PERFORMANCE FLOORING SOLUTIONS
DUR-A-FLEX® Inc.
EPOXIES • MMA • URETHANES
COLORED QUARTZ AGGREGATES

APPLICATION INSTRUCTIONS

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POLY-CRETE HF

IMPORTANT! Read these instructions carefully several days prior to starting your work. Seek answers to any questions you may have before you begin. DUR-A-FLEX, Inc. maintains a Technical Staff that will be glad to answer your questions and give you advice pertaining to your particular installation. DUR-A-FLEX Power Mixers are highly recommended for mixing this 100% solids heavy-duty resurfacer. Large areas will require two or more Power Mixers, or a large mortar mixer with close fitting plastic blades. **NOTE:** Cement mixers will not work.

POLY-CRETE HF is applied by "trowel method".

POLY-CRETE HF is typically applied at thicknesses ranging from 1/4" to 3/8". POLY-CRETE HF can also be used to form containment berms or to slope floor to drain by blending with additional sand.

SURFACE PREPARATION

Surface must be clean, sound, dry and free of all oil, grease, detergent film, sealers and/or curing compounds. A surface profile is appropriate for most applications. Please refer to the DUR-A-FLEX "**Surface Preparation Guide"** for detailed instructions. To obtain neat, straight, chip resistant edges at termination points and/or drains, a "keyed edge" must be installed.

MIXING AREA

Select a convenient mix area and protect the surface from spillage by covering with a layer of cardboard and/or a sheet of plastic. Be generous with the amount of space you allocate for this function. The more comfortably your mixer works, the less likely you are to have a "mix error". Do not mix this product in direct sunlight or when temperatures exceed 90ºF. Exposure to high temperatures will greatly reduce the working time of this product. Make ready all necessary tools, mix and measure containers, etc. DO NOT MIX UNTIL READY FOR IMMEDIATE USE.

PRIMING

POLY-CRETE HF is designed as a self-priming system.

TROWEL APPLICATION

A. Planning. Proper planning is essential for satisfactory appearance of the finished floor. Joint lines will show in the finished floor. Lay out installation in sections to allow full width to be finished in 20 minutes or less to assure absence of placement lines.

B. Edge Details. Wherever a free edge will occur, including doorways, wall perimeter, expansion joints, columns and equipment pads, keyways must be cut in. At free edges, such as doorways, drains and transition to other floor systems, about a ½" wide by a ½" deep keyway is recommended. A ¼" by a ¼" is satisfactory for others.

C. Slope and Pitch. POLY-CRETE HF may be installed on pre-sloped floors pitched up to ½" per foot. POLY-CRETE HF may be used on smaller areas to complete pitching and finishing in one install by adding ¼" or 3/8" pea gravel to prevent slumping of the product. Pea gravel may also be added in applications where POLY-CRETE HF needs to be installed at greater than ½". Larger areas that require pitching, sloping or repair may be completed by using polymer modified concrete or POLY-CRETE WR. Prime with POLY-CRETE TF and apply POLY-CRETE WR "wet on wet"

D. Crack Repair and Patching. Up to ½ x ½ can be overlayed at the time of install with POLY-CRETE HF. Larger cracks may be primed with POLY-CRETE TF and filled with POLY-CRETE WR. Allow POLY-CRETE WR to harden before applying POLY-CRETE HF.

Holes may be patched with DUR-A-CRETE or POLY-CRETE WR. Prime with GLAZE #4 fast. Do not allow primer to puddle during repairs. Apply wet on wet and allow to cure 2-3 hours before proceeding with installation of the POLY-CRETE HF floor. **Allow primer to tack-up prior to placement of mortar.**

E. Mixing. Ensure all components are between 40-85 ^{o}F. Any hardener crystallized (lighter color) by low temperature storage or transport must be decrystallized by heating to 100 ^{o}F in a hotbox or water bath. POLY-CRETE HF is supplied in pre-measured units consisting of one pail of resin, one jug of hardener and one bag of aggregate (powder). Double and triple mixes may be prepared. Pour resin into power mixer pail, scraping bottom and sides to assure all pigment is transferred. The resin and hardener should be added to a forced circulation pail mixer and pre-blended for approximately 30 seconds. A Jiffler or Bird Cage mixer is **not recommended** for this product Gradually add aggregate until homogenous mix is attained. (Approximately 1 minute) Move the paddle back and forth scraping the bottom and sides of the pail while mixing. This is very important! THOROUGH BLENDING IS MANDATORY. A properly mixed batch trowels easier and has a uniform surface appearance. Incomplete mixing will cause an inconsistent finish or possible blistering. Have two mixing buckets that are rotated to assure minimum time between mixes. Clean mixing paddle and pail regularly to avoid mixing fresh material with older batches. This may result in irregular curing or blisters. Apply material immediately after mixing.

F. Place the entire batch of mortar on the floor. Spread at a desired thickness with a screed box.

G. Finishing. Finish with a steel trowel. Apply sufficient pressure on the trowel to level POLY-CRETE HF as much as possible. Level POLY-CRETE HF using a trowel that is angled at approximately 60°F. Ensure material is at the desired thickness prior to finishing the floor with the trowel adjusted to a flat angle. Use sweeping motions to ensure the floor is fully closed up, level and finished. Do not use alcohol or solvent. The finished surface will follow the contour of the concrete substrate. Cracks and holes should be pre-filled with POLY-CRETE WR or NO-SAG #2 mortar before troweling overlayment. A bright light behind the applicator will readily reveal trowel marks. Avoid over troweling, as this results in variations in gloss and slip resistance. Lightly roll the surface with a clean 3/8" nap roller or adhesive roller to eliminate trowel marks and bring liquids to the surface. Replace sleeve periodically to reduce introduction or curing material to newly applied areas. Failure to follow these instructions may also leave variations in surface color. Apply minimal pressure to the roller. Aluminum Oxide or sand may be broadcast into the wet resin for enhanced slip resistance. Rolling after broadcast will embed aggregate in resin reducing added slip resistance.

Clean trowel with solvent but ensure the trowel is dry before using on the POLY-CRETE HF. Check for 1/4" or 3/8" thickness frequently. Allow to fully cure. **NOTE:** Keep moisture from contacting POLY-CRETE HF during installation and curing. Water may alter surface appearance. All plumbing leaks must be stopped or diverted prior to commencement of work.
IMPORTANT! Mix only what can be applied in 10 - 15 minutes. Never attempt to re-temper the mortar after it begins to set.

CURING

Allow a minimum of eight hours cure before light foot traffic at 75 ^{o}F. A minimum of 24 hours is required at 50^{o}F. Additional time must be allowed for heavy loads.

LIMITATIONS

Exposure to ultraviolet light will change the color of POLY-CRETE HF. Sunlight and metal halide lighting will cause yellowing without affecting the performance. As an option, a coat of POLY-CRETE CF can be applied to prevent ambering

JOINT GUIDELINES

Refer to the Joint Guidelines for complete details on our website.

CAUTION

Follow the Hazardous Materials Identification System labeling guide for proper personal protective equipment to use when handling this product. Use only as directed. KEEP OUT OF REACH OF CHILDREN.

Do not reseal moisture-contaminated hardener. This will result in carbon dioxide generation or possible violent rupture of containers.

Before using any DUR-A-FLEX, Inc. product, be sure the Material Safety Data Sheet is read and understood.