



# Painting Guidelines & Specifications

Always reference local building codes, use materials that comply with local building codes, and meet VERSATEX Installation Recommendations.

VERSATEX is not liable for paint used on our products and/or the results of its use.

VERSATEX does not require painting for protection. Use paints that are 100% acrylic latex or acrylic latex with urethane additive.

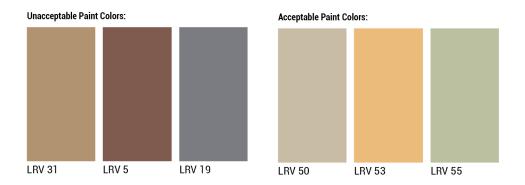
# \*\*CAUTION: PAINTING ANY CELLULAR PVC TRIM, INCLUDING VERSATEX, DARK COLORS (LRV <50) WITH A PAINT OTHER THAN APPROVED PAINTS FOR SUCH CAN RESULT IN POOR PERFORMANCE AND WILL VOID THE WARRANTY. USE LATEX ACRYLIC PAINTS WHEN THE LIGHT REFLECTIVE VALUE (LRV) IS 50 UNITS OR GREATER IF NOT USING APPROVED DARK PAINTS.

# TIPS:

- To obtain adequate paint adhesion, ensure the VERSATEX Trimboard's surface is clean, dry, and free of dirt, lose or peeling paint, mildew, chalk, grease, and any other surface contaminants before applying paint. Use a mild detergent (Spic 'n Span®) and water or denatured alcohol for cleaning. Remove any mold or mildew using a mixture of three parts water and two parts bleach.
- Follow the paint manufacturer's surface preparation and application recommendations.
- Extended paint life is due to the absence of moisture in VERSATEX trim.
- Paint can take up to 30 days to fully cure, depending on outside temperatures, humidity conditions, and other local factors.
- Paint manufacturers may require a primer if the homeowner wants the paint warranty.

# Option for dark colors (LRV <50)

VERSTAEX Endorses only one paint option for darker colors (LRV< 50), which is from PPG.



# **PPG IR Heat Reflective Paints**

| Applicant      | Coats | Paint                  | Description                               |
|----------------|-------|------------------------|---|
| Factory Finish | 1-2   | PPG Aquacron 200       | Waterborne Acrylic Enamel (MV 200 Series) |
| Factory Finish | 1-2   | PPG Duracolor Exterior | Exterior Acrylic Finish (54550 A Series)  |
| Field Applied  | 1-2   | PPG Permanizer         | Exterior Acrylic Finish (769-10 series)   |
| Field Applied  | 1-2   | PPG Acri-Shield Max    | Exterior Finish (589-10 series)           |



# **APPROVED PAINTS FOR DARK COLORS (LRV < 50)**

# **PPG Heat Reflective Paint Technology Colors**

There is a limit to how dark a paint can be applied to VERSATEX or any cellular PVC trim. The concern is the amount of heat absorbed relative to the heat distortion temperature and (coefficient of thermal linear expansion (CTLE) of the product.

On a scale of 0-100 – with 0 being black and 100 being white – LRV quantifies the amount of light a paint color will reflect or absorb. Absolute black will absorb all light and "heat", while pure white will reflect all light. Paint colors for cellular PVC trim have been limited to mid-tones, or any LRV above 50.

After extensive research and development, PPG has developed an approved IR heat-reflective paint for factory finishing and field application (see chart below).

If you are choosing to paint VERSATEX products a darker color with an LRV under 50, you can choose from the color palette below. The colors listed have been approved and tested by VERSATEX and carry a warranty of 15 years from PPG.

If you would like a custom color, don't hesitate to contact PPG, and allow extra time for processing.

The only location to order these paints from is below:

PPG Paints 2510 Independence Drive, Ft. Wayne, IN 46808

Phone: 260.373.2373 Email: <u>paf9270@ppg.com</u>

**PPG Color Selection** 

The costs for paint and shipping will be charged accordingly. Kindly note that PPG requires a lead time of 4 weeks. Please consider this when planning your orders. USA orders only. Disclaimer: VERSATEX Building Products is not liable for paint used on VERSATEX and/or the results of its use.

