

How to repair your existing low slope flat roof.

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 45° 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. 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.
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 time tested 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. Coatings 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 white reflective roof coating. Do not coat over a surface that is wet from rain or dew.

Maintainable Roof:

This 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 #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 1300T Reflective White. Just clean, prime with #600 if chalky, and recoat. Fabric may be necessary if trouble areas need patching. This option will extend the life of the roof through many cycles since the added weight is minimal.

Common Questions:

1. Can I apply my second coat the same day?

No. It is important that the coating is allowed to cure at least 24-48 hours. More time is needed if high humidity or lower temperatures are present.

2. 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.

3. I had purchased enough coating, so why did I run out?

If the coating 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 coating.

4. Can I use this product over asphalt or other materials?

Yes. Our coatings adheres very well to most clean surfaces including asphalt. Priming is necessary over chalky surfaces, asphalt aluminum coating or silicone coatings.

5. 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.

6. What happens if it rains before the coatings are cured?

If it rains immediately after applying and washes off, allow the surface to dry and recoat. If it 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.

7. Are these coatings used for ponding water? It is not recommended for ponding water. Positive drainage of 1/4" per foot to a drain is needed.

8. Can these coatings 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 either 1300T or 1300 Grey.

Recommended Equipment

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.