ENDURA
PAINT

ENDURA COATING GUIDES

CONCRETE FLOORS

COATING GUIDE

Endura offers a coating system for concrete floors consisting of an epoxy primer and a urethane topcoat. It can be used on garage, warehouse and machine shop floors.

It provides outstanding chemical and abrasion resistance.

ENDURA PAINT | COATING SYSTEMS

Epoxy/Urethane Concrete Coating System

Endura offers a coating system for concrete floors consisting of an epoxy primer and a urethane topcoat. It can be used on garage, warehouse and machine shop floors. It provides outstanding chemical and abrasion resistance.

Endura EP HiBuild Floor is used as the Primer and it is topcoated with EX-2C C.C Topcoat.

Before you START:

It is critical that the floor be dry before the EP HiBuild epoxy floor primer is applied. Moisture on the surface can cause adhesion problems.

The Technical Data Sheets and instructions for both EP HiBuild Primer (Concrete Floors) and EX-2C C.C. Topcoat (Concrete Floors) have been specifically tailored for flooring applications, for other substrates refer to the individual Technical Data Sheets available atwww.endurapaint.com

Technical Support

If you require additional technical support regarding any of the issues covered in this guide or need help with other paint related issues or troubleshooting, please contact Endura Paint.

Endura offers e-mail technical support for our customers.

E-mail inquires allow us to look into your problem before contacting you with a solution.
Simply email info@endura.ca

Please have the following information available when contacting us.

- Name, batch number and color of product being used
- Substrate being painted
- Type of spray/painting equipment being used
- Environmental information including ambient temperature and humidity levels

Technical support is also available by phone by calling 1-800-661-9930

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EP HiBuild Epoxy Primer Application

The Following guide provides detailed application information for coating concrete floors with the Endura Epoxy/Urethane Coating System.

Primer Surface Preparation

Existing Concrete Floors: Older than 30 days

Concrete floors should be shot blasted or acid etched. For acid etching concrete floors use muriatic acid, mixed at a ratio of 1 part acid to 5 parts water, by volume. Rinse the floor thoroughly with clean water after etching and dry completely. Force dry the floor, the concrete must be completely dry before it is coated with primer.

Note: New Concrete floors should be cured for a minimum 30 days prior to coating.

Primer Mixing:

Mix component A thoroughly. Mix 4 parts of EP HiBuild component “A” with 1 part EP Hi Build component “B” and 1 part epoxy reducer by volume.

Mix only enough material that can be applied within 1 hour.

Do not mix large volumes of EP Hi Build as they are very exothermic and will reduce overall pot-life.

Primer Application Equipment

A short (1/8”) pile roller should be used. A squeegee may be used for initial spreading, and then the product should be rolled.

Primer Application Method

Ensure the surface temperature and ambient temperature are between 15°- 30°C (60° - 86°F) before application of the EP Hi Build Primer. The floor temperature must be maintained at a minimum of 15°C (60°F) and the relative humidity should not exceed 50%.

The EP HiBuild Primer total coverage should be 50 - 75 sq. ft./quart (4.8 - 7.3 sq m./liter). This will result in a film build of 4.0 - 6.0 mils dry (100 - 150 microns). The smaller the coverage area the greater the abrasion resistance due to increased coating thickness.

The EP HiBuild should be applied in 2 thinner coats to achieve the desired film build and avoid solvent entrapment.

Pour 1 quart (0.95 liter) of mixed primer onto the floor and roll it out to approximately 100-150 square feet (9.6 -14.6 sq. m./liter). Allow 2-3 hours between coats. After the dry time, pour 1 quart (0.95 liter) of mixed primer onto the EP HiBuild surface and roll out once again to 100-150 square feet (9.6 -14.6 sq. m./liter). This will result in the recommended film build of 4.0 - 6.0 mils dry (100 - 150 microns).The EP HiBuild will be soft after the 2-3 hours dry so tread lightly on the surface during application of the second coat. Wearing either spiked shoes or running shoes will limit the surface imperfections. Important

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Note: Apply EX-2C C.C. Topcoat within 24 hours of primer application

EX-2C C.C. Topcoat Application

EP HiBuild Primer may be topcoated between 12 - 24 hours, at normal temperatures. Dry times will vary depending on the amount of film build and ambient temperatures and humidity.

For the best floor system performance (weathering, gloss retention and chemical resistance) EP Hi Build Primer should be topcoated with EX-2C C.C. Topcoat.

Sanding of the EP HiBuild primer is not normally required before application of the EX-2C concrete topcoat or between coats of primer. However, scuff sanding to remove surface imperfections will result in a superior surface appearance. **If the primer coating is left more than 24 hours, it will have to be scuffed with 120 – 150 grit sandpaper before refinishing**. Use a vacuum cleaner to remove all dust from the surface.