# All About Olive Linden Green Boothbay Blue Distance LRV 35.60 LRV 14.78 LRV 21.22 LRV 16.54 In The Navy Lumbermen's Red **Distant Valley** Monterery Taupe LRV 6.42 LRV 8.56 LRV 46.61 LRV 33.60 Clam Shell Cobblestone Light Gray Gray Stone LRV 18.32 LRV 54.38 LRV 50.49 LRV 47.85 Cool Charcoal Glazed Granite Iron Ore **PVC Black** LRV 8.25 LRV 4.85 LRV 20.58 LRV 12.24

2



VERSATEX is a free-foam cellular PVC that can be painted to achieve the desired look or accent color to your home. To ensure good adhesion, the surface of the product should be clean, dry and free of dirt, mildew, chalk, grease and any other surface contaminants before paint application. Prior to cleaning it is a good practice to fill all nail holes and remove any marks or blemishes that appear during the installation process. Sanding the surface is an acceptable method of removing blemishes. However, sanding removes the original exterior surface, exposing the micro cell structure. A 100% acrylic latex or 100% acrylic latex with a urethane additive should be used to achieve superior coating durability and flexibility. Only **light to medium colored PPG paints with a light reflective value of 55 units or greater** should be applied to VERSATEX. **Using paint with a LRV below 55 units will void our product warranty**.

PPG Industries have made product recommendations based upon our guidelines and their own investigative testing for adhesion and visual appearance. Simply using a product from this list does not ensure a perfect finish. Finished results and the paints' longevity depends on the amount of paint applied, proper application and the weather climatic conditions during application. Always follow PPG or the paint manufacturer's application instructions. Also, be sure to read and follow the instructions and warnings on the label.

The PPG acrylic paints listed below were tested and are approved for application over VERSATEX products:

- Sun-Proof Exterior Semi-Gloss Latex Paint (785 Series)
- Sun-Proof Exterior House and Trim Flat Latex Primer (72-1 Series)
- Manor Hall Exterior Premium Eggshell Acrylic Latex/Urethane Modified (79-45 Series)
- Manor Hall Exterior Premium Flat Acrylic Latex (74-45 Series)
- Manor Hall Exterior Semi-Gloss (75 Series)
- Manor Hall Exterior Gloss (52 Series)
- Olympic (Machine Coat) 54670 Flat Pastel Base

Apply when air and surface temperatures are 50°F or above, and when the air and surface temperatures remain above 50°F for the next 24 hours. Avoid painting early in the moming or late in the day when dew and condensation are likely to form, or when rain or snow is threatening. To prolong the shelf life of the paint, always protect it from freezing.

Cleaning can be accomplished using a cloth and a mixture of a mild detergent and water. Other cleaning agents include a mild household spray cleaner, a degreaser, or denatured alcohol.

# **Drying Times**

- 1. To Touch: 30 minutes
- 2. To Handle: 1 hour
- 3. To Recoat: 4 hours
- 4. To Cure: 30 Days

# **Features and Benefits**

- Superior Hiding
- Superior Adhesion
- Fade & Chalk Resistance
- Low-Temperature application to 35°F
- Soap & Water Clean-up

Dry Time at 77°F(25C); 50% relative humidity. Flash Point: Over 200°F (93C)

Please contact VERSATEX at (724) 857-1111 or sales@versatex.com for a technical data or MSDS sheets on the above listed PPG paints.

| Sample Description | 8lympie   | 54670     | Sun-Proof | 72-110    | Manor Hall | 74-110    | Manor Hall | 79-110    |
|--------------------|-----------|-----------|-----------|-----------|------------|-----------|------------|-----------|
|                    | dry x-cut | wet x-cut | dry x-cut | wet x-cut | dry x -cut | wet x-cut | dry x-cut  | wet x-cut |
| Smooth Sample #1   | 0         | 0         | <5        | <5        | 0          | 0         | 0          | 0         |
| Smooth Sample #2   | 0         | <1        | <5        | <5        | 0          | <5        | <1         | 0         |
| Smooth Sample #3   | 0         | <1        | <5        | <5        | 0          | 0         | 0          | 0         |
| Smooth Sample #4   | 0         | 0         | <5        | 5         | <1         | <5        | <1         | 0         |
| Embossed Sample #1 | 0         | 0         | <1        | <5        | 0          | 0         | 0          | 0         |
| Embossed Sample #2 | 0         | 0         | <5        | <5        | 0          | 0         | 0          | 0         |
| Embossed Sample #3 | 0         | <1        | <5        | <5        | <1         | 0         | 0          | 0         |
| Embossed Sample #4 | 0         | 0         | <1        | <5        | 0          | 0         | 0          | 0         |

