



## **What is a G90 Galvanized Frame?**

### 1. **How does galvanizing protect steel from corrosion?**

Zinc metal used in the galvanizing process provides an impervious barrier between the steel substrate and corrosive elements in the atmosphere. It does not allow moisture and corrosive chlorides and sulfides to attack the steel. Zinc is more importantly anodic to steel - meaning it will corrode before the steel, until the zinc is entirely consumed.

- Our islands have been in use in every location in the United States for 10 years and there has not been one structural failure in that time.

### 2. **What is a G90 or A60 coating?**

G90 is a grade of galvanized sheet produced to ASTM A653. It has 0.90 oz/sq. ft. of zinc overall or 0.45 oz/sq. ft. per side. A60 is also a grade, has 0.30 oz/sq. ft. per side, and has been annealed after galvanizing to produce a surface that promotes good adhesion of paint.

- Our uses only G90 product. This is recommended when used outdoors or in a marine environment. 33% more zinc is applied to each piece used versus an A60 coating. Most if not all galvanized framework purchased at a home improvement center is A60 or below.

### 3. **Is a salt spray test in a laboratory appropriate to estimate the corrosion rate of zinc coated steel?**

In order for zinc to develop its protective patina of zinc carbonate that is very stable and non-reactive, it requires a wetting and drying cycle like that produced by nature. Salt spray tests keep the zinc wet and essentially wash the zinc corrosion products off as they develop, inflating the corrosion rate of zinc. This lab test is not reflective of real-world performance of zinc coatings.

### 4. **Where are galvanized steel products used?**

First of all, the variety of things galvanized is broad. Structural steel (angles, channels, wide-flange beams, I-beams, H-beams), grating, expanded metal, corrugated sheets, wire, cables, plate, castings, tubing, pipe, bolts & nuts. The industries that utilized hot-dip galvanized steel range from bridge & highway (reinforcing steel for decks and column concrete, girders, stringers, light and signposts, guardrail, fencing), water & wastewater treatment plants (walkway grating/expanded metal, handrails) architectural (facades, exposed structural steel, lentils), parking garages (reinforcing steel for concrete decks, exposed structural steel columns and barriers), pulp & paper plants (structural steel, walkways, handrail), OEMs (motor housings, electrical cabinets, frames, heat exchanger coils), electrical utilities (transmission towers, distribution poles, substations, wind turbine poles), communication (cell towers), rail transportation (poles, switchgear, miscellaneous hardware), chemical/petro-chemical (pipeline hardware, manufacturing buildings, storage tanks, walkways), recreation (boat trailers, stadiums, arenas, racetracks), and many more.

- The OutdoorGreatroom Company's skeletal framework is comprised of a unique stud and track combination that is fastened together with a pneumatic rivet gun. The CNC machinery used allows us to engineer and make changes when needed before the product is in production.