DURASTONE FLOORING

Durastone Flooring & ACG Additives Guideline

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Durastone Installation Guide Categories:

1.Floor Prep

2.Base Coat installation

3.Topcoat

4.Repair

ACG "Arizona Cultured Glass" Installation Guide Categories:

Broadcast Vs. Already in the Matrix

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1.FLOOR PREP

Preliminary Floor Inspections: Check the Temperature and Humidity: Floor temperature and materials should be between 65°F and 90°F. Humidity must be less than 80%. DO NOT coat unless floor temperature is more than five degrees over the current local dew point.

BARE CONCRETE

CHECK THE CONCRETE: Concrete must be structurally sound and free of curing membrane, paint and/or other sealer.

CHECK FOR MOISTURE: Concrete must be dry before application of this floor coating material.

Concrete moisture testing is recommended. Test methods can be purchased at www.astm.org

NOTE: Although moisture testing is critical, it is not a guarantee against future problems. This is especially true if there is no vapor barrier, or the vapor barrier is not functioning properly and/or you suspect you may have concrete contamination.

NOTE: The statements in this installation guide are recommendations, testing of epoxy with Durastone Flooring is highly recommended, as there may be a color shift, viscosity, and air release changes from one epoxy to another.

APPLICATION EQUIPMENT

-Protective Clothing

-Slow speed drill (500 rpm or less)

-Jiffy®mixer – Manufacturer Part No: HS-1 (1 gal) or PS-a (5 gal)

-Spiked shoes

-18-24" Flat rubber squeegee

-18-24" Notched rubber squeegee

-Roller Assembly

-3/8" nap phenolic core roller (clean roller with tape to remove any residual lint).

-Scissors

-3/8" V-notched steel rake head

-7/16" Plastic, Porcupine Roller (minimum)

-60,80,100 grit sandpaper

ASSEMBLE EQUIPMENT: Due to the limited pot life of the material, all application equipment, etc. should be ready for immediate use.

USE OVER EXISTING COATINGS

Examine the existing coating to ensure it is well-bonded to the concrete. Any loose coating must be completely removed. Edges should be sanded to a feathered edge. Clean the entire floor thoroughly with a detergent cleaner. The surface must be free of all dirt, oils, or other contaminants. After the floor has completely dried, sand the existing coating until a powdery residue is evident and all gloss is removed. Sweep or vacuum clean, and wipe with xylene to ensure good adhesion of the new system.

NOTE: When applying Durastone Flooring over an existing coating, a test patch is recommended to evaluate compatibility.

NOTE: Existing color needs to be consistent across application area. A dark colored existing coating may show through.

PREPARATION

Detergent scrub and rinse with clean water to remove surface dirt, grease, oil, and contaminants.

Patch all depressions, divots, and stress cracks in concrete with thickened epoxy to reduce the ability to see the defect through the decorative system.

Diamond grind or shot blast, then sweep to remove large debris and vacuum to remove fine dust.

NOTE: Product may not adhere if oil, silicones, mold release agents or other contaminants are present. THIS MAY CAUSE (Fisheyes). Joint Filling: Depending on the preference, joints may or may not be filled.

Caution: Coating applied over filled joints may crack if there is concrete movement

PRIMER

Primers provide an abundance of benefits ensuring that you achieve the best possible adhesion and endurance of your flooring.

Primers provide for a better chemical bond of the thicker decorative base coat, which results in a longer lasting and more durable floor coating. Primers help to eliminate bubbles, fisheyes and pinholes that can form due to outgassing of the concrete. This allows for the subsequent base coat to achieve a uniform higher dry film thickness.

Prior to application of Durastone Flooring, once primer has cured, lightly sand with 80-100 grit sandpaper to remove any protrusions. Scrub with detergent, and rinse with clean water, before coating or vacuum and tack rag (a specialty wiping rag designed to pick up loose debris or dust particles) to remove fine dust.

NOTE: If outgassing, pinholes, or fisheyes occur, re-prep area and apply an additional coat of primer. Outgassing or pinholes must be remedied before proceeding with flooring installation.

NOTE: It is recommended to pigment your primer to match the color scheme of your Durastone Flooring. Pigment enough to provide a homogeneous – colored base.

2.BASE COAT (DURASTONE FLOORING)

APPLICATION OF DURASTONE FLOORING

COVERAGE RATE: Coverage rate will depend upon application thickness. A one bag kit 36 lbs. (4.5-gallons mixed material) will normally cover (finished floor):

120 ft^2/kit (11.1 m^2 @ 60 mils (1.5 mm)

105 ft^2/kit (9.8 m^2 @ 70 mils (1.8 mm)

90 ft^2/kit (8.4 m^2 @ 80 mils (2.0 mm)

MIXING INSTRUCTIONS:

PREMIX THE TWO GALLONS OF YOUR PART A EPOXY FOR 2 MINUTES using a jiffy® mixer (PS-1 Blade) and slow speed drill. NOTE: do not use a larger blade, which can entrap air into the blended material, causing micro-bubbles to form on the surface of the cured system.

ADD THE ONE GALLON OF YOUR PART B EPOXY TO YOUR PART A (3 GALLONS / 11.34 LITRES TOTAL MIX).

MIX FOR 2 MINUTES using a Jiffy® mixer (PS-1) Blade) and slow speed drill. (Failure to do so could result in lower/diminished coating properties.)