# ASTM D 3359: Cross-Cut Tape Test

| Adhe | sion | Sti | rength | Test |     |
|------|------|-----|--------|------|-----|
|      |      | -   |        |      | ~ . |

| Sample Description | Olympic   | 54670     | Sun-Proof | 72-110    | Manor Hall | 74-110    | Manor Hall | 79-110    |
|--------------------|-----------|-----------|-----------|-----------|------------|-----------|------------|-----------|
|                    | dry x-cut | wet x-cut | dry x-cut | wet x-cut | dry x -cut | wet x-cut | dry x-cut  | wet x-cut |
| Smooth Sample #1   | 5A        | 5A        | 4A        | 4A        | 5A         | 5A        | 5A         | 5A        |
| Smooth Sample #2   | 5A        | 4A        | 4A        | 4A        | 5A         | 4A        | 4A         | 5A        |
| Smooth Sample #3   | 5A        | 4A        | 4A        | 4A        | 5A         | 5A        | 5A         | 5A        |
| Smooth Sample #4   | 5A        | 5A        | 4A        | 3A        | 4A         | 4A        | 4A         | 5A        |
| Embossed Sample #1 | 5A        | 5A        | 4A        | 4A        | 5A         | 5A        | 5A         | 5A        |
| Embossed Sample #2 | 5A        | 5A        | 4A        | 4A        | 5A         | 5A        | 5A         | 5A        |
| Embossed Sample #3 | 5A        | 4A        | 4A        | 4A        | 4A         | 5A        | 5A         | 5A        |
| Embossed Sample #4 | 5A        | 5A        | 4A        | 4A        | 5A         | 5A        | 5A         | 5A        |

# ASTM D 3359 Rating System

- 5A No peeling or removal.
- 4A Trace peeling or removal along incisions or at their intersections.
- 3A Jagged removal along incisions up to 1/16"on either side.
- 2A Jagged removal along most incisions up to 1/s" on either side.
- 1A Removal from most of the area of the X under the tape.
- OA Removal beyond the area of the X.

# Considerations

- Higher-quality paints typically outperform lower-quality paints.
- Temperature humidity, wind and the amount of direct sunlight at time of application will affect paint drying times.
- Since VERSATEX is impervious to moisture it may take as much as 30 days for paint application to fully cure.
- Paint failures on wood are due primarily to moisture cycling. Since VERSATEX cannot absorb moisture, paints will adhere better and much longer than wood.



# **VERSATEX Paint Specification**

The Sherwin-Williams Company has completed adhesion testing and accelerated weather testing on VERSATEX Trimboard and makes the following coating recommendations;

#### **Surface Preparation**

VERSATEX Trimboards must be Clean, Dry and in Sound Condition prior to coating. If substrate is dirty it should be cleaned with ProClean Professional<sup>™</sup> Prep Wash Concentrated Cleaner to remove all surface contamination.

#### **Coating Specifications**

Field Application - Sherwin-Williams recommends priming VERSATEX Trimboard with A-100 Exterior Latex Primer followed by Two Coats of SuperPaint™ Exterior Latex, A-100 Exterior Latex, or Duration Exterior Coating. Sherwin-Williams also offers a field applied coating under their "GreenSure®" product designation. Kem Aqua® BP Enamel is a water reducible polyure- thane - acrylic top coat that offers fast dry times and no critical; recoat times. Due to its excellent adhesion properties it is an ideal coating for cellular PVC. A primer is not recommended but if you prefer to prime the trim use Aqua Kem® bonding primer E61W525.

Factory Application – Sherwin-Williams recommends factory priming with SuperPaint<sup>™</sup> Machine Finish Latex Primer. Product should be allowed to dry for a minimum of 2 hours and then top coated with SuperPaint<sup>™</sup> Machine Finish Satin Topcoat. For the longest lasting performance, a second Factory coat of SuperPaint<sup>™</sup> Machine Finish Satin Topcoat or a second field applied coat of SuperPaint<sup>™</sup> Exterior Latex, A-100 Exterior Latex or Duration Exterior Coating should be applied.

