How to repair your existing low slope flat roof.

Recycled Rubber Roofing is not a "Roof Coating." It is a liquid emulsion used as the underlayment of a new or retrofit, built-up roofing system. One of the major ingredients of Recycled Rubber Roofing is crumb rubber from recycled truck and auto tires which makes it a definite green product. The other two major components of the roofing system are Vap-R-Lok as a substrate primer and Pol-E-Force as a reinforcing fabric.

The system dries and cures to a membrane that expands and contracts with roof surfaces. It does not soften with the heat of the sun; nor will it become brittle. It's economical, long lasting and very user friendly. Use as a patch, repair section or as the entire area of flat sloped new or re-roof installations.

Recycled Rubber Roofing contains no asphalt. Water is used to clean up tools and equipment. Application is with brush, roller, texture sprayer or commercial airless spray equipment.

Roof Substrate Preparation
Surface is to be sound, dry, smooth and clean (free of dirt, oil, grease, asphalt that is not cured dry or any contaminant that would adversely affect adhesion), free of blisters and depressions and properly sloped to drains and eaves. Cants and tapered edges are to be sound and preformed to a 45º angle. Do not apply over wet roof insulation. If existing roof is not dry or sound, tear it off. Remove all loose roofing from parapets before applying Recycled Rubber Roofing. If your existing roof does not have roof vents, install them now.

Re-roof Application:
Surface must have 1/4" per one foot slope with no water ponding. If moisture is trapped in the surface it may be necessary to tear off all or some of the wet areas. The parapet walls and cant strips are critical areas and must be inspected and repaired or replaced if necessary.

1. Power wash the roof surface. Remove or nail down all loose rolled roofing. If the surface has "blisters", cut them open and nail them flush with the roof surface. Do not fill the cracks with silicone coating or asphalt cement. Prime any existing acrylic elastomeric coatings that are chalky with #600 Saturant at the rate of 100 square feet per gallon.

Apply #720 RRR at two gallons per square. The RRR is applied as an underlayment over the existing roof surface to level it so the Pol-E-Force reinforcing fabric can be adhered and saturated. Some areas may require more RRR to produce a flat surface. RRR is also available in “Trowel Grade.”

Allow 24 hours of dry curing time (below 50% humidity) with temperatures above 50° F.

2. Secure and seal all plumbing vents and roof jacks with Pol-E-Base saturated with #100 Vap-R-Lok.

3. Start at the low edge (eave) of the field area of the roof. Apply #100 Vap-R-Lok to a three foot wide area by rolling or spraying. Roll the Pol-E-Force fabric on the top of the wet surface adhering it with a 9" short nap paint roller. Immediately apply more #100 Vap-R-Lok on the top side of the Pol-E-Force to embed the fabric with no blisters or wrinkles. The Vap-R-Lok coverage for this application is 80 square foot per gallon, half to adhere and half to saturate.

Continue applying the Vap-R-Lok and fabric on the flat area of the roof, from the bottom of the cant strip on one side to the bottom of the cant strip on the other. Shingle lap the Pol-E-Force 3" and continue to cover the entire field area of the roof.

Allow 24 hours of dry curing time (below 50% humidity) with temperatures above 50 degrees Fahrenheit.
4. Apply one to two coats of #1300T White Plastic. #1300T is a reflective white liquid acrylic emulsion that cures to a tough, flexible waterproof membrane. #1300T is an elastomeric product with exceptionally high acrylic solids content. #1300T is UL listed and a time tested product since 1975. Apply at the rate of 100 square feet per gallon with a short nap paint roller or commercial airless spray equipment.

**Drying and Curing:**
The temperature and humidity affect the curing time. Do not apply at temperatures below 50°F, if the temperature will fall below freezing within 24 hours or if there is eminent danger of rain. Recycled Rubber Roofing will dry to touch on the top surface in less time than the membrane will cure at the substrate. Allow at least 48 hours of dry curing (below 50% humidity) before applying another coat of RRR or white reflective roof coating. Do not coat over a surface that is wet from rain or dew.

Today

- **Sunshine**
- **HI 72°**
- **LO 65°**

Wed

- **Sunshine**
- **HI 82°**
- **LO 66°**

Thu

- **Sunshine**
- **HI 85°**
- **LO 68°**

Fri

- **Sunshine**
- **HI 80°**
- **LO 65°**

**Maintainable Roof:**
Recycled Rubber Roofing is an economical roof system that is easily maintained for many years. Maintenance includes inspecting the roof at least once a year for damage or defects from weather related expansion and contraction. Most problems are repaired with a small quantity of RRR or #1300T and a paint brush.

At the end of 5 to 8 years, depending on climate and structure, you can renew the application by cleaning and recoating the surface with RRR or 1300T Reflective White. No additional fabric is necessary, just clean, prime with #600 if chalky, and recoat. This option will extend the life of the roof through many cycles since the added weight is minimal.

**Common Questions:**

1. **Can I apply RRR heavier than the application instructions suggest?**
   No. The RRR system is formulated to be most effective when applied at no more than 50 square feet per gallon for each of two coats. Applying RRR in heavier coats may result in the “mud cracking” of RRR.

