Metal Coatings

Use Guide for General Production

Vanberg Specialized Coatings

Early Stages of Rust

As metal roofs, ceilings and walls age, protective coatings begin to degrade. White rust (chalking) begins to form and then red rust soon follows. Without attention, additional corrosion and extensive rusting will result in no other option but replacement.

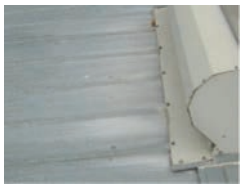
Replacing metal panels is a costly and time consuming process. This is especially true for interior walls and ceilings, as it requires taking down electrical and plumbing fixtures, removing equipment in addition to re-installing panels.

It is VSC's goal to repair metal corrosion and damage in the early stages to significantly extend the life of the metal components. VSC Metal Repair and Protection products are not designed to replace seriously corroded or damage metal.

After Restoration

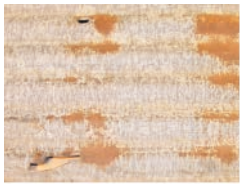
REPAIR DIAGNOSIS AND SUCCESSFUL METAL REPAIR & PROTECTION

White Rust



Red Rust

Holes, Splits & Seams



Successful repair and protection is the result of proper preparation techniques and the use of quality products designed to achieve long-lasting performance.

Convert Rust

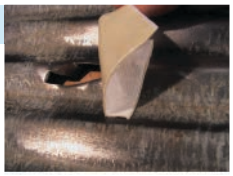
Although abrasive blasting and mechanical rust removal are great methods, they are not always feasible. Experience shows that the treatment of rust is best achieved through application of VSC Rust Converter following the removal of loose rust.

Before

After

Patch & Seal

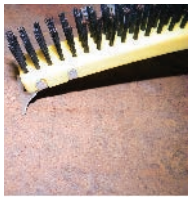
Holes, splits, seams and joints are covered with VSC Seam Tape, designed specifically for all weather conditions and compatibility with VSC coatings.



Corrosion Resistance Coatings - 3 choices

- AMC-100L for Galvanized Metal
- WMC-100 for White Interior Metal
- V-Thane for High Performace Interior and Exterior Color Stable Coatings

SURFACE REPARATION



Before

After


Rust may be removed in several ways

Mechanical Abrasion

One is by mechanical abrasion. Sand blast, drill with brush attachment or hand held plastic or wire brush. Ideally the process should get down to bare metal.

VSC Rust Converter

Rust Converter does not stop further rust formation from subsurface rust or if rust is forming on the other side of the metal being treated. Basically it converts surface rust to a black inert compound. If there is no subsurface rust, then the Converter has done its job and further rusting will be stopped. If there is known subsurface rust, the metal should be replaced.


Roll

Spray

Converted Surface

VSC Rust Converter Application Process

Preparation

Remove all debris and loose rust flakes by mechanical methods as noted above.

Mixing

Shake well.

VSC Rust Converter

Uniformly apply by brushing, spraying (conventional paint sprayer) or rolling product evenly over the rusted surface. Allow to dry completely (typically 1 to 2 hours). A clear hard finish will form and rust will turn blackish. If any rust is present, an additional application may be required.

PATCH & SEAL

VSC Seam Tape

VSC Seam Tape is a contouring, self-adhesive and high-strength seam tape that is great for repairing holes, loose screw heads, splits and seam separations. It will stop leaks as well. It has excellent structural strength, superior adhesion and accepts the solvent-based coatings AMC-100L, WMC-100 and V-Thane (unlike other tapes). Apply Seam Tape after preparation.


Application

Prior to coating, all holes, bolt heads, splits and seams must be sealed to prevent water penetration.
Cut to size, press the tape onto the surface and work into the split, seam, hole or over a bolt head. Entire seam lengths can also be taped.

METAL COATINGS

VSC metal coatings provide protection from environmental conditions that can adversely affect metal structures. The coatings are designed for interior and exterior metal surfaces that are exposed to abrasion, chemicals, solvents, vapors and weather. These premium grade coatings shield against the corrosive damage caused by continuous exposure. VSC Coatings are made to repair and protect metal that is beginning the rust process; not where rust is deep and severe or where subsurface rust is present. In such cases the metal should be replaced.

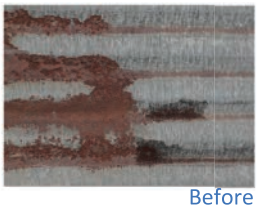

Roll

Spray

VSC HAS THREE METAL COATING FORMULATIONS TO FIT VIRTUALLY ANY NEED.

For Galvanized Metal: AMC-100L

AMC-100L is a single component, moisture cured polyurethane aluminum coating with excellent adhesion to sound, properly prepared galvanized metal or steel. This low viscosity, high "wetting" coating provides excellent corrosion resistance and abrasion resistance. It's resistance to creeping, undercutting, and blistering is superior to epoxy primers. It is ideal for exterior galvanized roofs, bins and equipment.


Before

After

For White Interior Metal: WMC-100

WMC-100 is a single component, moisture cured polyurethane coating with excellent adhesion to sound, properly prepared painted metal or steel. This low viscosity, high "wetting" coating provides excellent corrosion resistance and abrasion resistance. It's resistance to creeping, undercutting, and blistering is superior to epoxy primers. It is ideal for interior white painted metal surfaces. It should be noted that WMC-100 will discolor over time. If white color stability is needed then V-Thane is the best Solution.


Before


After

High Performance Color Stable Coatings: V-Thane Polyurethane

V-Thane is a polyurethane coating with stabilizing compounds that support heavy vertical application without sagging. Chemical resistance properties are coupled with enhanced resistance to UV light damage. Color stability means V-Thane is strongly suited for applications where maintaining color and appearance is desired. V-Thane is a flexible urethane, allowing for some movement due to expansion and contraction.


