

- B. U.S. Department of Agriculture (USDA) Pass

1.04 SUBMITTALS

- A. Comply with Bidding Requirements Section 00600 Bonds and Certificates, and 00650 Certificates of Insurance.
- B. Manufacturer's Technical Data Guides and application instructions.
- C. Submit laboratory tests or data that validate product compliance with compliance criteria specified.

1.05 QUALITY ASSURANCE

- A. Manufacturer qualifications: Company regularly engaged in manufacturing and marketing of products specified in this section.
- B. Contractor qualifications: Qualified to perform work specified by reason of experience or training provided by product manufacturer.
- C. Notify manufacturer's authorized representative at least 2 weeks before start of work. Schedule minimum of 3 job site inspections by Manufacturer's authorized representative, first scheduled before application of product. Application of floor coating without prior notice will not constitute acceptance by manufacturer of two-year warranty inspection procedure.

1.06 DELIVERY, STORAGE AND HANDLING

- A. Deliver products in original factory packaging bearing identification of product, manufacturer, batch number, and expiration date as applicable. Provide Material Safety Data Sheets for each product.
- B. Store product in location protected from freezing, damage, construction activity, precipitation and direct sunlight in strict accordance with manufacturer's recommendations.
- C. Condition products to approximately 55 to 70 degrees F for use in accordance with manufacturer's recommendations.
- D. Handle all products with appropriate precautions and care as stated on Material Safety Data Sheet.

- E. Do not breathe mixed product vapors or dust. Use adequate ventilation to keep airborne isocyanate levels below the exposure limits. Individuals with lung or breathing problems or prior allergic reactions to isocyanates must not be exposed to vapors or dusts.

1.07 PROJECT CONDITIONS

- A. Do not use products under conditions of precipitation or freezing conditions. Use appropriate measures for protection and supplementary heating or cooling to ensure proper drying and curing conditions in accordance with manufacturer's recommendations if application during inclement weather occurs.
- B. Protect all adjacent work from contamination due to mixing, handling, and application of sealants.

1.08 MOCKUP

- A. Provide mockup to include surface cleaning and preparation techniques, aesthetics, *****[color]***, ***[and slip resistance characteristics]*****.
- B. Apply mockup with specified floor coating and with other components noted.
- C. Locate where directed by Architect.
- D. Mockup may remain as part of Work if acceptable to Architect.

1.09 WARRANTY

- A. Provide manufacturer's standard pre-approved material warranty, with completion of warranty forms.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. For purpose of defining quality of materials in this Section SEAL-KRETE, DIV. COVENIENCE PRODUCTS, ST. LOUIS, MO. conforms to requirements of this specification.
- B. Substitutions
 - 1. Alternates to acceptable manufacturer will be considered only on basis of written requests. Include substantiation of product compliance as listed in section 2.02 below.

2.02 PERFORMANCE CRITERIA

Material Properties at 75° F	Matte	Gloss
Solids by Weight	66% +/- 3%	66% +/- 3%
Solids by Volume	55% +/- 3%	55% +/- 3%
Mixed VOC Content	<50 g/L*	<50 g/L*
Mix Ratio (A:B, by volume)	3:1	3:1
Tack Free Time	6 hours	6 hours
Recoat Time (min./max.)	6 hrs./24 hrs.	6 hrs./24 hrs.
Light Foot Traffic	24 hours	24 hours
Vehicular Traffic	5 days	5 days
ASTM E-96 Water Vapor Transmission	139 perms	139 perms
ASTM C - 722 Monolithic Surfacing	Pass	Pass
ASTM D - 4366 Konig Hardness	110	111
ASTM D - 2794: Impact Resistance	Pass >160 in./lb.	Pass >160 in./lb.
ASTM D4060 (CS-17): Abrasion Resistance	2.5 mg loss	4.0 mg loss
ASTM D - 638 Tensile Strength	2700 – 2900 psi	2715-2912 psi
ASTM D – 4541 Adhesion Strength	460 psi	480 psi

2.03 MATERIAL

- A. Use SEAL-KRETE PRODUCTS in all other instances and applications as recommended by manufacturer pertaining to this work to provide Owner with single source system and warranty.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Inspect all areas involved in work to establish extent of work, access and need for protection of surrounding construction, equipment, windows and shrubbery.
- B. Protect all surroundings from primer and floor coating to include, but not be limited to, windows, walkways, drives, and landscaping.