# Applications

Field Application - When the air temperature is at 50°F, substrates may be colder; prior to painting, check to be sure the air, surface, and material temperature are above 50°F and at least 5°above the dew point. Avoid using if rain or snow is expected within 2-3 hours. Apply primer and topcoats using the following methods;

Brush – Use a nylon/polyester brush.

Roller - Use a 3/8" - 3/4" nap synthetic cover.

Spray – Airless Pressure...2000 psi Tip...015"-.019"

#### **Pre-Finishing**

Pre-finishing of VERSATEX Trimboard by a Sherwin-Williams Authorized Factory Finisher is a superior way of finishing this substrate. Factory Pre-Finishing allows the substrate to be coated under environmentally and quality controlled conditions to provide exceptional adhesion and long lasting protection. Following the surface preparation procedure above, it is important to apply a light rinse and allow to dry prior to painting.

Apply SuperPaint<sup>™</sup> Machine Finish Latex Primer at a minimum of 4 mils WFT. Allow minimum of 2 hours to dry. For best results, factory finish with 1 or 2 coats of SuperPaint<sup>™</sup> Machine Finish Satin Topcoat at 4.0 to 6.0 mils WFT. Allow each coat to dry for 2 hours at 77° F, 50% RH. Force Dry with high intensity hot air or infrared head to a board surface temperature of 120°F for immediate recoat and packaging after board has cooled to ambient temperature. Use an IR

gun to check the temperature of the trimboard. Oven dwell time will vary depending upon the curing method being used. Typical dwell times will be three (3) to five (5) minutes.

Product may be shipped with only a primer coat, but must be top coated within 180 days after installation. Follow above instructions for Field Applied Topcoats.

All exposed surfaces must be coated. All field cut edges must be primed with one of the above primers and finished with the recommended topcoats.

#### Packaging

Interleaving is preferred as this will create a barrier to prevent edge blocking or what we refer to as paint pick off. Blocking is common with an acrylic latex coating if trimboards are stacked together. If product is being forced dried in an oven

the product must be allowed to cool to a temperature less than 100°F prior to packaging. If the product is being air dried it may take 10 to 20 days to achieve adequate cure before the product can be packaged. Factors such as humidity, temperature, air movement and the amount of tint in the paint will all affect the length of cure.



For questions regarding the above specification you may call (800) 4-Sherwin. You can also contact your local Sherwin-Williams Representative at (800) 524-5979 for Technical Data Sheets, MSDS or EDS sheets on any of the above listed products.

# KEM AQUA 600 Smooth / Water Reducible Enamel

| Black | F73B530 |
|-------|---------|
| Clear | F73V531 |
| White | F73W532 |

# DESCRIPTION

**KEM AQUA® 600 Smooth Water Reducible Enamel** is a one component, low gloss, 2.3 lb/gal VOC complying, acrylic latex, water reducible coating developed for the electronic business machine market. This product can be used as a smooth coating on treated metal, structural foam plastic, and wood substrates to obtain very smooth, non-orange peel surfaces.

#### Advantages:

- VOC of less than 2.3 lb/gal
- · Meets the performance requirements of the electronic cabinetry industry
- Air dry or force dry low energy cure
- Excellent solvent resistance
- Excellent smoothness no orange peel
- One package no catalyst
- Reduce and clean up with water means cost savings for solvent and insurance, reduced fire hazards, lower odors and improved working conditions
- · Apply with conventional, airless, air assisted airless, or HVLP spray methods
- Available in a broad range of colors
- · Ideal for a wide range of product finishing
- No flash point
- · Low HAPS content
- Free of lead hazards as packaged in compliance with Consumer Product Safety Commission's (CPSC) 16CFR Chapter II: Subchapter B, part 1303

#### CHARACTERISTICS

Gloss: 25-35 units Volume Solids: 36-40 ± 1% varies by color Viscosity: 61-67 Krebs Units

#### **Recommended film thickness:**

Mils Wet4.0 - 5.5 Mils Dry 1.5 - 2.0

Spreading Rate (no application loss) 297-439 sq ft/gal @ 1.5-2.0 mil DFT Drying (1.0 mils dft, 77°F, 50% RH): To Touch: 5-15 minutes

 Drying (1.0 mils dft, 77°F, 50% RH): To Touch:

 Tack Free:
 15-20 minutes

 To Handle:
 30-45 minutes

 To Pack: overnight

 Force Dry:
 30 minutes at 140°F Good at

ry: 30 minutes at 140°F Good air movement and humidity control is necessary for proper drying of water reducible coatings.

