

EP HiBuild Primer Concrete Floors

Technical Data Sheet (TDS)

Product Description

EP HiBuild Primer is a high solid, high build, two-component epoxy primer. EP HiBuild Primer is ideally suited as a multi-mil coating for use on concrete floors in garages, warehouses and in industrial shops.

Product features:

- Proven for heavy industrial applications
- Waterproof capability at 10 mils dry film thickness
- High solids provide quick film build
- Excellent alkali and salt spray resistance

Recommended Uses

EP HiBuild Primer is ideally suited for heavy industrial uses and/or waterproofing requirements. When using EP HiBuild Primer on a concrete floor it should be topcoated with Endura EX-2C C.C. Topcoat specially formulated for concrete floor applications.

Industrial Applications:

- Industrial Warehouse Floors
- Garage Floors
- Automotive Shop Floors
- Aircraft Hanger Floors
- Chemical Plant Floors

Product Characteristics

Finish: Medium Gloss	
Volume Solids Mixed: (Unreduced) FEA0274: FEB0275 (4:1)	73% ± 2%
Volume solids will vary by color	
Pot Life: (77°F (25°C) and 50% RH)	6 Hours
VOC Mixed (Unreduced): EPA Method 24 FEA0274: FEB0275 (4:1)	245 g/l 2.048 lb /gal
VOC content will vary with each color Note: All colors are below 250g/l.	
Shelf Life: For unopened product (77°F (25°C))	
Component A	3 years
Component B	2 years

Surface Preparation

Concrete: 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.

Concrete Floors should be cured for a minimum of 30 days prior to coating application.

All other substrates refer to the Endura recommended surface preparation instruction sheets or contact your Endura representative.

Mix Ratio

- 4 parts by volume of component A [**FEAXXXX**]
(Part Number varies with color)
1 part by volume of component B [**FEB0275**]
1 part by volume Epoxy Reducer [**FTHXXXX**]

The recommended temperature when mixed is 68-77°F (20-25°C).

Thinning will depend on ambient conditions. If extra thinning is required, use one of the following Endura Low VOC Epoxy reducers.

- [FTH0016] Low VOC Epoxy Reducer- Regular
[FTH0027] Low VOC Epoxy Reducer- Slow

Application Method

Application Equipment for Concrete Floors

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

The floor temperature must be maintained at a minimum of 15°C (60°F) and the relative humidity should not exceed 50%.

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.

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.

Refer to the Concrete Floor Coating System Guide for complete instructions.

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Film Build

EP HiBuild Primer recommended film thickness:

Wet: WFT Unreduced	5.5 – 8.0 mils	140 – 203 microns
Dry: DFT	4.0 – 6.0 mils	102 – 152 microns

Theoretical coverage at 1.0 mil (25 microns)
DFT: 1171 ft² per gallon at 100% transfer efficiency.

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.

Dry Times

Dry Film Thickness 4.0 – 6.0 mils (102 – 152 microns)	68°F (20°C)
Dry to touch	6 - 10 Hours
Walk-on	36 – 48 Hours
Heavy Traffic	4 Days
Full Cure	7-14 Days

Dry Times are subject to ambient conditions (temperature and humidity), good airflow and film build of primer.

For best results surface temperature must be 86°F (30°C) or less before topcoating. Maximum re-coat window without sanding is 24 Hrs. at 68°F (20°C). Mechanical sanding with 180 – 220 grit sandpaper is recommended after exceeding the recoat window for inter-coat adhesion.

For questions about scheduling please contact your Endura Representative.

Topcoating Information

If EP HiBuild Primer is used on concrete floors, it should be topcoated with EX-2C C.C. Topcoat for maximum performance.

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

Refer to the Concrete Floor Coating System Guide for complete instructions.

Clean Up

Clean all equipment immediately after use with Endura High Strength Gun Wash, Endura Epoxy Reducer or Endura EX-2C Thinner.

Follow manufacturer's safety recommendations when using any solvent.

Ordering Information (sizing)

EP HiBuild Primer	1 ¹ / ₄ mixed gallons (4.73l)	
Comp A – Std White	FEA0270-030	1 gallon (3.78l)
Comp A – Warm Grey	FEA0274-030	1 gallon (3.78l)
Comp A - Std Black	FEA0273-030	1 gallon (3.78l)
Comp B	FEB0275-020	1 quart (946ml)

EP HiBuild Primer	5 mixed gallons (18.9l)	
Comp A – Std White	FEA0270-054	4 gallons(15.1l)
Comp A – Warm Grey	FEA0274-054	4 gallons(15.1l)
Comp A - Std Black	FEA0273-054	4 gallons(15.1l)
Comp B	FEB0275-030	1 gallon (3.78l)

Other custom sizes may be available

Environmental Conditions

For optimum coating performance, product, substrate, and ambient temperature should be between 68°F-77°F (20°C-25°C). To prevent condensation during application the surface temperature must be 5°F (3°C) or more above the dew point at all times.

For use outside this range please contact your Endura Representative.

Specifications

Solvent Resistance	ASTM D4752	100 MEK Rubs; NO Failure
Impact resistance	ASTM D2794	20 in. lbs; NO Failure
Flexibility	ASTM D522	7/16 in. mandrel bend: NO failure
Service Temp Range	-40°F to 250°F	-40°C to 121°C

Safety Precautions

Please refer to all Safety Data Sheets (SDS) before using this product. SDS sheets can be found on our website at www.endurapaint.com.