



Seamless Flooring Systems

TECHNICAL DATA SHEET

Nationwide Dealer Network
575 West 3900 South
Salt Lake City, Utah 84123
(801) 261-4100 Office
(866)-777-4100 Toll Free
(801) 261-4888 Fax

The Cure for the Common Concrete™

info@GetSFS.com • www.SeamlessFlooringSystems.com

1-866-777-4100

Pebble Rock™ Flooring

Premium Epoxy and Aggregate Matrix with Maintenance Sealers

Product Description: Pebble Rock™ Flooring is a decorative, durable aggregate-filled system. This is a complete system which includes epoxy primer, pebble rock aggregate (river rock, glass, painted quartz, precious gems or tumbled marble), epoxy binder and maintenance sealers. It provides a slip and impact resistant surface with exceptional strength and wear characteristics.

Typical Uses, Applications: Ideally suited for commercial, industrial, institutional and residential applications such as:

- Auto Dealer Showrooms
- Restaurants
- Office Building Lobbies, Hallways & Offices
- Office Building Common Areas & Workrooms
- Furniture Stores
- Commercial Kitchens
- Employee Cafeterias
- Restrooms
- Sports Bars
- Taverns
- Supper Clubs
- ATV / Motorcycle Showrooms
- Locker Rooms / Showers
- Vestibules
- Retail Stores
- Grocery Stores
- Boardrooms
- Offices
- Stairways
- Convention Centers
- Libraries
- Universities
- Airports
- Garages
- Beauty Salons
- School Lobbies and Hallways

- Driveways
- Sidewalks
- Porches
- Gazebos
- Patios
- Decks
- Stairs
- Swimming Pool Decks
- Hot Tub / Jacuzzi Decks
- Green Houses
- Kitchens
- Hallways
- Entries
- Bathrooms
- Showers
- Great Rooms

Product Advantages:

- More cost effective and longer lasting than vinyl products
- Ability to install over concrete or wood substrates
- A variety of aggregate colors may be blended to match any decor
- A variety of aggregate colors may be used to create colorful borders, patterns, logos and designs
- Chemical resistant
- Highly durable
- Slip resistant

Packaging:

Primer: 5 Gallon Kit or 1 Gallon Kit Pre-Mixed
Binder (Indoor or Outdoor Formula - Regular or Fast Cure): 15 Gallon Kit (2 x 5 Gal. Resin Part A; 1 x 5 Gal. Hardener Part B); 1.5 Gallon Kit (1 x 1 Gal. Resin Part A; 1 x ½ Gal. Hardener)
Outdoor Sealer Coat (Clear Polyurea): 10 Gallon Kit (1 x 5 Gal. Resin Part A; 1 x 5 Gal. Hardener Part B); 1 Gallon Kit (1 x ½ Gal. Resin Part A; 1 x ½ Gal. Hardener Part B)

Indoor Sealer: 15 Gallon Kit (2 x 5 Gal. Resin Part A; 1 x 5 Gal. Hardener Part B); 1.5 Gallon Kit (1 x 1 Gal. Resin Part A; 1 x ½ Gal. Hardener)

Seamless Pebble Rock™ Aggregate: 36 natural rock selections packaged in 50 lb. bags; Glass and Painted Quartz available.

Storage: All containers should be stored at 50°F to 95°F and be kept tightly sealed and out of direct sunlight.

Cured Physical Properties		
Property	Test Method	Results
Compressive Strength	ASTM 695-85	11,500 PSI
Tensile Strength	ASTM D638-86	7,250 PSI
Flexural Strength	ASTM D790-88	12,185 PSI
Tensile Elongation	ASTM D638-86	5.5%
Indentation	MIL D 3134F	No Indentation
Impact Resistance	ASTM D4226	>160 in/lb
Shore D Hardness	ASTM D2240	85 - 90
Percent Elongation	ASTM D2370	6%
Water Absorption	ASTM C413	0.1%
Bond Strength	ACI Comm. #503. Pg. 1139-41	>800 psi
Abrasion Resistance, CS 17 Wheel, 1000 gms load, 1000 cycles	ASTM D4060	0.0041
Heat Resistance Limitation (continuous exposure)		140°F / 60°C
Coefficient of Friction	ASTM D2047	0.6
Flammability	ASTM D635	Self-extinguishing
Thermal Coefficient of Linear Expansion	ASTM C531	1.8 x 10 ⁻⁵ in/in/°C

