PRODUCT DESCRIPTION

Dry Coat Pro is a 100% solids, two-component, epoxy primer designed for concrete floors with moisture vapor transmission (MVT) problems. This primer is applied directly to concrete to reduce the adhesion and blister effects of MVT. Dry Coat Pro is resistant to MVT up to 25 lbs. per 1000 sq. ft. in 24 hours per ASTM F1869 or 95% relative humidity (RH) per ASTM F2170.

PRODUCT APPLICATION

READ ALL INSTRUCTIONS CAREFULLY BEFORE STARTING PROJECT

SURFACE PREPARATION

Concrete and coated concrete surfaces must be sound, clean, dry and free of contaminants such as dirt, dust, grease, oil, silicones and other contaminants that may negatively affect adhesion.

MOISTURE VAPOR BARRIER:

A suitable moisture barrier must be in place for concrete slabs on-grade. If a moisture barrier is not in place, seasonal variations in ground moisture can cause excessive moisture vapor transmission (MVT) regardless of results measured prior to coating application. 16 mils MVB is resistant to MVT up to 25 lbs. per 1000 sq. ft. in 24 hours per ASTM F1869 or 95% RH per ASTM F2170.

NEW/BARE CONCRETE:

Shotblast to a CSP 5. Refer to SSPC-SP13/NACE 6 or ICRI Technical Guideline No. 310.2.
New concrete must be cured a minimum of 28 days and should meet moisture vapor transmission (MVT) and relative humidity (RH) thresholds as described previously in Surface Preparation section.

PREVIOUSLY COATED SURFACES:

Clean surface to prevent any contaminants from being spread/redistributed to a greater area being prepared. Completely remove previous coatings, sealers, joint fillers, and patching materials. Shotblast to a CSP-5. Refer to SSPC-SP13 / NACE 6 or ICRI Technical Guideline No. 310.2.

EQUIPMENT RECOMMENDATIONS

ROLLER: Use a high quality 3/8” inch lint-free roller with a phenolic core.
BRUSH: Use a disposable natural fiber chip brush, 2-4 inch wide for cut in work.
SQUEEGEE: Use a 1/4” notched squeegee.

PATCHING AND JOINTS

All previous joint filler and patching materials must be completely removed prior to Dry Coat Pro application. Cracks and holes should be cleaned out using a wire brush and vacuum. Larger cracks should be widened to a 1/4” width and depth. Prime the sidewalls with Dry Coat Pro and patch the void with thickened Dry Coat Pro. Sidewalls of moving joints that will be honored, should also be primed with Dry Coat Pro and allowed to cure before installing an appropriate joint material. Patching and joint materials may be installed after Dry Coat Pro application.

APPLICATION

Dry Coat Pro mix ratio is 2 Parts A to 1 Part B by volume.

1. Pre-mix each componant for 2 minutes. Pour A side into a 2-5 gallon mixing pail. If pigmenting, mix tint into the A side. Then, add B side and mix for three minutes until uniform. Do not mix more material than can be applied in 25 – 30 minutes (material will stiffen or tack-up).
2. Immediately pour all mixed Dry Coat Pro on the floor in a long bead approximately 8 – 12 inches wide. Do not attempt to roll material out of a bucket or roller pan.
3. Wearing spiked shoes, spread evenly using a notched squeegee to 16 mils in order to get tolerance to MVT up to 25 lbs. per 1000 sq.ft. in 24 hours per ASTM F1869 or 85% RH per ASTM F2170
4. Use a non-shed 3/8” roller and back-roll the primer evenly across the squeegee passes to minimize application lines and leave a consistent film thickness.
5. Before overcoating, inspect the applied and set Dry Coat Pro for pinholes or voids from displaced air or inadequate patching. Sand and recoat if needed. Thickened Dry Coat Pro may need to be used to patch more severe holes or cracks.
6. Decorative Chip can be broadcast into the thicker, build coat of Dry Coat Pro before it sets.

ALTERNATE APPLICATION (HELPS REDUCE BUBBLES)

Dry Coat Pro mix ratio is 2 Parts A to 1 Part B by volume.

1. Pre-mix each componant for 2 minutes. Pour A side into a 2—5 gallon mixing pail. If pigmenting, mix tint into the A side. Then, add B side and mix for three minutes until uniform. Do not mix more material than can be applied in 25 – 30 minutes (material will stiffen or tack-up).
2. Immediately pour all mixed Dry Coat Pro on the floor in a long bead approximately 8 – 12 inches wide. Do not attempt to roll material out of a bucket or roller pan.
3. Wearing spiked shoes, spread evenly at 3 – 5 mils by pushing a flat squeegee or metal spring blade along the bead. Overlap previous passes in order to ensure concrete pinholes are filled. A tight, thin coat of Dry Coat Pro applied as primer with no backroll is the best way to minimize outgassing bubbles.
4. After the Dry Coat Pro has set, apply the balance of the material using a notched squeegee to equal 16 mils total in order to get tolerance to MVT up to 25 lbs. per 1000 sq.ft. in 24 hours per ASTM F1869 or 85% RH per ASTM F2170
5. Use a non-shed 3/8” roller and back-roll the primer evenly across the squeegee passes to minimize application lines and leave a consistent film thickness.
6. Before overcoating, inspect the applied and set Dry Coat Pro for pinholes or voids from displaced air or inadequate patching. Sand and recoat if needed. Thickened Dry Coat Pro may need to be used to patch more severe holes or cracks.
7. Decorative Chip can be broadcast into the thicker, build coat of Dry Coat Pro before it sets.