Flash Point: None, Seta Flash

Closed Cup Package Life: 1 year unopened, inside storage pH: 8.0 - 8.5

# Air Quality Data: (Theoretical)

Non-photochemically reactive Volatile Organic Compounds (VOC) as packaged, maximum, less exempt solvents 1.89 lb/ gal, 226 g/L

Volatile Organic Emissions as packaged, maximum .99 lb/gal, 118 g/L  $\,$ 

An Environmental Data Sheet is available from your local Sherwin-Williams facility.



# SPECIFICATIONS

**General:** Substrate should be free of grease, oil, dirt, fingerprints, drawing compounds, any contamination, and surface passivation treatments to ensure optimum adhesion and coating performance properties. Consult Metal Preparation Brochure CC-T1 for additional details.

Aluminum: Prime with Kem Aqua Wash Primer E61G520.

Galvanized Steel: Prime with Kem Aqua Wash Primer E61G520.

**Plastic:** Due to the diverse nature of plastic substrates, a coating or coating system must be tested for acceptable adhesionto the substrate prior to use in produc- tion. Reground and recycled plastics along with various fire retardants, flowing agents, mold release agents, and foaming/blowing agents will affect coating adhesion. If needed, prime with Kem Aqua Bonding Primer E61W525 or Polane W2 Primer E61AC514. If filling is required use Kem Aqua 65P SprayFil. Please consult your Sherwin-Williams Chemical Coatings Sales Representative for system recommendations.

**Steel:** Remove rust, mill scale, and oxidation products. For best results, treat the surface with a proprietary surface chemical treatment of zinc or iron phos- phate to improve corrosion protection. If needed, prime with Polane W2 Primer E61AC514. If filling is required use Kem Aqua 65P SprayFil.

**Wood** (interior only): Must be clean, dry, and finish sanded. Substrate should be free of grease, oil, dirt, fingerprints, and any contamination to ensure optimum adhesion and coating performance properties. Prime with Kem Aqua 65P SprayFil, Sher-Wood 2400 Millwork Primer E60W501, or Polane W2 Primer E61AC514.

**Testing:** Due to the wide variety of substrates, surface preparation methods, application methods, and environments, the customer should test the complete system for adhesion, compatibility and performance prior to full scale application.

# APPLICATION

#### Typical Setups

May require two coats. Spray a full wet coat and allow to flash off 10 minutes before applying the second coat

Reduction: Reduce with water as needed up to 10%.

# **Conventional Spray**

| Air Pressure   | 45-60 psi |
|----------------|-----------|
| Fluid Pressure | 15-20 psi |
| Tip Size       | 040070"   |

#### HVLP

| Air Pressure   | 8-10 psi  |
|----------------|-----------|
| Fluid Pressure | 10-15 psi |
| Tip Size       | 040070"   |

#### **Air Assisted Airless**

| Fluid Pressure      | 600-800 psi |
|---------------------|-------------|
| Air Assist Pressure | 5-15 psi    |
| Тір                 |             |

#### Airless

| Fluid Pressure | 1600-2300 psi |
|----------------|---------------|
| Тір            | 011013"       |

# **Cleanup:**

This product dries hard and adheres tightly to tanks and equipment. Cleanup may be very difficult once material is fully dry. For best results, wash with water while coating is still wet. If the product has begun to dry, use a blend of 4 partswater, 1 part Butyl Cellosolve, and 1-2% household ammonia to clean up equipment and tanks. Use protective safety apparel (rubber gloves, chemical mask, and safety glasses) when handling this solution. Follow manufacturer's safety recommendations when using any solvent.



# SPECIFICATIONS

# **Product Limitations:**

- Avoid freezing. Store at temperatures of 50°F to 100°F.
- Keep container closed to prevent skinning of this fast dry coating. Filtering may be required.
- Product is thixotropic. Do not use viscosity cup to measure viscosity. Do not reduce over 10%.
- A minimum of 1.1 mils dry film per coat is required for good adhesion and film integrity.
- Do not apply with electrostatic bell or turbodisk.
- Not intened for long term exterior applications. The practical upper limit for gloss is 40-45 units. This range will require up to a 1:1 addition of F73V531. Kem Aqua 600 is not a high gloss coating.
- Kem Aqua Colorants not to exceed 8 ounces per gallon.
- Gloss levels may be adjusted by using D64F505 Kem Aqua Flatting Base. Refer to data sheet CC-S13 for details.