Coverage:

Primer:

- Seamless Premium Primer™: 400-600 Ft²/Gal.; or
- Seamless Vapor Seal Primer™

Pebble Rock Matrix:

- Seamless Premium INDOOR or OUTDOOR Binder™ (Slow Cure or Fast Cure): 40 Ft²/Gal. at ½" thickness
- Seamless HP Epoxy Quartz™: ½ lb/Ft²/broadcast

Sealer:

- Seamless Final Coat INDOOR Sealer™: 350 Ft²/Gal.
- Seamless One-Coat OUTDOOR Sealer™: 200-300 Ft²/Gal.

Pebble Rock™ Flooring Application: Premium Epoxy and Aggregate Matrix with Maintenance Sealers applied to concrete, cement board over wood surfaces or waterproof membrane over wood surfaces.

Inspection

Surface Preparation - Concrete

Concrete must be clean, dry and free of grease, paint, oil, dust, curing agents, or any foreign material that will prevent proper adhesion. The concrete should be porous and be able to absorb water. A minimum of 30 days cure is required on all concrete. Relative humidity in the concrete floor slab should be below 80% (per ASTM F-2170).

Before starting flooring work, test existing concrete slab to test for efflorescence or high pH reading which means the floor is not neutral. The most common form of testing is the use of a wide-range pH paper or tape. Make sure the floors' pH reading ranges between 5-9 to ensure adhesion. The testing of concrete for alkalinity can show the amount of alkalinity only at the time the test is ran, and cannot be used to predict long-term conditions.

Calcium chloride tests should be conducted to determine if the concrete is sufficiently dry for an epoxy flooring installation. The calcium chloride tests should be conducted in accordance with the latest edition of ASTM F 1869, *Standard Test Method for Measuring Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride*. When running a calcium chloride test, it is important to remove any grease, oil, curing agents, etc. so accurate readings can be obtained.

Failing to adhere to these strict guidelines can result in product delamination, discoloration, blistering, or altogether failure of the coating system. Testing is the responsibility of the applicator. Seamless Flooring Systems LC bears no responsibility for failures due to any of the above conditions.

Concrete surfaces shall be bead blasted or diamond grinded to remove all surface contaminants and laitance. The concrete should be at least 2500 psi and have an ICRI concrete surface profile within 3-5. After initial preparation has occurred, inspect the concrete for imperfections and treat as necessary. Allow concrete to breathe for a minimum of 24 hours after preparation. Any voids need to be filled using a Seamless Premium Binder or Base Coat epoxy (100% solids epoxy) blended with our Seamless Binder Thickener to a paste-like consistency. Any high spots need to be ground smooth. For surface preparation recommendations, consult the Technical Services Department.

Cracks should be chased with a diamond crack chaser (approximately ¼" x ¼"), swept, vacuumed or blown clean. Fill cracks, expansion joints and control joints with a Seamless Premium Binder or Base Coat epoxy (100% solids epoxy) blended with our Seamless Binder Thickener™ to a paste-like consistency and packed tightly into expansion joints and cracks with a spatula. Follow this treatment by installing our Seamless Crack Suppression Membrane™. Primer is to be applied to the crack suppression membrane as well as the concrete surface. Control joints may receive a ½" L-shaped



Seamless Flooring Systems

TECHNICAL DATA SHEET

Nationwide Dealer Network
575 West 3900 South
Salt Lake City, Utah 84123
(801) 261-4100 Office
(866)-777-4100 Toll Free
(801) 261-4888 Fax

The Cure for the Common Concrete™

info@GetSFS.com • www.SeamlessFlooringSystems.com

1-866-777-4100

Pebble Rock™ Flooring Premium Epoxy and Aggregate Matrix with Maintenance Sealers

metal bar installed on one side of the control joint, or a 1/8" saw cut may be cut into the finished Pebble Rock™ Flooring matrix directly over the control joint prior to sealing.

