

Roof-Paint System 801

A Superior Single Component Water-Based System

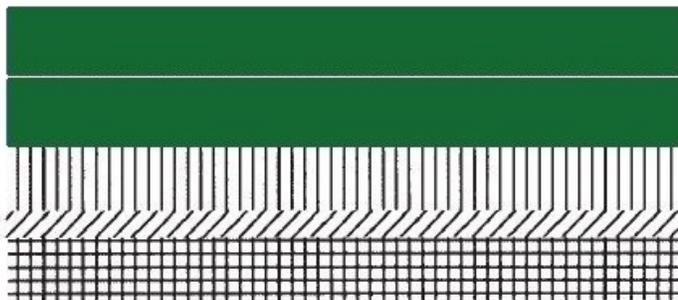
Using *Endura-Thane® Single Component Polyurethane Metal Finish*

For refinishing metal roof systems

Roof System 801 was developed specifically for the re-painting of SMP (silicone modified polyester) coil coated steel that has been roll formed into sheet metal panels used on roofs. It can also be used on fiberglass, clay tile, concrete tile, and some composite material.

It can be applied overtop new or previously painted roofs that are in good shape and have no existing peeling or otherwise failing paint. It should not be used on flat roofs or roofs that are subject to ponding water. Suggested the roof have a minimum 3:12 pitch. Lower pitched roofs use Roof-Paint System 1201.

This system involves the proper cleaning and preparation of the roof including the creation of a surface profile on glossy or smooth and slick substrates; the application of a bonding primer, then the application of *Endura-Thane® water-based single component polyurethane co-polymer*



- Endura-thane Metal Paint 2nd coat
- Endura-thane Metal Paint 1st coat
- Bonding Primer (if Required)
- Existing Coating (if previously painted)
- Metal, Wood or Masonry Substrate

This provides a durable, chemical and solvent resistant surface that is easily cleaned and resists chalking and fading. This robust system comes with a 6-year warranty.

Roof-Paint System 801-R Specifications overview

Average Service Life -----	6-8 year	Color retention -----	4
Composition -----	100% water borne polyurethane co-polymer	Gloss retention -----	4
Reduction -----	Water	Clean-ability -----	4
VOC Level -----	Gloss: Less than 150 gpl / 1.2 lb, Satin: Less than 180 gpl / 1.5 lb.	Scratch resistance -----	4
Sheen level -----	Gloss and Satin finishes available	Hardness -----	4
Application Temp Range -----	50°F to 95°F	Chemical resistance -----	4
Dry to handle -----	1-2 hour	Corrosion resistance -----	4
Application process duration -	Single day	Ease of application -----	6
Self-Priming -----	Primer required on new SMP, Self-priming on most other surfaces	Ease of touch-up -----	6
Versatility over substrates ----	Self-priming on most previously painted surfaces		
Minimum dry mil thickness ----	2.5 mil dry		
Cost, material per 100 sq ft --	As low as \$30.00		

6= Superior, 5= Excellent, 4= Good,
3= Fair, 2= Marginal, 1= Poor

Evaluating roof to determine if it is a candidate for refinishing with the *Roof-Paint System 801*

Roof-Paint System 801 System is designed to applied substrates that are sound and show no signs of peeling or adhesion failure. If there are any concerns or questions about the surface integrity then an adhesion test should be performed. This can help determine what *Roof-Paint System* system to use.

Roof-Paint System 801 System is designed to be used on most existing previously painted surfaces. Previously unpainted SMP coated roofs or roofs that are slick or glossy should be primed with Chem-bake Bonding primer. All rusting or exposed bare steel should be spot primed with a corrosion resistant steel primer.

Surface Preparation. Surfaces to be painted should be clean, dry and free from wax, grease, dust, silicone, scaling paint, oil and excessive chalk. Remove rust, lose or peeling paint and all foreign matter.

Clean all surfaces using Sand & Scrub cleaning mixture per label instructions or clean all surfaces with a degreasing agent such as TSP diluted at 8 oz per gallon.

Glossy or smooth hard surfaces must be dulled and/or abraded using Sand & Scrub cleaning mixture, silicon carbide sandpaper, Scotch-Brite® or other abrading medium to de-gloss and create a surface profile.

A completely clean and sound substrate with no dust, chalk, rust, or other surface contaminates must be obtained prior to applying any coating or primer. If dust, chalk, or dirt remains, repeat the cleaning process. **CAUTION** do not sand through existing paint film and expose bare metal. If this occurs spot prime bare metal with a corrosion inhibiting primer.

Any coating failure resulting from inadequate surface preparation or failure to follow manufacturer's recommendations and specifications are the sole responsibility of the Contractor to remedy.

Masking and Protection: Protect all areas not being. Check for nearby cars and trucks that might be at risk for overspray. *Endura-Guard®* products have high adhesion properties. If items are over-sprayed, it is very difficult to remove!

