RESIST
EXTERIOR SAND EPOXY SYSTEM

PRODUCT DESCRIPTION:

THE RESIST EXTERIOR EPOXY SYSTEM IS A TWO-COMPONENT CONCRETE RESTORATION SOLUTION, FORMULATED TO TRANSFORM, ENHANCE AND PROTECT EXISTING CONCRETE SLABS AND STRUCTURES. THIS PROPRIETARY OVERLAY SYSTEM PROVIDES EXCEPTIONAL ABRASION AND WEAR RESISTANCE.

THIS SYSTEM IS DESIGNED FOR EXISTING CONCRETE SURFACES THAT REQUIRE RESTORATION OR TRANSFORMATION.

KEY FEATURES:

- EASY TO USE 1:1 MIXING RATIO.
- SUPERIOR BOND STRENGTH AND IMPACT RESISTANCE.
- RESISTANT TO DEICERS AND OTHER CHEMICALS, SUCH AS GASOLINE & DIESEL.
- ADA APPROVED NON-SLIP. AS THE TOPCOAT NATURALLY FADES, THE GRIP INTEGRITY OF THE SYSTEM WILL NOT, DUE TO OUR UNIQUE LAYERING OF THE AGGREGATE IN THE APPLICATION PROCESS.

NON-VEHICULAR SLABS	VEHICULAR/HEAVY EXPOSURE SLABS
WALKWAYS PATIOS POOL DECKS STEPS	DRIVEWAYS PARKING STRUCTURES COMMERCIAL CONCRETE SLAB ON GRADE

COVERAGE RATES:

COVERAGE RATES ARE PROVIDED AS A GUIDELINE ONLY. MANY FACTORS INCLUDING SURFACE TEXTURE, POROSITY AND WEATHER CONDITIONS CAN AFFECT ACTUAL COVERAGE RATES.

APPLICATION	AREA	COVERAGE RATE
SINGLE BROADCAST	NON-VEHICULAR	EPOXY: 150 SQ. FT / GALLON SAND AGGREGATE: 80 SQ. FEET / 50 LB BAG
DOUBLE BROADCAST	VEHICULAR/ HEAVY EXPOSURE	**FIRST COAT** EPOXY: 150 SQ. FT / GALLON SAND AGGREGATE: 80 SQ. FEET / 50 LB BAG **SECOND COAT** EPOXY: 2ND COAT: 75 SQ. FT / GALLON SAND AGGREGATE: 80 SQ. FT / 50 LB BAG

SCAN HERE TO VISIT THE SYSTEM LANDING PAGE

INSTALLATION PROCEDURES

PREPARATION:

THE USER SHOULD BE FAMILIAR WITH THE CONTAINER'S LABEL PRIOR TO USING THIS PRODUCT. ONLY RESIST APPROVED SAND AGGREGATES SHOULD BE USED WITH THIS SYSTEM, UNLESS FORMALLY APPROVED BY MANUFACTURER.

THE RESIST EXTERIOR SAND EPOXY SYSTEM MAY BE USED AT A RANGE OF TEMPERATURES; HOWEVER, THE USER SHOULD BE AWARE THAT TEMPERATURE PLAYS A ROLE IN THE POT LIFE AND CURE TIMES OF THIS PRODUCT.

1. ENSURE SURFACE IS PROPERLY ABRADED, CLEAN AND DRY BEFORE APPLICATION. SURFACE CONTAMINANTS WITH FAILURE TO PROPERLY PREPARE THE SURFACE CAN LEAD TO POOR ADHESION AND DELAMINATION, NOT COVERED BY WARRANTY.

2. A PROPER INSPECTION OF THE CONCRETE IS REQUIRED TO CHECK FOR STRUCTURAL DEFICIENCIES, AND ANY DETERIORATED AREAS SHOULD BE PROMPTLY MARKED AND REMOVED. THE ENTIRE SURFACE SHOULD BE SHOT BLASTED OR GROUND TO A CSP #2 TO #3 OR A DEPTH THAT ENSURES THAT ALL DETERIORATED AND CONTAMINATED CONCRETE IS REMOVED.

