



INDUSTRIES, INC.

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DURABAK™ APPLICATION TIPS

SURFACE PREPARATION

NOTE: Surface preparation and application instructions for both **DURABAK™** and **DURABAK 18™** is identical unless otherwise noted.

IMPORTANT - READ CAREFULLY!

DURABAK™ will bond well to properly prepared, clean, thoroughly dry surfaces. On sound-painted surfaces, paint must be fully dried or cured to manufacturer's specifications. The solvents in **DURABAK™** will not soften or attack properly dried or cured paint. For fully-cured two-part epoxy substrates, contact **COTE-L Industries** or your **DURABAK™** distributor before application.

GENERAL DIRECTIONS

Always thoroughly clean the surface of all oily or waxy contaminants and use recommended cleaning solvent. Leave no residue. **Always do a small test on the substrate to ensure adhesion.**

DO'S AND DON'TS

- DO** Use only Xylene cleaning solvent as last step before applying **DURABAK™**, or to thin **DURABAK™** if necessary.
- DON'T** Clean surfaces with lacquer thinners or any solvent containing alcohol, which will prevent **DURABAK™** from curing and bonding.
- DO** Clean surface with strong aggressive detergent and rinse thoroughly with water. Then use Xylene to wipe the surface as a last step. Allow Xylene to evaporate.
- DON'T** Assume surface is clean unless you have cleaned it according to instructions.
- DO** Ensure surface is completely dry and/or catalyzed beforehand.
- DO** Test surfaces beforehand for adhesion with **DURABAK™**.

- DON'T** Shake can to mix. (Rubber granules will not mix evenly.)
- DO** Stir **DURABAK™** thoroughly before application (preferably with an electric mixer) to keep rubber granules in suspension.
- DO** Keep **DURABAK™**'s rubber granules in suspension by stirring periodically.
- DO** Apply **DURABAK™** in at least two coats. (Two coats is normally sufficient for most applications.)

SURFACE PREPARATION FOR SPECIFIC ADHESION

IMPORTANT - READ CAREFULLY!

The following information is provided as a guide only, because substrates can differ significantly. All surfaces should first be tested to ensure adhesion. Contact **COTE-L Industries** for test design.

§ Concrete

For best results:

New concrete should:

- Be fully cured, for at least 28 days.
- Have a brush finish.
- Be hand troweled (If already power troweled, test for adhesion of **DURABAK™**.)
- Be thoroughly cleaned with a citric cleaner or equivalent, rinsed with water, and thoroughly dried.
- Be wiped with Xylene and allowed to dry immediately before applying **DURABAK™**. (This is recommended, for best results, to ensure there is no remaining residue on the surface.)

NOTE:

- If the new concrete contains plasticizers, a small test for adhesion should be made using an etch primer that is compatible with one-part moisture-cured polyurethanes,

such as **COTE-L's METCOTE™**.

- If the concrete is oil-soaked, then see instructions for oil-soaked concrete (see below).

Old concrete should:

- Be completely dry before application of **DURABAK™**.
- Be shotblasted, if possible, and rinsed with water.

or

- Be abraded with a scarifying machine (leaving a roughened surface) and brushed off.

or

- Be thoroughly cleaned of surface dirt, rinsed with water and dried, then given a muriatic acid wash.

1. Use 45% to 50% muriatic acid solution mixed with 3 to 4 parts water.

2. Agitate solution on surface with a hard-bristled deck brush for approximately 10 minutes, to open pores on surface.

3. Rinse off with a 5% ammonia/water solution to neutralize acid. (Failing to neutralize acid could leave residue which might cause delamination.)

- Be dried completely. If necessary, use a heat source.
- Be brushed off to remove all residue.
- Be wiped well with Xylene immediately before applying **DURABAK™**. This is recommended to ensure there is no residue remaining on surface. Let the Xylene evaporate before applying **DURABAK™**.

NOTE: If the old concrete contains plasticizers, a small test for adhesion should be made using an etch primer that is compatible with one-part moisture-cured polyurethanes, such as **COTE-L's METCOTE™**.

§ Oil-Soaked Concrete

1. Open pores of concrete with muriatic acid and rinse, as above.
2. Apply an oil emulsifier and agitate with deck brush for 10 minutes.
3. Rinse with hot water.
4. Rinse twice with cold water.
5. Dry completely.
6. Wipe with Xylene, and then let the Xylene evaporate before applying **DURABAK™** or **DURABAK 18™**.

