# COATINGS – KNOW WHAT YOUR BUYING

**UNDERSTANDING METAL ROOF COATINGS:**

In the world of Metal over Metal Retrofit (MoM) coatings are our single largest competitor. Many millions of sq.ft. of metal roofs are coated each year. Whether considering one for your building or speaking to a potential customer about retrofitting their roof, inevitably the cost difference between coating the roof and a new metal roof will come up. Naturally it is impossible for a new 24 or 26 ga., 40-60 year warrantied, code compliant, metal roof to compete with a very thin application of a sprayed-on roof coating material.

Spray applied Coating

Metal over Metal Retrofit

There are some important differences to point out when comparing coating to retrofitting with a new metal roof.

**Coatings:** Did you know there are 2 different types of coatings, Standard Roof Coating and Liquid Applied Roofing. They come in a variety of materials: Elastomeric, Bituminous, Acrylic, Epoxy, Silicone and others.

**Standard Roof Coatings** are the most commonly quoted to a prospect with a metal roof issue. They are often 5-30 mils in thickness and sold as method to stop leaks by "sealing" the old roof. Nothing could be farther than the truth however. Standard coatings are intended to maintain the life of the existing roof finish by protecting it from UV exposure and increase reflectivity. Coatings are NOT intended to be a weathertight barrier.

Coatings are a thin, short-term, sacrificial barrier, designed to protect the existing metal panel finish from further deterioration and they require regular and periodic maintenance to provide that protection. Coatings can add reflectivity to the existing roof but again they need regular maintenance to keep that reflectivity.

Like all coatings, the proper cleaning and prep of the existing roof is critical to getting a good result. Proper cleaning for good adhesion and a uniform spray application are difficult to achieve. (see photo) Pinholes, blisters, edge gaps and other imperfections are common.

Generally, these products provide minimal if any value to the building owner who is most likely trying to deal with a leaking roof issue.

**Liquid (or fluid) Applied Roofing Products** are specifically design to be a water barrier between the elements and the existing metal or other roofing material. These systems are significantly thicker (30-60 mils) and significantly more expensive. They have similar cleaning, preparation and application issues as compared to standard coatings. They are typically installed in multiple layers and may have a primer, base coat, reinforcing fabric, weather coat and a top reflective coating.

The cost of these systems can be 50% - 70% the cost of a new retrofit metal roof and coatings do nothing to help meet the current building codes. They also can hide significant structural issues created by failing fasteners or improperly supported roof equipment or accessories.

Fastener caps are frequently used to cover corroded fasteners and panel defects but can also hide the structural problems of loss of diaphragm strength and panel uplift. (see photo)

In the snow regions of the country, existing metal roof panels often do not meet today's current snow drift load standards. Panels that suffer from overloading frequently deflect excessively and result in excessive accumulation of snow, water ponding and/or overloading of the purlins. These products do nothing to help this condition. When comparing coatings to a metal recovering, take the time to understand exactly what it is you are buying, what it will do and how long it will last.

A new metal roof is an investment in the future life of the building. It is the ideal platform for future photovoltaics. It complies with all current codes and has a 60 year or more service life.

Coatings are simply a short-life and costly products that do nothing to enhance the insurability or longevity of the building. Yes, a new metal roof is expensive but over the life of the building it will be significantly less than patching, repatching and dealing with the problems of a leaky and non-code compliant roof.