

# METAL ROOF APPLICATION GUIDE



**Liquid Rubber** has multiple options to coat and waterproof your metal roof. Depending on the needs of your project, we offer products with corrosion additives for use over light rust, excellent UV protection, a variety of colors and products with excellent solar reflectivity. Whatever your metal roof project needs, Liquid Rubber has a solution.



### **PREPARATION**

Liquid Rubber offers several options to waterproof and protect your metal roof. Available options include our MetalSafe Sealant, Color Sealant and Silicone Roof Coating. Talk to your technical representative to see which one is right for you. Our coatings offer UV resistance, solar reflectivity, superior elongation, superior waterproofing, and a weather barrier against wind, rain, snow, and ice.

## **Inspection:**

A thorough inspection of the roof will help you identify potential entry routes for water and the conditions that contribute to leaking. Look for adequate drainage, and water staining (to help you identify trouble areas). Inspect carefully around vents, rooftop units, skylights, solar panels. Look for loose screws/bolts, damaged panels, deteriorated butyl strips, deteriorated sealants, contaminants, holes, and punctures.





General Preparation & Cleaning: (Prep is 90% of the job!)

Liquid Rubber products must be installed on a clean, dry, and structurally sound surface that is free of dirt, debris, oil, grease, silicone, coal tar, mastics, and other contaminants. If silicone caulking is present, remove and replace with Liquid Rubber Sealant & Adhesive (or equivalent) Remove heavy rust/scale. Pressure washing is recommended to provide a clean bonding surface. Alternatively, use Liquid Rubber Deck and Patio Cleaner to remove tougher contaminants prior to power washing.

## Masking:

Tape-off, block off or otherwise mask areas that are not to receive coating. Remove masking while the coating is still wet.





## **DETAIL WORK**

#### Address The Seams & Details:

Tighten or replace screws as necessary. Repair damaged panels if needed. Remove silicone, if any, and replace with **Liquid Rubber Sealant & Adhesive** (or equivalent). Apply **Liquid Rubber Seam Tape** over seams, and around protrusions (e.g., vents and skylights.) Apply a "dab" of your selected sealant, or **Liquid Rubber Sealant & Adhesive**, over exposed screws and to fill gaps if present.

#### As An Alternative Method:

You can caulk the seams and around vents or skylights with **Liquid Rubber Sealant & Adhesive** (or equivalent) instead of reinforcing with Seam Tape. This will eliminate the look of the tape but comes with greater risk of cracking at the joint, seam, corner, etc. and you should be prepared to touch up the areas if necessary.

(Remember, these are the area's most likely to leak so pay special attention to the details, nobody wants to do it twice!)





## **APPLICATION**

## **Field Coat Application:**

Once preparation is complete and dry, start applying your Liquid Rubber waterproofing solution to the entire surface as described below. Do not apply in cold temperatures or if rain is expected within 24 hours. Roll, brush, or spray onto the surface. If you are applying a colored product, spot prime any rusted areas with a water-based rust primer or rust converter, prior to application. Once the primer is dry, apply your first coat of your selected waterproof sealant, evenly. Final coverage rates vary by product used and application. You can apply additional coats when the previous coat is dry to the touch, with nothing wet underneath and it is uniform in color (approx. 6-8 hours). Low temperatures and high humidity will extend curing times. Before applying the final coat, inspect for blisters, pinholes, light/thin area's, etc., and repair as necessary.

## Final Inspection:

After the final coating has dried sufficiently enough to walk on and not cause damage, inspect the area for uniformity of membrane thickness and coverage.



## **COVERAGE RATES**

#### **METALSAFE SEALANT:**

**Benefits:** Added corrosion protection - Choose for metal roofs with rust/corrosion.

#### Flat/Ponding Surface:

Apply a minimum final thickness of 1 gallon per 15 sq ft (1.4 sq/m). It should require around 4-5 heavy coats to achieve a 60-80 mil (1.5-2.0 mm) (DFT) membrane.

#### **Vertical/Sloped Surfaces:**

Apply a minimum final thickness of 1 gallon per 30 sq ft (2.8 sq/m). It should require around 3-4 heavy coats to achieve a 30 mil (0.76 mm) (DFT) membrane.