NOTE: For chemically soaked concrete or other unusually difficult surfaces, contact **COTE-L Industries**.

§ Sealed Concrete

Sealed concrete should first be tested for **DURABAK™** adhesion:

1. Clean surface thoroughly.
2. Roughen surface.
3. Brush surface off thoroughly.
4. Rinse with water, dry thoroughly.
5. A Xylene wipe is recommended. Let Xylene evaporate.
6. Apply **DURABAK™**
7. If delamination occurs, sealer must be removed by mechanical means (i.e., shot blasting or scarifying).

While it is not usually needed on concrete, a primer can provide enhanced adhesion.

Contact **COTE-L Industries** for specific information on surfaces to be primed.

§ Concrete Plus Primer

DURABAK™ exhibits good adhesion to new acrylic and polyurethane primers applied and overcoated to manufacturers recommendations. Check to make sure primer is compatible with one-part moisture-cured polyurethanes. Be sure to apply **DURABAK™** within time specifications of primer manufacturer. Aim for the first third of the recommended window of opportunity for over coating.

§ Asphalt

1. Prime surface with a mineral spirits or water-based driveway sealer according to manufacturer's specifications. Be sure the sealer is compatible with both asphalt and one-part moisture cured polyurethanes.

2. Apply **DURABAK™** when primer is thoroughly dry.
3. For oily asphalt, contact **COTE-L** for proper cross-link primer.

§ Aluminum

1. Abrade to obtain rough surface. May or may not require additional primer. Recommend test for adhesion.
2. If a primer is needed, use **COTE-L's METCOTE™** (see page) or another etch primer for aluminum which is compatible with moisture-cured polyurethanes.

§ Metal

All smooth metal should be thoroughly cleaned, aggressively roughened and primed with **COTE-L's METCOTE™** or another etch primer which is compatible with moisture cured polyurethanes. **DURABAK™** adheres well to sound-painted metal. Most 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 step nosings, a primer such as **COTE-L's METCOTE™** is recommended. It is recommended to pretest a small area with and without primer.

CAUTION! When priming metal surfaces, the primer must be fully dry before overcoating. Careful attention must be given to manufacturer's recommended window of minimum/maximum time for overcoating primer with polyurethanes. When using primers other than **METCOTE™**, a small test must be done to ensure adhesion of primer to **DURABAK™/DURABAK 18™**. Aim for the first third of the recommended window of opportunity for over coating the primer.

§ Wood

If wood texture is rough, it may not require special preparation. For best results, abrade surface of wood with 40-grit sandpaper before applying **DURABAK™**. Some pressure-treated woods may need priming. If in doubt, make a small test application first. **DURABAK™** will bond to wolmanized treated wood without priming.

§ Paint and Varnish

1. Remove all peeling, cracking or chipping paint.

2. Clean surface thoroughly.
3. For best results, lightly abrade surface to create a rough profile.
4. Wipe surface with Xylene immediately before **DURABAK™** application.
5. In the case of epoxy coatings which become very hard with age, clean, then abrade surface with 40-grit sandpaper. Rinse, dry, and test for adhesion.
6. For more information, contact **COTE-L**.

§ Rubber

Clean well using detergent or cleaning solvent, such as rubbing alcohol, to remove all surface release agents. Rinse well and allow to dry. Abrade surface aggressively, wipe off with Xylene, and then apply **DURABAK™**.

NOTE: **DURABAK™** will not bond to chlorinated rubber.

§ Fiberglass

Good adhesion can be obtained on unweathered gel-coated glass, rough fiber, side molded glass, and smooth-mold resin-side glass. Surface should be free of release agents, waxes and other production additives, then roughened well with 40-grit sandpaper to remove all gloss, leaving a high profile surface.

To ensure optimal bonding, use **COTE-L's METCOTE™** primer (see page 19). Epoxy primers compatible with fiberglass may also be used. Do a small test for adhesion.

§ Ceramic Tile

Remove glaze from tile with a grinder, rinse with water and let dry. Apply **METCOTE™** primer and let dry thoroughly. Then apply **DURABAK™** within 12 hours.

HOW TO APPLY

DURABAK™ for roller, brush or spray applications is available in one-quart and one-gallon containers. For volume applications, it is also available in five-gallon containers by special order.

