

**WoodForce:** A durable wood treatment that allows exterior wood to weather naturally while offering exceptional water repellency and protection from blackening, and wood rot. Easily mixed to create standard and custom colors or vintage effects, while letting the exposed surface weather naturally and more evenly.

## FEATURES

- Protects wood while allowing weathering
- Creates complete range of weathered looks, colors and effects
- Low VOCs
- VOC-SCAQMD Compliant
- Red List/CARB Compliant
- Penetrates the substrate
- Water repellent
- Breathable
- Clean up with soap and water
- Exceptionally easy to maintain

## WOODFORCE COMBINATIONS

| EFFECT          | Clear                                 | Accelerated                           | Intermix System                                                                            | Vintage Color System                                                           |
|-----------------|---------------------------------------|---------------------------------------|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|
| <b>OVERVIEW</b> | Develops natural weathered wood look† | Speeds up natural weathered wood look | 26 standard weathered wood colors using Intermix system or custom mix your choice of color | Create a vintage weathered wood effect with your choice of color and technique |
| <b>COAT #1</b>  | WoodForce Clear                       | WoodForce Accel                       | WoodForce Intermix                                                                         | WoodForce Accel                                                                |
| <b>COAT #2</b>  | WoodForce Clear                       | WoodForce Clear                       | WoodForce Clear                                                                            | WoodForce Intermix, technique as desired                                       |
| <b>COAT #3</b>  | --                                    | WoodForce Clear (Optional)            | --                                                                                         | WoodForce Clear                                                                |

† Weathering is subject to factors like location, climate, exposure, wood species and building design.

## IMPORTANT

Product Data Sheets are based on "ideal" work conditions. Due to wood variability and varying environmental conditions, it is strongly recommended that the end-user needs to determine that the application conditions, coating product system, and techniques are suitable to reach the desired results. Please see Conditions of Sale.

## APPLICATIONS

Recommended for use on new and old, weathered or restored vertical wood surfaces such as wood cladding, timbers, logs and wood roofing where high performance wood protection is desired.

## FORMULAS

The WoodForce system is made up of 3 base formulas that can be combined to create a variety of colors, distressed looks and natural weathering effects while protecting wood against UV, moisture and blackening. The WoodForce intermix system makes it easy to create our Standard colors or any custom color you desire.

- **WoodForce Clear** protects wood aggressively
- **WoodForce Accel** speeds up weathering effects
- **WoodForce Intermix** includes 7 base colors that can be intermixed as desired: Light Gray, Dark Gray, Brown, Dark Brown, Red, Dark Red, White

## COATING SYSTEMS

Formulate the WoodForce mixtures to any desired tone and transparency. Contact Sansin Care for specified architectural custom colors.

WoodForce is a protective weathering system - colors may or may not change depending on color formulation, wood species, treatments or possible tannin bleed. Rich colors will tend to be more sustainable and weather less than less intense colors. Consider Conditions of Sale prior to selecting a formula.

## PACKAGING

WoodForce is available in 1 gallon, 5 gallon and tote sizes. A WoodForce mixing pail for intermixing color formulas is available. Timed, continuous mixing is necessary during storage of larger containers.

## CHARACTERISTICS

|                                              | CLEAR                            | ACCEL                 | INTERMIX              |
|----------------------------------------------|----------------------------------|-----------------------|-----------------------|
| Appearance                                   | Milky white                      | Off white             | Seven Colors          |
| Odor                                         | Amine                            | Amine                 | Amine                 |
| Form                                         | Liquid                           | Liquid                | Liquid                |
| Specific Gravity                             | 1.01                             | 1.03-1.05             | 1.02-1.05             |
| Density                                      | 8.4                              | 8.5-8.8               | 8.4-8.8               |
| pH, (approx.)                                | 8.0-8.5                          | 8.0-8.5               | 8.0-8.5               |
| Viscosity, Brookfield #1, 60RPM, 20°C (68°F) | 80-100 cPs                       | 60-100 cPs            | 80-100 cPs            |
| Solvents                                     | Trace                            | Trace                 | Low                   |
| Freezing Point                               | -1°C (31°F)                      | -1°C (31°F)           | -1°C (31°F)           |
| Diluent                                      | Water                            | Water                 | Water                 |
| Cleanup                                      | Water                            | Water                 | Water                 |
| Drying Time @ 20°C (68°F @ 50% RH)           | ~2 Hrs*                          | ~2 Hrs*               | ~2 Hrs*               |
| Drying Time Before Packaging                 | Up To 24 Hours. Test Accordingly |                       |                       |
| Coverage, pending to penetration             | 200-350 sq ft /US Gal            | 200-350 sq ft /US Gal | 250-400 sq ft /US Gal |
| Regulatory VOC                               | <5 g/L                           | <5 g/L                | <10 g/L               |

\*Drying time between coats will vary depending on wood moisture content, humidity, temperature and air flow.

