



# PORK PRODUCTION MAINTENANCE GUIDE

v 1.0

## A Helpful Reference Guide to Flooring Solutions

For Use With Vanberg Specialized Coatings Products

### CONTENTS

#### **DIAGNOSIS** 2

*Identify your maintenance issue  
and quickly find a solution*

#### **SURFACE PREPARATION** 4

*Preparation instructions*

*Includes Easy Instructions*

#### **CON-KORITE XTRA** 5

#### **CON-KORITE XTEND** 6

#### **ARMOR-ROCK** 7

#### **ARMOR-GROUT** 8

#### **ARMOR-ROCK THX** 9

#### **OTHER PRODUCTS** 10

*Armorcoat Epoxy, Joint Fill Vertical  
& VSC Concrete Seal*

#### **ADDITIONAL INFORMATION** 11

*Clean-Up, Climate Affects  
& Flooring Solutions*

# DIAGNOSIS

## SLAT & PEN REPAIRS

### PROBLEM



#### *Slight Wear*

1/8" or Less Rough surface with minimal pitting



#### *Moderate Wear*

1/8" up to 1/4" Very rough with exposed stone



#### *Extreme Wear*

1/4" up to 1/2" or more Severely damaged, exposed stone, deep pitting



#### *Breakouts & Eroded Edges*

Severe damage that requires rebuilding

## TROUGH REPAIRS

### PROBLEM



#### *Slight Wear*

1/8" or Less Rough surface with minimal pitting



#### *Extreme Wear*

1/4" up to 1/2" or more Severely damaged, exposed stone, deep pitting



#### *Unwanted Troughs*

Troughs to be filled and capped to create a level surface

## MISCELLANEOUS REPAIRS

### PROBLEM

#### *Tight Stress Cracks*

Hairline cracks that require repair to avoid further spread

#### *Slightly Open Cracks*

1/6" up to 1/8" or wider

#### *Wide Cracks*

Up to 1/2" or more

#### *Moving Cracks and Joints*

#### *Deep Holes*

---

SOLUTION

---

*ARMOR-ROCK THX (non-slip)*

**Page 9**

*or*

*VSC CONCRETE SEAL*

**Page 10**

---

*ARMOR-ROCK SYSTEM*

**Page 7**

*or*

*CON-KORITE X'TRA*

**Page 5**

---

*CON-KORITE X'TRA*

**Page 5**

*or*

*CON-KORITE X'TEND*

**Page 6**

---

*CON-KORITE X'TRA*

**Page 5**

*or*

*ARMOR-GROUT*

**Page 8**

---

SOLUTION

---

*ARMOR-ROCK THX (smooth)*

**Page 9**

---

*CON-KORITE X'TRA*

**Page 5**

*or*

*CON-KORITE X'TEND*

**Page 6**

---

*CON-KORITE X'TEND*

**Page 6**

---

SOLUTION

---

*VSC CONCRETE SEAL*

**Page 10**

---

*ARMORCOAT BASE EPOXY*

**Page 10**

---

*CON-KORITE X'TRA*

**Page 5**

---

*EPOXY JOINT FILL VERTICAL*

**Page 10**

---

*CON-KORITE X'TEND*

**Page 6**

# SURFACE PREPARATION

## VP-151 CONCRETE CLEAN & ETCH

Aggressive formula cleans and etches concrete floors to create a "hold tight" textured surface improving adhesive qualities of mortars, sealers and coatings. *1 gal. etches 150 sq. ft. when mixed 1:2 with water (1 part Clean&Etch to 2 parts water).*

### HOW TO ETCH THE REPAIR SURFACE

---

#### STEP ONE

*1 part Clean&Etch  
to  
2 parts Water*

*Refer to MSDS for safety information before using.*

Combine CLEAN & ETCH with water (1:2).

*Sprinkle* (plastic watering can), *Spray* (acid resistant sprayer) or *Pour* etching solution onto the substrate.

---

#### STEP TWO

Broom the solution to spread it over the substrate and allow it to work several minutes until the fizzing reaction ends.

---

#### STEP THREE

Rinse thoroughly with clean water.  
Broom and rinse again if residue is present.

