

High Build Epoxy System is a high build, colored epoxy/urethane, high performance concrete coating system. It is used for environments requiring an attractive, high performance floor or when a concrete floor has sustained damage requiring a moderately thick resurfacer.

The system described is our standard system, several other product options that also work for this system including, but not limited to low odor or low VOC products. Consult your sales representative for details.

## BENEFITS

- Suitable in many chemical exposure environments
- Color stable with urethane topcoat
- Excellent wear characteristics
- Engineered chemistry to provide UV resistance
- Typical application of approximately 25 to 35 mils

# **RECOMMENDED FOR**

- Industrial or manufacturing areas
- Pharmaceutical manufacturing
- Commercial Areas
- Auto repair shops
- Aeronautical hangars
- Animal care areas
- Anywhere a solid color concrete resurfacer is desired

### SYSTEM COMPONENTS (approx 25 to 35 mils)

Coat	Product	Mix	Coverage
Primer	707lvp Low Visc	2:1	200 sf/gal
	Epoxy Primer		
Body	707 High Build	2:1	80 to 125
	Ероху		sf/gal
Topcoat	322	2:1	350 to 400
	VOC Urethane		sf/gallon

### Multiple Options Available

\*Refer to individual data sheets for preparation, mixing and application instructions as well as product limitations, limitations of liability, warranty information and common chemical resistance information.

PHYSICAL PROPERTIES			
Property	Test Method	Result	
Adhesion		430 psi	
		(concrete	
		failure)	
Flexural	ASTM D790	5,400 psi	
Strength			
Compressive	ASTM D695	9,100 psi	
Strength			
Tensile	ASTM D638	4,800 psi	
Strength			
Elongation		3.1%	
Impact		50 inch lbs.	
Resistance		Direct	
Abrasion	CS-17 1000/500	22 mg	
Resistance			
Gloss	Glossmeter	>70	
Application		60° to 90° F	
Temp.			

Typical values and not specifications.

See individual component product data sheets for specific product properties.

We also have available several crack fillers, joint sealant and other support products. Please inquire with your sales representative for more information on these products.

# HIGH BUILD EPOXY SYSTEM APPLICATION INSTRUCTIONS (See individual data sheets for complete details)

**PRODUCT STORAGE:** Store product in an area so as to bring the material to normal room temperature before using. Continuous storage should be between 60 & 90 degree F. Keep from freezing.

**SURFACE PREPARATION:** Surface preparation will vary according to the type of system to be applied. For a complete system build higher than 10 mils dry, we recommend a fine brush blast (shot blast). All dirt, oil, dust, foreign contaminants & laitance must be removed to assure a trouble free bond to the substrate. A test should be made to determine that the concrete has an appropriate vapor barrier. This can be done by placing a 4'X4' plastic sheet on the substrate and taping down the edges. If after 24 hours, the substrate is still dry below the plastic sheet, then the substrate does not show signs of eventual hydrostatic pressure problems that may later cause disbanding.

**PRIMER MIXING:** This product has a mix ratio of 12# part A to 3.85# part B for standard colors. Standard packages are in pre-measured kits and should be mixed as supplied in the kit. We recommend that the kits not be broken down unless suitable weighing equipment is available. After the two parts are combined, mix well with slow speed mixing equipment such as a jiffy mixer until the material is thoroughly mixed and streak free. After mixing, transfer the mixed material to another pail (the transfer pail) and again remix. The material in the transfer pail is now ready to be applied on the substrate. Improper mixing may result in product failure.

**PRIMER APPLICATION:** This product is only intended as a high solids primer suitable for most substrates. However, if the surface is very porous, then a lower solids primer might be more suitable to reduce the possibility of air release problems occurring. The mixed material can be applied by brush, or roller. However, the material can also be applied by a suitable serrated squeegee and then back rolled as long as the appropriate thickness recommendations are maintained. Maintain temperatures & relative humidity within the recommended ranges during the application & curing process. If concrete conditions or over aggressive mixing causes air entrapment, then an air release roller tool should be used prior to the coating tacking off to remove the air entrapped in the coating. Thinner applications will not level as well as higher build applications.