## APPLICATION METHODS

- Always flood surface to the point of saturation
- Apply product by brush, flood coat or spray – hand or automated spraying (low pressure or airless)
- Use a Corona-type china bristle 6" brush to brush out puddles and spread evenly. For Intermix, technique the surface with a brush, rag, roller or preferred tool may be used to achieve vintage effects as desired

## PREPARATION

- Inspect the wood surface for defects and make any necessary repairs
- Use Sansin cleaners and/or pressure wash the entire surface using clean water with appropriate pressure. A minimum of 3000 psi is required using a non-damaging technique when using water
- Sand milled or smooth wood well using a 60-80 grit paper and a variable speed random orbital sander

WoodForce™

ENVIRO STAIN®



2-3 COATS

NATURAL WEATHERING

CUSTOM COLOR &amp; EFFECTS



SANSIN®

Intermix Color Guide

| COLOR         | COLOR # | COMPOSITION                       |                                                               |
|---------------|---------|-----------------------------------|---------------------------------------------------------------|
| Pale Gray     | WFI-01  |                                   | Intermix White                                                |
| Mist Gray     | WFI-02  | 1.5 parts<br>2 parts<br>0.5 parts | WoodForce Clear<br>Intermix White<br>Intermix Light Gray      |
| Granite Gray  | WFI-03  | 1 part<br>1 part<br>2 parts       | Intermix Light Gray<br>WoodForce Clear<br>Intermix White      |
| Slate Gray    | WFI-04  | 2 parts<br>2 parts                | Intermix Light Gray<br>WoodForce Clear                        |
| Comet         | WFI-05  | 1.5 parts<br>2.5 parts            | Intermix Light Gray<br>WoodForce Clear                        |
| Basalt Brown  | WFI-06  | 1 part<br>3 parts                 | Intermix Dark Brown<br>Intermix Dark Gray                     |
| Taupe         | WFI-07  | 0.5 parts<br>0.5 parts<br>3 parts | Intermix Light Gray<br>Intermix Dark Brown<br>WoodForce Clear |
| Coffee        | WFI-08  | 2 parts<br>2 parts                | Intermix White<br>Intermix Dark Brown                         |
| Charcoal      | WFI-09  | 2 parts<br>2 parts                | Intermix Dark Brown<br>Intermix Dark Gray                     |
| Pigeon Gray   | WFI-11  | 1 part<br>3 parts                 | Intermix Light Gray<br>WoodForce Clear                        |
| Hatteras Gray | WFI-12  | 0.5 parts<br>3.5 parts            | Intermix Light Gray<br>WoodForce Clear                        |
| Thunder       | WFI-13  | 2 parts<br>2 parts                | Intermix Dark Gray<br>WoodForce Clear                         |
| Oyster        | WFI-14  | 1 part<br>3 parts                 | Intermix Dark Gray<br>WoodForce Clear                         |
| Ash           | WFI-15  | 0.5 parts<br>3.5 parts            | Intermix Dark Gray<br>WoodForce Clear                         |
| Burnt Sienna  | WFI-16  | 2 parts<br>2 parts                | Intermix Dark Red<br>WoodForce Clear                          |
| Pepper Red    | WFI-17  | 1 part<br>3 parts                 | Intermix Dark Red<br>WoodForce Clear                          |
| Venetian Red  | WFI-18  | 0.5 parts<br>3.5 parts            | Intermix Dark Red<br>WoodForce Clear                          |
| Brown Sugar   | WFI-19  | 2 parts<br>2 parts                | Intermix Dark Brown<br>WoodForce Clear                        |
| Dakota        | WFI-20  | 1 part<br>3 parts                 | Intermix Dark Brown<br>WoodForce Clear                        |
| Nut Brown     | WFI-21  | 0.5 parts<br>3.5 parts            | Intermix Dark Brown<br>WoodForce Clear                        |
| Umber         | WFI-22  | 2 parts<br>2 parts                | Intermix Brown<br>WoodForce Clear                             |
| Tawny Brown   | WFI-23  | 1 part<br>3 parts                 | Intermix Brown<br>WoodForce Clear                             |
| Beach Sand    | WFI-24  | 0.5 parts<br>3.5 parts            | Intermix Brown<br>WoodForce Clear                             |
| Terra Rosa    | WFI-25  | 2 parts<br>2 parts                | Intermix Red<br>WoodForce Clear                               |
| Sunrise Red   | WFI-26  | 1 part<br>3 parts                 | Intermix Red<br>WoodForce Clear                               |
| Bloom Red     | WFI-27  | 0.5 parts<br>3.5 parts            | Intermix Red<br>WoodForce Clear                               |

Color may vary depending on texture, grain, color, porosity and type of wood and may not be exactly as illustrated. Always test the purchased product on an inconspicuous part of the project to ensure the color and transparency meet expectations of your control sample.



- Follow by power washing, vacuuming or using compressed air. Surface must be clean, free from dust, dirt, grease, wax or other contamination like a pre-existing coating
- Time the sanding step just ahead of application - ideally within 24 hours.