---

#### STEP FOUR

Remove standing water. To hasten this process use a good wet/dry vacuum to quickly remove excess water or use compressed air or a weed blower to blow it away.

**NOTE:** CON-KORITE is applied to a *moisture saturated surface* which appears slightly damp with no standing water.

**NOTE:** ARMORCOAT, ARMOR-ROCK and all other epoxy products are applied to a *dry surface*. To expedite drying process the surface can be torch dried (weed burner) or fans may be operated.

---

### MIXING STATION

When preparing for application it is important to setup an area to mix materials and clean up tools. This area should be near an exit, a water supply and a power outlet. Large pieces of cardboard work excellent as a disposable mixing station surface.

# CON-KORITE X'TRA

## MIXING LIQUIDS (Pre-blend for use with Con-Korite X'tra & X'tend)

### MIXING LIQUIDS CHART (Recommended for best results)

Repair Thickness	Mixing Liquids Ratio (Water/KB25)
1" and up	Water 100%
1/2" up to 1"	1 Part KB25/2-3 Parts Water
1/4" up to 1/2" (edging)	KB25 100%

1 to 1.25 gallons of mixing liquids are used for every 55 lbs. of mortar. Add SET CONTROL to the mixing liquids when extended working time is required (1-3 pouches per 1 gal of liquid).

## MIXING PROCEDURE

### STEP ONE

*Prime the surface to be repaired with mixing liquids.*

*1 part Liquid  
to  
3-4 parts Mortar*

Combine the mortar with the mixing liquids in a clean, dry mixing container.

Start with smaller batches if installing for the first time. Typical small batch: 1 quart of mixing liquids and 3 to 4 quarts mortar.

### STEP TWO

Mix thoroughly for approximately two minutes with a prop mixer attached to a 1/2 inch variable speed drill. Add additional mortar or mixing liquids if needed to obtain a pasty, trowel-able mix.

## APPLICATION PROCEDURE

### STEP THREE



Place the mortar where repairs are to be made. Use a trowel to spread the mortar to a uniform depth. Use a second trowel or mud hawk to form edges and repair breakouts.

#### NOTE:

Do not finish. Allow mortar to "Tack in" for several minutes before applying finish.\*

### STEP FOUR

As the mortar becomes firm the desired surface finish can be applied.

**SMOOTH:** Use a flat, moistened finishing trowel

**BROOM:** Use a moistened broom or brush device

**NOTCH:** Use a moistened 1/8th inch notched trowel

\*Adding set control can extend the "Tack in" time up to 15 minutes.

# CON-KORITE X'TEND

## MIXING LIQUIDS

Pre-blend mixing liquids for priming and mixing.  
See the MIXING LIQUIDS section on page 5.

## MIXING PROCEDURE

### STEP ONE

*Prime the surface to be repaired with mixing liquids.*

*1 part Liquid  
to  
3-4 parts Mortar*

Combine mortar with the mixing liquids in a clean, dry mixing container.

About 1 to 1.25 gallons of mixing liquids are used for every 55 lbs. of mortar.

Start with smaller batches if installing for the first time. Typical small batch: 1 quart of mixing liquids and 3 to 4 quarts mortar.

### STEP TWO



*Mix thoroughly for approximately two minutes with a prop mixer attached to a ½ inch variable speed drill. Add additional mortar or mixing liquids if needed to obtain a pasty, trowel-able mix.*

### STEP THREE

*2 parts Mortar  
to  
1 part Sand*

Add sand extender to the blend and continue mixing.

Use 25 lbs. of sand extender per 55 lbs. batch of CON-KORITE adding slight amounts of mixing liquids or mortar to maintain the pasty, trowel-able consistency.

*Mix thoroughly for 1½ - 2 minutes*

For smaller batches mix at a rate of 2:1  
(2 parts mortar to 1 part sand extender)

## APPLICATION PROCEDURE

### SEE PAGE 5

Follow the APPLICATION PROCEDURES for CON-KORITE X'TRA on page 5.

- 2** KB25 can replace 25-100% of the water for mixing liquids. The higher the concentration of KB25 the greater the resistance to chemicals and abrasion. KB25 is highly recommended in pork production facilities.

