

Protecta-Kote - Application Instructions

SURFACE PREPARATION

IMPORTANT — READ CAREFULLY!

PROTECTA-KOTE™ will bond well to all prepared, clean, thoroughly dry surfaces. On sound-painted surfaces, paint must be fully dried or cured to manufacturer's specifications. The solvents in **PROTECTA-KOTE™** will not soften or attack properly dried or cured paint.

GENERAL DIRECTIONS

Always clean the surface of all oily or waxy contaminants by using recommended cleaning solvent ensuring that no residue is left.

DO'S AND DON'TS

DO Use only Xylene cleaning solvent as last step before applying **PROTECTA-KOTE™** and to thin **PROTECTA-KOTE™** if necessary.

DON'T Clean surfaces with lacquer thinners or any solvent containing alcohol, as this will prevent **PROTECTA-KOTE™** from curing.

DO Clean surfaces with strong aggressive alkaline detergent such as CIF and rinse thoroughly.

DON'T Assume surface is clean unless you have cleaned it yourself!

DO Ensure surface is completely dry beforehand.

DO Test doubtful surfaces beforehand for adhesion with **PROTECTA-KOTE™**

DON'T Shake can to mix. (Rubber granules will not mix evenly.)

DO Stir **PROTECTA-KOTE™** thoroughly before application (preferably with an electric mixer) to keep rubber granules in suspension and aid speed of curing.

DO Keep **PROTECTA-KOTE™** rubber granules in suspension by stirring periodically.

DO use a Polypropylene stipple roller for good distribution of the rubber granules. *Nb. Use of other types of rollers may cause clumping.*

DON'T allow **PROTECTA-KOTE™** to become wet (dew or rain etc.) before it is dry.

SURFACE PREPARATION FOR SPECIFIC ADHESION

IMPORTANT! -- READ CAREFULLY!

The following information is provided as a guide only, because substrates can differ significantly. All surfaces of which you are unsure should first be tested to ensure adhesion

CONCRETE

For best results with NEW concrete:

- Fully cure — for at least 6 -8 weeks
- Give concrete a brush finish
- Hand trowel (power troweling may overwork the concrete)
- Thoroughly clean with a citric cleaner or equivalent, rinse and thoroughly dry.
- Dilute first coat 10% with Xylene
- Power floated (smooth & shiny) will need to be treated in the same way as old concrete.

For best results with OLD concrete:

- Shotblast, if possible. or
- Thoroughly clean with concrete floor etch
- Agitate solution on surface with a hard-bristled deck brush for approximately
- 10 minutes, to open pores on surface.
- Rinse off thoroughly with clean water (an acid residue might cause delamination)
- Dry completely. If necessary, use a heat source.
- Brush off residue
- Dilute the first coat with 10% Xylene

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Sealed concrete should be tested for **PROTECTA-KOTE™** adhesion:

1. Roughen surface
2. Clean surface thoroughly
3. Allow to dry completely
4. Apply **PROTECTA-KOTE™** with the first coat diluted by 10%
5. If delamination occurs, sealer must be removed by mechanical means (i.e. shot blasting)

While it is not usually needed on concrete, a primer such as DuraPrime can provide enhanced adhesion. It is also recommended for where there is no damp membrane and the surface suffers from rising damp

CONCRETE PLUS PRIMER

PROTECTA-KOTE™ exhibits good adhesion to most acrylic and polyurethane primers newly applied and over coated to manufacturers recommendations within time specifications. Check with manufacturer that primer will bond to one-part moisture-cured polyurethanes.

ALUMINUM

Abrade with 180 grit or equivalent, immediately cleaned and overcoat within two hours before the oxide layer re-forms. We recommend using an etch primer but in some circumstances a primer may not be required. Recommend test. When needed use a suitable etch primer such as Metcote or Protectakote 2K. Metcote is not recommended if there is standing water. It is recommended that the adhesion of the primer is checked prior to overcoating.

ANODISED ALUMINUM

Abrade with 180 grit or equivalent and then solvent wipe with Xylene. Use either Metcote or Protectakote 2K to prime the surface and allow to cure for a minimum of 2 hours (20°C). Apply Protectakote as normal. Metcote is not recommended if there is standing water. Because of the possible variation in the anodising we recommend that a test should always be carried out first.

