

# Met-A-Sil™

ROOF RESTORATION SYSTEM

## The Silicone Metal Roof Restoration Solution

The Met-A-Sil Roof Restoration System is the premium silicone solution to restore and protect commercial and industrial metal roof surfaces. Utilizing advanced Silicone 410 or optional High-Solids Silicone 412 provides the Met-A-Sil System with outstanding UV protection, reflectivity, weatherability, and performance in metal roof repair and restoration.

The Met-A-Sil System offers facility managers and property owners a variety of money-saving benefits. It does more than stop leaks—it effectively prevents rust and corrosion, reduces maintenance costs, lowers energy consumption, improves performance, and extends service life. Best of all, the Met-A-Sil System costs significantly less than a total roof replacement.

### Basic Uses

The Met-A-Sil Roof Restoration System is specifically formulated to seal, waterproof, and protect metal roofs from the harmful effects of the sun, wind, and rain. The system's main components, Silicone 410 or optional High-Solids Silicone 412, provide superior elemental protection for metal roofing surfaces. The Met-A-Sil System is designed for metal roofs affected by moderate levels of rust and corrosion with positive drainage.

### Features/Benefits

- Stops leaks and vastly improves performance
- Costs significantly less than a total roof replacement
- Substantially reduces maintenance and energy costs
- Extends service life by restoring the existing metal roof surface
- Excellent UV stability, reflectivity, weatherability, and adhesion
- Cures to form a seamless, watertight membrane
- Eliminates the onset of rust and corrosion
- Long-term warranty options available
- Minimal interruption to business

### Suitable Substrates

- Metal

#### SURFACE PREPARATION

To ensure optimal adhesion, the roof is pressure washed to remove all dirt, dust, and debris. In some cases, a primer application (1A) of Red Oxide Rust Prime 912 may be necessary.

#### SEAMS/DETAILS

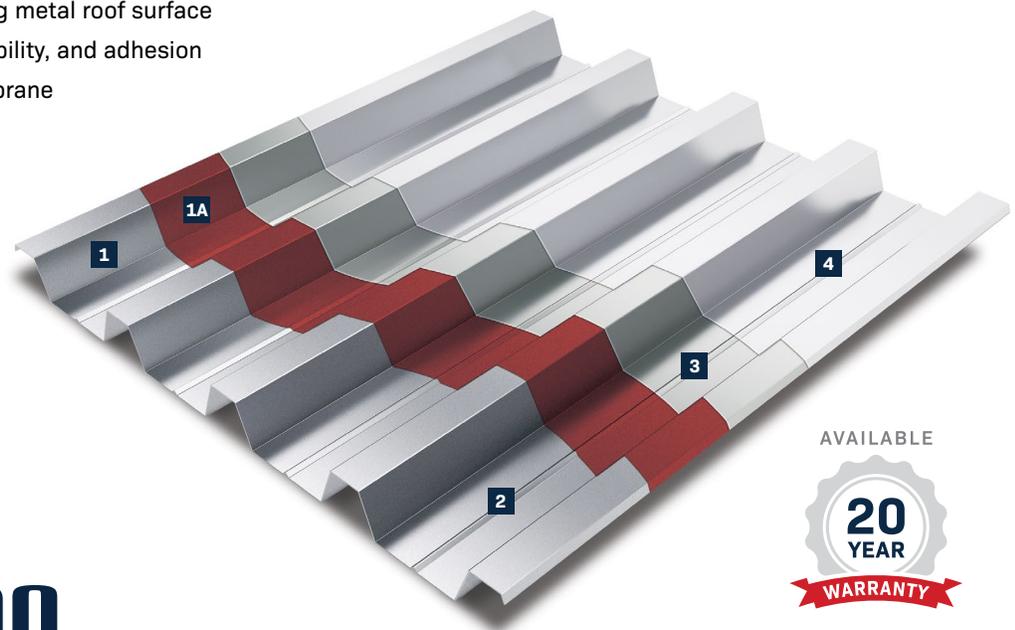
All seams and flashing details are coated with a thick “rubber-like” mastic to help withstand the expansion and contraction of the roof structure.

