

Non-slip floor and deck coating

Technical Bulletin # 2004

Product Description

AS-175 is a two-part coating which combines water-borne epoxy resins and tough, fine grained abrasives to produce a self-sealing, non-slip floor and deck coating. Enhanced cleanability, chemical resistance and coverage are but a few of the reasons AS-175 is the first choice for low-profile applications.

AS-175 is fire retardant in the cured state and is ideal for recreation areas as well as industrial and institutional facilities where use of a water-based coating is desirable. Refer to American Safety Technologies Chemical Resistance Table for detailed performance data.

Surface Preparation**CONCRETE**

Remove oil, grease, dirt, wax, etc., by dissolving with a commercial grade cleaner/degreaser then flush the area thoroughly with clean water and allow it to dry. Remove all paint films, laitance, and loose concrete by scarification or shot blasting. Patch any holes or significant defects with AS-5000 Epoxy Patching compound. Smooth or glazed surfaces should be roughened and new concrete should cure at least 30 days with good ventilation prior to application. Form release agents, hardeners, sealer, etc... will interfere with adhesion and must be removed. Prime the surface with PS-100 WB Water-based primer or EP-100 Epoxy Primer.

METAL

All surfaces must be clean, dry and free of surface contamination. Remove all deposits of oil and grease using Solvent Cleaning method SP-1. All previous coating, rust and mill scale should be removed and the surface abraded to a Commercial Grade SP-6. Blasted surfaces should be primed immediately with MS-5C Industrial Primer.

WOOD/FIBERGLASS

A clean sound surface is required. Remove any dirt or oils from the surfaces with a commercial cleaner/degreaser and allow the surface to dry. Follow with sanding to remove loose or deteriorated surface and to obtain the proper surface profile. For wood prime the surface with PS-100 WB Water-based Primer. For fiberglass use the MS-5C Industrial Primer for the best adhesion.

Application

AS-175 is designed to be applied over a primer or sealer.

1. Pre-mix base component with a mechanical mixer such as a pneumatic drill motor with a Jiffy® mixing blade. Make sure all settlement is lifted off bottom of the container and is uniformly dispersed in the material.
2. Pour entire contents of hardener can into base material. Mix hardener and base material with a mechanical mixer such as a pneumatic drill motor with a Jiffy® mixing blade for approximately 3-5 minutes or until mixed material assumes a uniform color and appearance. Apply material immediately. No induction time is required.
3. Working pot life is approximately 1 hour at 70°F. Pot life is increased at lower temperatures and decreased at higher temperatures.
4. AS-175 can be applied at surface temperatures between 50.F and 130.F. Application is not recommended when surface temperature is above 130.F or below 50.F. Below 50°F, curing time will increase substantially.

Application Techniques**ROLLER**

Rolled applications provide the most aggressive non-slip characteristics with an irregular, ridged profile.

1. Use a phenolic roller available from American Safety Technologies Inc. It is important that the rolled profile expose the maximum amount of non-slip aggregate. If the aggregate is not properly exposed, the coating may become slippery when wet.
2. Pour a ribbon of AS-175 on the surface approximately 4" long by 6" wide. Roll material in one direction only, in slow straight strokes pulling material toward you with a moderate amount of pressure until a uniform thickness is achieved. Be careful not to over-roll too many times and avoid applying the material to heavy Material applied too thickly may not cure properly. Work small sections at a time and make the final pass with the roller in one direction to give an even texture and to help eliminate lap marks.
3. Higher temperatures will shorten drying time and conversely, lower temperature and high relative humidity will lengthen drying time. Exterior applications must be protected from rain for at least 24 hours after application according to humidity. Protect from heavy or extended exposure to water, oil and chemicals for 5 to 7 days.

SPRAY

Sprayed applications will result in a uniform appearance with good non-slip characteristics.

1. AS-175 should not be thinned. Thinning could result in grit not remaining properly in suspension.
2. Specialized mastic type spray equipment is required. A recommended set-up is as follows:

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- a. A 5-gallon bottom outlet pressure tank equipped with a double regulator and an air driven agitator, and 1" I.D. outlet pipe.
 - b. 25 feet of 3/8" air hose with 3/8" female connectors at each end.
 - c. 25 feet of 3/4" material hose with 3/4" female connectors at each end.
 - d. A Binks Model 7E2 spray gun equipped with 1/4" (#45) fluid nozzle and a 1/4" internal air cap or a Binks Model 52-2012 (4 foot) pole gun equipped with the same fluid nozzle and air nozzle.
3. Minimum air supply required is 20 CFM at 90 lbs. pressure. Recommended pressure is 15-20 psi on material and 20-25 psi on atomization. Always keep atomization air pressure higher than pot pressure. Keep agitator running slowly. Good coverage and film thickness will be obtained working at 18" or 24" distance from surface. Overlap strokes about 50%. Make sure of wet application. Very little abrasive rebound will be noticed at 15 psi; however, it will be more noticeable at higher pressure.
 4. When temperature is above 80° F, it is advisable to flush the spray equipment with water every hour or so in order to prevent the possibility of any material setting up and plugging the equipment.

Surface Maintenance

Maintain a clean surface to ensure that the anti-slip safety performance of AS-175 is maximized. We recommend the following cleaning procedure.

1. Apply an all-purpose, biodegradable cleaner/degreaser, diluted with water to the surface.
2. Scrub surface with a long-handled, fiber-bristle brush or floor machine. Rinse with clean water and dry.
3. Although extremely durable, AS-175 is not a permanent coating and will require occasional touch up, especially in heavy traffic areas.

Standard Colors

Black, Gray, Tile Red, Beige, and Safety Yellow. Custom colors are available and subject to minimum order requirements. Contact our Customer Service Department for more information at: (800) 631-7841.

Use approved tinting system and pigment when adding colorants. The white tint base should receive no more than 8 fluid oz. of tint and the neutral base 12 fluid oz. high amount of colorants can affect viscosity, cure time and ultimate strength of the product. After colorant has been added, material must be shaken for a minimum of 5 minutes to blend in pigment. Some color separation may be apparent until the converter is added. Premixing with a drill prior to application is also recommended. Deep colors may require additional coats to hide.

Specifications

VOC:	0.5 lbs. per gallon (60 grams/liter)
VOLUME SOLIDS (%):	63%
POT LIFE:	1 hour @ 70°F (21°C)
DRY TIME:	Light Traffic - 24 hours @ 70° F (21° C) Heavy Traffic - 72 hours @ 70° F (21°C)
ESTIMATED COVERAGE:	90 sq. ft. per gallon – roller 120 sq. ft. per gallon – spray
WEIGHT PER GALLON:	12.2 lbs. per gallon (1.47 kg/liter)
FLASH POINT:	N/A
COEFFICIENT OF FRICTION ASTM F609:	Dry - 0.78 Wet - 0.86
PACKAGING:	1 gallon kits

Date

07/2006

CAUTION

Read Material Safety Data Sheet before using this material. Use only with adequate cross ventilation. Keep away from extreme heat, sparks and open flame. Keep from freezing. Avoid prolonged breathing of vapors. For dizziness, seek fresh air. Avoid contact with skin. Use gloves, goggles and coveralls. In case of spillage on clothing, change clothing to prevent prolonged contact with skin. Wash contaminated clothing before reuse. In case of accidental contact with skin, wash immediately with soap and water. In case of eye contact, flush thoroughly with plenty of water and call physician. If swallowed accidentally, do not induce vomiting. Seek medical attention immediately.

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