ALL EXISTING CRACKS SHOULD BE REPAIRED BY UTILIZING THE FOLLOWING STEPS:

a. CRACKS SHOULD BE OPENED WITH A V-BLADE AND CLEANED THOROUGHLY.
b. DEPENDING ON THE TIMELINE OF YOUR PROJECT, YOU WILL THEN UTILIZE TK-9030 OR THE RESIST EPOXY AND APPROVED SAND AGGREGATE FOR YOUR REPAIRS.

REFER TO THE CHART TO THE NEXT CHART TO DETERMINE BEST REPAIR PRODUCT FOR YOUR PROJECT.

REPAIR METHOD	HIGHLIGHTS
TK-9030	FOR PROJECTS WITH TIGHTER TIMELINES, THE USE OF THE TK-9030 IS IDEAL AS IT WILL SET AND BE READY FOR THE NEXT STEPS AFTER 30 MINUTES. REFER TO THE TK-9030 TDS FOR FULL DETAILS OF HANDLING THIS PRODUCT.
RESIST EPOXY	THE USE OF THE RESIST EPOXY IS A REPAIR METHOD THAT CAN BE USED, PROVIDED THE 4-6 HOURS CURE TIME CAN BE ADHERED TO WITHIN YOUR PROJECT TIMELINE. 1. MIXING 1:1 PART A & PART B OF THE RESIST EPOXY, YOU WILL INCLUDE X OF YOUR SYSTEM APPROVED SAND AGGREGATE INTO THIS TO BLEND INTO A REPAIR PASTE. 2. APPLY THE PASTE WITH A STANDARD TROWEL, WHICH WILL LATER BE GROUND FLUSH TO SURFACE AFTER CURING IS COMPLETE (4-6 HOURS).

MIXING:

1. VERIFY YOU HAVE EQUAL AMOUNTS OF RESIST EPOXY A & EPOXY B ON HAND. THE MIXING RATIO FOR THE TWO COMPONENTS IS 1:1 BY VOLUME (NOT WEIGHT).

2. EACH COMPONENT IS SUPPLIED IN SEPARATE CONTAINERS AND SHOULD BE COMBINED USING A PADDLE MIXER (POWERED BY A LOW-SPEED ELECTRIC DRILL) OR A PROPORTIONING PUMP FOR 3 MINUTES.

WHEN USING THE SAND AGGREGATES GOLD MINE OR SILVER FOX, THE USE OF CORRESPONDING UNIVERSAL TINT PASTE IS REQUIRED, MIX AS FOLLOWS IN STEP 3.
IF YOU ARE USING THE ARMOSTONE(R) PREMIER AGGREGATE, YOU CAN MOVE ON TO STEP 4.

3. ADD UNIVERSAL TINT PASTE TO PART A AND MIX ON LOW-MEDIUM RPMS FOR 1-2 MINUTES OR UNTIL THOROUGHLY MIXED WITH A MIXING PADDLE ON A VARIABLE SPEED DRILL.
   **UNIVERSAL TINT PASTE PAIRING BY SAND AGGREGATE CAN BE FOUND IN THE SYSTEM COMPANIONS SECTION.*

4. COMBINE PART A AND PART B INTO A CLEAN MIXING BUCKET AND MIX FOR 3 MINUTES.

APPLICATION:

FOR PROJECTS WITH HEAVY TRAFFIC OR EXPOSURE, STEPS 2-6 SHOULD BE REPEATED FOR A SECOND BROADCAST PRIOR TO SEALING.

NOTE: EPOXY COVERAGE WILL CHANGE WITH SECOND APPLICATION, YIELDING COVERAGE OF APPROXIMATELY 75 SQ. FEET PER GALLON.

DEPENDING ON THE CONCRETE SLAB TEMPERATURE, ONLY MIX WHAT CAN BE APPLIED IN A 20-MINUTE WINDOW.