#### **Performance Tests**

24 gaugeBonderite 1000 steel panels and 1.5 mils dft, 14 days air drying Salt Spray Test ASTM B117 ......48-72 hours Humidity ASTM D2247, 100°F, 100% RH ... 100 hours Pencil Hardness ......HB Taber Abrasion CS 17 wheel, 1000 g, 1000 cycles ... <100 mg Freeze Thaw Stability ......2 cycles

#### **Chemical Resistance**

| After ½ hour spot test and 1 hou | r recovery |
|----------------------------------|------------|
| Isopropanol                      | Excellent  |
| 10% NaOH                         | Excellent  |
| Ethyl Acetate                    |            |
| Ammonia                          | Excellent  |
| Ivory Liquid                     | Excellent  |
| Clorox Formula 409               | Excellent  |
| MEK                              | Good       |
| Toluene                          | Good       |
| 10% HCI                          | Excellent  |
| 1 normal H2SO2                   | Excellent  |
| 5% Tide solution                 | Excellent  |
| MEK Resistance 50 double rubs    | .Passes    |

#### **Stain Resistance**

| After ½ hour spot test |             |
|------------------------|-------------|
| Coffee                 | .Excellent  |
| Vaseline               | . Excellent |
| Coca Cola              | . Excellent |
| Catsup                 | Excellent   |
| Motor Oil              | Excellent   |
| Gasoline               | . Excellent |
| Lipstick Excellent     |             |

#### CAUTIONS

# FOR INDUSTRIAL SHOP APPLICATION

Thoroughly review product label for safety and cautions prior to using this product. A Material Safety Data Sheet is available from your local Sherwin-Williams facility. Please direct any questions or comments to your local Sherwin-Williams facility.



**Note:** Product Data Sheets are periodically updated to reflect new information relating to the product. It is important that the customer obtain the most recent Product Data Sheet for the product being used. The information, rating, and opinions stated here pertain to the material currently offered and represent the results of tests believed to be reliable. However, due to variations in customer handling and methods of application which are not known or under our control, The Sherwin- Williams Company cannot make any warranties as to the end result.

# Benjamin Moore makes the following recommendations based on adhesion testing of representative premium exterior paint testing.

# **Surface Preparation**

Surfaces must be clean and free of grease, wax, and mildew. Remove any chalk and loose or scaling paint. Roughen the surface with a 220 grit sandpaper or equivalent for optimum adhesion. Wash dirty surfaces with a detergent solution and/or rinse with a strong stream of water from a garden hose to remove contaminants.

#### **Exterior Paint Selection**

Apply one or two coats of the following Benjamin Moore® premium exterior paints:

- Aura® Waterborne exterior paints, Flat 629, Low Lustre 634, Satin 631, or semi-gloss 632.
- Regal<sup>®</sup> Select high build Exterior Finish, Flat N400, Low lustre N401, Soft Gloss 403, and Soft Gloss N402 (regular build).
- Moorlife® 100% Acrylic Flat House Paint N105, Moorgard® 100% Acrylic low lustre House Paint N103, Moorglo® 100% Acrylic Fortified Soft Gloss House Paint N096.
- ben<sup>®</sup> 100% Acrylic Exterior Finish, Flat 541, Low Lustre 542, Soft Gloss 543.
- Premium Commercial Ultra Spec® Exterior Finish, flat N447, Satin N448, Gloss N449.
- Premium Commercial Super Spec® 100% Acrylic Exterior, Flat 183, Low Lustre N185, Satin 184, Semi Gloss 170.

#### **Dark colors recommendation**

Dark colors from the Benjamin Moore Vinyl Select palette can be used to supersede the general recommendation of never painting vinyl siding or trim darker than the original color.

#### Considerations

- Higher quality paints typically outperform lower quality paints.
- Temperature humidity, wind and the amount of direct sunlight at time of application will affect paint drying times.
- Since VERSATEX is impervious to moisture it may take as much as 30 days for paint application to fully cure.
- Paint failures on wood are due primarily to moisture cycling. Since VERSATEX cannot absorb moisture, paints will adhere for a much longer time when applied to VERSATEX versus wood.