

Revitalizer Metal is an asphalt-based fluid-applied membrane that provides waterproofing and rustproofing over through-fastened metal roofs.

MATERIALS

The materials used in the Revitalizer metal roof restoration system include:

1. Coating: Revitalizer Metal
2. Primer: Metal Roof Primer
3. Compatible Garland repair materials
4. Fabric Reinforcement: Grip Polyester™ Soft
5. Cleaning Solution: Simple Green® Oxy Solve

APPLICATION EQUIPMENT

1. 3/8" (10 mm) shed resistant nap roller
2. Heavy duty electric power drill
3. Jiffy mixer blade (ES model)
4. Wet Mil Gauge
5. Graco 833 or equivalent if spraying

INSTALLATION

Installation of the Revitalizer system is accomplished in the following steps: repair, preparation, priming, and application.

Repair

1. All necessary field and flashing repairs must be done according to good construction practices, including replacement of all metal that is deemed unsalvageable or unsafe.
2. All metal panel fasteners must be checked and any loose fasteners must be tightened, or if necessary, replaced with oversized fasteners with neoprene washers. Missing fasteners must be replaced.
3. Stitch-fasten metal panel laps together where gaps are greater than 1/8" wide.
4. Repair gaps, holes and joints in the metal roof with appropriate patching materials.
5. Completely remove existing seam coatings, mastics and sealants.
6. Ensure skylights, scuppers, gutters, penetrations and structures are firmly secured, watertight and in good working condition.
7. Where necessary, install water deflecting crickets behind rooftop mechanical units.
8. All roof areas must promote positive drainage.

Preparation

1. Confirm local water run-off ordinances and restrictions prior to cleaning roof.
2. Carefully power wash all roof surfaces with greater than 2,000 psi pressure to remove debris, rust, scale, dirt, dust, chalking, peeling or flaking coatings, etc. Do not force water into the roof system or damage roof surfaces.
3. Wearing personal protective clothing and equipment, algae, mildew or fungus with Simple Green Oxy Solve and scrubbing with a push broom scrub brush. Rinse at least twice to be sure all cleaning agents or contaminants are completely removed to prevent adhesion issues.

4. Rust must be removed using the most rigorous method suitable for each particular job to ensure substrate is smooth and free of loose rust. Jet water blasting, sand blasting, grit blasting and/or power wire brushing is effective.
5. For optimal metal surface preparation to enhance coating adhesion, grit blasting is recommended.
6. Wipe galvanized metal surfaces clean with acetone prior to application.
7. If the roof surface becomes contaminated with dirt, dust or other contaminants at any time during the application of the Revitalizer system, then cleaning measures must be taken to restore the surface to a suitable condition.
8. Ensure roof is dry prior to product application.

Priming

Rust and oxidation must be removed by the most rigorous method suitable for the particular project. After rust or oxidation has been removed, these surfaces should be primed with Metal Roof Primer immediately after cleaning to prevent rust or oxidation from reoccurring. Metal Roof Primer should be applied at the rate of 0.5 gal./100 sq. ft. (0.21 l/m²) over the rusted areas only. Metal Roof Primer must only be used after proper and thorough preparation of the surface to be primed.

Treatment of Fasteners

Make sure all fasteners are properly tightened and neoprene washers are in place. Tighten all loose fasteners or replace with oversized fasteners as necessary. Missing fasteners must be replaced. Create a watertight seal on all fastener heads by applying a heavy dab of Garla-Flex® rubberized asphaltic caulk to the tops of all fastener heads.

