

DOFASCO

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DOFASCO GALVALUME STEEL

WHAT IS GALVALUME STEEL SHEET ?

The Coating Chemistry - the Galvalume™ coating, which is applied by the continuous hot-dip process, is an alloy consisting of approximately 55% aluminum, 43.4% zinc and 1.6% silicon by weight.

Properties - Galvalume™ steel sheet combines the barrier protection of aluminum-coated (aluminized) and zinc-coated (galvanized). The aluminum/zinc coating has barrier corrosion resistance similar to aluminum-coated steel. It also has good bare edge or scratch galvanic protection and forming qualities similar to continuously annealed Commercial Quality Galvanized.

Double Sided Protection - since Galvalume is produced by the hot-dip process, similar to Galvanize, both top and bottom surfaces are equally coated and protected.

This allows tubing (and other applications) to be protected on the inside and outside of the tube by the proven and durable Galvalume™ coating.

Appearance - the appearance of Galvalume coating is quite distinctive. Its smooth, flat and fine satiny spangle and a silvery metallic appearance make it attractive in unpainted applications.

CORROSION RESISTANCE OF GALVALUME COATINGS

Galvalume steel sheet, by virtue of its combined protection of aluminum and zinc, has at least twice the service life, in most atmospheric environments, of conventional galvanized with the same coating thickness. This improved performance has been proven in long-term natural exposure tests performed in severe marine, marine, industrial and rural atmospheres in North America and worldwide.

Galvalume Steel Versus Galvanized Steel – Exposure Tests

In these series of exposure tests performed over a thirteen-year period by several companies including Dofasco, Galvalume steel was found to outlast G90 galvanized by:

- . Four times in exposure tests in a severe marine environment
- . Twice as long in a less severe marine location
- . Six times longer in industrial environments
- . Three times longer in rural situations

Galvalume Steel Versus Galvanized Steel - Salt Spray (ASTM B117)

(Comparison with same coating thickness)

Product	Number hours to red rust
Galvalume AZ50, .50 oz/sq. ft. minimum (total both sides) Typical coating thickness .0008"/side	Typical > 2700 hrs
Galvanize G90, .90 oz/sq. ft. minimum (total both sides) Typical coating thickness .0008"/side	Typical 500 hrs

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