Transitions should be prepared in accordance with the flooring surface abutting the Pebble Rock™ Flooring

Pool coping, uncovered concrete, 1/8" flooring (VCT, vinyl, rubber, etc) metal thresholds:

A key-way should be cut from the Pebble Rock™ Flooring side into the concrete at a 60° angle to a depth of at least 1/2 inch. This will maintain a 1/2" depth of Pebble Rock™ Flooring as it is installed into the transition, leaving a level transition eliminating any trip hazards and maintaining the proper depth for durability. An alternative to cutting a key-way is to install a metal reducer bar from 1/2" to 1/8" or even zero but is not recommended for pool coping transitions.

Carpet, hardwood, tile:

Install a 1/2" L-shaped metal bar for transitions to high profile flooring. If the flooring profile is greater than 1/2" a taller metal L-shaped metal bar may be installed to ensure a level transition.

Floor drains, floor sinks:

Due to the porosity of the finished Pebble Rock™ Flooring surface, water drainage will follow the existing substrate (unless a 90% epoxy flood using Seamless Premium Flood Coat™ is added to create a sanitary surface). Use Seamless Border Foam™ to form a temporary stop edge for the aggregate. Upon curing, the foam is to be removed and finished edges ground to eliminate rough edges and roughness.

Surface Preparation - Wood

Wood surfaces must be covered with one of the two following products:

1. Seamless Waterproof Membrane™ or Seamless Waterproof Membrane Non-Wear Layer™
2. Cement Board: Durock® or PermaBase® ONLY

Refer to the applicable Technical Data Sheets for waterproof membrane application and the Seamless Flooring Systems LC Installation and Technical Reference Manual for specific instructions.

Follow manufacturer's installation guidelines for cement board. DO NOT use any other cement board products because of excess surface laitance that may inhibit bonding of the primer coat and cause delamination. Install rough side of cement board facing up for proper bonding of our primers.

Verify that the wood substrate is structurally sound and engineered for an added load of 4 Lbs. /Ft² which is the average weight of the Pebble Rock™ Flooring matrix installed at 1/2" height.

1. Primer Application

Select the Primer Application

If the vapor emission is less than 4 Lbs./1000 Ft²/24 hr select the Seamless Premium Primer™ for application. If vapor emission is greater than 4 Lbs./1000 Ft²/24 hr select the Seamless Vapor Seal Primer™. Cement Board may receive the Seamless Premium Primer™ or wet primer only. Waterproof membrane must receive a wet primer application using the Seamless Premium INDOOR Binder™ thinned with 10% Acetone. Refer to the applicable Technical Data Sheets and the Seamless Flooring Systems LC Installation and Technical Reference Manual for specific instructions.

Mixing

Premix Seamless Premium Primer™ for a minimum of 60 seconds with a slow speed, battery-powered drill with a jiffy-type mixing wand. Seamless Base Coat may optionally be used as a primer when blended with 10% Acetone and mixed at a ratio of 2:1 (Part A Resin to Part B Hardener, respectively). If adding Seamless Anti-Microbial Additive™, add 1 ounce anti-microbial additive per gallon and mix for a minimum of 90 seconds.

Application

After mixing, Pre-measure and pour into a paint tray. Measure 48 ounces for a 12" paint tray for use with a 9" roller or measure 1 gallon for a 20" paint tray for use with an 18" roller. Fully wet the roller pad and using a 3/8" nap roller pad apply to the concrete in overlapping strokes. Do not contact finished wall, railing, stone or other finished surfaces to come into contact with the roller pad as staining will occur. Ensure a spread rate of between 300 to 600 Ft²/gallon.

Drying Time

You may apply our Seamless Flooring Systems product as soon as the surface is dry to touch or in about 30 minutes to 1 hour (but not later than 10 hours). If re-coat time has been exceeded, lightly sand the surface and wipe with Acetone before next application. All times are based on average temperature of 70°F and 50% humidity. Cooler temperatures will increase drying time.