GENERAL WORKING PROCEDURE

- Use only WoodForce Intermix formulas provided by Sansin for intermixing color. Do not use any other colorant as this will negatively impact product performance and durability
- Stir product well before and during the application process
- Test formula and coating system on an inconspicuous wood surface to ensure proper color and results according to specification and control sample
- Apply in proper conditions with an ideal temperature of 21°C (70°F) and relative humidity of approximately 50%
- Do not apply if rain or near freezing temperatures are expected. Do not apply in direct sunlight
- Saturate the surface to the point of refusal. Spray apply using an HVLP or Juicebox to spread evenly. Brush out runs and puddles using a large China Bristle brush (Corona Type 5" or 6")
- Apply to dry wood only. Do not apply to wood that is warm to the touch or in direct sunlight
- Always read published directions for use prior to beginning any project

CLEAR & ACCELERATED WORKING PROCEDURE

Clear Natural Weathering:

- Apply the first coat of WoodForce Clear at 6-8 mil
- Allow to dry, generally 2 hours in favorable conditions
- Apply the second coat of WoodForce Clear at 4-6 mil
- Allow to dry in favorable conditions

Clear Accelerated Natural Weathering:

- Apply the first coat of WoodForce Accel at 6-8 mil
- Allow to dry, generally 2 hours in favorable conditions
- Apply a second coat of WoodForce Clear at 4-6 mil
- Allow to dry in favorable conditions

INTERMIX COLOR SYSTEM

Clear mixing pails allow WoodForce Intermix to be mixed according to the Color Guide or as desired. Ensure formulas are mixed thoroughly before use.

INTERMIX COLORS WORKING PROCEDURE

- Mix WoodForce Intermix using the pail system as per Color Guide or create custom colors
- Always test the colored WoodForce Intermix formula to ensure proper results are achieved
- Apply first coat of WoodForce Intermix at 6-8 mil
- Allow to dry, generally 2 hours in favorable conditions
- Apply the second coat of WoodForce Clear at 4-6 mil; can create stronger color by adding more tint (up to 50%) in Clear
- Allow to dry in favorable conditions

VINTAGE COLORS WORKING PROCEDURE

- Apply the first coat of WoodForce Accel at 6-8 mil
- Allow to dry, generally 2 hours in favorable conditions
- Mix color using the Intermix pail system as per Color Guide or create custom colors as desired
- Test the colored WoodForce Intermix formula to ensure proper results are achieved
- Apply a second coat with WoodForce Intermix in the specified formula at an initial 4-6 mil and technique the surface, which may remove some product for effect. To further accelerate weathering effects, you may reduce color strength by adding Clear to the Intermix coat. Allow to dry in favorable conditions

- Apply the third coat of WoodForce Clear at 4-6 mil
- Allow to dry in favorable conditions

MAINTENANCE

Exposed vertical surfaces require a maintenance coat of WoodForce Clear every 4-6 years. Use Multi-Wash ahead of maintenance applications. Carefully rinse using clean water. Allow to dry and apply the maintenance application. Use WoodForce Intermix to enhance aesthetics as desired and follow with an application of WoodForce Clear to enhance protection. Without maintenance, WoodForce will erode slowly to expose natural weathering, darkening will occur as wood moisture content increases and degradation takes place. Reapply WoodForce to enhance protection.

STORAGE & SAFETY

Shelf life when stored in ideal conditions is 18 months. Store at temperatures of between +10°C and + 24°C (50°F and 75°F). Keep containers tightly closed. Keep from freezing. See Safety Data Sheet.

CONDITIONS OF SALE

The only obligation of the manufacturer and seller shall be to replace such quantity of Sansin product that is proven to be defective. Proof of purchase is required. Seller or manufacturer shall not be liable for any loss or damage connected with the use and/or handling of this product. All labor costs are specifically excluded. User should determine suitability of product for the intended use before application. User assumes all risk and liability in connection therewith. This warranty is expressly made in lieu of any and all other rights, warranties, conditions and remedies, express or implied, including but not limited to any implied warranty or condition of merchantability, fitness for a particular purpose, and any warranty or condition arising out of a course of dealing, a custom or usage of trade. If any distributor or seller of product offers warranties or remedies which differ from those offered by Sansin, Sansin accepts no responsibilities for such warranties or remedies.

WARNING TO USERS

Keep out of reach of children. If swallowed immediately drink two glasses of milk or warm water, do not induce vomiting and call physician immediately. Avoid contact with skin or eyes; flush with soap and water. Avoid breathing of vapor or mist. Wear a properly fitted NIOSH/MSHA approved respirator. The information contained in this document is given in good faith based on our current knowledge. The use of the product is beyond the control of The Sansin Corporation and no guarantees, expressed or implied, is made as to the result to be obtained if not used in accordance with the published Directions for Use. The Sansin Corporation does not assume any legal responsibility for use or reliance on same. This information must on no account be used as a substitute for necessary field tests, which alone can ensure that the product is suitable for the expected use. Before using any product, read its label.

WoodForce  
Intermix Pail

