Americrete

Decorative Overlays • Sealers • Waterproofing

Description

Americrete's 6300 is a two component, 100% solids, low viscosity, moisture accepting epoxy primer. It has an ability to reduce the hydrostatic pressure emitted by the floor from 12 lbs per 1000 square feet to less than 1 lb. Americrete's Vapor seal can even cure underwater without affecting its adhesion. When applied at 73°F / 50% humidity, Americrete's 6300 is a 5-7 hour cure.

Uses

Americrete's 6300 can be used to prime concrete, metal, and wood. Corrosion inhibitors can be added (by special request) for use over metal substrates. It is an excellent all around concrete primer/sealer with incredible adhesion.

Advantages

- Meets USDA criteria
- 100% Solids
- Low Viscosity
- Chemical Resistant
- High Build
- Moisture Tolerant
- Convenient 2:1 Mix; A:B=2:1
- Superior Adhesion

Coverage

Americrete's 6300 covers up to 300 sq.ft. per gallon under normal conditions, which will achieve 5.2 dry mils. Americrete's 6300 may be applied at a heavier rate to achieve a higher build system or to accommodate the broadcasting of aggregates.

Colors

Available pigmented in any of our standard colors. Clear is also available, but has an amber hue.

Packaging

1 1/2 gallon kits
(1 gallon part A to 1/2 gallon part B)
15 gallon kits
(10 gallons part A to 5 gallons part B)

Inspection

Concrete must be clean, dry, and free of grease, paint, oil, dust, curing agents, or any foreign material that will prevent proper adhesion. The concrete should be at least 2500 psi and feel like 30-grit sandpaper. The concrete should be porous and be able to absorb water. A minimum of 14 days cured is required on all concrete. Relative humidity in the concrete floor slab should be below 80% (per ASTM F-2170).

Before starting flooring work, test existing concrete slab to make sure there is no efflorescence or high levels of alkalinity. Alkalinity refers to a high pH reading which means the floor is not neutral. A high alkaline environment can cause salts to creep up through the cement called efflorescence. These salts have a tendency to prevent or destroy the bonding of coatings to the concrete. The most common form of testing is the use of a wide-range pH paper or tape. Make sure the floors pH reading ranges between 5-9 to ensure adhesion. The testing of concrete for alkalinity can show the amount of alkalinity only at the time the test is ran, and cannot be used to predict long-term conditions.

Calcium chloride tests should be conducted to determine if the concrete is sufficiently dry for an epoxy flooring installation. The calcium chloride tests should be conducted in accordance with the latest edition of ASTM F 1869, *Standard Test Method for Measuring Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride*. When running a calcium chloride test, it is important to remove any grease, oil, curing agents, etc. so accurate readings can be obtained. A rate of 15 lbs/1000 ft²/24hr period or less is an acceptable amount of vapor pressure for use of Americrete's 6300.

Failing to adhere to these strict guidelines can result in product delamination, discoloration, blistering, or all together failure of the coating system. Testing is the responsibility of the applicator. Americrete bears no responsibility for failures due to any of the above conditions.

Surface Preparation

Prepare the surface by shot blasting. All expansion joints should be honored. Cracks should be chased with a diamond crack chaser (approximately 1/4" x 1/4"), swept or blown clean. Surface should feel like 30 grit sandpaper and be porous enough to absorb the primer. Lightly misting the floor with water can help promote adhesion. Avoid puddling.

Mixing

Mix 2 parts A with 1 part B (by volume) of Americrete's 6300 together for 3 to 4 minutes with a slow speed drill mixer. For best penetration into concrete, thin by

adding up to 1 quart of acetone to each 1.5 gallon kit. Thinned material must be applied at less than 5 mils (and not puddle) to cure properly. The Americrete's 6300 will have approximately 20 minutes of working time.

Application

As a primer: Immediately after mixing, spread a strip of the batch onto the surface along the edges where it will be cut in using a brush. Pour the remaining material near the cut in area and spread evenly using a trowel or squeegee and back roll using a 1/4" nap non-shedding roller. Thinned material must be applied at less than 5 mils (and not puddled) to cure properly.

Americrete's 6300 can be applied as an intermediate coat for extra protection from hydrostatic pressure: Mix and apply without solvent at the desired thickness using a notched trowel or squeegee and backroll using a 1/4" nap non-shedding roller.

Drying Time

You may re-coat as soon as the surface is dry to touch or in about 8 hours (but not later than 48 hours). Light foot traffic may be permitted in 24 hours, light vehicle traffic in 72 hours, heavy traffic in 7 days. All times are based on average temperature of 70 degrees and 50% humidity. Cooler temperatures will increase drying time.

Limitations

- Do not apply at any temperature below 50° F or above 95°F.

- Concrete must be cured for a minimum of 10 days and have less than 15 lbs of moisture per thousand square feet.

- For interior use only unless protected by a UV resistant coating *such as urethane.*

- Epoxy must be cured for a minimum of 24 hours before coming in contact with water.

- Concrete should be a minimum of 2500 psi.

Hardener	Americrete's 6300			
Mix Ratio, By Volume	2 parts resin / 1 part hardener			
Test Temperature / Relative Humidity	41°F / 80%	59°F / 60%	73°F / 50%	95°F / 35%
Mixed Viscosity, cP	<4000	2,800	1,350	500
Gel Time (100g mass), minutes	699	393	139	56
Tack-free Time, hours	>24	8	5.5	2.5
Dry Through Time, hours	>24	10.5	7	3.5
Visual Appearance	Uncured	Semi-gloss	Glossy	Glossy
Mechanical Properties				
Pencil Hardness	2H			
Persoz Hardness, seconds	200			
Cross-cut Adhesion	5A			
Impact Resistance (D/R), in lb.	30 / 2			
Elcometer Pull-off Adhesion ASTM D4541	553 psi (average)			