2. **Can I apply my second coat the same day?**
   No. It is important that RRR is allowed to cure at least 48 hours. More time is needed if high humidity or lower temperatures are present.

3. **When do I need to use #5511 Pol-E-Scrim?**
   Use Pol-E-Scrim to reinforce RRR on complete roofs or when patching larger cracks.

4. **When do I use Pol-E-Force?**
   Use 6" wide Pol-E-Force on cant strips and 36" wide for uneven roof surfaces or reroofing applications. Pol-E-Force conforms better to the roof without bridging.
5. I had purchased enough RRR, so why did I run out?
RRR was applied too thick or the surface area was estimated improperly. A common mistake in estimating is not taking into consideration uneven sections of the roof which may use more RRR.

6. Can I use this product over asphalt or other materials?
Yes. RRR adheres very well to most clean surfaces including asphalt. Priming is necessary over chalky surfaces, asphalt aluminum coating or silicone coatings.

7. Do I need to coat RRR?
No. RRR is U.V. stable and requires no coating. A reflective coating may be applied if desired.

8. Do I need to remove my old roof?
If your roof is leaking there is most likely water trapped in the insulation or sheathing. This must either be dried out or torn off, otherwise you may get blisters in your new system as the moisture tries to work its way out.

9. What happens if it rains before the Recycled Rubber Roofing is cured?
If it rains immediately after applying and washes off, allow the surface to dry and recoat. If the RRR has not washed off allow additional time for the coating to dry before applying the next coat. If blisters appear, leave them alone and allow them to dry and flatten back down before recoating.

10. Can RRR be used for ponding water?
It is not recommended for ponding water. Positive drainage of ¼" per foot to a drain is needed.

11. Can Recycled Rubber Roofing be applied over sprayed foam insulation?
Yes, as long as the surface is sound and dry. Use Pol-E-Force and #600 Fabric Saturant if the surface is deteriorated. Finish coat with two coats of Recycled Rubber Roofing at 50 square feet per gallon. Urethane foam applications build-up mil thickness faster with RRR.

12. How do I connect to a pitched shingle roof or a wall with siding?
Inspect the flashing to be sure that it extends under the existing shingles or siding far enough to assure you that it will not leak at those points. If it does not you must remove and replace the shingles or siding after properly flashing those points. Remove and replace two courses of shingles at the area where the low sloped roof intersects with the shingles. The top edge (8") of the Pol-E-Base is adhered to the roof sheathing, under the roofing felt or "ice and water guard". The lower (4") of the Pol-E-Base is adhered over the Pol-E-Scrim reinforcing fabric. Apply both first and second coat of Recycled Rubber Roofing before replacing the shingles.
The Cool Roof Rating Council (CRRC) is an independent, non-profit organization that maintains a third-party rating system for radiative properties of roof surfacing materials. Specification Chemicals excellent rating makes your roof energy efficient, saving you money, as well as improved occupant comfort.

<table>
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<th>CRRC Prod. ID</th>
<th>Manufacturer Information</th>
<th>Brand</th>
<th>Model</th>
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<th>Thermal Emittance</th>
<th>Slope Application</th>
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A nylon paint brush or a tapered sponge brush is a good choice for roof patching or applications with inside corners etc.
Do not use course bristle tooth brush, tampico or heavy 3 knot roof brushes--they will produce unwanted ridges instead of a smooth surface.

**Short nap paint rollers** are used for flat areas such as roof decks, floors and walls. Long nap roller covers will give a heavy texture that may be desired on wall surfaces but are not recommended for surfaces such as roof decks where waterproofing is the purpose of the application. Select a "heavy duty" nine inch paint roller with an extension handle. Use a short nap roller cover (1/2" or less) to provide a smooth application.

**Gas engine powered airless spray equipment** is an excellent choice for applications such as roof decks and parapet walls on commercial buildings. Airless spray equipment is usually the choice for coating the Recycled Rubber "in house" factory applications, where an existing air compressor is available.

**AIRLESS SPRAY** equipment must produce a minimum of 3000 PSI and pump a minimum two gallons per minute with a .039 tip. Most sprayers require a minimum of 8 HP. Call for more information of this and other recommended equipment. Tools and equipment are cleaned with water.

**Texture Spray equipment** is the best choice for sidewall and foundation applications where texture is more important than the positive waterproofing required, such as for roof applications.

For selecting the proper pump size for the spray equipment:

- Centipoise of #700 or #720 Recycled Rubber Roofing = 4400<>
- Centistokes of #700 or #720 Recycled Rubber Roofing =5000<>
- Centipoise of #100 Vap-R-Lok =2200<>
- Centistokes of #100 Vap-R-Lok =2750<>
- Spray tip size for airless sprayers:
  - Recycled Rubber = .041
  - #100 Vap-R-Lok = .031
#465 Screw Caps are 2 inch round die cut pieces of Pol-E-Base to be used as a seal over screws or nails that secure metal roof and side wall panels.

**Estimating**

#465 Screw Caps are applied over roof fasteners that have been tightened. Remove the paper backing and center the Screw Cap over the fastener and form tightly around the fastener with the thumb and forefinger. Screw Caps must be coated with an elastomeric coating for UV protection.

