



## APPLICATION INSTRUCTIONS FOR NANSULATE® CRYSTAL CLEAR PROTECTIVE ROOF COATING FOR SLOPED ROOFS

Nansulate® Crystal is designed to provide thermal insulation, UV resistance and mold resistance for clay, cement or slate tile and asphalt or wood shingle roofs. The coating dries to a clear, matte finish which will keep the beauty of the roof intact and prolong service life. The recommended application is 3 coats, with each coat being applied between 3-5 wet mils in thickness.

**SURFACE PREPARATION:** Proper surface preparation must be done to ensure proper adhesion of the coating. The roof should be pressure washed by a professional prior to application to remove all dirt, grease, mildew, and other debris. Patch all cracks and seams. You should have a completely clean, dry and firm surface before any coating is applied. Make any necessary repairs or replacements to damaged or leaking roof materials. Avoid using cleaners with built-in wax or silicon additives since this may affect coating bond.

**Ponding Water:** Any area of a roof where water may pond must be repaired by installing drains, or any means necessary to remove and prevent ponding water.

**APPLICATION:** Apply only at temperatures above 50° F. (10° C). Stir thoroughly before using and occasionally while using.

Preferred application method is by brush, roller, or airless or H.V.L.P. sprayer at low pressure. Care should be taken during mixing prior to application not to cause particle shear of the nanocomposite. Preferred method of mixing is using a mixing paddle at slow speed for approximately 1-2 minutes. Do Not thin the product with paint thinner or other medium.

The minimum recommended application consists of 3 separate coats. One gallon yields approximately 3 coats over 150 square feet of surface area (3.79 litres yields approx. 3 coats over 13.94 square meters of surface area), depending on surface texture. Allow each coat to dry thoroughly before walking upon or applying the next coat.

See approximate guidelines below:

**IN FULL SUN, WARM (80F and higher)**

1st coat dries sufficiently to apply 2nd coat in 15 - 30 minutes.

2nd coat dries sufficiently to apply 3rd coat in 30 - 60 minutes.

3rd coat needs 24 hrs before being subject to any rain or condensation or other moisture.

**IN SHADE, CLOUDY DAY OR HIGH HUMIDITY**

1st coat dries sufficiently to apply 2nd coat in 1-2 hours.

2nd coat dries sufficiently to apply 3rd coat in 2-3 hours.

3rd coat needs 72 hrs before being subject to any rain or condensation or other moisture.

Full cure time of approximately 30 days is for a three coat coverage in low to normal humidity. Extra coats and higher humidity will increase dry and cure times.

**IMPORTANT:** If you are experiencing cracking, peeling, or flaking this indicates your coat application is too thick. Each coat should be approx. 3-5 wet mils (76-127 microns) in thickness. Most paint and hardware stores have inexpensive wet mil thickness gauges available.

**DRYING TIME:** Drying time will vary depending on surface and air temperature, humidity, wind or air movement, and exposure to sunlight. Under ideal drying conditions, Nansulate® Crystal dries to a touch dry film in approx. 30 to 60 minutes after application. A longer drying time will be required if the surface being coated is not completely dry, is colder than 50F (10C)., if too thick a coat is applied, if the relative humidity is higher than 90%, if the air is calm, or the surface is not exposed to direct sunlight.

**CLEAN UP:** Any drips, splatters, overspray or spills on shrubbery, walkways, drive-ways, or sides of mobile homes must be cleaned up immediately before Coating dries.

**NOTE:** If Coating is spilled or splashed remove it at once, using water from a hose, warm soapy water, or alcohol solvent. Clean hands, brushes, rollers, tools and other equipment immediately after use in warm, soapy water.

**WEATHER CONSIDERATION:** Before application, **KEEP FROM FREEZING.** Apply only at temperatures above 50F (10C). Do not apply late in the afternoon or early evening when a heavy dew could develop on the coating surface before it dries thoroughly. A very heavy rainstorm, such as those common in tropical climates, could wash the coating off during the first few hours after application, if it has not dried thoroughly.

**IMPORTANT:** Do not allow an application to be subject to rain, condensation, or moisture within the first 72 hours after application, nor be subject to below freezing temperatures before the first 30 days after application. Either of these situations could

cause loss of adhesion, peeling or flaking. Do not apply the coating over a wet or moist surface - the surface should be completely dry prior to application to ensure proper adhesion.

Airless Spray Equipment Recommendations: Graco Silver Gun, 395, Titan 440i (or similar) with a 0.11 or 0.13 tip.  
Keep pressure low.

See our FAQ at [www.nansulate.com](http://www.nansulate.com) for further application tips and information.

Specifications Sheets for each product  
can be downloaded at: [www.nansulate.com/Nansulate\\_downloads.htm](http://www.nansulate.com/Nansulate_downloads.htm).