



APPLICATION MANUAL OF NASACOAT PRODUCTS

PART ONE

APPLICATION INSTRUCTIONS FOR ALL PRODUCTS EXCEPT FOR ANTI-NITER

1. GENERAL INFORMATION

Applying *NASACOAT* products is very simple, so No special technical knowledge or specialized training is required, but a High COMMON SENSE, and follow our directions carefully, since Duration, Warranty, and High Performance depend on its compliance. It is advisable to take a Training Course for a Certified Applicator, and/or in case of any doubt, problems, or special requirements, consult your applicator, supplier, or manufacturer, who will always assist you and will have a solution.

NASACOAT products always have a DOUBLE WARRANTY: One, issued by the Manufacturer, as to quality; and Two, the one provided by the Applicator, as to application. The two are complementary.

It is very important that the areas or surfaces where *NASACOAT* products are applied on have the utility, use, treatment, and destination that are common to them under normal conditions. EXAMPLE: do not puncture or drag furniture or machines, or walk in high heels, making holes, on ceilings or roofs where waterproofing is applied, since our waterproofing is a fine thin layer of one-quarter ($\frac{1}{4}$) of a millimeter thick, whose properties are: **first**, it is Thermal Insulating resistant to infrared rays (*heat*), and ultraviolet rays (*damage and destruction*); **second**, it is True Waterproofing (*water*); and **third**, it is 100% ecological (*no lead, pollutants or toxic components*); however, it is NOT made to resist punctures or for immoderate use of the surfaces on which it is applied. The supplier or applicator must inform the customer about the precautions to be taken thereon to get maximum benefits.

2. HARDNESS, CLEANING, AND DRYING

It is important that the material surfaces where they are applied on are **Solid, Firm, and Not Thin Coats Feasibly Removable and Breakable**. (Example: the so called roof "grouts"), which, for being poorly cemented to the Firm Substrate, may detach and break, which is NOT attributable to *NASACOAT* products, which adhere strongly to where it is applied.

In *NASACOAT* products, ADHESION plays a major role, since an air Bubble under the coating caused by lack of Adhesion could be expanded due to heat, causing further product to come off, thus creating tunnels between the surface to be covered and the coating layer, which creates areas where rust, mold, and saltpeter can be developed, thus limiting and/or nullifying its efficiency. Once the coating starts to peel off, it increases the likelihood that the water finds ways to infiltrate and penetrate into protected areas, resulting in loss of waterproofing, or oxidation of metals, with the possibility that it may seem that the products are inefficient.

Just like when a coating or paint is applied under optimal conditions, cleaning and neatness of the surface to be protected are critical. In all cases, the objective is that this surface is free of residues of previously applied products, as well as of other pollutants such as particles, dust, grease, soap materials, and roughness. This phase (cleaning) is the most important of the whole application process, because if *NASACOAT* products are applied on



poorly adhered material, this old material will eventually peel off, which will cause water infiltration problems or detachments, attributable only to poor cleaning and water or moisture, since *NASACOAT* products adhere perfectly to almost any type of material whose surface to be protected IS FIRM. Water and moisture on the surfaces to be protected must be totally removed.

2.1. Removal of solids, dirt, and dust.- Solid materials that are on the surface to be protected, as well as "shells" of old products, easily removable layers, and dust, should be removed from the area so that they are not an impediment or hazard during the application. This removal should be done with brushes, stiff brooms, or blowers, otherwise, the product will adhere to dust, "shells" of old paint, and easily removable coats, which eventually will peel off together with the product, and it may seem that the products are not efficient.

2.2. Removal of rust, grease, and other products.- Both oxidation and grease, as well as other chemical, oily, and/or soap products constitute a high risk for proper adhesion of *NASACOAT* products, so if not removed from the surface to be protected, the products already applied might peel off after a certain time. For this reason, before, after, or while sweeping or cleaning, it is very important to remove any trace of such obstacles, for which certain chemicals can be used, depending on the type of stain to be treated.

2.3. Washing and drying.- After finishing the work described above, the area to be protected must be thoroughly cleaned, to make sure that it is clean, by using a cleaning machine with pressurized water and dissolved liquid detergent. In the absence of such a machine, it will be cleaned with water and detergent, using brooms or mops, as more appropriate. It is important to rinse with clean water to avoid spots caused by detergent. Before applying *NASACOAT* products, we must ensure that the surface to be protected is completely dry, without moisture, so we must let it dry in the sun for at least 2 hours, and in case of cloudy sky, at least 5.

