaned with industrial-type solvents.

- **What are the operational advantages for the use of ACRYLUME® Coated Sheet?**

ACRYLUME® Coated Sheet Steel is designed to be roll-formable without additional lubricating oil. This provides a cleaner roll forming operation. Our customers have noted that it is possible to transition from roll-forming ACRYLUME® Coated Sheet Steel, to roll-forming prepainted products on the same roll former, without the necessity of extensive clean-up of the roll-forming dies, thus providing productivity advantages.

### **DISCLAIMER**

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