## **READ ME!**

# Avoid Problems & Callbacks Handle & apply Setzer Products as described in this leaflet

#### **Primer**

The main reason for the use of paint is to protect. Wood with all its virtues has a major disadvantage in that it absorbs water, which leads to distortion and encourages rotting. Paints provide protection along with visual appeal to wood. Primers are primarily used to fill in the spaces, grooves, holes and other irregularities on the surface of the moulding and provide better saw-tooth adhesion for a topcoat. Typically, primers have high hiding power and allow discolored wood to appear to be uniform. Primers are not intended to be used as a finished coat. Without the use of a primer on bare wood, it might take several additional applications of topcoat to achieve the desired look, whereas primed wood might only take one finish coat. Primers are not intended to provide the durability, water resistance, and physical performance characteristics of a finish coat.

Quality primers will provide the moulding with good hide, smoothness, printability, recoatability and some degree of protection prior to application of the finished paint.

#### Prevent Moisture Problems Before You Start

Most lumber and finish problems are caused by moisture. Wood shrinks as it dries and swells when it absorbs moisture. These dimensional changes can cause lifting, splitting, checking, buckling, and nail popping. Most problems are preventable through proper handling and construction techniques. Builders can minimize performance problems and finish failures by limiting moisture's access to the wood, Setzer Forest Primed Products work better because they are protected with a high quality primer.

# Finish Coat

Finish coats or topcoats are intended to give a desired look (color), durability, mar/scratch resistance, and water resistance to wood. They are not porous like a primer and exhibit higher resistance to environmental conditions. They give the wood an "armor" like property and can be formulated for a wide latitude of physical and chemical resistant properties. Topcoats "bite" into the primer and have a very strong inter-coat bond. Without a primer present, some finish coats might not adhere to a wood substrate. Therefore, if you are intending to use multiple finish coats on bare wood make sure that the finish coat is recommended to be applied on bare wood.

A high quality latex paint, preferably a 100% acrylic product, should be used as a finish coat. Finish coats must be applied within 30 days of installation. If longer than 30 days, the primed surface should be cleaned and field-primed prior to finishing. Follow the paint manufacturer's recommendations on thinning, application technique, re-coat, and dry times.

#### Q & A

- 1. Why does the finish peel down to the bare moulding?
  - A. Some of the causes are as follows:
    - Certain latex paints are not intended to go onto bare wood.
      - 2. Solvent and water reducible topcoats have a strong, slow drying solvent that can re-dissolve the binders in the primer. Water, moisture or extreme environments intensify the problem. Solvent primers also have less porosity that the latex paint, so when water gets into it, water lifts the thermoplastic primer/topcoat and delays the re-adhesion or recovery of the primer/topcoat causing it to flake-off afterwards.
      - 3. Wood always wants to remain in equilibrium with the environment. If the relative humidity is 15% or more, the bare wood will absorb moisture from the air until it is at equilibrium. Primed wood is porous enough to allow water to migrate freely in and out of the wood. The problem arises when the primed wood is exposed to excessive moisture, high humidity, or rain and becomes

saturated with water and is then sealed with a finish coat. When the water attempts to migrate out of the wood, it will be unable to escape freely and can form water pockets or blisters under the finish coat. So make sure you keep your primed wood dry before a topcoat is applied.

 When coated wood is heavily saturated with moisture for an extended time, adhesion may be lost and the primer/paint will

## 2. How soon after installation should primed moulding be painted?

- A. Under normal conditions, a maximum of 30 (thirty) days. It is preferable to minimize the exposure to extreme environments (excessive moisture direct sunlight, dirt, etc.)
- B. If moulding has been outside, exposed to the environment, or underneath a tarp where condensation might be high, take moulding inside and allow it to equilibrate before installing and finishing. Stabilizing the product with its installation environment minimizes the risk of warping, excessive shrinkage, and other dimensional abnormalities after installation. A minimum of 7 days is recommended.
- C. If the primed moulding or casing is completely saturated, use air movement (fans) and if possible, heat (warm air) to dry it.

## 3. Is it O.K. to dry wet moulding in direct sunlight?

- A. Direct sunlight probably is not the best way to dry a wet piece of moulding. Direct sunlight can cause the surface of the primed wood to get too warm and cause any excess moisture to be extracted out of the wood too quickly. This can cause wood checking, warping, and unwanted stress in the primer.
- B. If you want to dry wet moulding outside, dry the primed wood in a shaded area. Do not dry the primed wood in direct sunlight.

# Why is the topcoat crawling (flowing non-uniformly, separating, etc.) on the surface of the primer?

- A. Crawling is usually a surface tension anomaly. If the surface tension of a finish coat is higher than the primer or surface that is intended to be painted, the paint will not "wet" of flow uniformly over that surface. Surface tension is controllable by the coating manufacturer. Higher quality paint manufacturers typically control the surface tension of their coatings and usually design their paints for a broad range of surfaces with different surface tension. Low quality paints do not account for the differences. Use high quality 100% acrylic latex paint.
- B. Water has very high surface tension. If a finish coat is thinned with too much water, it will increase the surface tension of the coating and result in the finish coat's inability to "wet" or properly flow over the primed surface. Follow the finish coat manufacturer's recommendation for thinning the product with water. Do not exceed the recommendations.
- C. In some cases, crawling will result if the primed wood surface has been contaminated prior to painting. Oils, grease, dirt, etc can affect the wetting of coatings and lead to crawling. Care should be taken to avoid contaminating the surface of primed wood prior to painting.
- Any contamination should be removed by cleaning with a mild detergent and water.

#### 5. What topcoats are recommended?

A. The topcoat should be a high quality latex paint, preferably a 100% acrylic or acrylic modified with polyurethane. It should be applied and dried under recommended temperatures and humidity using quality equipment as recommended by the topcoat manufacturer.