

## **DESCRIPTION:**

The Armor-Flake Random Flake System is a decorative floor surfacing system using clear and pigmented polymers to encapsulate colored and blended flakes of different sizes. The broadcast of flakes is not installed to rejection, but in a sparse, randomized pattern which allows the base coat color to show and contrast with the colored flakes. The finished flooring system can be created with a near infinite variety of flake sizes and color blends broadcast into a base coat using any of ROCK-TRED's Standard Solid Colors. ROCK-TRED offers many standard color blends plus will custom blend flakes per the customer specifications at no additional charge.

## **RECOMMENDED USES:**

The Armor-Flake Random Broadcast System is specified for use as a high performance, decorative flooring system in areas that are subjected to light to moderate traffic. It is intended as a high wear system for use in commercial, institutional or residential spaces where a durable, seamless, low maintenance, decorative floor finish is desired. Typical applications include retail stores, showrooms, offices, schools, residential basements/rec rooms/garages, dining and bar areas of restaurants, etc.

## **SYSTEM FEATURES:**

- 100% solids, very low odor and VOC compliant
- Wide variety of sizes and colors of flake available
  - ROCK-TRED offers 4 standard sizes of flake. Small (1/16"), Medium (1/8"), Large (1/4") and Hybrid (a blend of sizes). We offer 17 Standard Blends including our specialty Marble Blend Flakes which have up to 3 colors on every separate flake within the blend
- Good chemical, UV and abrasion resistance
- Flakes are highly UV resistant. System can be applied indoors/outdoors when correct coatings are used
- Easy to clean and maintain
- Final texture is variable to meet job specific needs
- USDA / FDA accepted for use in food retail locations
- High gloss finish is standard, but can be varied using different high performance finish coats
- Easy mixing ratios and application steps

## **BASIC SYSTEM INSTALLATION STEPS:**

1. Prepare substrate according to ROCK-TRED's Surface Preparation Guide. A minimum surface profile of CSP-2 achieved via diamond grinding is recommended.



2. Perform any necessary substrate patching using approved ROCK-TRED materials.
3. If required for the job, install hand troweled cove base or EASY-COVE per manufacturer's specifications. Install pigmented primer and colored broadcast coat onto base at the same time as the floor. For the colored base coat and finish coat a higher viscosity epoxy such as CHEM-ROCK HV may be used to help prevent the coatings from running down the cove face.
4. Apply appropriate primer for job site conditions in the same color chosen for the base color of the system. Recommended ROCK-TRED primers for this system include POXI-ROCK Primer or CHEM-ROCK Primer. Depending on substrate conditions, the field tinted primer is typically installed at 135-150 sq. ft. per gallon.
5. After primer coat is sufficiently cured, apply a solid color base coat of 100% solids, finish grade epoxy such as CHEM-ROCK LV or LV-UV at approximately 135-150 sq. ft. per gallon. Immediately after back rolling, broadcast the flakes in the amount desired to create the selected finish.
6. After the base coat is cured apply a clear topcoat of CHEM-ROCK LV, CHEM-ROCK LV-UV, CHEM-THANE P-50 or P-80 at approximately 135 - 150 sq. ft. per gallon. Anti-slip aggregate can be broadcast and back rolled into this coating to provide required texture.

# ARMOR-FLAKE SYSTEM DATA SHEET

## SYSTEM COMPONENT PRODUCTS:

- Primer: CHEM-ROCK PRIMER or POXI-ROCK PRIMER pigmented to match the base coat.
- CHEM-ROCK LV, MV, LV-UV or CHEM-THANE P-50, P-80, or P-100 for the pigmented basecoat to receive the flakes.
- CHEM-ROCK LV, MV, LV-UV or CHEM-THANE P-50, P-80, or P-100 for the clear finish coat(s).
- CHEM-THANE WBP Gloss or Low Luster or CHEM-THANE 509 Gloss or Satin for an optional and more abrasion resistant finish coat.
- ROCK-TRED Universal Colorants
- ROCK-TRED Flake – when estimating flake consumption for this system take the total square footage (including cove base) and multiply by .02 to determine the number of pounds of flake needed to achieve a typical “random” broadcast. The amount of flake broadcast may be increased or decreased to create the desired finished appearance. ROCK-TRED Flakes are sold only in 50 pound boxes so round up to the nearest 50 pounds when ordering. Re-using reclaimed flake is not recommended.

