



## APPLYING A ROOF COATING

**If you are a contractor or an aggressive do-it-yourselfer, applying elastomeric roof coatings can be an easy job. Good results require care, attention to detail, but few special skills. This bulletin takes you through many of the basics of coating a typical roof.**

*Sprayed polyurethane foam, gravel, roofs over cathedral ceilings, as well as roofs with severe ponding problems are higher risk applications and should be discussed with us before proceeding. Product warranties may be limited or voided in these situations. See our bulletin before coating shingle roofs, [www.elastek.com](http://www.elastek.com).*

Please consider that a quality coating application will take time, often working in a very warm environment. Protect your eyes and skin from excessive exposure. In very warm weather, work early in the day. See our "Cool Weather Application" bulletin when applying coating from November through February (desert Southwest).

Pails of material weigh over 60 pounds each and must be lifted to the roof. This requires strength and safe equipment.

*Consider pouring the coating into a smaller container to make lifting easier.*

A strong ladder and someone to help with the project are desirable.

### GETTING STARTED

Carefully examine the roof membrane (surface material) for cracks, tears, blisters, evidence of ponding, exposed foam, and open seams. If already coated, evaluate the condition of the coating. Pay particular attention to areas around roof penetrations (vents, skylights, pipes, etc.), ponding areas, cracks in parapet walls, and the attachment of roof membranes to parapet walls. Roofs should be in good condition to warrant coating.

*Serious roofing problems should always be referred to a qualified roofer for repair before attempting any coating. Coatings cannot save worn-out, dried-out, or structurally weak roofs.*

Measure the length and width of the roof to determine the size in square feet. Be sure to allow for parapet walls, garage and porch roofs to be covered. (NOTE: The roof size is not the same as the living space.)

Purchase all necessary materials and tools in advance. Nothing is more frustrating than climbing off a roof in the middle of a job to buy more material.

A coating job can often be completed over a two-day weekend in warm weather. Dry, sunny weather over 70° is ideal. Avoid periods of very cold nights when dew and frost can be a problem. See for our "Cool Weather Application" bulletin at [www.elastek.com](http://www.elastek.com).

Do not coat roofs that may have moisture trapped below the surface. Always allow each coat to cure before applying the next coat.

### [1] CLEAN



Clean roof with TSP or TSP Substitute and water or power wash.

### [2] PREP & REPAIR



Fix leaks; fill low areas; patch cracks and open seams; seal roof penetrations. (black background for contrast)

### [3] COAT



Use the correct E-las•tek® reflective elastomeric roof coating for your roof. (black background for contrast)

In extremely hot weather, start as early as possible and get off the roof before temperatures become too high. On extremely hot surfaces (dark roofs or very hot days), apply top coatings before roof temperatures are too high (causing drying on contact).

### APPLYING THE COATINGS

There are three simple steps for applying roof coatings:

**1. Thoroughly clean the roof surface.** Roofs collect oils from asphalt, chimneys, and cars plus lots of dirt and dust. Coatings don't stick well to any of these. We recommend cleaning with an inexpensive solution of TSP or TSP Substitute in a bucket of water (follow label instructions). Use a broom to scrub ponding areas and areas of peeling coatings. Work a section at a time and hose off the dirty water. Sweep away puddles to promote drying. Do not allow wash water to dry on walls, furniture, windows, and visible surfaces.

**2. Repair and seal roof penetrations, tears, open seams, etc.** using *E-las•tek #103 Crack & Joint Sealant* and reinforce with polyester roof fabric as necessary. In larger or deep ponding areas, apply *E-las•tek #505 Puddle Plaster™* to fill in areas that hold water. **Avoid using plastic roof cement.** Serious ponding should be referred to a roofing contractor. Blisters in previous coatings may be opened but these areas must be allowed to dry-out completely. Blisters in the roofing ply should be left alone unless likely to break.

Caulk and reinforce open seams, roof penetrations, cracks, and tears. These are potential leak points so work carefully and thoroughly.

Use fabric to build flashings around roof edges or roof

penetrations, and to reinforce various coating repairs. A polyester fabric is used because it will stretch with the coatings. (Fiberglass fabric is not recommended.) Fabric is normally cut to extend three inches beyond the repaired area in all directions. The coating is applied to the roof surface and the fabric is immediately pushed into the wet surface. An additional coat is applied over the fabric and the patch is allowed to dry.

If your roof has stucco parapets, examine them for cracks along the sides and top. These areas often permit water to enter the wall and can cause blisters and wrinkles in the roof surface. Repair with *E-las•tek #103 Crack & Joint Sealant*. If you do not have parapets, examine the metal drip edge for a tight seal with the roof membrane. Use 4" or 6" roofing fabric covered under and over with *#103 Crack & Joint Sealant* to seal cracks along drip edges, penetrations, and open seams.

**3. Apply coating when the roof is dry and the sealant has set.** You will be using a 9-inch heavy-duty frame, ½-inch paint roller for spreading coating on roof or 1-1/4-inch roller for dipping in pail, and a 5-to-6-foot extension pole. Use a ¾-inch roller with basecoats and emulsions. Map out your roof and make each pail fill that area. See *E-las•tek Product Information Sheets* for recommended coverage. An inexpensive 3-inch or 4-inch brush should be used to reach areas not possible with a

roller. Use a stiff paintbrush for applying *Crack & Joint Sealant*.

Topcoat should always be applied in a very thick coat, to achieve a rate of 100 sq. ft. per gallon, and a dry coating thickness of 10 mils. Two thin coats or one heavier coat may be used to achieve this result.

### *Do Not Over-Roll Coatings!*

Coatings are applied with a minimum of working the product for a maximum thickness. Work right from the pail, dipping the roller or pour on roof and spread.

Give scupper and ponding areas several additional coats for added protection. Allow each coat to dry before recoating. In cool weather, one coat a day is the maximum; two may be possible in the summer. Watch the weather!

For maximum durability and leak resistance, we recommend that two coats of topcoat be applied at 100 sq. ft. per gallon, or a minimum of 20 mils dry coating. If two complete topcoats are not applied, always apply two thick coats to problem areas such as scuppers, drain areas, ponding areas, seams, and repaired areas. Avoid using *E-las•tek #109, Solar Magic™* or *E-las•tek #114 The Shield™* on ponding roofs. Clean skin and tools promptly with water.

Be sure to inspect the roof to note changes several times per year. Much of the reflectivity of a coating can be preserved if the surface is washed occasionally.

Save any unused coating for minor repairs that may be required later.