

DESCRIPTION.

ACE FLAKE SYSTEM is a multi-layer decorative floor coating system consisting of pigmented epoxy primer broadcast with decorative flake and sealed with a polyaspartic topcoat. The topcoat provides a clear gloss surface for excellent abrasion, chemical resistance, and UV stability. ACE EPOXY 202 primer provides 5 lbs. / 1,000 sq. ft / 24 hrs. per ASTM F1869, providing industry leading adhesion to concrete.

With ACE EPOXY, product configuration can be designed to be installed in one or two days and accommodate for climate variables.

SYSTEM.

PRODUCT.	FIRST COAT.
202 ACE EPOXY	150-250 sq. ft per gal
204 ACE EPOXY	150-250 sq. ft per gal
OPTIONAL: 200 SERIES ACCELERATOR	1-2 packs per gallon of epoxy
500 UNIVERSAL PIGMENT	1 pack per kit of epoxy
600 ACE FLAKE	400-500 sq. ft. per 50lb box
302 ACE POLYASPARTIC	150-175 sq. ft per gal
303 ACE POLYASPARTIC	150-175 sq. ft per gal
304 ACE POLYASPARTIC	150-175 sq. ft per gal

SUBSTRATE CONDITIONS.

All concrete should clean, bare, and free of any curing membranes, such as densifiers, paints, or other sealers inhibiting the adhesion directly to the concrete substrate. Concrete shall be in structurally sound and stable condition. Concrete shall be free of dust, dirt, grease, contamination, surface laitance, and other potential bond-breaking substances that could impair adhesion. All cracks, gouges, and other surface defects shall be repaired appropriately prior to System installation, see ACE EPOXY options for cracks and joint fillers.

Moisture reading on concrete should not exceed 5 lbs. / 1000 sq. ft / 24 hrs. per ASTM F1869 for 204 ACE EPOXY and 5 lbs. / 1000 sq. ft / 24 hrs. per ASTM F1869 for 202 ACE EPOXY. Consult with ACE EPOXY Technical Support if moisture vapor transmission readings are above the recommended levels.

ENVIRONMENTAL CONSIDERATIONS.

Ideal environmental conditions for ACE FLAKE SYSTEM are between 50-85°F and relative humidity of 65%.

- Hot and humid climate will shorten the pot life and curing time, which can have an adverse effect on the final appearance of the floor.
- Cold and dry climate will increase the pot life and prolong the curing time, making the floor susceptible for contamination and longer shutdown times.
- Applying the product during descending temperature will help reduce concrete out-gassing from occurring.

Storing the material before the application in areas where the temperature is within the recommended range for at least a day is strongly recommended. Other methods accommodate for temperature and moisture outside the range:

- Ice the buckets several hours before the application in case of hot and humid weather. Use pail warmer in case of cold weather.

Applying the material during the night, morning or afternoon will improve application conditions for hot weather. Applying during the day will help with colder conditions. Consult with ACE EPOXY Technical Support.

SURFACE PREPARATION.

Pour water onto the concrete surface. Inspect area to see if water penetrates concrete (concrete will darken). If water beads up during the penetration test, then the following additional preparation will be needed.

Nonporous concrete must be mechanically prepared to a profile of CSP (Concrete Surface Profile) between 2 and 4 per ICRI (icri.org). The method used to mechanically achieve the recommended CSP can range from grinding, shotblasting, sanding, light scarification, or any method recommended by ICRI. Non-acid biodegradable etchers might also be used. Consult with ACE EPOXY Technical Support.

RECOMMENDED APPLICATION TOOLS.

- 18" x 3/8" Lint free Rollers
- 18" roller assembly
- Epoxy / Paint Mixer
- Spike Shoes
- Bent Floor 24" Scraper + Handle
- Rigid 18" Floor Scraper + Handle
- 4-Inch Weenie Roller Frame
- 4-Inch Weenie Roller 3/8 Nap 2 Pack
- 6-Inch Weenie Roller Frame
- 6-Inch Weenie Roller 3/8 Nap 2 Pack
- 22" Magic Trowel
- Acetone or Xylene for cleaning
- Rags
- Gloves, Long Pants & Long Sleeves
- Eye Protection
- Respirator compliant with NIOSH / Face mask

MIXING EPOXY.

1. Premix Part A and Part B prior to mixing both components with a low-speed drill using a jiffy type mixer.
2. Add color pack to Part A and mix.
3. Add Part B to colored Part A and mix for 2-3 minutes.
4. Scrape sides of the bucket to assure all material is mixed, continue drilling for one minute.
5. Optional: add accelerators (consider environmental conditions, pot life will be reduced).

EPOXY APPLICATION.

1. Apply enough product on the floor to work edges with 3"-4" brush or 6" weenie roller. Work fast enough to keep wet edge.
2. Pour a line of 202 ACE EPOXY or 204 ACE EPOXY on the floor; begin rolling with 3/8" nap 18" roller. Target between 6-10 mills (150-250 sq. ft/gal). Wear spike shoes as needed.
3. For even coverage and better flake adhesion back roll the 202 ACE EPOXY or 204 ACE EPOXY.

FLAKE APPLICATION.

1. For the application of flake to be completed, broadcast the flake over the wet epoxy to rejection—until the entire wet epoxy has been covered and is no longer visible.
2. When the 202 ACE EPOXY is dry enough for foot traffic the excess flake can be recovered through these different methods: vacuuming, sweeping or blowing. Flakes might be reused on future projects if they kept their original size.
3. Scrape the floor thoroughly with a rigid scraper to remove all edges, spikes and remove any additional flake pieces. Use a vacuum to remove the additional flake residue and dust.

POLYASPARTIC TOPCOAT APPLICATION.

1. Premix Part A and Part B within their respective buckets at the ratios listed on label.
2. Pour Part B into Part A and mix for 3 minutes using a jiffy blade mix with a low-speed drill.
3. Make sure that all areas of the material in the container are mixed. Scrape the walls of the bucket with a wooden paddle to ensure all material is mixed. Continue mixing for one minute.
4. Use spike shoes when applying polyaspartic for proper reach of the application areas.
5. Pour the material in even lines about 4" to 6" thick.
6. Using an 18" x 3/8" nap roller spread the polyaspartic topcoat to achieve a rate of 150 -175 sq. ft per gallon, back roll the area at a 90 degree angle to ensure an even topcoat.
7. Assure there is an edge of uncured material between applications of material for uniformity and proper curing.
8. Allow the topcoat to cure proper time according to climate conditions before opening to traffic. Please refer to product TDS for curing times.

LIMITATIONS.

- Must be top coated with a UV Resistant Sealer to stop ambering.
- Epoxy may amber if a light broadcast technique is used.
- Will not bridge cracking.
- All sources of ignition should be turned off during installation and remain off until solvent vapors have dissipated.

ADDITIONAL CAUTIONS AND RECOMENDATIONS.

- Have all personnel who come in contact with liquids read The ACE EPOXY, URETHANE, AND POLYASPARTIC 2K SAFETY GUIDE and Material Safety Data Sheets before commencing work.

TECHNICAL SUPPORT.

Visit www.aceepoxy.com/techsupport or scan the QR code below for system support and videos.

