



# **NRX**<sup>TM</sup> Application Technology

*NRX<sup>TM</sup>* is a high performance 3-coat paint system. It can also be used as an excellent primer for:

Water based Epoxy Epoxy with 100% solids Water based Polyurethanes Any paint without solvents Paints specifically approved by NanoRustX

#### FOR UNPAINTED SURFACES WITH OR WITHOUT RUST

Remove loose rust and peeling paint with a hand or powered metal brush, or with pressure water spray 3000-3500PSI (207-241bar). Wash with water after cleaning with brush to remove dust, loose rust and dirt.

Remove any oil, grease, diesel etc. from the surface using a water spray with a detergent and then wash again with water.

Check for presence of oil or grease (use a white rag to wipe the surface; oil usually leaves a black mark).

*NRX<sup>TM</sup>* can be applied to damp degreased rusty surface.

*NRX<sup>TM</sup>* coatings can be applied using an airless spray gun (similar to a Titan XL 255 equipped with a .017" -.021" spray tip) or by brush or roller. Roller application is recommended for horizontal surfaces only.

Surface temperature must be at least  $5^0$  F ( $3^0$  C) above the dew point for application.

#### **MEASURE RUST THICKNESS AND APPLY PAINT AS FOLLOWS:**

#### Medium to Heavily Rusted Surfaces: (over 50 microns of rust)

A) Primer #1	Wet film thickness	200-250 microns
	Dry film thickness	Approx. 70-80 microns
B) Primer #2	Wet film thickness	200-250 microns
	Dry film thickness	Approx. 70-80 microns
C) Finish coat	Wet film thickness	200-250 microns
	Dry film thickness	Approx. 70-80 microns
Total system	Dry film thickness	210-240 microns
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#### Lightly Rusted Surface (<50 microns of rust):

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A) Primer #1	Wet film thickness	180-210 microns
	Dry film thickness	Approx. 60-70 microns
B) Primer #2	Wet film thickness	200-250 microns
	Dry film thickness	Approx. 70-80 microns
C) Finish coat	Wet film thickness	200-250 microns
	Dry film thickness	Approx. 70-80 microns
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l otal system	Dry film thickness	200-230 microns

#### FOR SURFACES WITH OLD PAINT

The same procedure as above can be used. The chemical components of the *NRX<sup>TM</sup>* paint include Nano-powder particles that actively react with existing paint to form a reinforced anti-corrosive structure..

- **NOTES:** 1. When applied over existing paint, *NRX*<sup>TM</sup> will react with the old paints. With some existing paints, white staining phosphate deposits may occur as a result of this reaction. This does not affect the performance of the paint. It is just cosmetic.
  - 2. First prime rusted areas with approximately 120-150 WFT and when dry to touch coat entire area following directions for Lightly Rusted Surfaces.
  - 3. *NRX<sup>TM</sup>* cannot be used over silicon-based paints.

Temp	To Touch	1 <sup>st</sup> Layer	2 <sup>nd</sup> Layer	3 <sup>RD</sup> Layer
10 15 %	15 60 min	1 Hrs	1 Hrs	1 Hrs
10-13 C	45-00 mm	4 111 5	4 111 5	4 111 5
15-20 °C	30-45 Min	3 Hrs	3 Hrs	3 Hrs
+23 °C	20-30 Min	2 Hrs	2 Hrs	2 Hrs

#### **Recommended Drying Times:**

When coating in an enclosed areas, ventilation must be provided to facilitate proper drying.

Allow 48 hours to dry before rain or other application of water to the surface to allow for initial polymerization to take its course.





# When preparing samples for testing, wait 7 days to allow the coating to fully cure before starting the tests.

Do not use solvent to clean the surface prior or after application of  $NRX^{TM}$ .

Use water to clean application equipment prior to coating. If solvents must be used to clean equipment from old paint, rinse equipment thoroughly with water to remove all solvents prior to coating.

The product should be stored away from direct sunlight at temperatures of  $3^{\circ}$  C to  $35^{\circ}$  C. **DO NOT ALLOW TO FREEZE**.

NEVER store *NRX<sup>TM</sup>* in metal containers, as the coating will react with metal and affect its active ingredients. Confirm coating is thoroughly mixed before pouring from a large container into a smaller one.

#### DO NOT DILUTE NRX<sup>TM</sup>

#### **PROPER MIXING OF THE PAINT BEFORE USE IS IMPORTANT!**

*NRX<sup>TM</sup>* coating is thixotropic – it settles and gets thicker during storage. Thorough mixing will restore the original viscosity. Mix with slow speed mixer and avoid drawing air into the coating. If air bubbles get into the coating remove them using a fine paint filter. Coating is properly mixed when upon lifting mixing disc out of the container, the coating flows like oil without dripping.



## Use the correct mixing blade

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Use a mixing disc with a diameter of approximately 1/3<sup>rd</sup> the diameter of the pail.



Use a slow mixer (200-300rpm) and create a vortex without drawing air into the coating.



Coating is properly mixed when upon lifting the mixing disc out of the pail, the coating flows smoothly like oil without dripping.

As the coating will thicken in storage, confirm there is no material on the side walls or the bottom of the container during the mixing process. Re-mix coating daily before use.

# Use the right tools and equipment to guarantee good results!