



Understanding Metal Roof Restoration





The secret to success with metal roof restoration with cool roof coatings is regular maintenance with a quality inspector.



Understanding Metal Roofing

Metal roofing experiences more expansion and contraction than any other roof surface.

Metal roofing also has more joints, seams, & fastener penetrations.

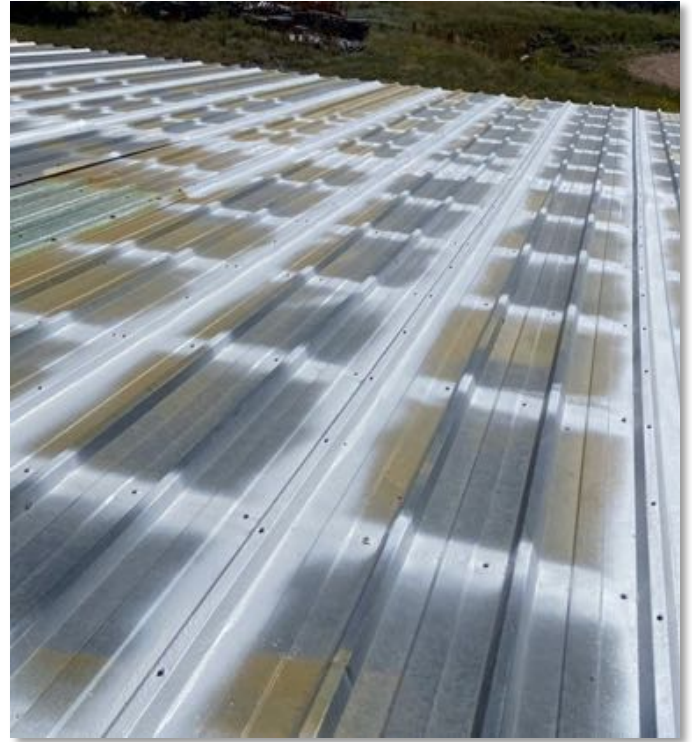
In the commercial roofing industry a roof is usually a membrane. It could be a hot asphalt roof, modified bitumen, single ply membrane, or various PVC, EPDM or TPO membranes. Most of those roofs are sealed from edge to edge to create a watertight roof.



Metal Roofing is Traditionally Made With Panel

On a low slope commercial roof, it has little opportunity to shed water like a residential paneled steep slope roof, so all its seams and openings must be made watertight. A metal roof could have 50 times more openings to address than traditional roof products with up to thousands of feet of seams.

Given the movement taking place in a metal roof, it is important to address all the proper leak points prior to top coating the roof.

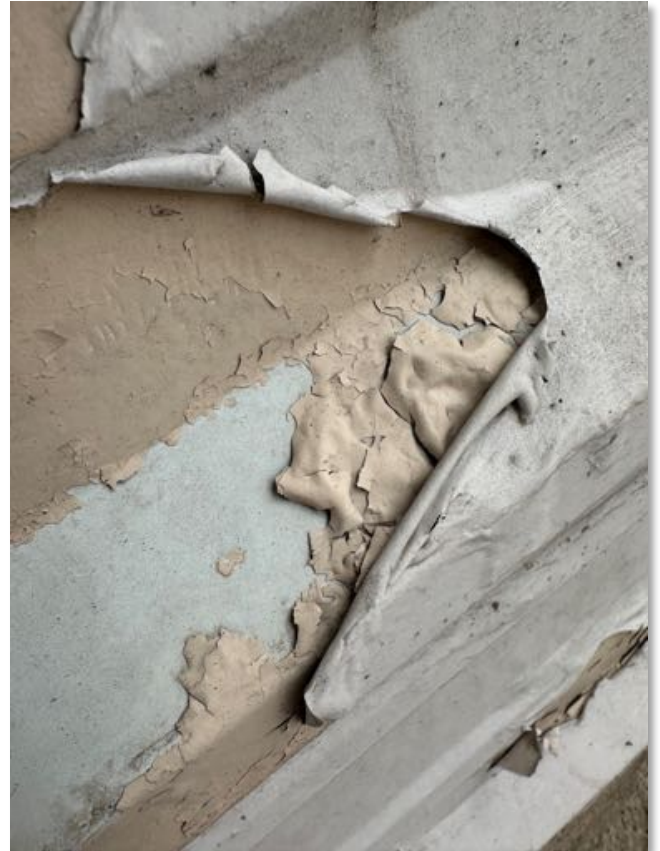


Preparing the roof properly is Key

Adhesion is also an important component to a successful installation. Metal roofing has a very non-porous surface but can easily be adhered to when the surface is properly prepared.

The first impulse is to use a primer, but with most metal roof surfaces it is not necessary. Sometimes a good cleaning is all that is needed. Make sure your contractor properly evaluates the roof surface.

It is also possible to restore over rust with proper primer and preparation.



Next comes the task of properly addressing the penetrations, seams, and joints. It is a challenging task but important to the integrity of the roof.



Ventilation and Metal Roofs

Ventilation is key to the performance of the entire roofing system, but it's a little hard to understand as well.

Metal roofs can be notorious for condensation. Condensation has become a big buzzword in the roofing industry since cool roofs came around.

When we start cooling off roofs it can bring the temperature down to where the interior vapor can condense on the underside of a membrane or the underside of a roof deck.

You can experience what you think is a roof leak but it's because there is moisture inside the building that condenses under the roof deck on the ceiling, and if it's a reflective roof, it can increase this effect.

It is best to create air movement venting inside air out of the building.



Cool Roof Only Applications

Sometimes you don't need to seal a metal roof. It's working but it's hot and you would like to get it cooler. Perhaps you just want to put an energy or reflecting coating on it. That is valid because metal conducts heat.

There is very little emissivity in the small amount of enamel coating that is on the metal roof. It doesn't give off the heat it gains, it passes it right through to the interior of the building.

We know metal conducts electricity, it also conducts heat, and a lot of things very easily. That is why a reflective white acrylic coating on a metal roof is ideal.

Finally, the best thing you can do for you metal roof is hire an experienced contractor.

Western Colloid is here to help you with your next steps.



In Summary

Western Colloid has FM Approved systems that can repair and restore your metal roof, no tear-off required.

Western Colloid's Metal Roof Restoration Solutions are:

- Money Saving – Fraction of Replacement Costs
- FM Approved – Meets & Exceeds Ratings
- Renewable 10, 15 & 20-year Warranties
- 50-year Track Record – With Proven Systems

For more information on which of our coatings are FM4470-compliant and how to best protect your roof, contact Western Colloid.





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