PRO TIP

MAXIMIZING MATERIAL | *FLAYOUT MATERIAL TO DO A WET-ON-WET APPLICATION VERSUS CREATING A SITUATION WHERE YOU ARE DRAGGING MATERIALS ACROSS THE SLAB.*

1. AFTER THOROUGHLY MIXING THE NECESSARY MATERIALS TRANSPORT MIXING BUCKET TO SLAB AND POUR OUT RIBBONS OF MATERIAL IMMEDIATELY TO CORRESPOND COVERAGE FROM THAT BATCH.

2. MATERIALS SHOULD THEN BE SPREAD UTILIZING AN 8-12MIL GAUGE SQUEEGEE TO CREATE A UNIFORM THICKNESS OF RESIST EPOXY.

IF RESIST EPOXY IS THE CHOSEN METHOD, AND THE SURFACE HAS BECOME CONTAMINATED DURING THE CURING PROCESS, THE SURFACE WILL NEED TO BE PROPERLY CLEANED AGAIN BEFORE MOVING ON.

3. NEXT, GRIND DOWN ALL FILLED CRACKS AND SPALLS TO BE FLUSH WITH SURFACE. REMOVE ANY REMAINING DUST WITH COMPRESSED AIR, USING A PROPERLY MAINTAINED AND FILTERED COMPRESSOR THAT WILL NOT SPRAY OIL OR MOISTURE ONTO THE DECK. IF SURFACE WAS PRESSURE WASHED, ENSURE CONCRETE IS FULLY DRY BEFORE COATING. THE OVERLAY SHOULD BE APPLIED TO THE SURFACE WITHIN 24 HOURS OF CLEANING.

PRO TIP

PROJECT STAGING | *FOR A SMOOTH INSTALLATION, THIS SYSTEM FUNCTIONS IDEALLY WITHIN A STAGED WORKSPACE AND JOBSITE WITH PRE-ASSIGNED ROLES FOR EACH STEP OF THE INSTALLATION.*

- *KEEP ALL NON-MIXED KITS IN A CONTROLLED ENVIRONMENT.*
- *TO EXTEND THE MATERIALS WORKING TIME, POUR THE MIXED EPOXY INTO RIBBONS IMMEDIATELY AFTER MIXING.*
- *ONLY MIX ENOUGH EPOXY FOR YOUR CREW SIZE TO BE ABLE TO INSTALL IN A 20-MINUTE WINDOW (TYPICALLY 2-GALLONS OF MIXED PRODUCT PER BATCH).*
- *WHEN USING THE UNIVERSAL TINT PASTE, PRE-BLEND THE COLOR (1 QT : 2-GALLONS) TO PART A OF THE EPOXY FOR BEST COLOR CONSISTENCY.*
- *CONFIRM THAT ALL YOUR BAGS OF SAND ARE DRY PRIOR TO USE.*
- *TRANSFER THE CHOSEN, APPROVED SAND AGGREGATE TO EASY-TO-MANAGE BUCKETS FOR EFFICIENT BROADCASTING.*

3. TAKE A 3/8-INCH NAP ROLLER, PREFERABLY 18”, AND BACK-ROLL OVER THE GAUGED SQUEEGEE WORK TO PROVIDE A FLAT AND CONTINUED UNIFORM LAYER OF EPOXY.

4. FOR MATERIEL THAT HAS COLLECTED IN CONTROL JOINTS, CAN BE WORKED OUT WITH A CHIP BRUSH PRIOR TO APPLICATION OF THE SYSTEM APPROVED AGGREGATE CHOSEN.