#100 Vap-R-Lok is a liquid acrylic emulsion. It cures to a tough, flexible membrane which prevents stain penetration, asphalt bleed and water migration. It is an excellent saturant for Pol-E-Scrim or Pol-E-Force and the recommended primer/saturant for the Recycled Rubber Roof system. Allow 24 hours to cure.

**Estimating**

#100 Vap-R-Lok is applied at 80 square feet per gallon for sealing asphalt bleed and stain penetration.

#100 Vap-R-Lok is applied at a rate of 50 square feet per gallon to adhere Pol-E-Scrim on OSB, plywood, concrete and smooth asphalt surfaces.

#100 Vap-R-Lok is applied at a rate of 40 square feet per gallon to adhere Pol-E-Force to granulated rolled roofing and other rough surfaces.

#5511 Pol-E-Scrim is a 5x5 strands-per-inch polyester scrim with a thin layer of spun bonded polyester bonded to the top side. The woven strands of the scrim give very high tensile strength to the fabric. This is the specified fabric for the Recycled Rubber Roof system.

**Estimating**

#5511 Pol-E-Scrim is applied over the entire field area of the roof. Start at the low (eve) side and shingle lap 2 to 3 inches. Apply fabric over wet #100 Vap-R-Lok and smooth the fabric with a long-handle paint roller. Apply only over smooth, even roof surfaces. Do not allow fabric to bridge over voids. 36” x 100’ roll yields 275 square feet, 36” x 360’ yields 1000 square feet. Smaller size rolls can be used for patching.

#720 Recycled Rubber Roofing cures to a light grey. This gives the option of a more reflective surface for warmer climates. The acrylic binders are compatible with cured asphalt, concrete, metal, wood and rolled roofing.

**Estimating**

Recycled Rubber Roofing is applied with a sponge brush, ½ inch nap roller or airless sprayer. Coat at a rate of 50 square feet per gallon over Vap-R-Lok. Apply at a rate of 33 square feet per gallon over granulated rolled roofing or uneven roof surfaces. Do not apply at a rate less than 33 square feet per gallon. Apply two coats with not less than 48 hours of curing time after first coat. The parapet wall above the Pol-E-Base may be coated with RRR after priming with #100 Vap-R-Lok. As an option Recycled Rubber Roofing may be coated with reflective white or gray elastomeric roof coatings, immediately after curing.
#600 Saturant/Primer is a light green translucent liquid acrylic. Use to saturate and adhere polyester roof reinforcing and condition chalky surfaces of weathered acrylic or asphalt. Allow 8 hours to cure.

**Estimating**

#600 Saturant/Primer is applied at a rate of 50 square feet per gallon when adhering polyester fabrics to plywood, OSB, granulated rolled roofing or adhering to parapets.

#600 Saturant/Primer is applied at a rate of 100 square feet per gallon when conditioning asphalt and weathered acrylic surfaces.

#600 Saturant/Primer is applied at a rate of 75 square feet per gallon when adhering polyester fabrics to acrylic and smooth asphalt surfaces.

#460 Pol-E-Base is a self-adhering roof membrane with removable paper on one side and polyester reinforcing fabric on the top. It is an excellent base for acrylic coatings and Recycled Rubber Roofing.

**Estimating**

#460 Pol-E-Base is applied over cant strips primed with #80 Primer, in two 6” strips centered over the joints starting with the field area joint then applying over the parapet joint. Pol-E-Base is also used in valleys and other problem areas.

#460 Pol-E-Base is applied centered over the seams on metal roofing. Pol-E-Base must be coated with an elastomeric coating for UV protection. #460 Pol-E-Base is available in 4”, 6”, 12” and 36”. The 36”x67’ widths include a selvedge edge to apply on the entire roof surface.

#1300T Reflective White Plastic is an elastomeric acrylic reflective white emulsion, formulated to cure to a reflective white, flexible, waterproof membrane. The cured product has excellent tensile, elongation, flexibility and recovery properties. White Plastic products for roofing and waterproofing are time tested since 1975.

**Estimating**

#1300T Reflective White Plastic is applied at the rate of 100 square feet per gallon for each coat. When applied over Pol-E-Base, the first coat is applied at a rate of 80 square feet per gallon. Application is with a nylon paint brush, a paint roller or with a commercial heavy duty airless sprayer. Two coats are recommended. Do not thin this product.

#1300 Grey White Plastic is an elastomeric acrylic grey emulsion, formulated to cure to a grey color that blends with weathered galvanized metal roofing that forms a flexible waterproof membrane. The cured product has excellent tensile, elongation, flexibility and recovery properties. White Plastic products for roofing and waterproofing are time tested since 1975.

**Estimating**

#1300 Grey White Plastic is applied at the rate of 100 square feet per gallon for each coat. When applied over Pol-E-Base, the first coat is applied at a rate of 80 square feet per gallon. Application is with a nylon paint brush, a paint roller or with a commercial heavy duty airless sprayer. Two coats are recommended. Do not thin this product.

Specification Chemicals, Inc.
800-247-3932