Before applying **DURABAK™**, 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. Use a razor knife to cut along the taped edge.

IMPORTANT - READ CAREFULLY!

DURABAK™ contains flammable solvents. Ensure proper ventilation and fire precautions.

ROLLER APPLICATION

Apply **DURABAK™** with special, open-foam stipple roller (only available through **COTE-L Industries** or an authorized **DURABAK™** dealer). Use only a **DURABAK™** special stipple roller -- other rollers will not pick up and spread **DURABAK™** evenly. Rollers are available in 9" and 4" sizes. Use one 9" roller sleeve for approximately 1 to 1-1/2 gallons.

NOTE: It is recommended that the smooth version of **DURABAK™** and **DURABAK™** Clear be applied with a 3/16" nap mohair varnish roller.

Apply first coat as a thin coat to fully cover. When touch dry (usually within one hour), apply second coat. To avoid "mud cracking" or pooling, do not apply **DURABAK™** too thickly. Pour a small amount of Xylene over rollers between coats so rollers will not dry out. Intercoat/curing time may be significantly shortened by the use of the special accelerator (see section on accelerator). Extreme climactic conditions of heat, humidity and cold can shorten or lengthen this period.

BRUSH APPLICATION

DURABAK™ can be applied with a soft paint brush in two coats at right angles to one another. (**DURABAK™** 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 Xylene. The second coat can be applied as soon as the first coat is touch dry (usually within one hour). Extreme climactic conditions of heat, humidity and cold can shorten or lengthen this period.

COVERAGE

One quart covers a flat area of about 15 square feet in two coats; one gallon covers approximately 60 square feet with two coats and a final dry coat thickness of 25-35 mils.

IMPORTANT ADVICE!

DURABAK™ should be stirred thoroughly before applying -- preferably

with an electric paint mixer attachment -- as shaking can **will not** distribute rubber granules evenly.

Stir periodically to maintain rubber granules in suspension.

To avoid "mud cracking" or loss of slip-resistance, do not allow **DURABAK™** to pool.

DURABAK™ 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 seconds. This will seal any space in the can and may prolong the life of the unused portion of **DURABAK™**. Putting unused portion into a smaller container may help prolong the life of the product, as well. Make sure that the rim of the new container remains free of **DURABAK™** to avoid difficulty in reopening the container.

If the product thickens slightly, it can be thinned by using up to 15% Xylene without affecting performance.

IMPORTANT:

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

Once the consistency of the product has become pasty and unmixable, it should be discarded. If **DURABAK™** is thick but still liquid, it can be thinned with Xylene and used.

Normally, regular **DURABAK™** can be subjected to light foot traffic within 6 to 12 hours of application. It takes approximately 2 to 4 days to fully cure: less in hot humid conditions, and more in cold dry weather. The coating should not be subjected to cleaning or chemical exposure until fully cured. For specific extreme kinds of loading, consult your **DURABAK™** dealer.

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 and light foot traffic long before this minimum full-cure time requirement (see above).

§ Accelerator

An accelerator can be used to decrease drying time. In hot, humid

conditions, an accelerator is not recommended because it may create pinholing.

SPRAY APPLICATION

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

1. **COTE-L's** shutz gun with a 1/4" orifice (and no filter), attached to a 45-60 PSI compressor

Attach spray gun to compressor air line, giving pressure of 40 to 60 psi.

2. Use a conventional spray gun, such as Binks #2001 gun, with the following specifications, or equivalent: 67 fluid nozzle; 567 fluid needle; 67 PB air cap; heavy-duty (#54-1372) needle spring; 2-28 teflon fluid packing; 1/2" I.D. (#71-283) fluid hose with 3/8" connectors (#72-1333), and 3/8" I.D. air line with 1/4" connectors (#71-1355).

To remove contaminants from the air line, use Oil & Water extractors mounted at the pressure tank.

3. Sears Craftsman No. 15524 (or De Vilbiss AS 300) with external mix nozzle. Requires 7 CFM. Use compressor with 9 CFM at 50 psi. (For more information call De Vilbiss Air Power Tools at (901) 423-7983.)
4. Airless spraygun: Graco Bulldog 33:1 with air intake pressure = 6-7 bar (90-100psi). Outlet pressure = 100 bar (+/- 3000 psi). Tip: 0.039 ins (ie 35-39 thou). Delivery rate: 2.9 Gallons per minute.
5. For smooth **DURABAK™**, Graco Bulldog 33:1 with 21-23 thou. tip.
 - Use a respirator with chemical absorbing cartridges, such as Binks #40-128.
 - Before starting the job, spray a few short bursts away from the surface to test that everything is working properly.
 - If **DURABAK™** does not spray easily and evenly, thin with Xylene.

