

GALVALUME PLUS CONDENSED SPECIFICATIONS

Acrylic Coated Galvalume Sheet Steel

PRODUCT DESCRIPTION

Acrylic Coated Galvalume Sheet Steel is U. S. Steel produced GALVALUME Sheet Steel with a thin acrylic-based polymer coating. Acrylic Coated Galvalume Sheet Steel incorporates a tough and durable protective surface film that assists in roll forming of the sheet and imparts lasting long-term corrosion protection to the material. However, the acrylic is extremely thin (approximately 1 micrometer or 1/25 of a mil) and can be damaged by improper handling. Acrylic Coated Galvalume Sheet Steel is the 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.

Acrylic Coated Galvalume 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. 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.

PRODUCT ATTRIBUTES

Increased Formability

Acrylic Coated Galvalume Sheet Steel has been specifically designed to eliminate the need for oiling at the roll former. Acrylic Coated Galvalume Sheet Steel has been successfully roll formed on some of the toughest 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 Acrylic Coated Galvalume 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.

STORAGE AND HANDLING

Conditions that have a negative impact on the Acrylic Coated Galvalume Sheet Steel include:

- Marine atmospheres with constant spraying of salt or fresh water.
- Fallout of corrosive materials including, but not limited to, chemicals, fumes, ash, cement dust, and animal wastes.
- Water runoff from lead or copper articles or metallic contact with lead or copper.
- Corrosive fumes or condensates generated or releases within the building.

Situations that may affect the long-term corrosion resistance of the acrylic-coated sheet include:

- Chemical or mechanical damage of the acrylic or metallic coating during shipment, handling, fabrication, or erection.
- Failure to provide free drainage of water including condensation.
- Failure to remove debris from the surface of the material.
- Contact with green or wet lumber.
- Presence of damp or wet insulation materials.

Other issues to consider include material treatment at the roll former and job site:

- Coils must be used within 90 days of receipt at the buyer's plant.
- During storage, the coils must be kept in a dry, temperature-controlled environment.
- Roll forming should be done without the addition of oil- or water-based lubricants.
- During storage in bundle form the material should be kept in a dry and temperature controlled environment.
- During shipment, the bundles must be covered to protect the coils from any contact with moisture.

Acrylic coatings do provide many benefits over traditional chemically treated sheet steel products, but are not impervious to damage. Improper storage and handling can have a negative impact on the excellent corrosion resistance of these coatings.

More Detailed Information Available Upon Request