3.02 SITE VERIFICATION OF CONDITIONS

- A. Conduct pre-application inspection of site verification with authorized SEAL-KRETE Representative.
- B. Ensure floors are structurally sound and fully cured 28 days minimum.
- C. Test floors for vapor drive in accordance with ASTM F-1869. Rising moisture vapor emission rate must not exceed 3 lb. per 1000 sq. ft. over a 24 hour period as measured by the calcium chloride test method referenced above.

- D. Evaluate atmospheric, floor, and material temperatures. Do not apply materials if temperatures are below 50 or above 95 degrees F. Evaluate relative humidity. Do not apply materials if relative humidity is below 35 or above 80 percent.
- E. Repair concrete and install joint sealants and fillers as directed by Engineer. Make all repairs in accordance with manufacturer's written instructions prior to application of Seal-Krete Dura-Shell.

3.03 PREPARATION

New concrete must cure a minimum of 28 days. The concrete must be structurally sound, dry, and free of any grease, oils, coatings, dust, curing compounds and other coatings or contaminants. Surface laitance must be removed.

The preferred method of surface preparation is abrasive blasting or scarification using diamond heads to achieve a final 80 – 120 grit finish, reference Profile SP – 2 ICRI Technical Guideline No. 03732.

If a chemical etch is preferred, use SEAL-KRETE Clean-N-Etch, following all label instructions and product data sheet.

Ensure that substrate is clean and dry prior to application and that all criteria in 3.02 above and 3.03 herewith have been satisfied.

3.04 APPLICATION

A. Seal-Krete Dura-Shell:

1. Mix part A by using a low speed drill with mixing attachment for 2 minutes. Add part B and mix for an additional 2 minutes. Mix only the amount that can be applied during the pot life (approximately 1 hour depending on air/substrate temperature) Do not aerate the mix. Apply immediately.
2. Apply by Spray or roller at **250 - 400** square feet per gallon, depending on substrate porosity.
3. If rolling, use a 3/8" short nap roller cover for horizontal surfaces. For vertical surfaces, use a 1" roller cover with a phenolic core. Two light coats are recommended. Second coat can be applied after 6 hours, with no more than 24 hours between coats.

B. Application Conditions:

Apply only when temperature of the air, substrate and material is between 50 degrees F and 95 degrees F. Relative humidity should not be above 80 %.

For detailed application instructions, refer to Application Guide or visit hp.seal-krete.com.

3.05 FIELD QUALITY CONTROL

- A. Manufacturer's Field Service. Final inspection: Warranty request. Manufacturer's representative will inspect finished surface preparation, application, and finished coating and may require further preparation or application to achieve appropriate result.

3.06 CLEAN UP AND DISPOSAL

- A. Clean tools and application equipment immediately after use with water first and wipe; then use an active solvent like xylene. Dispose of container and contents in accordance with local laws and regulations.
- B. Remove all debris related to application of floor coatings from job site. Clean spills and drips while still wet with xylene.
- C. Dispose of container and contents in accordance with all local, state and federal laws and regulations for hazardous waste disposal.
- D. For large spills, collect with an absorbent material. Dispose of in accordance with all local, state and federal laws.

3.07 LIMITATIONS

Seal-Krete Dura Shell not designed for immersion or any use where moisture can reach the underside of the coating. Do not apply to floors that have been treated with curing compounds, unless they have been completely removed. Do not apply on vinyl, tile, paving brick, quarry tile, Mexican tile or similar materials. ***Do not apply if substrate or ambient temperature is below 50 degrees F.***

3.08 MAINTENANCE

SEAL-KRETE Industrial Flooring Systems are monolithic, making them easier to clean as dirt and other contaminants remain on the surface. For maintenance and care recommendations, refer to application guide or visit hp.seal-krete.com.

END OF SECTION