MILD STEEL

All smooth metal should be thoroughly cleaned, aggressively roughened and primed with etch primer. **PROTECTA-KOTE™** adheres well to sound-painted metal. Rough metal surfaces such as pitted rust need not be primed; however, all loose scale should be removed. On applications of extreme wear, such as the front of steps, a primer is recommended. When in doubt, it is recommended to pre-test a small area with and without primer.

CAUTION! When priming metal surfaces, the primer must be fully dry before over-coating. Careful attention must be given to manufacturer's recommended window of minimum and maximum time for over-coating primer with polyurethanes.

GALVANISED STEEL

1. It is essential that galvanized steel is cleaned and abraded until it is 'water-break free'. In this state, when wet, water will form a thin film that will not retract at the edges or break or bead at all, even on vertical standing.
2. Cleaning can be done with a scouring pad and an alkaline (only) domestic detergent. Certain 'Galv Cleaners' are also effective at producing a 'water break free' surface.
3. Rinse well with water.
4. Prime with Duram Metcote or a recommended etch primer. (see caution note above)

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WOOD

If wood texture is rough, it may not require special preparation. For best results, abrade surface of wood then wipe with Xylene moistened cloth before applying **PROTECTA-KOTE™**. Better coverage will be achieved if the wood is primed first, this must be completely dry before applying **PROTECTA-KOTE™**. If in doubt, make a small test application first, **PROTECTA-KOTE™** will bond to pressure treated wood without priming but where the wood has been tanned we recommend that the first coat is diluted by 10% with Xylene to aid penetration into the hardened wood. Oily woods such as teak should be primed with **DURAPRIME™** prior to being painted with **PROTECTA-KOTE™**.

Very Absorbant materials such as MDF or ply (not marine ply) should be sealed with 10% dilute matt emulsion paint or dilute PVA. It is important that the rough texture of the surface is not covered, if it is then lightly sand and clean with Xylene. Where there is regular or long term exposure to water the ply should be primed with Duraprime or a marine ply should be used.

PAINT AND VARNISH

1. Remove all peeling, cracking or chipping paint.
2. Clean surface thoroughly.
3. For best results, lightly abrade surface.
4. Wipe with xylene immediately before **PROTECTA-KOTE™** application.
5. On epoxy coatings, soak with xylene for 10 minutes, wipe off, roughen and wipe once more with xylene.

RUBBER

Clean well using detergent or cleaning solvent, removing all surface release agents. Rinse well and allow to dry. Abrade surface aggressively, wipe off with xylene, and then apply **PROTECTA-KOTE™**. Nb: **PROTECTA-KOTE™** will not bond to chlorinated rubber.

FIBREGLASS

Good adhesion can be obtained on un-weathered gel-coated glass, rough fibre, side moulded glass, and smooth-mould resin-side glass. Surface should be free of release agent, waxes and other production additives, then roughened well to remove all gloss, leaving a high profile surface and then solvent wiped with Xylene. To ensure optimal bonding, use an etch primer.

HOW TO APPLY PROTECTA-KOTE™ for roller, brush or spray applications is available in 1 litre and 4 litre containers. Using the roller application will provide a rougher final texture than either the brush or the spray applications. Before applying **PROTECTA-KOTE™**, it is important that the surface to be coated is completely clean. (See Surface Preparation). Mask all areas not to be coated. Remove masking tape after application of second coat, do not allow it to fully cure before removing. If tape sticks, cut along edge with razor.

IMPORTANT -- READ CAREFULLY!

PROTECTA-KOTE™ contains flammable solvents. Ensure proper ventilation and fire precautions.

ROLLER APPLICATION

Apply **PROTECTA-KOTE™** with textured, open-foam stipple roller. Rollers are available in 7" (other sizes available on request). **DO NOT USE STANDARD EMULSION ROLLERS.**

Apply first coat as a thin coat to fully cover. When touch dry (usually within 1-2 hours), apply second coat (ideally at 90 degrees to first coat). To avoid "mud cracking," do not apply **PROTECTA-KOTE™** too thickly. Pour some thinner/cleaner (Xylene) over rollers between coats so rollers will not dry out. Inter-coat / curing time can be significantly shortened by the use of

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special accelerator (see section on accelerator). Extreme climatic conditions of heat, cold and humidity can shorten or lengthen this period.