5. ONCE EPOXY IS APPLIED AND ROLLED, APPLICATION OF RESIST SAND AGGREGATE SHOULD COMMENCE IMMEDIATELY. *

6. AFTER EPOXY HAS HARDENED, UN-BONDED AGGREGATE SHOULD BE SCRAPED AND RECOVERED PRIOR TO APPLICATION OF A SEALER USING A STANDARD METAL FLOOR SCRAPER.**

**AGGREGATE SHOULD BE BROADCAST RELEVANT TO A RATE OF 80 SQ. FEET PER 50LB BAG. NOTE THAT THICKER APPLICATIONS OF EPOXY WITH REQUIRE MORE SAND AGGREGATE FOR COVERAGE TO BE ACHIEVED.*

***THE EPOXY AND SAND AGGREGATE NEED TO COMPLETELY HARDEN BEFORE SCRAPING AND RECOVERING ANY LOOSE MATERIAL, WHICH IS APPROXIMATELY 3-5 HOURS.*

SCAN HERE TO SEE AN INSTALLATION IN ACTION

SEALING:

SEALER SHOULD BE UNIFORMLY APPLIED WITH SPRAYER & BACK-ROLLED FOR THE MOST UNIFORM COVERAGE. WE RECOMMEND TWO COATS OF THE SELECTED, COMPATIBLE SEALER. REFER TO THE SELECTED, COMPATIBLE SEALER'S TECHNICAL DATA SHEET FOR FULL HANDLING AND APPLICATION INSTRUCTIONS.

YOU WILL SPRAY AND BACK-ROLL USING A HIGH-QUALITY, INDUSTRIAL GRADE PUMP-UP SPRAYER, OR APPLY WITH AN APPROVED COMMERCIAL SIPHON SPRAYER.

FINISHED PRODUCT CAN BE RE-OPENED TO FOOT TRAFFIC AFTER 12 HOURS & VEHICULAR TRAFFIC AFTER 48 HOURS.

WE HAVE SELECTED A PREMIUM LINE-UP FROM OUR SURECRETE, TK PRODUCTS & CONCRETE COATINGS BRANDS TO PROVIDE THE OPTIMAL SURFACE PROTECTION AND ENHANCEMENT BASED ON YOUR PROJECT NEEDS:

SYSTEM COMPANION		
	RESIST TOPCOAT	SOLVENT BASED ACRYLIC FOR USE IN REGIONS WITH A LOW VOC REQUIREMENT.
COMPATIBLE ALTERNATIVES		
	DK 400 WB	AVAILABLE IN GLOSS AND SATIN FINISHES, THIS 2-PART WATER BASED POLYURETHANE OFFERS SUPERIOR WEAR, SCRATCH AND CHEMICAL RESTANCE AND DURABILITY WHILE REMAINING BREATHABLE.
	SUPER 20 / SUPER 30	THESE HIGH QUALITY, SOLVENT BASED ACRYLICS OFFER BREATHABILITY, HIGH GLOSS, AND COLOR ENHANCEMENT. CHOOSE EITHER BASED ON THE AMOUNT OF SOLIDS YOU PREFER IN YOUR TOPCOAT.
	SUPERSEAL	OUR SUPERSEAL LINE PROVIDES SUPERIOR NON-YELLOWING, COLOR ENHANCING, SOLVENT BASED FORMULAS IN STAND AND VOC COMPLIANT VARIATIONS.
	TK BRIGHT KURE & SEAL	THIS SOLVENT BASED ACRYLIC IS AN ALL-AROUND GENERAL-USE SEALER THAT PROVIDES A SEMI-GLOSS FINISH, IS SPRAYABLE, AND WILL ENHANCE COLOR.
	TK ULTRA DIAMOND SEAL	PREMIUM HIGH SOLIDS SOLVENT BASED ACRYLIC SEALER, WHERE A HIGHER GLOSS FINISH AND AN ENHANCED COLOR IS DESIRED.
	TK GAS RESISTANT SEALER	FORMULATED FOR PROJECTS WHERE INCIDENTAL EXPOSURE TO GASOLINE IS PRESENT. THIS UNIQUE OFFERING IS A GREAT CHOICE FOR DRIVEWAYS, FUEL PUMP STATIONS, AND PARKING AREAS. WILL PROVIDE COLOR ENHANCEMENT AND A SEMI-GLOSS FINISH.

CLEAN UP:

CLEAN EQUIPMENT, TOOLS AND SPILLS WITH AN AROMATIC SOLVENT SUCH AS TK- 00 XYLENE*.