Limitations

- Do not apply at any temperature below 45°F or above 95°F or within 5°F of the dew point
- Concrete must be cured for a minimum of 30 days and have less than 4 Lbs. of moisture per thousand square feet unless treated with Seamless Vapor Seal Primer™.
- For interior use: Must be protected by our Seamless Final Coat INDOOR Sealer™
- For exterior use: Must be protected by our U.V. resistant coating, Seamless One-Coat OUTDOOR Sealer™
- Epoxy must be cured for a minimum of 24 hours before coming in contact with water
- Concrete should be a minimum of 2500 psi
- If concrete is in excess of 4 Lbs/Ft²/24 Hrs. then apply Seamless Vapor Seal Primer™ prior to the application of this Seamless Premium Primer™
- Wet priming with Seamless Premium OUTDOOR Binder™ or Seamless Premium INDOOR Binder™ does not require drying time. Installation may proceed immediately after surface is primed. Surface will be wet. Use caution to avoid slip and fall accidents.

Mixing as a Binder with Aggregate

Mix 2 parts Resin A with 1 part Hardener B (by volume) of Seamless Premium OUTDOOR Binder™ for outdoor installations or for indoor installations, mix 2 parts Resin A with 1 part Hardener B (by volume) of Seamless Premium INDOOR Binder™ together for a minimum of 90 seconds with a slow speed, battery-powered drill with a jiffy-type mixing wand. A typical mix is one Seamless Gallon™ (86 oz. Part A Resin and 43 oz. Part B Hardener) for 150 Lbs. of aggregate.

Pour the mixed contents into a plastic cement mixer containing 150 to 160 Lbs. of clean, kiln-dried pebble rocks, glass or painted quartz aggregate and mix for approximately 3 to 4 minutes.

Mixing as a Wet Primer

Mix 2 parts Resin A with 1 part Hardener B (by volume) of Seamless Premium OUTDOOR Binder™ for outdoor

installations or for indoor installations, mix 2 parts Resin A with 1 part Hardener B (by volume) of Seamless Premium INDOOR Binder™ together for a minimum of 90 seconds with addition of 10% Acetone or Xylene by volume. Add 12 oz. for a one gallon mixture.

Application as a Primer

After mixing, Pour into a paint tray. Mix 48 ounces with 4 ounces thinner for a 12" paint tray for use with a 9" roller or measure 1 gallon for a 20" paint tray for use with an 18" roller. Fully wet the roller pad and using a 3/8" nap roller pad apply to the concrete in overlapping strokes. Do not contact finished wall, railing, stone or other finished surfaces to come into contact with the roller pad as staining will occur. Ensure a spread rate of between 300 to 600 Ft²/gallon.

Application as Pebble Rock™ Flooring (Aggregate Matrix) With a Screed Box

If using a wheel barrow type mixer, pour entire mixture into the screed box set at 5/8" depth on adjustable wheels. If using a fixed base mixer, transfer contents to a plastic wheelbarrow and pour entire contents into the screed box. Beginning at the farthest point of finishing area, slowly roll the screed box to evenly spread the mixture onto the surface.

With a Screed Rake

If using a wheel barrow type mixer, pour entire mixture into the floor. If using a fixed base mixer, transfer contents to a plastic wheelbarrow and pour entire contents onto the floor. Immediately break down pile with a garden rake. Finish screeding with a screed rake with 5/8" cams. Beginning at the farthest point of finishing area, slowly screed mixture to evenly spread the mixture onto the surface.

Finishing the mixed matrix

Using a 4" x 18" steel finishing trowel, using a forward-and-backward motion, pack aggregate tightly to eliminate voids and provide a uniform surface. Finish by using a light arching motion to smooth any aggregate protruding beyond the surface. May also be finished with a power trowel. Cut in edges with a finishing trowel and trowel field area with the power trowel. Finishing trowel and power trowel blades should be regularly cleaned with Seamless Trowel Lube™ to ensure smooth troweling by eliminating epoxy binder build-up on the trowels. All vertical forming top edges should be treated with a concrete edging tool.

Drying Time

As a Wet Primer:

The Pebble Rock™ Flooring matrix may be applied immediately after primer is applied. Do not wait for a full, tack-free cure.

