



BREAKTHROUGH PRODUCTS BASED ON BETTER TECHNOLOGY.

NANSULATE® ADVANCED ENERGY SAVING COATINGS

APPLICATION INFORMATION

For Nansulate® water-based acrylic latex products - *patented technology*

Nansulate is designed for applications where a thin coating is required and the highest possible insulation, combined with superior corrosion protection and mold resistance is necessary.

Preferred application method is by brush, roller, or airless or H.V.L.P. sprayer at low pressure can be used. 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 150-175 square feet of surface area (3.79 litres yields approx. 3 coats over 13.94-16.26 square meters of surface area), depending on surface texture. Allow each coat to dry to touch (non tacky) before applying the next coat. (approx. 1-2 hours) The product can be painted over with a water-based paint after it has dried for at least 72 hours. It can be painted over with a non-water-based paint after it has fully cured (approximately 30 days). The product can be covered with tile, carpet, or other building material, after it has fully cured (approximately 30 days). 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. Full cure time is approximately 30-60 days, depending on climate and humidity.

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.

Proper surface preparation must be done to ensure proper adhesion of the coating.

Metal Surfaces: Remove all loose contamination by wire brushing. Remove all dirt, grease, oil, soluble salts and other contamination by using a suitable cleaner/degreaser and clean water rinse. Remove all loose, flaking rust and/or paint by Hand Tool Clean or Power Tool Clean. Commercial Blast Clean may be done.

Painted/Coated Surfaces: Ensure paint is not flaking or peeling. Remove all loose dirt, oil, grease or other contaminate. Abrade the surface prior to Nansulate application, if needed. If applying over wood paneling or other surface with u/v cured or urethane coating use appropriate primer for that surface, which is compatible with water-based coatings. If you are painting Nansulate over a prepainted surface, make sure that that paint, coating, or sealant is compatible with a water-based acrylic latex. If it is not, then a suitable primer may be necessary (check with that product manufacturer for information).

IMPORTANT: If you are unsure of the surface that you are overcoating, try Nansulate on a small area first to ensure it is suitable for your application and has proper adhesion before coating a larger area.

Other Surfaces: Remove all loose contamination by wire brushing. Remove any dirt, oil, grease, etc. using a suitable cleaner/degreaser that does not leave a residue.

Concrete and Poursous Surfaces: Be sure there is no moisture in the substrate that will escape after application, and interfere with proper adhesion of the coatings. Follow same surface prep procedures as 'other surfaces'.

Nansulate is not meant to be used in an underwater environment.

Do not allow an application to be subject to rain, condensation, or similar moisture within the first 72 hours after application, nor be subject to below freezing temperatures before the first 30 days after application.





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For application to surfaces above 125° F (52° C) it is recommended that the first coats be applied as thinly as possible to prevent blistering. Each subsequent coat may be applied more thickly as the first coats will reduce surface temperature. See our High Heat Application Methods for further information on applying to hot surfaces.

The temperature extremes for the substrate to which the material can be applied are 40° F to 212° F (4° C to 100° C). The application should not go below freezing until cure time of at least 30 days is complete, or you may experience cracking and peeling.

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

The temperature extremes for the substrate on which the material can maintain its integrity after fully cured are: Nansulate Translucent PT, GP, HomeProtect a low of minus 40° F (minus 40° C) to a high of 257° F (125° C). Nansulate Translucent High Heat: a low of minus 40° F (minus 40° C) to a high of 400° F (204° C).

Coverage Rate: One gallon (3.79 litres) will cover approximately 150-175 square feet (13.94-16.26 square meters) (depending on surface texture) with the minimum recommended 3 individual coats.

See our FAQ at www.nansulate.com for further application tips and information. Specifications Sheets for each product can be downloaded at: www.nansulate.com/Nansulate_downloads.htm.

Manufacturer's Limited Warranty: is for 5 years when applied as instructed on suitable surface. See full copy of Warranty for details at www.nansulate.com.

For NanoPrime:

Coverage Rate: One gallon will cover approximately 450 Square Feet (46.45 Square Meters) (depending on surface texture) with the recommended single coat.

Residential Tips

Attic Application Tips:

To help prevent heat transfer into your attic we recommend using our HomeProtect Clear Coat product. Suggested application would be to the ceiling and/or walls of the attic in order to create as thorough a barrier to heat transfer as possible. Application can be done on wood, drywall, or most non-flexible surfaces. Application can be done with a paint sprayer (at low pressure), brush or roller. Surfaces should be clean and free of dust, dirt, oil, etc.. prior to application to ensure good adhesion. Nansulate is a low vapor barrier product, so it will not interfere with normal ventilation.

Wall Application Tips:

To help prevent heat transfer into and out of your home, one of the recommended applications is on your interior walls that abut the exterior. Application should be on as many walls to the exterior as possible in order to create as thorough a barrier to heat transfer as possible. You can apply Nansulate HomeProtect over existing paint. Ensure prior to application that the paint is adhering well with no flaking or peeling because Nansulate will only adhere as well as the surface to which it is applied. Nansulate HomeProtect Clear Coat will provide an invisible protection and will only add a slight sheen to your surface.

Window Application Tips:

We do not recommend using Nansulate HomeProtect Clear Coat on windows that must maintain the same clarity. Nansulate will give windows a slightly cloudy look after application. Nansulate HomeProtect Clear Coat is well suited for frosted windows, such as those in bathrooms or basements, where clarity is not a requirement. It is useful in daylighting applications, allowing in diffused light, while providing resistance to heat transfer. When applying to glass, we suggest applying coats at the lower end of the recommended 3-5 wet mil (72-127 microns) coverage to promote the best adhesion.