Topcoat Surface Preparation

Sanding of the EP HiBuild Primer is not normally required before application of the EX-2C C.C. if it is applied within the maximum recoat window of 24 Hours. If the primer coat is left more than 24 hours, it must to be sanded with 180 – 220 grit to achieve intercoat adhesion.

Prior to applying the topcoat ensure that the surface is free of flaws, nibs or imperfections. If large imperfections exist after primer coat use 120-150 grit sandpaper to remove them. Use a vacuum cleaner to remove all dust from the surface

Topcoat Mixing

Mix component A thoroughly. Check to ensure correct color.

Rolling: Mix 2 parts EX-2C C.C. Topcoat component “A” with 1 part EX-2C Special component “B”, by volume, with 2 parts Xylol, by volume.

Topcoat Application Equipment

A short (1/8') pile roller should be used. A squeegee may be used for initial spreading followed by rolling.

Topcoat Application Method

The application conditions should be about 20°C (68°F) at 50% relative humidity. It is important that the temperature of the mixed paint be between 20°-25° C (68°- 77°F) as temperature can greatly affect viscosity. Substrate temperature should not be lower the 7°C (45°F) or higher than 30°C (86°F).

Note: Above or below normal conditions will decrease or increase the length of drying time respectively.

DO NOT apply when the surface is less then 3°C (5°F) above the dew point.

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Note: The surface of the EP HiBuild is soft after 12-24 hours therefore it is recommended to walk lightly on the EP HiBuild surface with either spiked shoes or running shoes to limit the surface imperfections which may show through the topcoat.

The EX-2C C.C Topcoat total coverage should be 70 - 100 sq. ft./ quart (6.8 - 9.3 sq m./liter). This will result in a a film build of 2.0 - 3.0 mils dry (50-75 microns). The smaller the coverage area the greater the abrasion resistance due to increased coating thickness.

The EX-2C C.C Topcoat should be applied in 2 thinner coats to achieve the desired film build and avoid solvent entrapment.

Pour 1 quart (0.95 liter) of mixed EX-2C C.C. topcoat color onto the EP HiBuild and roll it out to approximately 140 - 200 square feet (13.6 - 18.6 sq. m./liter). Allow 4 hours dry between coats. After the dry time, pour 1 quart (0.95 liter) of mixed EX-2C C.C. Topcoat color onto the first coat of EX-2C.C. and roll out once again to 140 - 200 square feet (13.6 - 18.6 sq. m./liter). The EX-2C C.C. topcoat color will be soft after the 4 hours dry therefore, tread lightly on the surface during application of the second coat. Wear either spiked shoes or running shoes to limits the surface imperfections. For areas over 1000 sq. ft. (93 sq. m.) use a squeegee to spread out the EX-2C C.C. Topcoat and then back roll with the short pile roller.

Drying Time:

Based on 2.0-3.0 Mils DFT. The dry time will be longer if thicker films are applied and will also depend on temperature, humidity and the amount of air circulation.

Dry To Touch: 6 -10 Hours
Walk On: 24 - 48 Hours
Heavy traffic: 4 Days
Full Cure: 7 -14 Days

Tape Application

Under normal conditions, EX-2C Concrete Topcoat generally does not tape mark after 16 – 24 Hours.

Additional Colors

Stripes or trim colors can be applied after an 8 – 16 hour drying period. After masking, lightly scuff sand color with 180 grit sandpaper, or scuff sand with abrasive pad.

Alternate Method: Apply trim color slightly wider than final width, allow to dry 8 – 12 hours (less if Super Catalyst II was used), mask off and scuff sand as above and apply next color coat.

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Signs and Decals

Sign painting and lettering should be done as soon as possible (8 – 16 hours after the last coat was applied). Decals should not be applied for 14 days.

Cleaning Instructions

Surfaces coated with EX-2C C.C Topcoat should be allowed to dry a minimum 36 – 48 hours before even a gentle cold-water wash or rinsed is carried out. The complete cure of Endura Concrete Floor Coating System takes between 15-30 Days. DO NOT USE hot water or pressure wash for 30 days as there is a risk of water spotting, delamination or blistering of the coating. Protect the paint surface from rain, condensation (dew), or sudden exposure to high heat for at least 24 hours after painting.

Storage

Keep materials away from open flames or sparks. Keep containers tightly closed and whenever possible keep shop temperatures between 15° & 20°C (58° & 68°F). In case of spillage, absorb and then dispose of in accordance with local applicable regulations.

Personal Protection: **Read the Safety Data Sheets prior to using the products**

Only use EP HiBuild Primer and EX-2C C.C Topcoat with adequate ventilation to minimize exposure to vapor and spray mist. Wear the proper personal protective equipment when applying these products. A fresh air supplied respirator is the only acceptable type of respiratory protection for solvent vapor and spray mist. This should be well fitted and regularly serviced.

For more information on this guide or on any Endura coating product please contact us at 1-800-661-9930 or by email info@endura.ca.

Additional Information:

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