

# 6 QUESTIONS TO ASK YOUR METAL SUPPLIER.

## 1

### WHAT SUBSTRATE DO YOU USE?

Galvalume  Galvanized

### IF GALVANIZED, WHAT GRADE?

G100  G90  G60  Other



The substrate is the rust-inhibitor coating that is covering the steel but under the paint. A Galvalume substrate uses a mixture of aluminum and zinc to protect against rust, whereas a galvanized substrate uses zinc. Galvalume may begin to show rust around the edges of the panel before galvanized substrate, but the rust should stop when it comes in contact with the aluminum in the substrate. A galvanized substrate will take a few years longer to show edge rust, but once the rust begins it could continue to corrode the entire panel. In non-agricultural applications, a galvalume substrate is comparable with a galvanized G90 coating and far superior to a Galvanized G60 coating. (The higher the number with galvanized, the more protective coating.) Also, Galvalume-coated panels also offer a “rust- through” warranty for 20 years, while the Galvanized-coated panel offers no such warranty.



## 2

### WHAT PAINT SYSTEM DO YOU USE?

PVDF (Kynar-based)  Siliconized Polyester  Polyester

It is important to know that the paint system is manufactured by a reputable company. Kynar offers the best protection against chalking and fading. Siliconized polyester is the most widely used paint system and it mixes silicon with the paint to protect against chalk and fade. Although a polyester paint system is becoming less used, there are still companies that use it and it will have the lowest performance of the three paint systems. Polyester paint systems are generally reserved for economy panels or secondary panels.

## 3

### WHAT IS THE THICKNESS OF YOUR PAINT?

The thicker the paint, the more protection you will have against chalking and fading. For prime material, we recommend that the primer and paint should be at least 1 millimeter thick in order to provide adequate protection. For economy and non-warranty panels, the thickness may be less.

## 4

### WHAT IS THE HARDNESS OF YOUR METAL?

80,000 psi  50,000 psi (Pounds per square inch)

Metal is made with “minimum yield strength.” This affects the performance of the sheet in regards to denting and bending. The lower the hardness, or tensile strength, the easier it is for the material to bend or dent. For optimal performance, panels should be rolled out of a minimum of grade 80 panels (Also called grade E). Trim should be bent out of Grade 50 material (trim is bent at sharper angles and should be made out of a softer material). Many manufacturers carry only one type of inventory and this leads to a either a softer panel that can show footprints, hail damage, or rock dents, or a harder trim that can crack and show rust quickly. Always ask what the “minimum” hardness is. This is the guaranteed hardness (some companies advertise a hardness that is above the guaranteed).



## 5

### WHAT IS THICKNESS OF YOUR METAL?

29 gauge and 26 gauge metals have a variety of thickness that fall into these gauge ranges. The thicker the panel, the sturdier it will be and the longer it will last. The recent trend is to offer a thinner panel to offer cheaper prices, but many reputable manufacturers still offer an optimal thickness. We recommend that Prime 29 gauge material be at least .015 thicknesses for 29 gauge and .0185 for 26 gauge. Economy or secondary panels may be less. This thickness is before paint.

## 6

### HOW LONG HAVE YOU BEEN IN BUSINESS?

With more and more metal manufacturers opening across the nation, it is becoming harder to find a manufacturer that has experience and longevity. The longer a manufacturer has been around, the better quality systems they will have established. They will also have better relationships with vendors and will be able to efficiently handle warranty claims should they arise.