

Use of Primers Prior to Roof Coating

Primers aid in the adhesion of the coating by providing a bond between the surface of a roof and the roof coating. Primers come in many different forms, the type of primer employed will be based upon the substrate, weather conditions, and the type of coating being applied. A decision to employ a primer should not be made without consulting the manufacturer's requirements for the specific coating and substrate.

A primer is never a substitute for proper roof membrane preparation. The substrate should be clean and dry prior to roof coating application. Dust, chalking film, bitumen exudate and greases or oils should be cleaned off of the roof prior to the application of coatings. For more on preparing a modified bitumen roof surface prior to coating application, consult the Roof Coating Manufacturers Association/Asphalt Roofing Manufacturers Association document entitled *Evaluation and Preparation of Modified Bitumen Roofing Systems for the Application of Surface Coatings*.

Surfaces which generally require primer include: metal flashings, gravel stops, and other metal edging; concrete and masonry roof decks, masonry walls and floors and gypsum and other porous surfaces. Asphalt primers should be used with asphalt materials only. Primers are compatible with modified bitumen products, but the manufacturer recommendations should be checked before using a primer. Primers are generally applied to clean dry surfaces, however asphalt emulsions primers can be applied to damp (not wet) surfaces. Primer and surface coating application should occur in short order. Following are some general guidelines regarding the application of primer which are useful to consider.

Asphalt Roofs

Asphalt Roofs, such as smooth-surfaced built-up or modified bitumen membranes contain light oils, called exudate, that can leave a membrane soon after its application. This process, called "tobacco juicing" is normal and the exudate will generally wash off the roof after rainstorms. Any exudate on a roof prior to coating application should be thoroughly cleaned. Special primers to resist the exudate from bleeding through fresh coating may be required for application of acrylic coatings.

Glaze-coated built-up roofing can also release exudate. In addition, the glaze coat, if not reinforced, will crack or "alligator". One way to reduce this effect on new roofs, or to cover cracks in older roofs is to prepare the roof with a layer of fiber-reinforced asphalt

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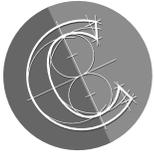
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emulsion coating prior to the application of reflective coating. On old, weathered asphalt roofs, many coating manufacturers recommend the use of primer after cleaning the membrane to prepare the surface for coating. When coating an existing aluminum roof with an acrylic coating, priming is usually needed. Consult the coating manufacturer for recommendations.

Metal Roofs

Primers are generally recommended before applying a surface coating to a metal roof, regardless of whether the roof is new or old. Special primers are made for both aluminum asphalt and elastomeric coating application over metal roofing. Certain primers, such as zinc-chromate-based primers may be incompatible with some coatings. The use of primer is not a substitute for removing rust and scale on weathered metal roofing. Ask the coating manufacturer for guidance in preparing metal roofing for surface coatings.

Coal Tar Roofs

Generally speaking, coal tar roof coatings are considered self-priming, and do not require primer application prior to application of coal tar coating or resaturant.

Acrylic Coated Roofs

On roofs with an existing layer of acrylic coatings, primer may be required prior to application of new coating. The use of primer is largely dictated by the age and condition of the existing coating.

Sprayed Polyurethane Foam Roofs

Existing sprayed polyurethane foam roofs may have been coated with silicone-based coatings. As adhesion of acrylic coatings is difficult over silicone, manufacturers often perform adhesion tests on a sample of the roof membrane and recommend the appropriate primer to help assure the proper attachment of the new coating. If silicone roof coatings present, special coating procedures are required, contact the roofing manufacturer for instructions.

Single Ply Roofs

If coating is an option, the manufacturer of the roof membrane generally sell specialty primers for these membranes.

Concrete

Prior to coating a concrete surface, the concrete shall be clean and dry. Loose concrete should be removed or repaired before coating. A primer is used on concrete to seal the pores of the concrete and aid in the adhesion of the coating. The coating manufacturer should be contacted for a recommended primer. If a release agent or curing compound has been used on the concrete surface, inform the coating manufacturer, as these may inhibit the adhesion of the primer and coating.

Note: These recommendations were prepared by and have the approval of the Roof Coating Manufacturers Association for informational purposes only. They are not intended to revoke or change the requirements or specifications of the individual roofing material manufacturers or local, state and federal building officials that have jurisdiction in your area. Any question, or inquiry, as to the requirements, or specifications of a manufacturer, should be directed to the roofing manufacturer concerned.

