



Manufacturer of
U.S. SPECIALTY COATINGS

APPLICATION INSTRUCTIONS FOR MONOCHEM FLOOR & DECK COATINGS

Application procedures and surface preparation apply to all industrial flooring systems or deck coatings manufactured by **Monopole Inc.** including but not limited to:

AQUASEAL W20
PERMASEAL
DEX-COAT
FLOORCOAT

MONOCHEM 200
EPOXYGUARD
PERMASHIELD 100
PERMASHIELD 200

PERMASHIELD 1000
MONOCHEM 300
MONOCHEM 310
MONOCHEM 610

SURFACE PREPARATION TESTS

***ABSORPTION TEST:**

Sprinkle a few drops of water onto the concrete surface.

If water is absorbed into the surface within a few minutes, the surface is ready for cleaning and preparation. If the water remains on the surface (the surface doesn't darken), an application of **MONOCHEM 21** primer and an adhesion test is required.

****ADHESION TEST:**

If the floor is previously painted, test the adhesion of the existing paint by doing the following:

- Use a single-edged razor blade, cut an "X" through the paint all the way down to the concrete.
- Firmly press a 4" piece of duct tape over the cut "X".
- Remove by quickly pulling the tape.
- If more than 15% of the tape has product attached to it when removed, the existing paint is not adhering properly. The floor should not be coated until the old paint is totally removed.

*****MOISTURE TEST:**

Apply a 2' x 2' plastic storage bag to an area of the floor. Tape down the edges with duct tape and allow 24 hours to set. If water droplets appear on the inside of the plastic or if the concrete appears wet, moisture levels are high and the floor should not be painted.

******CONCRETE TEST:**

If the concrete is chipping, cracking/loose (spalled), or has concrete dust present, the coating will not adhere properly. To fix this issue all the loose material and dust must be completely removed. Also all cracked or damaged areas have to be repaired or caulked.

*******HYDROSTATIC PRESSURE TEST:**

Hydrostatic pressure is the term used to describe water migration below a concrete slab to the surface of the slab. It can be caused by high ground water tables, the lack of protective membrane below a slab, or a broken membrane. Hydrostatic pressure will cause paint and coatings to bubble as the water pushes the paint film away from the concrete's surface. Concrete floors exhibiting the symptoms of hydrostatic pressure should NEVER be painted until the problem is corrected.

SURFACE PREPARATION

Before starting your application, read the entire Technical Data sheet. You may obtain a copy from your sales person; by logging to www.monopoleinc.com; by contacting Monopole for technical assistance at 800-491-9977; or at your local distributors.

SURFACE CONDITION:

The surface must be dry, clean, and free from all dirt, dust, oil, grease, wax and loose materials or contaminants.

METAL SURFACES:

Steel and Metal: The surface must be rust free and requires a rust inhibitive primer before coating.

Galvanized and Aluminum: Remove the adhesion impairing oily film from the surface before coating.

WOOD SURFACES:

A primer is not required for a clean, bare, properly prepared, unpainted, and unsealed wood surface. The moisture content should be 13% or lower. The exterior stain blocker primer **AQUAPRIME** is required to stop tannin acid from bleeding through fresh redwood, pine or cedar prior to applying a coating.

Wood should be sanded to level all rough areas and feather irregular edges. Also seal knots and pitch pockets and make sure to fill cracks and nail holes. Allow filling materials a full cure.

Dimensional lumber (2x4) structures are built with gaps between planks. On (2x4) decks where there is no taping or caulking, water may penetrate behind the coating and create hydrostatic pressure.

Wood decks should be sloped to allow drainage, preferably into a gutter or drain. One quarter inch of slope per foot is recommended. The slope should also be part of the original design. A coating should not be used to provide such a slope.

A deck that lacks an adequate slope may experience leaks at low thresholds due to standing water, or surface stains from ponding water and debris. Avoid soiling the fascia by incorporating a gutter or drain into the design. Insert a drain flush with plywood and install a positive drip so that drainage is outside the fascia.

PREVIOUSLY PAINTED CONCRETE SURFACES:

LATEX BASED PAINT: Remove all loose, peeling or poorly bonded paint. The surface must be mechanically cleaned and abraded, using 80-120 grit sandpaper. Vacuum clean

to pick up all dirt and dust. Dulling glossy surfaces by sanding or using a chemical deglosser is always recommended. Where necessary, also clean the surface by scrub washing with a solution of one pound of Monochem **CLEAN-POWER** to one gallon of warm water. Pay special attention to areas where build-ups of dirt, grease, and oil exist. These areas should be scrubbed as clean as possible.