Before


After

APPLICATION PROCESS

AMC-100L and WMC-100 are single component products that only require some stirring prior to use.

V-Thane is a two-component product that requires mixing

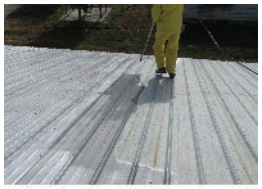
V-Thane Mixing: The hardener and resin are combined and blended with a spiral prop mixer attached to a low or variable speed drill. Mix Ratios (Resin:Hardner): V-Thane - 2:1

Zinc Additive for V-Thane

When severe corrosion threatens metal surfaces, VSC Zinc Additive, a particle compound that enhances corrosion resistance properties, is used. Add 1 lb. (0.5 kg) per gal. (3.8 L) of mixed V-Thane during the base coat mixing process. Thoroughly blend the components to achieve visible consistency.

Application

Using solvent resistant brushes, epoxy roller covers, or airless spraying equipment apply the base coat in a uniform fashion. After the base coat is applied and allowed to cure, then apply a final coat in the same manner.
For best performance a 2nd coat is recommended.
For detaled application guidelines refer to the specific Product Data Sheet.



PRODUCT AVAILABILITY

Surface Preparation

VSC Rust Converter (Typical Coverage: up to 500 sq.ft./gal. | 12.3 m²/L)

1 qt. (0.9 L) jug (12/case)	RC900
1 gal. (3.8 L) jug (4/case)	RC900-1
13 oz. (0.4 L) spray can(12/case)	RC900-S

Metal Coatings

AMC-100L (Typical Coverage: 300-400 sq.ft./gal. | 7.4-9.8 m²/L)

1 gal. (3.8 L) (4/case)	AMC100L-1
5 gal. (18.9 L) pail	AMC100L-5
Repair Kit	AMC100L-1K

(1 qt. (0.9 L) AMC-100L, 1 pt. (0.9 L) Rust Converter, 2" (50.8 mm) Chip Brush, 4 pieces Seam Tape)

WMC-100 (Typical Coverage: 350 sq.ft./gal. | 8.6 m²/L)

1 gal. (3.8 L) (4/case) (white)	WMC100-1
5 gal. (18.9 L) pail (white)	WMC100-5
Repair Kit (white)	WMC100-1K

(1 qt. (0.9 L) WMC-100, 1 pt. (0.9 L) Rust Converter, 2" (50.8 mm) Chip Brush, 4 pieces Seam Tape)

Patch & Seal

VSC Seam Tape

2" (50.8 mm) x 50' (15.2 m) roll	RC800-2

V-Thane Polyurethane (Typical Coverage: Base coat: 300 sq.ft./gal. | 7.4 m²/L) Tope coat: 400 sq.ft./gal.| 9.8 m²/L)

.75 gal. (2.8 L) kit (white)	320VW-75
1.5 gal. (5.7 L) kit (white)	320VW
15 gal. (57.8 L) kit (white)	320VW-15

VSC Zinc Additive

1 lb. (0.5 kg) container	AC105Z-1

TOOLS & SUPPLIES

10'x12' Poly Tarp (Blue) (3.0m x 3.7m)
TS1012T

Rubber Gloves
TS5000G

4" Prop Mixer (101.6 mm)
TS46565

2 1/2" Prop Mixer (63.5 mm)
TS46555

5 gal. (18.9 L) Mixing Pail (lid sold separate)
TS305

2 qt. (1.9 L) Measuring Container
TS2QM

5 qt. (4.7 L) Measuring Container
TS5QM

1 gal. (3.8 L) Solvent 101
VPC-101-1

5 gal. (18.9 L) Solvent 101
VPC-101-5 *not shown*

2" Chip Brush
TSF5117-2

3" Chip Brush
TSF5117-3

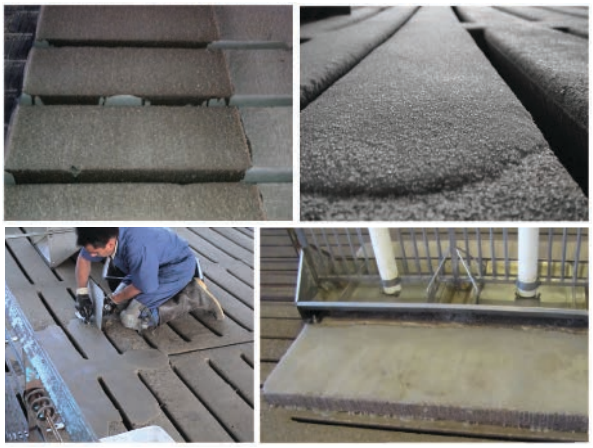
ARMOR-ROCK XC FOR PORK PRODUCTION

Armor-Rock XC offers maximum durability, UV and chemical resistance, and speed clocking in around 40 minutes set time at 70°F (21°C). An added 'cold-cure' accelerator may also be used in below freezing temperatures for fast overlays in refrigerated areas or during inclement weather.

The VOC compliant technology offers a flowable stand-alone coating with good leveling properties and can also be used to create a number of systems to facilitate the needs of any fast-paced production environment.

Advantages

- Xpress Cure - Quick return to service in 30-60 minutes
- Cold Weather Cure - Apply down to -20°F (-29°C)
- Superior Wear Protection - Up to 20 years protection or more
- Chemical Resistant - Withstands corrosive production compounds



For additional technical product info, or application assisstance, contact us by phone, or visit our website

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