**Recoat time:** 6-8 hours. **Cure:** 24-48 hours.

#### **COLOR SEALANT:**

**Benefits:** Comes in various colors/solar reflective (varying degrees) - Choose when greater elongation is needed, and a color is desired.

#### Flat/Ponding Surface:

Apply a minimum final thickness of 1 gallon per 15 sq ft (1.4 sq/m). It should require around 4-5 heavy coats to achieve a 60-80 mil (1.5-2.0mm) (DFT) membrane.

#### **Vertical Surfaces:**

Apply a minimum final thickness of 1 gallon per 30 sq ft (2.3 sq/m). It should require around 2-3 heavy coats to achieve a 30 mil (0.76mm) (DFT) membrane.

**Recoat time:** 6-8 hours. **Cure:** 24-48 hours.

#### **SILICONE ROOF COATING:**

**Benefits:** 1 Coat application/solar reflective - Choose when you only want to do 1 coat. Apply a minimum final thickness of 1 gallon per 50-60 sq ft (4.65-5.57 sq/m). It should require 1-2 coats.

Recoat time: 1-2 hours.

Cure: 1-4 hours.

## **APPLICATION TIPS**

- Apply using a 3/8 (10mm) roller, brush or heavy duty airless paint sprayer.
- Apply to dry surface that is free of dirt, loose paint, rust, oil, grease, coal tar, silicone, or other contaminants.
- Apply when temperature is above 10°C (50°F) and rising. (Including overnight temps)
- Apply each coat in an alternate direction to the last coat to ensure even coverage.
- Apply final coat in the direction of slope for positive drainage.
- Apply next coat when dry to the touch with nothing wet underneath and is uniform in color.
- Avoid hot, direct, intense sun when applying.
- Avoid contact with solvents and solvent based cleaners, adhesives, and paints.
- · Do not allow to freeze until fully cured.
- Do not combine black products with colored Products.
- Do not apply in wet conditions (including fog and dew) or if rain is forecasted within 24 hours.
- · Wrap brushes in plastic to use for the next coat.
- Remove painters tape/blocking while coating is still wet.
- Seal gaps, cracks, etc. with Liquid Rubber Sealant & Adhesive (or equivalent).
- Initial cure(set) within 48 hours or until completely dry.
- Curing depends on temperature, humidity, and airflow.
- Make sure what you're coating is at least 5 degrees above the dew point of the environment you are coating in. (See technical specs for more details)
- For best results remove existing paints/coatings and apply directly to the substrate. (Some paints and coatings will not be compatible. Loose/flaky paint may be an indication that the existing paint/coating is not well bonded and therefore your Liquid Rubber solution may fail if applied over it instead of directly to the substrate. Oil based paints, enamels, epoxies, powder coats can be difficult to bond to. Contact your Liquid Rubber technical representative for further direction.)



## **CLEAN UP** - It turns out that cleaning up your mess is not nearly as fun as making one, so follow these rules.

- Always organize yourself and your work area to reduce the potential for spillage and other accidents.
- Set out a tarp or large piece of cardboard to keep containers and tools on, when not in use.
- · Soak up as much material as possible with rags.
- If dried, scrape off as much as you can, (with a razor/scraper/etc.) then scrub with a brush/wire brush, etc.
- Colored Products: Clean with soap and water.
- Bitumen or Silicone: Clean immediately with mineral oil/ baby oil for hands and use odorless mineral spirits for surfaces to weaken the material and an appropriate tool to mechanically remove (wire brush, grinder, etc.)
- (test odorless mineral spirits in an inconspicuous area first to ensure no discoloration)
- If dried, scrape off as much as you can. (with a razor/scraper/etc.)
- Warning: Mineral spirits can spread the stain, be sure to use sparingly, in a controlled manner, and to follow the manufacturers safety recommendations.
- Refer to the Product Safety Data Sheet for personal protective equipment recommendations.

## PHYSICAL PROPERTIES

Color (Liquid) % solids (wt) (Liquid) Adhesion to Metal Working Temperatures Various Offerings 49-92% Varies by product Cohesive Failure -40°C to + 160°C (Varies)

## **PACKAGING**

- 1000 L (264 Gal) IBC Tote
- 205 L (55 Gal.) Plastic Drum
- 18.9 L (5 Gal.) Pails
- 3.78 L (1 Gal.) Cans

## **OTHER USES**