WHILE CONTINUING TO MIX, SLOWLY ADD DURASTONE FLOORING. Mix until 36 lbs. of your Part C filler have been emptied into the container.

CONTINUE MIXING FOR AN ADDITIONAL 3 MINUTES after all of part C filler has been added. Bucket will contain approximately 4.5 gallons of mixed material.

NOTE: Move mixing blade throughout container to ensure complete blending of filler. Do not whip air into the mixture.

POTLIFE: Mix only enough material which can be applied within the work time (time between the addition of Part B to Part A and the completion of all application actions).

APPROXIMATE WORK TIME (minutes) – This can vary with different epoxy brands and temperatures. Example of working times with different temperatures:

65°F = 40 min

70°F = 30 min

75°F = 25 min

80°F = 20 min

90°F = 15 min

IMMEDIATELY POUR ALL OF THE MIXED MATERIAL onto the floor in a single bead. Scrape sides of container.

USING AN 18-INCH WIDE, 3/8 V-NOTCHED STEEL RAKE HEAD apply material over desired area. Push the material out to edges and the corners. Draw the material down the floor using smooth strokes.

USE HAND TROWELS, recommended ½ in hand trowel held at a 33-45-degree angle to finish along edges and drains.

NOTE: Allow product to self-level for at least 5minutes before porcupine rolling. Use a minimum 7/16” plastic, porcupine roller to smooth and level the Durastone Flooring. Material must be rolled (back and forth over a given area) with a porcupine roller to release entrained air.

NOTE: Do NOT over roll material.

NOTE: The use of Spiked shoes will allow freedom of movement on the wet floor.

NOTE: Avoid slipping with spiked shoes, as this will create a void. To repair wet surface imperfections, gently slide a marginal trowel across the marks caused by the spikes and then back roll with the porcupine roller.

LAY ABUTTING EDGES WITHIN 10 MINUTES to ensure a clean edge. A “wet edge” installation is imperative during large placements to avoid lines and ridges in the finished floor.

ALLOW DURASTONE FLOORING TO HARD CURE.
APPROXIMATE CURE TIMES (hours) once again this will all depend on the Epoxy system you are using, and these are just estimated examples:
65°F = 24 hours
70°F = 20 hours
75°F = 16 hours
80°F = 12 hours
90°F = 8 hours

3.TOPCOAT

SANDING REQUIRED
Durastone Flooring must be thoroughly sanded before applying urethane topcoat.
(See chart below)
APPROXIMATE SAND TIME, this is an example of estimated times before your Durastone Flooring may be ready to sand.
65°F = 24 hours
70°F = 20 hours
75°F = 16 hours
80°F = 12 hours
90°F =8 hours

Use 80 grit sandpaper. The use of more aggressive sandpaper will introduce deep grooves that will not be covered by a single layer. Thin coat of urethane: swirl marks will be particularly evident if the topcoat is glossy. We recommend thorough sanding with a swing-type floor buffer so that multiple scratch marks cause an obvious gloss loss on all areas (depressions will remain shiny), and the floor is uniformly dulled.

The ability to see individual scratch marks is an indication that sanding is not adequate. Scrub with detergent and rinse with clean water, and /or vaccum and tack rag (a specialty designed wiping rag designed to pick up loose debris or dust particles) to remove fine dust. You are now ready for your topcoat.

4.REPAIR

REPAIRING MINOR DURASTONE FLOORING DAMAGE

IDENTIFY THE DAMAGED SPOT. Tape off the surrounding area to protect it.

REMOVE THE DAMAGED MATERIAL using a router with a straight carbide-tipped bit.

VACCUUM THE ROUTED AREA, followed by a clean tack rag (a specialty designed wiping rag designed to pick up loose debris or dust particles)

MIX DURASTONE FLOORING AT A RATIO OF 1.5 FILLER TO 1 OF YOUR EPOXY, pour onto area to be repaired. Let cure, sand with 80 grit sandpaper and apply topcoat.

ACG “Arizona Cultured Glass” Installation Guide

ACG chips are used to give an epoxy floor a decorative attractive terrazzo look while delivering a functional and seamless low-cost alternative to traditional terrazzo flooring.

NOTE: ACG is lighter therefore 1 lb. of ACG would be the same volume as 2.5 lbs. of real glass.

1.Broadcast

This process can be an add on to any of the Durastone Flooring colors, Once Durastone Flooring is installed and immediately after being spike rolled, with your spike shoes still on you may broadcast your ACG chips.

NOTE: When broadcasting chip try to throw in an upward motion not towards the floor.

COVERAGE: ½ lb. of ACG per sq. ft will give you heavy coverage.
GRINDING OR SANDING: Recommended 70 grit tooling on planetary grinders, wet grind is easier than a dry grind and helps control how much dust is created. From the 70 grit you can move up from there if you would like a finer polish.

2.Matrix

This would be the small particles of the ACG otherwise known as fines that is mixed into the filler at a determined percentage to maintain its self-leveling properties. This means no broadcasting. ACG is premixed into the filler, just mix with epoxy, and pour. After your Durastone floor is cured you may then sand with a 60-80 grit sandpaper on your swing-type floor buffer, to expose the aggregate, then topcoat.

NOTE: Sanding screens are not recommended.

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