# ARMOR-ROCK

## BEFORE STARTING

The following steps are general instructions for applying ARMOR-ROCK. Special instructions for slat repair are included when applicable.

## MIXING PROCEDURE

### STEP ONE

2 parts Resin  
to  
1 part Hardener

Combine pre-proportioned ARMORCOAT resin and hardener bag packs in a clean, dry mixing container. *Mix thoroughly for 1½ - 2 minutes* with a prop mixer attached to a ½ inch variable speed drill.

When using 15 gal. units, 1½ gal. batches are recommended. Mix ratio is 2:1 (2 parts resin to 1 part hardener) for *all* batch sizes.

### STEP TWO

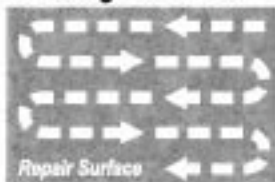
25-30 lbs. Sand  
per  
1 ½ gal. Unit

Aggregate is added creating a slurry with an oatmeal-like consistency. Blend in 25-30 lbs. of aggregate per 1½ gal. unit. *Mix thoroughly for 1½ - 2 minutes.*

## APPLICATION PROCEDURE

### STEP THREE

#### Working Direction



From right to left pour entire batch of slurry over repair surface in a straight, manageable bead.

With a 1/4" Notched squeegee or trowel pull the slurry evenly over the repair surface. Pull from one side to the other keeping excess slurry buildup flowing toward you. Use flat side of tool to smooth out notch marks.

#### SLATS:



Transfer slurry to small flexible pails for pouring more accurate beads directly onto slats. Quickly pour a single bead across each slat in need of repair until the entire batch is used. Pull slurry across the slats with a SLAT SQUEEGEE. Use flat side of tool to smooth out notch marks.

CONTINUED ON NEXT PAGE →

- ② To reform slat edges use CON-KORITE (page 5-6) or ARMOR-GROUT (page 8).

# ARMOR-ROCK cont.

## APPLICATION PROCEDURE

### STEP FOUR

Broadcast aggregate over the repair surface after spreading the batch. All wet areas on the repair surface should be saturated in a uniform manner and appear dry. Observe the repair area from different angles, as light reflections will expose any remaining wet areas.

**NOTE:** When applying multiple batches to repair surface, a 6"-12" non-sanded, wet edge must be left facing the direction of progress. Each additional batch will be blended at the wet edge of the previous batch.

### STEP FIVE

When the epoxy cures in approximately 8-12 hrs the remaining aggregate is swept from the surface.

# ARMOR-GROUT

## MIXING PROCEDURE

### STEP ONE

*44 fl. oz. Resin  
to  
22 fl. oz. Hardener*

Mix 44 fl. oz. resin with 22 fl. oz. hardener of ARMORCOAT in a clean, dry mixing container. Add 1 pint of SOLVENT 101 and *mix thoroughly for 1½ - 2 minutes* with a prop mixer attached to a ½ inch variable speed drill.

### STEP TWO

*35 lbs. Aggregate*

35 lbs. of aggregate is added to create a heavy bodied, epoxy mortar. *Mix thoroughly for 1½ - 2 minutes.*

## APPLICATION PROCEDURE

### STEP THREE



Use a trowel to place grout on the repair surface. Spread and level the grout. Use two trowels or a mud hawk to form edges. Apply solvent to a smooth trowel and finish the repair surface.

**NOTE:** Large holes and cracks can easily be filled in with ARMOR-GROUT.

# ARMOR-ROCK THX

## MIXING PROCEDURE

### STEP ONE

2 parts Resin  
to  
1 part Hardener

Combine pre-proportioned ARMORCOAT resin and hardener bag packs in a clean, dry mixing container. **Mix thoroughly, 1½ - 2 minutes** with a prop mixer attached to a ½ inch variable speed drill.

When using 15 gal. units, 1½ gal. batches are recommended for optimal working time. Mix ratio is 2 parts resin to 1 part hardener for all batch sizes.