Environmental Conditions: Don't apply if the air, surface, or material temperature is above 95 degrees. Avoid painting in direct sunlight. Apply in the shade during warmer temperatures. Don't apply when there is a risk of rain or freezing temperatures within 12 hours after the application. Don't apply when relative humidity is above 90% or will become so within 2 hours after application. Don't apply when the ambient or surface temperature is within 5 degrees of the dew point. Don't apply if the air, surface, or material temperature is below 50 degrees or if it will become so within 4 hours after application. Don't apply within 2 hours of sunset if the temperature is below 60 degrees.

Avoid spraying in windy conditions to reduce the risk of contaminates adhering to the surface.

Handling: Read all label warnings and data sheets prior to handling any paint or coating! Although the *Endura-Guard®* products are considered environmentally friendly when used properly, as with any industrial coating it does contain certain chemicals that can irritate the skin and lungs. Always wear chemical resistant gloves when handling and avoid contact with the skin. Always use a properly fitted respirator that employs chemical cartridges while handling, mixing, or spraying this product. Consult MSDS sheets for further warnings and information on the chemical composition.

Sprayer and Spray Equipment. Use only airless spray equipment that has low pressure capability, either hydraulic or have electronic pressure controls. The sprayer, hoses and gun must be thoroughly clean and flushed with water. Always use a hose and gun that is dedicated for spraying water based coatings, separate from spraying solvent based products.



Adjusting for Correct Spraying Pressure:

- *Endura-Guard*® should be sprayed at the least amount of pressure required to obtain a uniform spray pattern.
- To adjust to the proper pressure, using a NEW tip, back-off the pressure knob all the way and then screw it in about 1/3rd of the way. (Screwing in increases pressure on most sprayers). Point the gun at a piece of cardboard for testing and with your hand in motion, pull the trigger and spray a sample area.
- If you have thick lines at the edge of the spray pattern, sometimes referred to as “tails” or “fingers”, turn pressure knob 1/8 and spray again. Repeat until they are gone. Now you have the proper amount of pressure for the material you are spraying. (If no amount of pressure eliminates the tails, then the tip is worn or damaged).
- If you need more paint flow, increase the size of the tip, not the pressure. There should never be a cloud of spray-mist surrounding the person spraying, a sign of too much pressure!



Application of *Endura-Guard*® Water-Based Polyurethane Co-Polymer:

Mixing: Mix contents of each container of *Endura-Guard*® thoroughly to assure proper pigment disbursement. Box together all material that will be used that day to assure color consistency from container to container. Normally thinning is not recommended, however if thinning is needed to help with the application, use cool distilled water only. Reduce in small increments to avoid over-reduction. Do not exceed 5%

***Endura-Guard*® Spray Application Method:** Confirm the substrate is clean, free of chalk, and de-glossed per above specifications. If spraying overtop a glossy or hard slick surface, 1st apply a coat of Chem-Bake® bonding primer and allow to dry for a minimum 3 hours.

- *Endura-Guard*® should be applied in **two coats** at 3 mil wet per coat (533sq ft per gallon no reduction) to achieve a minimum 2.5 mil dry film thickness.
- Use a new 4-12 or 5-14 double orifice fine finish spray tip. Holding the spray gun approx. 6”, and no more than 10” from the surface.
- Start your hand in motion first and then pull the trigger, release the trigger just before you reach the stopping point of your swing. Each pass should overlap the prior pass by 50% to obtain full coverage.
- Improper technique can lead to “dry-spray” resulting in areas that have a rough texture, and a blotchy and inconsistent look. Always maintain a wet edge and overlap passes by 50%. If “dry spray” does occur, apply a 2nd coat.
- HELPFUL HINT: Keep all fluid lines, spray pump, and material out of the sun. Cooler material flows (smooth’s) out on the surface better.
- The final finish should be smooth and have no pinholes or stippling in the finish which may void the warranty.
- Make a thorough inspection of all painted surfaces. On standing seam roofs closely examine the sides of all ribs as these are the area’s most commonly prone to holidays. Minor imperfections can be touched up with a high-quality brush. Larger areas will need to be re-sprayed.



Incorrect: stipple / orange peel



Incorrect: Pinholes



Correct: smooth finish no stipple

Appendix A

A correctly completed roof should be smooth with uniform color and gloss on all sides of each rib. There should be no mottling in the finish, and free of dirt, grit and debris. It should have a hi-gloss luster with no orange peel, holidays, or “dry-spray and be free of runs and sags.

Common Workmanship Mistakes that can Void a Warranty

Painting in the Rain, Snow, Fog, etc. (note rain drops in finish)

Painting Over Grit and Dirt

Severe Orange Peel

Runs and Sags

“Dry Spray” (applied too thin or when too hot)