BRUSH APPLICATION

PROTECTA-KOTE™ can be applied with a soft paint brush in two coats at right angles to one another. (**PROTECTA-KOTE™** is not a paint, and should be laid onto the surface, in one direction, not brushed out as an oil or latex paint.) Between coats, clean brush only with recommended thinner/cleaner (xylene). The second coat can be applied as soon as the first coat is tacky or touch dry (usually within 1/2 hours). Extreme climatic conditions of heat, cold and humidity can shorten or lengthen this period.

COVERAGE

One litre covers a flat area of about 1.2 -1.5 square metres with two coats, with a final dry coat thickness of 29-39 mils.

- **PROTECTA-KOTE™** should be stirred thoroughly before applying – preferably with an electric paint mixer – as shaking the can will not mix rubber granules evenly .
- Stir periodically to maintain rubber granules in suspension.
- Do not apply **PROTECTA-KOTE™** too thickly, or pooling and "mud cracking" may occur, resulting in loss of slip resistance.
- If **PROTECTA-KOTE™** goes on too thickly, wait until the surface begins to get tacky and go over it with a relatively dry stipple roller in one direction.
- **PROTECTA-KOTE™** is a moisture-cured product. An open or partially used can will thicken and eventually become unusable. Seal can well and turn upside down for a few minutes. This will seal any space in the can and may prolong the life of the unused portion of **PROTECTA-KOTE™**. You can also pour the unused **PROTECTA-KOTE™** into a smaller sealed container.
- If the product thickens slightly, but is still liquid, it can be thinned by using up to 15% of the recommended thinner/ cleaner xylene without affecting performance.

IMPORTANT: Other solvents can cause product failure. **Do not** dilute product or clean rollers, brushes or spray guns with lacquer thinners.

- Once the consistency of the product has become pasty and un-mixable, it should be discarded. If **PROTECTA-KOTE™** is thick but still liquid, it can be thinned with xylene and used.

- Normally, **PROTECTA-KOTE™** can be subjected to light foot traffic within 12 hours (6-8 hours with UVR Protectakote). This time can be reduced significantly by using accelerator. The coating should not be subjected to cleaning or chemical exposure until fully cured, in 4-7 days.

PROTECTA-KOTE™ takes about 4-7 days to fully cure: less in hot humid conditions, and more in cold dry weather. With accelerator, curing time is reduced by up to 60%.

PLEASE NOTE that full curing time **only** affects the amount of time required to wait before subjecting the surface to cleaning and chemical exposure. Surface can be subjected to loading well before this minimum time requirement (see above).

SPRAY APPLICATION

PROTECTA-KOTE™ can be sprayed using a simple shutz gun, a hopper gun, or professional spray equipment. Make sure to thoroughly mix **PROTECTA-KOTE™**. A drill with a mixing adaptor works best. **PROTECTA-KOTE™** should flow through the spraygun easily and can be thinned with Xylene.

- Use a respirator with chemical absorbing cartridges.
- Before starting the job, spray a few short bursts away from the surface to test that everything is working properly.

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- If **PROTECTA-KOTE™** does not spray easily and evenly, thin with enough xylene (up to 10%) to spray easily.
- Spray an even coat over the entire surface to be covered in a quick, "S"-shaped motion. Be careful not to apply coat too thickly.
- When surface becomes tacky, spray second coat. Extreme climatic conditions of heat, humidity and cold can shorten or lengthen the drying period.
- Intercoat / curing time can be significantly shortened by use of special accelerator.

IMPORTANT ADVICE!

- Do not use thinners with **PROTECTA-KOTE™** as the alcohol in it will prohibit it from curing.
- Remove any over-spray immediately with Xylene. **PROTECTA-KOTE™** is very difficult to remove once cured.
- Solvents released when spraying are flammable. Observe all fire precautions. Proper ventilation is required.
- Remove any masking prior to the **PROTECTA-KOTE™** curing or it will be very difficult to remove.
- Keep water out of hose line or foaming could occur.
- Clean spray gun between coats and immediately after job is completed. Use only approved thinner/cleaner Xylene.