OIL BASED PAINT: Remove all chlorinated rubber and solvent based finishes such as oil based enamels, epoxy, urethane, etc. by sandblasting, sanding or bee blasting. The application of **MONOCHEM 1, MONOCHEM 21, or ULTRA-PRIME** Primer is then required to increase top coat adhesion to these properly prepared surfaces.

NOTE: ALWAYS apply a test patch to check for adhesion, compatibility and desired results. Responsibility for determining the adhesion of a top coat to an existing finish rests with the applicator. The application of a top coat over an existing and poorly adhering painted surfaces may result in the eventual lifting of the old paint.

UNPAINTED CONCRETE SURFACES:

Concrete surfaces must be porous, structurally sound, cured for a minimum of four weeks, dry for 48 hours, and free from rock pockets, voids and cracks before coating. Dense, non-porous concrete* should be sandblasted, shot blasted, or acid etched for proper penetration and adhesion.

*Refer to **ABSORPTION TEST** (Page 1)

ETCHING INSTRUCTIONS:

Acid etch the floor surface using a solution of one part muriatic acid to 4 parts warm water. Floors can also be etched using one pound of MONO-CLEAN dissolved in one gallon of warm water. Concrete slabs can contain both dense and porous areas. The dense areas will require a second or third acid etching to open the pores. A properly etched floor feels like 120-grit sandpaper. It provides a good bond between the coating and substrate.

Neutralizing the surface is required after etching, by scrubbing with a solution of ammonia and water (one part ammonia to 10 parts water).

APPLICATION OF TEXTURED DECK COATINGS

TAPING and FLASHING:

Apply a high quality, elastomeric, paintable acrylic caulking to all joints and cracks. Then apply caulking according to the manufacturer's recommendations. Smooth the caulk flush with the deck surface. If the caulking is allowed to dry more than 24 hours, wipe it with a damp cloth to remove any dust or dirt prior to application.

To begin taping, brush a 5-6" wide stripe of deck coating, centered over the joints or cracks. Work in small sections since most of our top coatings dry quickly. Press the polyester tape smoothly over the surface. Then brush another layer of deck coating over the tape, smoothing out any wrinkles. Allow the surface to dry. For a seamless finish, lightly sand the edges of the coated tape with a medium grit sandpaper before applying the first coat of deck coating.

FIRST COAT:

MIX OR STIR WELL BEFORE USING. DO NOT SHAKE. Shaking will not keep the texture of the finish uniform. Mix or stir well by hand for a minimum of 10 minutes or, by drill or electric mixer for a minimum of 5 minutes. You should also mix occasionally during application in order to keep the texture of the finish uniform. Box all the cans to ensure color and sheen uniformity also.

Apply an even coat of a **TEXTURED DECK COATING**, using 1 gallon per 100-125 square feet over entire surface (including taped or flashed areas). Unlike paint, apply a heavy coat in order to create a waterproof Elastomeric membrane. Allow the surface to dry until it can be walked on. Wait 2-4 hours in ideal conditions before applying a second coat.

The best results are achieved by applying the **TEXTURED DECK COATING** in parallel overlapping roller passes, either North-South or East-West.

SECOND COAT:

When applying another coat of a **TEXTURED DECK COATING** follow the same application method and coverage rate.

SPECIAL CIRCUMSTANCES:

During hot weather (above 90°F) APPLY THE COATING IN THE MORNING OR EVENING. Do not apply at temperatures below 50°F, or when temperature will fall below 50°F within 6 hours. Wait two or more days before using the deck or placing heavy objects on the surface.

ADDITIONAL INFORMATION

TEXTURED DECK COATINGS create a decorative and slip-resistant finish for your deck.

WHEN NOT TO USE A FLOOR/DECK COATING:

- Do not apply over surfaces previously sealed.*
- Do not apply over poorly-bonded paint.**
- Do not apply if moisture in the concrete substrate is higher than 15%.***
- Do not apply to poorly cured or dusty concrete.****
- Do not apply to a surface exhibiting hydrostatic pressure.*****
- Do not apply if rain is eminent or expected within 24 hours.
- Do not apply if surface temperature is over 90°F.
- Do not apply if outside temperature is below 50°F.
- Do not apply if the surface pH is over 9.
- Do not apply under direct hot sun.
- Do not apply below grade or where ponding exists.