E•las•tek®
CERTIFIED COOL ROOF COATINGS

PREPARING & COATING SPF FOAM ROOFS WITH SUSPECTED WATER-INTRUSION PROBLEMS

Coating existing SPF roofs is usually very straightforward. Clean the surface, make spot repairs, and apply a heavy coat of elastomeric topcoat. The only potential difficulty is the possibility of moisture accumulation below the coated surface of an older foam roofs.

Recoating a foam roof reseals the roof and limits moisture movement. Water near the surface can cause blistering in the roof coating or de-lamination of the upper layer of foam. Water at the deck level below the foam can eventually lead to foam de-laminating from the deck surface, causing foam "domes."

Water at-or-near the foam surface often can be eliminated by removing the covering coating layer, and exposing the wet foam to dry, warm weather. Several days of drying time may be sufficient. Water below the foam or deep in the foam takes more intensive drying and should be dried during the hottest, driest time of the year. A very thin coat of asphalt emulsion over the exposed foam area may be helpful in concentrating heat in this area that will promote drying. This coating can be removed later. Several weeks of drying may be needed for deeply imbedded water.

Check foam roofs for moisture before undertaking repairs. Areas which were exposed for drying should be given a layer of fabric imbedded in a coat of *E•las•tek #120 Solar Tek Extreme* or *#103 Crack & Joint Sealant* to complete repair.

General Procedure

Examine roof surface for exposed foam and evidence of trapped water. Look specifically at all low areas for signs of coating damage (dirt stains would indicate damage). Test with a hand or foot for a spongy feeling. Also, look at previous foam repairs for signs of deterioration. Inspect areas around coolers and HVAC units for leakage. If there is evidence of water or sponginess in the foam, test with moisture meter (a garden meter with a long shaft and water sensitive tip is fine for this).

Use the meter to determine depth of water near the surface or near the base of foam. Insert the meter tip very slowly and look for any waver of the needle. Water deep in foam is unusual and coating these roofs should be deferred until prolonged warm, dry weather is available. Consulting a roofing professional is advisable.

Use the meter to determine the circumference of the wet area (the point where there is no needle reaction). Mark area of coating to be cut away for drying.

Make a very shallow cut in the coating with a shop knife, pull away the old coating, and discard. Do not perform this step until the roof surface has been cleaned.

Allow exposed foam areas to dry until evidence of water is gone. Coat open foam with *Crack & Joint Sealant* or *Solar Tek Extreme* and polyester fabric, overlapping the patch 2-to-3 inches beyond the open foam. After drying, add one additional coat of *Solar Tek Extreme* before applying the general coating.

Check the sealing around all roof penetrations (duct work, coolers, plumbing, etc.). Repair with *Crack & Joint Sealant* and fabric as needed. Allow for drying.

Gouges and small damaged areas in foam surface can be repaired with *Crack & Joint Sealant.* Other exposed foam areas should be given two coats of *Solar Tek Extreme*.

Additional Notes

Open foam on flat areas of the roof should be three-coursed. Apply a wet coat of *Crack & Joint Sealant* or *Solar Tek Extreme*, and imbed polyester roof fabric in the wet coating. Apply another wet coat over the top of the patch.

Areas of long-term ponding can be eliminated by using *E•las•tek #505 Puddle Plaster*. This black, lightweight filler reduces the depth of ponds and reduces water evaporation time. See *E•las•tek* for details.

Some blistering may occur when recoating problem roofs because of residual moisture. Simply remove these later and patch as usual.

Clean roof surfaces before opening foam areas for drying. Wash with TSP or TSP Substitute and water. A broom and hose work fine; pressure washing is okay if there is no water damage to the foam on the roof. Rinse thoroughly and allow to dry completely.

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