## OPTIONAL SYSTEM COMPONENT PRODUCTS:

- If need is indicated through proper ASTM testing, or as a precaution, ICP’s Arizona Polymer Flooring’s VaporSolve System can be applied directly to the concrete prior to the primer coat to mitigate moisture vapor transmission.
- Pre-patching to non-moving joints, cracks, spalls or eroded areas of concrete can be completed using ROCK-TRED’s POXI-ROCK Flooring Mortar, Crack N Patch Kits, ROCK-MENDER or RQP rapid set patching compound.
- If the concrete substrate is less than 5 years old, or there is evidence of minor movement along the control joints, control joints through the ARMOR-FLAKE System should be installed. After cutting, the joints can be filled with ROCK-TRED’s ELASTI-POXI JOINT FILL permanently flexible sealed joints.
- This system may be modified for outdoor use by substituting our highly UV resistant CHEM-THANE P-50 or P-100 for the basecoat and topcoat(s) at the same recommended coverage rates.
- On applications where expected traffic is low and amount of flake broadcast is relatively light a single finish coat of CHEM-THANE WBP or 509 urethane can be applied directly over the Random Flake basecoat. This is not recommended

for high wear areas or for areas that need to have a textured, anti-slip finish.

## FOR BEST RESULTS:

- Recommended for Interior Use Only unless both the basecoat and topcoat(s) are CHEM-THANE P-50, P-80 or P-100.
- DO NOT thin the polymer products unless directed on the Tech Data Sheets.
- DO NOT apply when humidity exceeds 70% indoors.
- DO NOT allow material to puddle during application.
- Allow each coat to dry tack-free or clear before recoating.
- Apply each coat within 24 hours of previous coat.
- DO NOT apply to structurally unsound surfaces.
- Remove all surface oil and/or grease during preparation
- Mix full kits of resin/hardener only. Kit components are pre-measured for optimal performance. Catalyzation errors due to mis-mixing in the field voids product warranty.

**SURFACE PREPARATION:** The substrate must be clean, dry and sound. New concrete should be cured for at least 28 days @ 70°F and have an effective moisture vapor barrier in place. If the concrete is too new, and/or when moisture testing per ASTM F2170 shows results over 80% RH, the substrate should be treated with ICP’s Arizona Polymer Flooring System’s Vapor Solve System per specifications. Remove dust, laitance, grease, curing compounds, waxes, foreign particles, disintegrated or soft base materials and any previously applied potentially incompatible coatings. Create a surface profile on the substrate by either steel shot blasting or diamond grinding to a minimum CSP-2 profile. For additional floor preparation information refer to ROCK-TRED’S Surface Preparation Guide.

**Review ROCK-TRED’S Safety Data Sheets (SDS), labels and individual technical data sheets for the component products prior to mixing and applying.**

## ADDITIONAL REFERENCE MATERIAL:

Armor Flake Random Flake System AIA Specification  
Component Tech Data Sheets  
Component Material Safety Data Sheets  
ROCK-TRED’s Surface Preparation Guide  
ROCK-TRED’s Floor Maintenance Instructions

**MAINTENANCE:** For optimal floor appearance and performance following installation, refer to ROCK-TRED’s Floor Maintenance Instructions.

**CUSTOMER NOTE:** For information on application situations not covered above, contact your local ROCK-TRED representative or the corporate office at 888-ROCK-TRED.

WARRANTY STATEMENT: Information about ROCK-TRED products is given to the best of our knowledge, based on tests and experience. Such information supplied about our products is not a representation or a warranty. It is supplied on the condition that you will make your own tests to determine the suitability of the product for your particular purpose. As products are often applied or used under conditions beyond our control, ROCK-TRED cannot guarantee anything but the quality of its products. ROCK-TRED warrants that its products meet the specifications set forth by ROCK-TRED, but we reserve the right to change any given specification without prior notice. ROCK-TRED DISCLAIMS ALL WARRANTIES RELATING TO THE PRODUCTS AND THEIR APPLICATION, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Receipt of ROCK-TRED products constitutes acceptance of the terms of this limited warranty and the terms and the conditions set out in our invoice, contrary provisions of buyer’s purchase documents notwithstanding. Upon receipt of merchandise, purchaser has 30 days to notify ROCK-TRED in writing that materials are defective. In the event ROCK-TRED finds that the product delivered is off specification, ROCK-TRED will, at its sole discretion, either replace the product or refund the purchase price thereof, and ROCK-TRED’s choice of one of these remedies is the buyer’s sole remedy. In no event shall the liability of ROCK-TRED exceed the purchase price of shipped merchandise. Claims must be in writing. Claims after 30 days are void. ROCK-TRED will under no circumstances be liable for special, incidental or consequential damages. This warranty supersedes all other guaranties, whether oral or written, and whether expressed, implied or statutory. No representative is authorized to make any representation or warranty or assume any other liability on our behalf with any sale of our products. Certain products may contain chemicals which may cause serious physical injury. Before using, please read the Material Safety Data Sheet and follow all precautions to prevent bodily harm.