- Spray an even coat over the entire surface to be covered. Be careful not to apply coat too thickly.
- When surface becomes tacky -- between 20 minutes and one hour, depending on weather conditions --- spray second coat. Extreme climactic conditions of heat, humidity and cold can shorten or lengthen this period.
- Intercoat / curing time can be significantly shortened by use of special accelerator (see section on accelerator).

IMPORTANT ADVICE!

- Remove any over-spray immediately with Xylene. Once cured, **DURABAK™** is very difficult to remove.
- Solvents released when spraying are flammable. Observe all fire precautions. Proper ventilation is required.
- Clean spray gun between coats and immediately after job is completed. Use only approved Xylene.

THE CARE AND MAINTENANCE OF DURABAK™ SURFACES

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

CAUTION! If dirt sets in on **DURABAK™** surface while it is soft and before it is cured, it could become permanently inbedded.]

1. Use any general floor cleaner, from a neutral household cleaner to a degreaser.
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 **DURABAK™** surface.] A synthetic fiber material mop may be used if a deck brush is unavailable.
3. Rinse surface thoroughly to remove all residue.
4. Remove all water with a sponge mop, a 24 oz. mop or water vacuum.

ALTERNATE METHODS

For larger areas, where the above method is not time efficient, there are alternatives available to expedite cleaning.

§ Pressure Washer

A wide-angle water pressure spray of 600-700 PSI can clean **DURABAK™** 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

DURABAK™ surfaces can also be cleaned with 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 over time will negatively affect the **DURABAK™** surface.

SPECIFIC CLEANING ISSUES

§ Grease Spillage

To clean a **DURABAK™** surface of a greasy or slippery solution, it is necessary to 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 **DURABAK™** surface, use a pressure washer as above. A wide-angle water-pressure spray of 600 to 700 PSI, at an angle of 35-40 degrees, should enable the removal of gum pieces within 10 to 15 seconds without any damage to the **DURABAK™** coating.

§ Removal of Organic Stains

Organic stains, such as leaves, can be removed using a quaternary or a slightly acidic cleaner. Leave on for five or 10 minutes. Rinse off according to manufacturer's recommendations. This will only work if the stain has occurred after **DURABAK™** has fully cured.

REPAIRING DURABAK™

DURABAK™ can easily be repaired or over-coated, as it bonds to itself.

- Cut out all damaged **DURABAK™** to eliminate uneven edges.
- Clean area to be repaired

and rough up surrounding **DURABAK™** with 60-grit sand paper.

- Clean area with Xylene.
- On exposed surfaces to which **DURABAK™** does not bond easily, a primer may be needed.
- Brush, roll, or spray fresh **DURABAK™** onto cleaned areas, as per application instructions.

ACCELERATOR

A liquid accelerator (available from **COTE-L** or an authorized **DURABAK™** dealer) can be used to reduce the drying/curing time of regular **DURABAK™** by up to 75%, depending on the climactic conditions. This may be helpful in areas of low atmospheric moisture, or when shorter curing/drying times are required. The accelerator comes in premeasured packets, plastic bottle, or metal cans, one size for quarts and one for gallons.

DIRECTIONS

Contents of accelerator should be added to the **DURABAK™** can upon opening, at the ratio of one quart-packet or container per quart, or one gallon-packet or container per gallon.

The mixture should be stirred thoroughly to assure complete blending, then applied as per **DURABAK™** regular instructions.

Accelerator will not affect product performance. It only speeds drying and curing time.

SILICON CARBIDE

For added slip resistance in very wet conditions or extreme slopes, 60-grit silicon carbide can be broadcast onto the top coat of the **DURABAK™** application.

DIRECTIONS

- Use a simple flour shaker covered with a stretched piece of old stocking to facilitate the application.
- The silicon carbide should be applied immediately after the top coat **DURABAK™** has been laid and while it is still very wet.
- Sprinkle silicon carbide lightly over the wet **DURABAK™**, as evenly as possible.
- One ounce silicon carbide will cover approx. 8 sq.ft of **DURABAK™**.