CLEAN-UP

Clean up mixing and application equipment immediately after use. Use toluene, acetone or xylene; do not use alcohol. Follow solvent manufacturer’s safety instructions. Be sure to follow all local, state and federal regulations when disposing of materials.

FOOD SAFE

This document serves to confirm that the products listed below meet the performance criteria set forth in the U.S. Department of Agriculture (USDA) “Sanitation Performance Standards Compliance Guide” and the U.S. Food and Drug Administration (FDA) “2005 Food Code.” These standards apply to paints and coatings utilized in food processing plants and food establishments. It should be noted that the USDA and FDA have ceased issuing product approval letters to coatings manufacturers. Instead, it is required that coatings applied on walls and ceilings in relevant facilities adhere to regulatory standards and be certified as follows:

Garage Force certifies that the following products comply with Title 9, Part 416.2(b) of the Code of Federal Regulations and the FDA “2005 Food Code” when used as topcoats on walls, floors, and ceilings. When applied according to the instructions on the label, these products will not cause insanitary conditions nor will they adulterate food products. Furthermore, they are not classified as pesticides and do not exhibit pesticidal properties.

Upon request, Garage Force will provide the complete chemical composition of these products to the Food Safety Inspection Service (FSIS). It remains the responsibility of the end user to consult with the local FSIS inspector to verify if any additional requirements are applicable for the specific use intended.

SHELF LIFE

24 months from date of manufacture when stored indoors in the original unopened container at 60°F – 85°F (16°C – 29°C) in a dry location with humidity below 65%. Do not allow materials to freeze.

LIMITATIONS

- 16 total mils (100 sq/ft per gal.) of Dry Coat Pro must be applied to achieve MVT resistance up to 25 lbs. per 1000 sq. ft. in 24 hours per ASTM F1869 or 95% RH per ASTM F2170.
- Dry Coat Pro is not designed to be used as a stand-alone product. Dry Coat Pro must be over-coated with a more durable Garage Force coating system.
- Concrete must have a minimum compressive strength of 3,500 psi and a tensile strength of 300 psi.
- This product will not prevent failures caused by Alkaline Silica Reaction (ASR) or contaminants left by previously applied hardeners/sealers.
- Do not apply at a temperature or thickness not recommended.
- Do not delay in pouring mixed material onto the floor.
- Do not apply over loose or unsound concrete, asphalt or bitumen substrates, glazed tile or nonporous brick and tile, magnesite, copper,metal, polyesters, or elastomeric membranes.
- Moving joints and shrinkage cracks may reflect through system. Joints that are designed to move may reflect through the finished flooring system if the are not honored.

PHYSICAL PROPERTIES

Solids by Volume	100%
Solids by Weight	100%
VOC (EPA Method 24)	0 g/l
Mixing Ratio	2:1 (Part A to Part B)
Mixed Viscosity	1500cP
Work Time	25-30 minutes
Practical Coverage Rate	100 - 400 sq.ft./gal.

Coverage rate can vary depending on the texture and porosity of the concrete

Cure Times @ 72°F and 50% Relative Humidity*

Tack Free	9 hours
Minimum Recoat	5 hours
Maximum Recoat	12 hours
Light Foot Traffic	24 hours
Full Cure	5 days

Temperature

Air	38° - 85° F	(3.4° - 29° C)
Surface	38° - 85° F	(3.4° - 29° C)
Material	50° - 85° F	(10° - 29° C)

**Cure times at lower temperatures will be unpredictable. Higher temperatures will shorten pot-life and working time. Floor temperature must be at least 5 degrees over the current dew point. Be ready to aggressively sand or lightly grind the cured product before applying the next coat.*

***Apply a second coat of Dry Coat Pro or the basecoat within 12 hours of the initial coat of Dry Coat Pro . If the re-coat window is missed, the coating system will need to be sanded. Recoat maximun will vary depending on tempersture and humidity.*

Performance Characteristics

TENSILE STRENGTH
METHOD: ASTM D638
TYPICAL VALUE: 9,600 PSI

FLEXURAL STRENGTH
METHOD: ASTM D790
TYPICAL VALUE: 12,800

COMPRESSIVE STRENGTH
METHOD: ASTM C695
TYPICAL VALUE: 11,600 psi

HARDNESS, SHORE D (24 hours)
METHOD: ASTM D2240
TYPICAL VALUE: 75

GLOSS
METHOD: ASTM D523 @60°
TYPICAL VALUE: 90+

WATER VAPOR TRANSMISSION
METHOD: ASTME96
TYPICAL VALUE: .064 perms (grains/hr/sq.ft.)