3. CURING AND DRY TO THE TOUCH

Curing is the time that elapses from the application of a product until it is sufficiently fixed on the surface to be protected, so that its **guaranteed efficiency** is met. Curing takes at least 36 hours in normal sunny conditions. During this time the treated surface should not be walked on, and water should not be poured on it.

Dry to the Touch is when the product no longer shows moisture to the hand contact by the effect of sunlight and air, making it possible to apply the complementary products. None of our products should be applied in the event of rain, threat of it, presence of dew, during night hours, or when it can attract moisture.

4. INSPECTION AND CORRECTIONS

Once the coating is Dry to the Touch, check the entire surface, making sure that there are no areas with Lack of Material, Adhesion Failures, or Material Discontinuity.

Lack of Material is corrected by applying further coats with a brush, until the area is evenly covered. Adhesion Failures are corrected by cutting and removing the coating in an area of 4 inches (10 centimeters) around the affected zone, by cleaning and drying it, and reapplying the coating. Discontinuity of Material due to holes, cracks, scratches, etc., is corrected by using the proper products, depending on the nature of the surface, and reapplying



NASACOAT product. For corrections on Metal Surfaces, use stucco for metal; on Wood Surfaces, stucco for wood; and on earthy or stony material, stucco for walls, always following the manufacturer's instructions, and then use *NASACOAT* product.

PART TWO

PRODUCT APPLICATION. SPECIAL FEATURES

1. ELASTIC CEMENT

Upon completion of cleaning, locate, on the surface to be protected, any type of crack, hole, cold joint, as well as screws, nails, rivets, pipes, drains, and any irregular situation that may facilitate infiltration of water into lower substrates, in order to correct them, by filling and/or sealing them with *Elastic Cement*. Should openings be found over 3 mm long, they should be filled with construction material and, finally, they should be coated as well.

Elastic Cement is applied undiluted with a spatula or a stiff brush or, if necessary, with the hand fingers protected with polyethylene gloves; should the skin be touched, it must be washed before the product dries, within 10 or 15 minutes. After application, if no additional products are to be applied, a 36-Hour Curing period should be waited; and if, instead, other products are to be applied, before proceeding, it is required at least An Hour for the *Elastic Cement* to be Dry to the Touch.

2. PRIME SEALER

After sealing cracks, and in the case of porous surfaces (roofs or walls), it is appropriate to apply a coat of sealant to cover the pores and facilitate the implementation of *Sun Glare* or *Power Skin 10*, thus maximizing their performance.

If the surface to be protected consists of earthy, loose, and/or compacted materials, such as SASCAB, *jal*, mortar with some cement, compressed plaster, and the like, a version of *Prime Sealer* must be requested and used for such surfaces, especially formulated to penetrate thoroughly and consolidate the substrate, thus improving the adhesion of the coating and avoiding peeling risks. *Prime Sealer* is a very good adhesion inter-phase between the material and the final layers of *Sun Glare* or *Power Skin 10*, improving their resistance to abrasion, light traffic, and weather.

Prime Sealer is applied by brush, roller, *istle* brush, or airless spray. If applied by brush, roller or *istle* brush, this should be made in one direction (right to left or left to right, or top to bottom or bottom to top) making sure that the material is evenly distributed, so that a smoother surface and material savings will result. It takes at least One Hour for the product to be Dry to the Touch, in order to implement the other complementary products.

3. SUN GLARE AND POWER SKIN 10

Once sealing is completed, proceed to apply *Sun Glare* or *Power Skin 10*, by using a brush, roller, or airless spray. Upon opening the buckets of *Sun Glare* or *Power Skin 10*, there may be a thin layer of water and/or a crust, which should be removed with a spatula before applying because, failure to do so, there is a risk that the concentrated water or the crust prevent its homogenization prior to application, even because of lumps.



3.1. First coat.- The first coat of *Sun Glare* is applied with uniform motion, always in the same direction, as directed above, making sure that the product is evenly distributed, at a rate of 1 liter per 32 or 43 square feet (3 or 4 square meters), while *Power Skin 10* is applied at the rate of 1 liter per 54 and up to 107 square feet (5 and up to 10 square meters). In both cases, it depends on the porosity of the surface. If rain occurs or if the application gets wet before drying time, leave the surface to dry completely and re-apply the first coat in the same manner as mentioned above.

3.2. Second coat.- The second coat of *Sun Power* or *Skin Glare 10* is applied in the same way as directed above, but in the opposite direction that the first was applied, and in the same proportion, and after 2 Hours of applying the first coat (Dry to the Touch). After this second coat, a period of 36-Hour Curing must be waited.