**TK-00 XYLENE MUST BE PURCHASED SEPARATELY*

FIRST AID:

CONSULT THIS PRODUCT'S SAFETY DATA SHEET FOR ADDITIONAL HEALTH AND SAFETY INFORMATION.

LIMITATIONS:

FOR OPTIMAL PRODUCT LONGEVITY, STORE IN ORIGINAL SEALED CONTAINER BETWEEN 50^0-80^0 F AND OUT OF DIRECT SUNLIGHT. SHELF LIFE CAN BE EXPECTED TO BE 5 YEARS IN THIS ENVIRONMENT.

AIR AND SUBSTRATE TEMPERATURES SHOULD BE 50°F OR HIGHER AT THE TIME OF APPLICATION. LOWER TEMPERATURES WILL RESULT IN LONGER CURE TIMES.

TECHNICAL DATA

TEST	RESULT
POT LIFE	25-35 MINUTES @ 75 F
MIXED VISCOSITY (ASTM D7867)	400-600 CPS @ 75 F
VOC (EPA METHOD 24)	NO TINT: <0.1 G/L VOC WITH TINT: 60 G/L VOC
ADHESION (ASTM D7234)	> 500 PSI (SUBSTRATE FAILURE)
SLANT SHEAR BOND STRENGTH (ASTM C882)	2 DAYS - 890 PSI 14 DAYS - 1,395 PSI
TENSILE STRENGTH AND ELONGATION (ASTM D638)	TENSILE STRENGTH @ 7 DAYS - 1,744 PSI TENSILE ELONGATION @ 7 DAYS - 1.6% TENSILE MODULUS @ 7 DAYS - 6.6 X 10^5 PSI
COMPRESSIVE YIELD STRENGTH (ASTM D695)	1 DAY - 5,088 PSI 3 DAYS - 5,697 PSI 7 DAYS - 5,955 PSI 14 DAYS - 6,128 PSI
COEFFICIENT OF FRICTION (ASM 825A DIGITAL SLIP METER)	DRY COF: 1.26 (97 SRV) WET COF: 1.04 (85 SRV)
QUV WEATHERING (ASTM D4799)	(UVA-340, 500 HOURS) WITHIN THE DARKER SAND AGGREGATE BLENDS, INSIGNIFICANT SHIFT IN COLORING. WITHIN THE LIGHTER SAND AGGREGATE BLENDS, MAY SHOW A NATURAL COLOR CHANGE OVER TIME AND REGULAR EXPOSURE.
AVERAGE WATER VAPOR PERMEANCE (ASTM E96)	20.0 MILS EPOXY ONLY: 0.082 US PERMS 10.7 MILS WITH AGGREGATE: 0.598 US PERMS (WET CUP METHOD)
FREEZE THAW STABILITY (ASTM C666)	NO NEGATIVE EFFECTS
CHEMICAL RESISTANCE (GASOLINE AND DIESEL)	**RESIST TOPCOAT:** (24-HOUR EXPOSURE) DIESEL: NO EFFECT GASOLINE: DAMAGE TO TOPCOAT, NO DAMAGE TO BASECOAT. (SPILL AND LET EVAPORATE) GASOLINE: 10 SPILLS, NO DAMAGE **RESIST BASECOAT:** (24-HOUR EXPOSURE) DIESEL: NO EFFECT GASOLINE: NO EFFECT

CERTIFICATIONS & STANDARDS

TEST	RESULT
A.I.M. CATEGORY	CONCRETE PROTECTIVE COATING MAXIMUM VOC 400 G/L
APPLICABLE STANDARDS	- ASTM C-881, TYPE III, GRADE 1, CLASS B AND C - AASHTO M-235 TYPE II AND III, GRADE 1, CLASS B, C AND D
COF TESTING WITH ASTM 825A DIGITAL SLIP METER	CLASSIFIED AS “HIGH TRACTION” THAT MEETS ADA REQUIREMENTS.