**TOPCOATING THE PRIMER:** When topcoating this product, be sure that the coating has tacked off before topcoating can commence. Before topcoating, check the coating to verify no epoxy blushes were developed (a whitish, greasy film or deglossing). If a blush is present, it must be

removed prior to topcoating. A standard type detergent cleaner can be used to remove any blush.

**BODY COAT (BUILD COAT) PRODUCT MIXING:** This product has a mix ratio of 12# part A to 4.15# part B or 2 parts A to 1 part B by volume for standard colors. Standard packages are in pre-measured kits and should be mixed as supplied in the kit. We recommend that the kits not be broken down unless suitable weighing equipment is available. After the two parts are combined, mix well with slow speed mixing equipment such as a jiffy mixer until the material is thoroughly mixed and streak free. After mixing, transfer the mixed material to another pail (the transfer pail) and again remix. The material in the transfer pail is now ready to be applied on the primed substrate. Improper mixing may result in product failure.

**BODY COAT (BUILD COAT) APPLICATION:** The mixed material can be applied by brush or roller. However, the material can also be applied by a suitable serrated squeegee and then back rolled as long as the appropriate thickness recommendations are maintained. Maintain temperatures and relative humidity within the recommended ranges during the application and curing process. If concrete conditions or over aggressive mixing causes air entrapment, then an air release roller tool should be used prior to the coating tacking off to remove the air entrapped in the coating.

**TOPCOAT (Wear Coat) PRODUCT MIXING:** This product has a two to one mix ratio by volume- merely mix two gallons of part A with 1 gallon part B. After the two parts are combined, mix well with slow speed mixing equipment such as a jiffy mixer until the material is thoroughly mixed and streak free. Avoid whipping air into the coating. Improper mixing may result in product failure.

**TOPCOATING BODY COAT (BUILD COAT):** After the Body Coat has cured, the mixed material can be applied by brush or roller. Maintain temperatures within the recommended ranges during the application and curing process. It is best to maintain a wet edge to avoid roller marks. Direct sunlight or high temperatures may cause visible roller marking during application. Too thick of an application may result in product failure. Exposure to certain types of lighting such as sodium vapor lights may cause the product to discolor. Topcoat within 24 hours to insure a proper bond. If topcoating after 24 hours, it is recommended to degloss the Body coat prior to applying the final topcoat.

#### NOTICE TO BUYER: DISCLAIMER OF WARRANTIES AND LIMITATIONS ON OUR LIABILITY

We warrant that our products are manufactured to strict quality assurance specifications and that the information supplied by us is accurate to the best of our knowledge. Such information supplied about our products is not a representation or a warranty. It is supplied on the condition that you shall make your own tests to determine the suitability of our product for your particular purpose. Listed physical properties are typical and should not be construed as specifications. NO WARRANTY IS MADE, EXPRESSED OR IMPLIED, REGARDING SUCH OTHER INFORMATION, THE DATA ON WHICH IT IS BASED, OR THE RESULTS YOU WILL OBTAIN FROM ITS USE. NO WARRANTY IS MADE, EXPRESSED OR IMPLIED, THAT OUR PRODUCT SHALL BE MERCHANTABLE OR THAT OUR PRODUCT SHALL BE FIT FOR ANY PARTICULAR PURPOSE. NO WARRANTY IS MADE THAT THE USE OF SUCH INFORMATION OR OUR PRODUCT WILL NOT INFRINGE UPON ANY PATENT. We shall have no liability for incidental or consequential damages, direct or indirect. Our liability is limited to the net selling price of our product or the replacement of our product, at our option. Acceptance of delivery of our product means that you have accepted the terms of this warranty whether or not purchase orders or other documents state terms that vary from this warranty. No representative is authorized to make any representation or warranty or assume any other liability on our behalf with any sale of our products. Our products contain chemicals that may CAUSE SERIOUS PHYSICAL INJURY. BEFORE USING, READ THE MATERIAL SAFETY DATA SHEET AND FOLLOW ALL POPYRIGHT 6/6/19 NATIONAL POLYMERS, INC.