

## **Surface Preparation**

Application surfaces must be structurally sound, and the overall structural integrity of the asset is critical to the overall success of any coating or overlay. Some surface damage such as deterioration, cracks and spalls can occasionally be repaired, but CRS does not provide structural improvement or enhancement.

CRS has been formulated to penetrate into tightly adhered intact rust, and bond with the substrate surface. Other materials (such as petro-chemicals) which could interfere with this process, must be removed. Remove any loose, soft, or contaminated materials from the area that will be repaired/resurfaced.

A comprehensive prep system for CRS will include the following program:  
Remove all loose debris using a hand pump or spray on a degreaser over the entire area, let sit for 5 minutes (allowing degreaser to sit for longer will NOT increase effectiveness), and then completely rinse 2 times. Let dry for 30 minutes before any further application. With extreme surface dirt or oil, you may have to apply a second time. You must repeat this process until the substrate is free of any petro-chemical substances.

**An optimal application of CRS is to aim for a total thickness of 2-3mils WFT (Wet Film Thickness)**

## **General Application Information**

CRS can be applied using a sprayer, brush, trowel or roller depending upon the application tools available, substrate, volume of surface to cover, vertical or horizontal surface, hard to reach areas or unique thickness requirements. Please review the above information regarding a thoroughly cleaned substrate. A light application of water could be applied to the area in hot conditions but if sprayed it is NOT mandatory due to the effects of a high volume, low pressure sprayer (15-80psi) rebound or splash back should be minimal.

With any application method, to avoid mud cracking, do not use too much material on a single coating. Instead, use less material across 2 layers, and make sure the previous layer properly dries before adding a new layer.

## **The Importance of Striping Your Surface Edges:**

Ensure proper coverage on edges, as during normal hydrolysis induced cure, the material may become thinner than expected. Brush edges or corners before spraying the surface to ensure enough material is in contact with the substrate.

## **Airless Spray Application**

Line pressure should be 1,800 to 2,200 lbs

Spray tip sizes that can be used: 311 - 617

Use a line size of 1/4 inch at your spray gun with an in-line filter

When spraying, hold your spray gun 12-24 inches from the substrate at a 90-degree angle to achieve minimum over-spray.

**First pass:** Spray 1-1.5 wet mils (max) all in one direction, for instance "East-West." Allow at a minimum 10-15 minutes for this pass to dry.

**Second pass:** Spray another 1-1.5 wet mils (max) in an alternate direction, for instance "North-South." Dry film thickness when both applications are done should be as close to 2 mils as possible.

**Do not over build each spray application exceeding recommended wet film thickness of 2-2.5 mils or else material will run.**

## **Conventional Spray Application**

We recommend using quality conventional spray guns from brands like: Binks, DeVilbiss, etc.

Spray pot pressure: 20-40 lbs

Spray air pressure: 40-60 lbs - adjust to your environmental conditions

When spraying, hold your spray gun 12-18 inches from substrate at a 90-degree angle to achieve minimum over-spray.

**First pass:** Spray 1.5-2.0 wet mils (max) all in one direction, for instance "East-West." Allow at a minimum 10-15 minutes for this pass to dry.

**Second pass:** Spray another 1.5-2.5 wet mils (max) in an alternate direction, for instance "North-South." Dry film thickness when both applications are done should be between 1.5 to 2.5 mils. Do not over build each spray application exceeding recommended wet film thickness of 1.5-2.5 mils or else material will run.

All spraying equipment must be cleaned. If there is any break in the spraying procedure, water should be immediately used to clean the nozzle and hose. For any CRS that has started to dry, use common solvents like paint thinner to clean.

**YOUR EQUIPMENT MAY BE PERMANENTLY DAMAGED IF NOT CLEANED WITH PLENTY OF FRESH, CLEAN WATER DURING ANY INTERRUPTION IN SPRAYING.**

*Application (continued)*

**Brush, Roller or Trowel Application:**

The applicator should treat the brushing or rolling of CRS the same as a latex paint when it comes to consistency when mixed properly. When brushing on a vertical surface, start from the bottom-up, there should be virtually no liquid running down the substrate.

Brush marks may be visible after the first brush or roller pass, but after a second pass the surface will be smoother. Brushed or Rolled surfaces will not have as glossy a surface as a sprayed application. Continue to agitate the CRS solution during application. Let each coat dry completely before applying a second coat.

**Edges:**

Ensure proper coverage on edges, as during normal hydrolysis induced cure, the material may become thinner than expected. Brush edges or corners before spraying the surface to ensure enough material is in contact with the substrate.

Refer to our Material Safety Data Sheet (MSDS) regarding regulatory compliance, safety, hazards, spill procedures and disposal of this product.

While the descriptions, designs, data and information contained herein are presented in good faith and believed to be accurate, it is provided for your guidance only. Because many factors may affect processing or application/use, we recommend that you make tests to determine the suitability of a product for your particular purpose prior to use. NO WARRANTIES OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE MADE REGARDING PRODUCTS DESCRIBED OR DESIGNS, DATA OR INFORMATION SET FORTH, OR THAT THE PRODUCTS, DESIGNS, DATA OR INFORMATION MAY BE USED WITHOUT INFRINGING THE INTELLECTUAL PROPERTY RIGHTS OF OTHERS. IN NO CASE SHALL THE DESCRIPTIONS, INFORMATION, DATA OR DESIGNS PROVIDED BE CONSIDERED A PART OF OUR TERMS AND CONDITIONS OF SALE.