### STEP TWO

1-2 parts Thixo  
to  
1 part Epoxy

THIXO is added creating a heavy, gelatin consistency. Blend in 1½ gal. of THIXO with each 1½ gal. unit. In areas where slump reduction is required up to 3 gallons of THIXO can be added to each 1½ gal. unit. **Mix thoroughly for 1½ - 2 minutes.**

**NOTE:** A thicker blend of ARMOR-ROCK THX is excellent for sloping feed troughs.

## APPLICATION PROCEDURE

### STEP THREE

Pour a bead of ARMOR-ROCK THX over the repair surface. Roll coat apply. If the blend is thicker use a 1/8" notched trowel to spread over repair area.

### STEP FOUR

On slopes the blend may slump slightly to the lowest point of repair this can be rolled or trowel finished back into position. This must be done within approximately 15 minutes to avoid working with stiff material. Solvent can be applied to the flat side of a trowel to help smooth the surface.

## ADDITIONAL OPTION

### NON-SLIP

Broadcast aggregate into the placed system while it is still wet. See ARMOR-ROCK, steps 4-5 (page 8) for a detailed description.

# ARMORCOAT EPOXY

## MIXING PROCEDURE

### STEP ONE

*2 parts Resin  
to  
1 part Hardener*

Combine the required amount of resin (2 parts) and hardener (1 part) in a clean, dry mixing container. Use small batches for crack filling. **Mix thoroughly for 1½ - 2 minutes** with a prop mixer attached to a ½ inch variable speed drill.

## APPLICATION PROCEDURE

### STEP TWO

Pour the ARMORCOAT EPOXY directly onto the crack. Use a roller or flat trowel to push the epoxy into the crack and smooth out any excess material. If the epoxy sinks into the crack, repeat this step as needed.

# JOINT FILL VERTICAL

## MIXING PROCEDURE

### STEP ONE

*1 parts Resin  
to  
1 part Hardener*

Combine the required amount of resin (1 part) and hardener (1 part) in a clean, dry mixing container. Use small batches for crack and joint filling. **Mix thoroughly for 2 - 3 minutes** with a prop mixer attached to a ½ inch variable speed drill.

## APPLICATION PROCEDURE

### STEP TWO

Place the material onto the repair area or joint with a margin trowel or putty knife. Remove any excess material prior to curing.

# VSC CONCRETE SEAL

## APPLICATION PROCEDURE

### STEP ONE

Pour the single component epoxy out onto the surface. Roll coat apply making sure all areas are thoroughly saturated. Use a flat bladed squeegee to move material around on the floor. The surface does not require etching prior to application. Instead wash the surface so no contaminants are present.

# **ADDITIONAL INFORMATION**

## **CLEAN-UP TIPS**

Keep an area within your mixing station to clean tools and supplies while working and upon completion of your project. Water and SOLVENT 101 should be available at all times. SOLVENT 101 works excellent for removing epoxy residue from tools and supplies.

## **CLIMATE AFFECTS**

High and low temperatures should be considered before application of any of these products. Higher temperatures will cause epoxy and mortar components to begin curing faster. Use set control with CON-KORITE to extend the working time in these conditions. Keep epoxy products out of the heat when possible and use smaller batches if necessary. After mixing, spread the entire batch onto the repair surface to keep the epoxy from kicking over in the pail.

Lower temperatures will slow down the cure time of these products. Catalyst compounds may be added to epoxies to expedite curing in colder weather. Keep all products away from the cold and allow them to warm near a heater, when possible. Some temperatures may be too low for applying mortar or epoxy. Please consult the products MSDS and GUIDELINES for further information.

## **FLOORING SOLUTIONS**

VSC believes strongly in providing high quality, long-term flooring solutions. When you need help with application procedures, product information or techniques for a successful installation. You have access to 20 years of experience in the field. We help you find real flooring solutions - that's our promise.

***Thank You!***

Flooring solutions from a company you can trust



**VANBERG**  
SPECIALIZED COATINGS

P.O. Box 19414, Lenexa, KS 66285-9414

1-800-874-0631

email: [vsc@vanbergcoatings.com](mailto:vsc@vanbergcoatings.com)

[www.vanbergcoatings.com](http://www.vanbergcoatings.com)