As a Matrix:

Allow 24 hours before vertical forms are removed and for light foot traffic. This time is based on average temperature of 70°F and 50% humidity. Cooler temperatures will increase drying time.



Seamless Flooring Systems

TECHNICAL DATA SHEET

Nationwide Dealer Network
575 West 3900 South
Salt Lake City, Utah 84123
(801) 261-4100 Office
(866)-777-4100 Toll Free
(801) 261-4888 Fax

The Cure for the Common Concrete™

info@GetSFS.com • www.SeamlessFlooringSystems.com

1-866-777-4100

Sealer Application

As soon as any vertical forms are removed and surface is initially cured, lightly scrape the surface with a 14" floor scraper blade to remove any high rocks from the surface. Lightly grind vertical surfaces to remove epoxy bleed-out on the surface. Vacuum or power-blow the entire surface to remove loose rocks and dust. If Pebble Rock™ Flooring surface is allowed to dry longer than 24 hours, surface must be lightly sanded with a 30-60 grit sanding pad, vacuumed and lightly washed with Acetone to prevent delamination of the sealer.

Refer to the Technical Data Sheet for proper application of Seamless One-Coat OUTDOOR Sealer™ for outdoor installations or Seamless Final Coat INDOOR Sealer™ for indoor installations. The finished product is rated by OSHA and ADA as a slip-resistant surface. Additional broadcast media may be applied to the sealer coat for a more aggressive traction surface. This additional media broadcast is recommended for sloped surfaces.

You may re-coat as soon as the surface is dry to touch or in about 8 hours (but not later than 24 hours). If re-coat time has been exceeded, lightly sand the surface and wipe with Acetone before next application. Light foot traffic may be permitted in 24 hours, light vehicle traffic in 72 hours, heavy traffic in 7 days. All times are based on average temperature of 70°F and 50% humidity. Cooler temperatures will increase drying time.

Limitations

- Do not apply at any temperature below 45°F or above 95°F or within 5°F of the dew point
- Concrete must be cured for a minimum of 10 days and have less than 15 Lbs. of moisture per thousand square feet if primed with Seamless Vapor Seal Primer™
- Concrete must be cured for a minimum of 30 days and have less than 4 Lbs. of moisture per thousand square feet if primed with Seamless Premium Primer™ or Seamless Premium OUTDOOR Binder™ as a wet primer
- Epoxy must be cured for a minimum of 7 days before coming in contact with water, chlorine, bromine, salt water or mild detergents
- Concrete should be a minimum of 2500 psi

Clean Up: Uncured material can be removed with a solvent such

as Xylene or Acetone. Cured material can only be removed mechanically.

Maintenance: Sweep away dust and debris with a broom. Clean on a regular basis with a surfactant type mild detergent. Pebble Rock™ Flooring surfaces should never be waxed. Refer to the Seamless Flooring Systems "Care and Maintenance Guidelines" sheet for Pebble Rock™ Flooring for more information.

Re-Coating

Pebble Rock™ Flooring should be inspected every 1-2 years outdoors and 3-5 years indoors and re-coated as necessary. Surface should be clean and dry. Lightly sand the surface with a 60-100 grit sanding pad. Vacuum or power-blow all dust. Apply Seamless One-Coat OUTDOOR Sealer™ at least every two years. Consult Technical Data Sheets for benefits and specifications or contact Seamless Flooring Systems.

Please read material safety data sheets before using any products.

Disclaimer: All statements and recommendations are based on experience we believe to be reliable. The use or application of these products beyond the control of the Seller or Manufacturer, neither Seller or Manufacturer make any warranty, expressed or implied, as to results or hazard from its use. The suitability, risk and liability whatsoever of a product for an intended use shall be solely up to the User. The Ten Year Limited Material Warranty for Pebble Rock™ Flooring is available from Seamless Flooring Systems or from an Authorized Pebble Rock™ Flooring Dealer only and should be carefully read before consenting of any work to commence.

TO BE INSTALLED BY A CERTIFIED INSTALLER ONLY. CERTIFICATION MAY BE VERIFIED BY CONTACTING SEAMLESS FLOORING SYSTEMS LC.