When *Power Skin 10* is applied to high-absorbency materials such as plaster, drywall, adobe, *jal* coats, etc., it will be required more than one coat, because the product is absorbed into the material, which reduces its ability to coat. The same need may occur when the color of the surface to be coated is very strong and dominant to the new color.

3.3. Steam Exhalers.- Since *Sun Glare* is a True and Fully Waterproof coating, check for moisture that eventually could get caught beneath roof and ceiling materials because, sometimes, although the surface seems perfectly dry, there may be invisible moisture trapped in the deepest parts of the roof, that, over time, tends to rise (come out) to the surface due to capillary action of the pores of the material. If *Sun Glare* is applied disregarding this aspect, it is possible that, after a few days, the invisible moisture reaches the surface, where the *Sun Glare* film is located, which will NOT let it go. In this case, pressure of moisture, exerted upward (out) by capillary effect, pushes the *Sun Glare* film and, finding no way out, such moisture can form Bubbles.

By cutting these Bubbles with a cutter, they will be found full of water from moisture that was trapped in the deep parts of the protected area, so this cut should be made on an area of about 4 inches (10 centimeters) around the affected section, by lifting the coating, drying the area thoroughly, and reapplying two coats of *Sun Glare*.

In order to minimize this phenomenon, it is appropriate to place special accessories that allow the surface to "breathe", promoting the evaporation of trapped water and avoiding the formation of bubbles. Such accessories are called "steam exhalers" which are placed on the surface to be treated before applying *Prime Sealer* sealant. Their ideal distribution is at the rate of 1 every 65 or 82 square feet (20 or 25 square meters), fixing them on a flat, clean area with *Elastic Cement*.

4. OXYBLOCK

In the case of metals, cleaning methods are varied, as are the tools and products used. Such methods include: **Mechanical cleaning**, where hand tools are used such as scrapers, sandpaper, brushes, etc.; mechanical tools such as grinders, sanding machines, etc; sand blasting, by abrasion of hard materials, such as sand particles, which is the most common; and iron , quartz, garnet filings, etc. **Chemical cleaning**, by the use of industrial detergents, acids (pickling), or their solutions, alkali or its solutions, phosphate, and solvents, and specific preparations for non-ferrous metals, and **Thermal cleaning**, by using high temperature blowtorches.

After carrying out the above work, apply a coat of *OxyBlock* to eliminate any possibility of



oxidation and/or corrosion. This is applied **undiluted**, by brush or spray gun, and One Day has to be waited for the Dry to the Touch before applying the topcoat, either *Acrymalt*, *Sun Glare* or *Power Skin 10*.

5. ACRYMALT

In metals, this is applied as shown in the previous section. On wooden surfaces, if they are not painted or lacquered, they should be scrubbed with scrapers, wire brushes or sandpaper until a smooth surface is achieved; and when they are, completely remove such materials by mechanical methods or even by paint remover, and if they show grease stains or other contaminants, wash with water and mild detergent. It is used **undiluted**, applying 2 or more coats, depending on the type of surface and color, by brush or spray gun and, after the first coat, wait at least 30 Minutes, or more, until it is Dry to the Touch before applying the second coat. Once the second coat is applied, wait a 36-Hour Curing Period.

6. STREET MARKER

Upon completion of cleaning as directed in Part I, Item 2, it is applied by brush, roller, or *istle* brush. A single coat in the case of traffic signs; two coats in opposite directions, in the case of industrial, commercial or parking lot floors, for which it must wait for it to be Dry to the Touch, to the extent that it can be walked on it without damaging it. Either in one or two final coats, you must wait a 36-Hour Curing period.

7. ANTI-NITER

To fight Saltpeter, or to prevent its occurrence, apply *Anti Niter*. For application, dilute at the rate of One Liter per 66 gallons (250 liters) of water (*proportions may vary according to the geographical area of the material to be treated. For more information, ask your provider*).

When stony and earthy materials are wanted to be protected, where other *NASACOAT* products are to be applied, *Anti-Niter* treated water must be used, once they are clean and dry. This is done with a sponge soaked with such water, with a sprayer or a brush, making sure that the surface to be protected is pretty wet and absorbs as much treated water as possible. The application is repeated from 2 to 5 or more times to ensure penetration to the bottom of the material. After application, wait again until the surface is completely dry to proceed with the application of the coatings.

***Anti-Niter* may be diluted in water used for mixtures with which bricks are made, and in mixtures with which they are cemented, or those with which plastering is made.**