#### BASE COAT

A base coat Silicone 410/412 ensures uniform mil thickness and is uniquely formulated for maximum adhesion to metal roof surfaces.

#### TOP COAT

A top coat of Silicone 410/412 provides the system with unsurpassed UV stability, reflectivity, and weatherability.



AVAILABLE



# QUICK SPEC

## ADHESION TEST

To ensure a successful application, an adhesion test is recommended to ensure maximum adhesion of the Silicone 410/High-Solids Silicone 412 base coat to the metal roof substrate.

## PRE-INSPECTION

Before system application, pre-inspect the roof for necessary repairs. The inspection should include, but not be limited to:

- HVAC flashing
- Proper drainage
- Water leakage
- Fasteners
- Skylights
- Horizontal seams
- Vertical seams
- Roof penetrations
- Sign or display anchorage
- Coping and flashing

## INSTALLATION TIPS

- All roof surfaces to be coated must be properly cleaned and prepared. Pressure washing at 3000-4000 psi is recommended.
- Existing coatings must be checked for proper adhesion. Before application, any loosely adhered coating must be removed and bare surfaces must be prepared, cleaned, and checked for compatibility. In some cases, the use of a primer may be necessary.
- Silicone 410/High-Solids Silicone 412 may be applied using medium nap roller, synthetic brush, tank spreader, or airless spray equipment.
- Apply Silicone 410/High-Solids Silicone 412 base coat to clean, dry, sound surfaces free of contaminants and other foreign matter.
- Depending on temperature and humidity, allow 2-8 hours for coating applications to cure. For technical assistance, please contact your American WeatherStar Field Representative.

## RUSTY PANELS

Rust, also known as iron oxide, is formed by a chemical reaction in which iron oxidizes when in the presence of oxygen and water or excessive moisture. Iron Oxide lacks many of the structural characteristics of the original iron material and will continue to spread deeper into the material. If left alone, rust almost always result in failure of the panel. Rust primers from American WeatherStar neutralize existing rust and prevent it from advancing.

## SKYLIGHTS

Skylights that are still within their serviceable life can be renewed and restored with American WeatherStar Skylight Sealer 230 clear liquid-applied membrane.

## TECHNICAL DATA

### SILICONE 410

|                  |         |
|------------------|---------|
| Solids by Volume | 69% ± 2 |
| Elongation       | 318%    |
| Tensile Strength | 500 psi |
| Reflectivity     | 84%     |
| Emissivity       | .85     |

### HIGH-SOLIDS SILICONE 412

|                  |             |
|------------------|-------------|
| Solids by Volume | 96% ± 2     |
| Elongation       | 170 ± 25    |
| Tensile Strength | 450 ± 50    |
| Reflectivity     | Initial .87 |
| Emissivity       | Initial .89 |

### RED OXIDE RUST PRIME 912

|                  |             |
|------------------|-------------|
| Color            | Red         |
| Solids by Volume | 40% ± 2     |
| Viscosity        | 600-800 cps |
| Dry time         | 2-3 hours   |

Please see product data sheets for complete technical data.

| SUBSTRATE | TERM     | BASE COAT        | INTERMEDIATE COAT | TOP COAT         | TOTAL DFT* |
|-----------|----------|------------------|-------------------|------------------|------------|
| Metal     | 12 years | Silicone 410/412 | -                 | Silicone 410/412 | 20         |
|           | 15 years | Silicone 410/412 | -                 | Silicone 410/412 | 25         |
|           | 20 years | Silicone 410/412 | -                 | Silicone 410/412 | 30         |

\*Dry film thickness (DFT) is rounded to the nearest mil and is theoretical. Actual DFT varies depending on substrate, application technique, and waste factor.

**NOTE:** This document is intended as an overview of installation procedures only. Please refer to application guidelines for complete installation information. Published technical information is subject to change without notice. Please visit [www.americanweatherstar.com](http://www.americanweatherstar.com) or contact your Field Representative for current technical data.

