## How It Works



## The Coating Used By Green American Home

At Green American Home, we manufacture our unique residential roofing systems from steel that has been coated before we receive it for processing through our stamping and rollforming operations. The metal has been coated in a carefully controlled process called roll coating (or "coil coating") while it is still in coil form. The coating process includes cleaning the metal, applying chemicals to prepare the metal for paint adhesion, and then applying the primer and baking it on followed by application of the top coat and baking it on. Some of our premium colors have additional coats for extra decoration and protection. The coatings are baked at around 500 degrees and the process occurs at about 175 feet per minute (much slower than what some companies paint at, in order to help ensure quality). To further ensure quality, we are present for about 40% of all of our coating runs. Most other metal roofing manufacturers never attend a paint run.

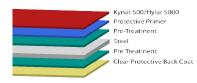




The roll coating process is overseen in North America by the National Coil Coating Association (NCCA). We use only coaters who are members of NCCA and who have agreed to abide by certain protocols and quality checks on the products they paint. As part of those quality control checks, each painted coil of metal is subjected to checks for paint adhesion, color, gloss, thickness, and hardness to ensure that it meets our specifications. As a double check, after the coated metal arrives at our manufacturing plant, each coil is checked again for these attributes before it is released to our plant floor for production. We believe that we are the only metal roofing manufacturer to do in-house double checks on quality before the coil is used in production.

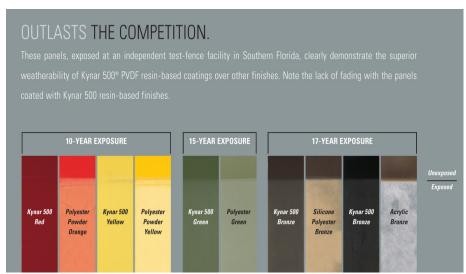
Regardless of the quality checks, the most difficult "survival tests" for the metal we use are our stamping operations that produce our quality metal roofing systems. Our products are produced on sophisticated stamping presses ranging in size up to 800 tons of capacity. We do extreme yet precise folding and bending of the metal along with continuous checks for quality, all of which add up to a worry free roof for you.



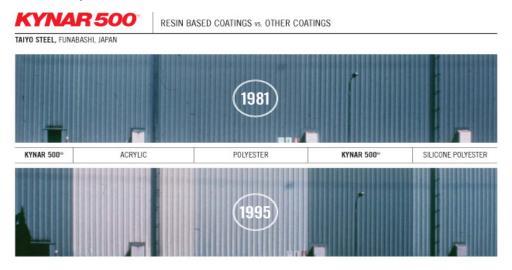


The coatings we use are also key to the quality of our products. In their purest form, coatings consist of three basic components – Solids (the pigments that give them color), Resin (which makes the paint stick to the metal and also bonds the pigments in place) and Solvents (which are evaporated off when the coatings are baked and dried).

We use only coatings which are of PVDF (polyvinylidenefluoride) chemistry. These coatings, often sold under the Kynar 500® and Hylar 5000® trade names, use a specific resin which is absolutely unmatched for its ability to withstand exposure to the elements. When resins break down, the bare metal is exposed and the pigment releases from the coating (seen as "chalking" on inferior coatings). PVDF finishes are highly resistant to this, allowing us to offer our fade and chalk warranty. The PVDF resin creates a very tight molecular bond in the finish chemically very similar to the bond in the well known Teflon™ cookware coatings.



Additionally, our coatings use only inorganic ceramic pigments which hold their color far better than less expensive organic pigments. A check with any experienced architect will reveal that PVDF chemistry coatings are the most respected building products finishes used today. A check within the coatings industry will reveal that there are no coatings even on the horizon with anticipated better performance. Most of our colors also feature pigments that have are highly reflective, allowing our "cool colors" that naturally reflect radiant heat.



Green American Home has used PVDF finished for over 20 years with great success. Our unique quality control procedures have allowed us to operate with almost no warranty claims over the past 35 years. We take extra steps wherever that we can to ensure that you receive the worry free roofing future which you want. Please Contact Green American Home for more information.