THE CARE AND MAINTENANCE OF PROTECTA-KOTE™ SURFACES

Once **PROTECTA-KOTE™** coatings have fully cured, they are very easy to maintain. Because **PROTECTA-KOTE™** cures to an impermeable membrane, all dirt sits on the surface.

CAUTION! If dirt sets in on **PROTECTA-KOTE™** surface while it is soft and before it is cured, it could become permanently in-bedded.]

1. Use any general floor cleaner.
2. **IMPORTANT!** For best results, use a stiff bristled deck brush to agitate cleaner on the surface. (A cotton mop is **not** recommended since pieces of mop may get caught on high profile of **PROTECTA-KOTE™** surface. A synthetic fibre material mop may be used if a deck brush is unavailable.
3. Rinse surface thoroughly to remove all residue.
4. Remove all water with sponge mop, 24 oz. mop or water vacuum.

ALTERNATIVE METHODS

PRESSURE WASHER

A wide-angle water pressure spray of 600 - 700 PSI can clean **PROTECTA-KOTE™** without damage to the surface.

ROTARY MACHINE

A rotary 14" waxing-type machine with a (thickline) blue pad can be used.

RINSE-FREE DETERGENT

If a rinse-free detergent is used, the dirty water pickup can be done with a water vacuum.

AUTOMATIC SCRUBBERS

PROTECTA-KOTE™ surfaces can also be cleaned with use of automatic scrubbers. These are machines which, in one pass, put down the washing solution, scrub the floor with a (blue) pad, and vacuum up the dirty water. The pad pressure used in the scrubber (using a **blue** pad) need only be sufficient for the pad to make light contact with the floor. Heavy scrubbing will negatively affect the **PROTECTA-KOTE™** surface.

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SPECIFIC CLEANING PROBLEMS

GREASE SPILLAGE

To clean a **PROTECTA-KOTE™** surface of a greasy or slippery solution, use a slightly more aggressive detergent, containing a degreaser, available from chemical suppliers.

REMOVAL OF STICKY SUBSTANCES

For removal of gum or other sticky substances from a **PROTECTA-KOTE™** surface, use a pressure washer as above. A wide-angle water-pressure spray of 600 to 700PSI, at an angle of 35-40 degrees, should enable the removal of gum pieces within 10 to 15 seconds without any damage to the **PROTECTA-KOTE™** coating.

REMOVAL OF ORGANIC STAINS

Organic stains, such as leaves, can be removed using a cleaner with a neutral PH or as close to neutral as possible. Leave on for 5 to 10 minutes. Rinse off according to manufacturer's recommendations. This will only work if the stain has occurred after **PROTECTA-KOTE™** has fully cured.

REPAIRING PROTECTA-KOTE™

PROTECTA-KOTE™ can easily be repaired or over-coated, because it bonds to itself.

- Cut out all damaged **PROTECTA-KOTE™** to eliminate uneven edges.
- Clean area to be repaired and rough up surrounding **PROTECTA-KOTE™** with 60-grit sand paper.
- Clean area with xylene.
- On exposed surfaces to which **PROTECTA-KOTE™** does not bond easily, a primer may be needed.
- Brush, roll, or spray fresh **PROTECTA-KOTE™** onto cleaned areas, as per application instructions.

ACCELERATOR

A liquid accelerator (available from NVP) can be used to reduce the drying/curing time by up to 50%, depending on the climatic conditions. This may be helpful in areas of low atmospheric moisture, or when shorter curing/drying times are required.

DIRECTIONS

- Contents of accelerator should be added to the **PROTECTA-KOTE™** can upon opening, one 3ml sachet per 4 litre tin.
- The mixture should be stirred thoroughly to assure complete blending and then apply as per **PROTECTA-KOTE™** regular instructions
- Accelerator will not affect product performance. It will only speed drying and curing time.

ADDITIONAL SLIP RESISTANCE

For added slip resistance in very wet conditions, areas subject to contaminants or steep slopes, SafetyGrip can be mixed in with the second and if required third coat of the **PROTECTA-KOTE™** application. It should be mixed in at approximately 200 grams per litre. The Protectakote should be thoroughly stirred before use and regularly during use to ensure that the granules remain in suspension.

For further technical or sales advice please contact New Venture Products Ltd on
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