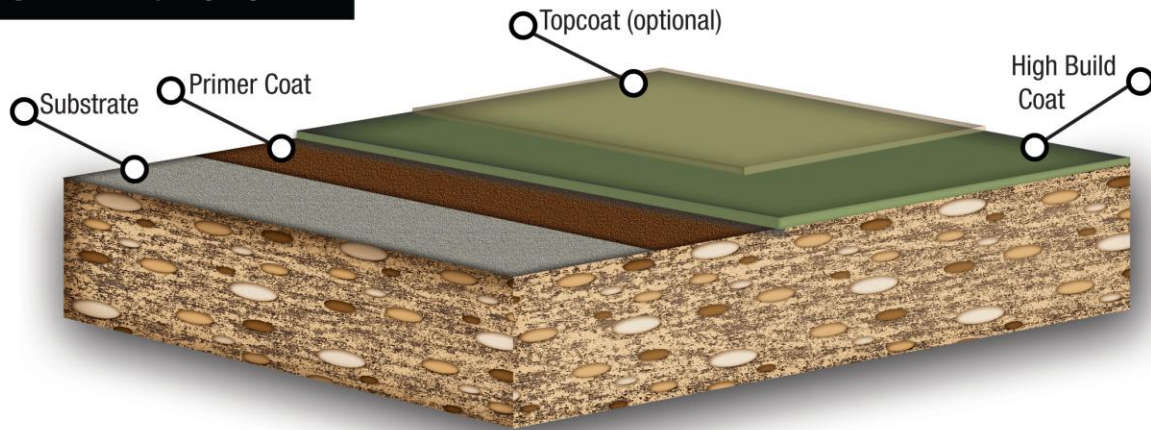


## High Build Epoxy System



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 surfacer.

**The system described is APS's standard system, APS has 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
- Great physical characteristics
- Color stable with urethane topcoat
- Excellent wear characteristics
- Engineered chemistry to provide UV resistance
- Typical application of approximately 18 to 36 mils

### RECOMMENDED FOR

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

#### SYSTEM COMPONENTS (approx 16 to 36 mils)

Coat	Product	Mix Rate	Coverage
Primer	ST 3015 Water	4:1	267
	Based Epoxy		sf/gallon
Body	ST 4107 High	2:1	53-133
	Build Epoxy		sf/gallon
Wear	ST 3320 High	2:1	320-500
	Performance Urethane		sf/gallon

**Multiple Options Available**

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

PHYSICAL PROPERTIES		
Property	Test Method	Result
Adhesion		425 psi (concrete failure)
Flexural Strength	ASTM D790	5,400 psi
Compressive Strength	ASTM D695	9,100 psi
Tensile Strength	ASTM D638	4,800 psi
Elongation		3.1%
Impact Resistance		50 inch lbs. direct
Abrasion Resistance	CS-17 1000/500	22 mg
Gloss	Glossmeter	>70
Application Temperature		60° to 90° F

\*See individual component product data sheets for specific product properties.

**APS also has 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 Mixing and Application Instructions

**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 and 90 degree F. Keep from freezing.

**SURFACE PREPARATION:** Surface preparation will vary according to the type of complete 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 and 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. However, the primer can be applied to a damp floor as long as there are not standing puddles.

**PRIMER MIXING:** This product comes pre-packaged by weight. Kits should be mixed in their entirety. If partial kits are to be used, refer to the front of this technical data for proper weight mix ratios. After the two parts are combined, mixes well with slow speed mixing equipment such as a jiffy mixer until the material is thoroughly mixed and streak free. This product is an emulsion product and should be mixed well before using.

**PRIMER APPLICATION:** The mixed material can be applied by brush or roller. Maintain temperatures within the recommended ranges during the application and curing process. Apply material with relative humidity within the parameters shown on the technical data. When the end of the pot life has been reached, you will find that the material becomes hard to apply and will actually tend to roll back up onto the roller. Do not try to continue application when the coating has reached this step. Applications made at different times with differing environmental conditions, may show slight variations in gloss.

**TOPCOATING THE PRIMER:** When you topcoat the primer, you must first be sure that all of the solvents and water have evaporated from the coating during the curing process. The information on the front side of the individual data sheet are reliable guidelines to follow. However, it is best to test the coating before topcoating. This can be done by pressing on the coating with your thumb to verify that no fingerprint impression is left. If no impression is created, then the recoat or topcoat can be started. Always remember that colder temperatures will require more cure time for the product before topcoating can commence. Before topcoating, check the coating to insure no epoxy blushes were developed (a whitish, greasy film or deglossing). If a blush is present, it must be removed prior to topcoating or recoating. A standard type detergent cleaner can be used to remove any blush.

**PRIMER CLEANUP:** Use PM solvent

**BODY COAT (BUILD COAT) PRODUCT MIXING:** This product has a mix ratio of 12# part A to 4.15# part B or two parts A to one 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, mix two gallons of part A with 1 gallon part B. (volumes approximate) 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.

**CLEANUP:** Use xylol.

**FLOOR CLEANING:** Caution! Some cleaners may affect the color of the floor installed. Test each cleaner in a small area, utilizing your cleaning technique. If no ill effects are noted, you can continue to clean with the product and process tested.

**RESTRICTIONS:** Restrict the use of the floor to light traffic and non-harsh chemicals until the coating is fully cured (see technical data under full cure). It is best to let the floor remain dry for the full cure cycle.

### 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 PRECAUTIONS TO PREVENT BODILY HARM.**