



# Log & Solid Timber Construction

## Application of NatureOne® - 100% acrylic exterior

### Log Types

There are many types of log building systems that are categorized by how the logs are shaped, what type of corner fitting systems are used and the wood species selected (i.e. Handscribed or Machine milled; Green, Air Dried or Kiln dried).

The primary concern for wood finishing of log and solid timber construction is moisture. There are two primary areas where moisture may be present in a log; the Surface and Inner log. Both surface and inner moisture levels must be no more than 18% for NatureOne® coatings to penetrate and achieve the optimum bonding to the wood substrate.

When the moisture of the log is above 18% this moisture will migrate out of the logs, which could cause a penetrating film finish to loose its adhesion to the wood.

#### **Note:**

All outer and inner bark plus the cambium layer should be removed from the log prior to coating. As the logs continue to dry, these layers of the log will release from the sapwood and will lift any coating that is applied to these layers.

### Design & Building Techniques

A design that keeps the water and sunlight away from the wood surfaces will result in lower maintenance, which will save the building owner time and money. Here is a list from "The Log Home Maintenance Guide" by Gary Schroeder.

- Plan with a "Maintenance Perspective"
- Good foundation drainage
- Sill (bottom) logs should be 2 to 3 feet above ground
- Protect log posts from ground moisture
- Keep exterior walls free from back splashing
- Use self draining notches at the corners
- Ventilation systems for moisture producing areas of the home (i.e. kitchens, baths, etc). Vent through roofing system whenever possible.
- Log ends that do not extend beyond the roof overhangs
- Provide a minimum of 3-foot overhangs, 4-foot is better
- Install gutters and downspouts
- Install flashing – dormers, chimneys, etc.
- Use Borate Rods
- Cap log posts on railing systems with metal
- USE A QUALITY FINISH

### Preparation

Follow the instructions on the General Preparation for Siding guide sheet.

### Application Methods

#### **High Moisture Content of Surface & Inner Log (Green Logs above 21%):**

1. Apply Wood Preservative or Borate treatment
2. Let log dry (6 warm months)
3. Prep Procedure
4. One Coat of NatureOne®
5. Wait minimum of 2 hours\*
6. One Coat of NatureOne®
7. Wait 1 year\*
8. Prep Maintenance Procedure
9. One Coat of NatureOne®

#### **Low Inner Moisture:** (less than 18%)

1. Prep Procedure
2. One Coat of NatureOne®
3. Wait minimum of 2 hours\*
4. One Coat of NatureOne®
5. Wait minimum of 2 hours\*
6. One Coat of NatureOne®

#### **High Inner Moisture:** (more than 18%-21%)

Allow logs to dry-out to less than 18% moisture content before proceeding with prep & coating

\*Note: Low temperatures or high humidity may extend dry times. 3-4 hours is recommended drying time between coats.

## Timing

If inner moisture levels allow, apply a third coat within two weeks of the 2<sup>nd</sup> coat of NatureOne® for optimum performance and longer time periods between maintenance coats. Maintenance will come sooner if applying only two coats.

Surfaces should be coated within two weeks of cleaning procedure, second coat within two weeks of the first coat and third coat within two weeks of the second coat.

If subsequent coats are extended beyond these parameters cleaning of the surface should be done per the maintenance preparation specifications.

## Product Check

Prior to application, test area should be done using the product purchased for the project. The test will confirm the desired color has been achieved, dry time is within 4 hours and product compatibility is evident.

## Batch Check

Batch numbers appear on the bottom of Gallon and Five Gallon containers. For color consistency always use the same batch number for the job. If different batch numbers exist, mix all batches together to assure color consistency.

## Tools

NatureOne® - acrylic exterior is best applied with a nylon polyester bristle brush. NatureOne® products can be sprayed, but always back brushed to work the product into the wood and to even the pigmentation and film thickness.

### Spray Specifications:

- Airless Sprayer
- Tip Size: 5-15 to 5-17
- Pressure – 1000 to 1500 PSI
- Saturate surface with product
- Even application by back brushing

*TIP: Keep the spray head no more than 12 inches from substrate.*

## Clean Up

Wipe up spills and spatters immediately with damp rag. Equipment and tools should be cleaned with soap and water.

Dispose of empty can or unused finish in accordance with state and federal regulations.

## For Best Performance

- Keep material from freezing
- Do not thin or add colorants
- Apply when moisture level of wood is below 18%
- Apply liberal coats
- Apply in direction of the grain
- Maintain a wet edge
- Saturate all end grains
- Apply when surface and air temperatures are between 50°F and 85°F.
- Avoid application of product when temperatures are expected to drop below 50°F within 4 hours.
- Avoid application when dew or moisture is present
- Avoid applying finish in direct sunlight or when surface is hot to the touch. If weather conditions become too hot during application and product is drying too quickly, STOP and wait for cooler application conditions.

## Notice

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