Application of Fully Reinforced Revitalizer Metal Restoration System

1. Determine where first run of 36 in. (914 mm) Grip Polyester Soft reinforcement will be started.
2. After positioning the Grip Polyester Soft reinforcement to roll out, apply Revitalizer Metal about 40 in. (1016 mm) wide to the surface where the reinforcement is going to be applied. Do not apply Revitalizer Metal too far ahead of fabric reinforcement because it may dry before the fabric can be embedded. The minimum application rate should be 3 gal./100 sq. ft. (1.22 l/m²). Immediately embed the reinforcing fabric into the wet coating. Care should be taken to lay the fabric tight to the roof surface without air pockets, wrinkles, fish mouths, etc.
3. After embedding reinforcement into the Revitalizer Metal, apply additional Revitalizer Metal to completely saturate the fabric reinforcement at minimum application rate of 2 gal./100 sq. ft. (0.82 l/m²). This saturation coat should be applied as soon as possible after embedding fabric reinforcement into the Revitalizer Metal. During this process, be sure to keep the fabric saturated with Revitalizer Metal to prevent plucking or snagging of reinforcement.
4. Allow system to dry for a minimum of 30 days before applying the reflective finish coat.

Application of Reflective Coatings

After the Revitalizer Metal System has cured a minimum of 15-30 days, apply either Garla-Brite, Silver-Shield or Pyramic Plus LO at the specified coverage rate.

***NOTE:** During final application of the Revitalizer Metal, special attention should be given to coating flashings and other critical areas to build adequate membrane thickness. Multiple top coats may be necessary on verticals or steep slope to prevent sagging. In any event, all specified material must be applied and minimum membrane thickness achieved.

Inspection

Inspect entire roof area and touch-up deficient areas with additional Revitalizer Metal as necessary to ensure complete and uniform coverage. Special attention should be given to critical areas of roof, including roof penetrations, transitions, flashings, etc.

LIMITATIONS

These are general guidelines for application of the Revitalizer Metal system. The material requirements may vary depending on the specific job requirements. If unusual conditions exist, contact your local Garland Representative. Garland's fluid-applied elastomeric roofing systems must be applied to structurally sound substrates and properly prepared surfaces. All surfaces must be clean and dry before application of coatings. Garland systems must not be applied over wet insulation or related materials. Failure of the substrate does not constitute failure of the Garland fluid-applied membrane or system. Garland's systems are designed for use on well-drained roofs.

1. Application of Revitalizer Metal System must not be done when rain or other conditions such as fog or heavy dew are possible, as the product must dry sufficiently to be resistant to these occurrences. Increased curing from too much moisture caused by rain or dew can cause the product to blister. Drying time is affected by numerous factors including – but not limited to – temperature, direct sunlight, relative humidity, air movement, product application thickness. Do not apply when temperatures are below 40°F (4°C) or expected to drop below freezing before coating is dry. Do not apply if the ambient temperature is 95°F (35°C), or higher.
2. Surfaces must always be clean before applying Revitalizer Metal. Care must be taken to ensure that on-site manufacturing emissions or extended time intervals after original cleaning do not interfere with any stage of the coating applications. If either condition occurs, cleaning may be required again.
3. Adequate fluid-applied system thickness is essential to performance. If the applicator is unfamiliar with gauging application rates, we suggest that a controllable area be measured and the specified material be applied. In all cases, all minimum specified material must be applied and proper minimum dry film thicknesses must be achieved. A wet-mil gauge may be used to measure coating thickness to assist in a uniform coverage rate throughout the entire fluid-applied roof system. Care must be taken to ensure that all completed areas including all flashings, roof penetrations, etc. are coated sufficiently to ensure a watertight seal.
4. During final application of the Revitalizer restoration system, special attention should be given to coating flashings and other critical areas to build adequate membrane thickness. Multiple coats may be necessary on verticals and steep slope to prevent sagging.
5. Applicator must comply with all applicable local, state, and federal regulations if lead-based paint or other hazardous materials are encountered.
6. Roofing is hazardous work and is a low odor fluid-applied waterproofing membrane that cures much faster than traditional asphalt coatings are very slippery when wet. Comply with all protection rules and regulations.
7. Ensure preparation and planning regarding typical construction odors.



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