

## VOC Compliant Sealer Application Guidelines

In 2010, the Canadian Government instated regulations limiting the amount of Volatile Organic Compounds (VOC) an architectural coating can contain, including concrete sealers. Solvents that were historically utilized by manufacturers could no longer be used, and have been replaced or partially replaced with VOC compliant solvents. VOC compliant solvents have a much lower flash/evaporation point which causes the end product to dry much faster than past formulas. The faster dry time is much more evident when used in high temperatures and/or windy conditions that can be common when applying concrete sealing compounds.

The following are recommendations to help achieve successful results and minimize application issues:

### General Guidelines

- Clean surface and allow to dry completely (1-2 warm days)
- Conduct a test on a small area to ensure substrate and product compatibility
- Ensure area is well ventilated, extinguish any open flames as the fumes are flammable
- Do not apply in direct sunlight or on hot surfaces, surface temperatures should be 5-25°C
- Early morning application, application not recommended between 12:00-7pm (see bullet above)
- Keep product container out of direct sunlight, re-seal after each use
- Thin coats are better than thick coats (e.g. two thin coats are better than one thick coat)
- Overly thick coats may result in blisters or bubbles
- Wait a minimum of 2 hours between coats
- Wait 24 hours before opening to vehicular traffic

### Application- Spraying (Preferred)

- Use a low-pressure industrial grade pump-up airless style sprayer with solvent resistant washers (Teflon)
- Use a 1 gallon per minute tip for spraying
- Hold spray tip approximately 12" (30cm) away from surface
- Once sprayed, immediately back roll puddled areas to achieve optimal results

### Application-Rolling

- Use a solvent resistant medium nap roller (1/2" – 1")
- Do not over-apply, thin coats are preferred
- Maintain a wet edge to prevent roller marks
- Do not overwork, roll back and forth and move on
- Over-working will trap air in sealer and cause micro-bubbles

Common Application Issue:Bubbles and Blisters:

Most commonly associated with hot weather application, and over application. As the sealer begins to dry, the top surface skins over, trapping solvents that are still trying to escape from below. As the solvents evaporate blisters or bubbles are the result.

To prevent bubbles, do not apply to hot surfaces, do not apply in direct sunlight, and do not apply thick coats. Apply sealer in the early morning to a cool surface, apply in thin coats, and allow 2 hours between coats.

If bubbling or blistering does occur, applying xylene to the affected areas will re-dissolve the acrylic sealer and remove the imperfections.

If bubbling or blistering occurs:

- Ensure the surface is clean, and dry.
- Conduct a test on a small area to familiarize yourself with how xylene behaves on the acrylic sealer
- Apply xylene with a roller or sprayer; if sprayed it is important to roll out the solvent to ensure even distribution (Do not apply when surface is hot, or in direct sunlight)
- Back-roll the xylene 3-4 times, or until majority of bubbles have disappeared
- Allow the xylene to evaporate, time involved will vary depending on environmental conditions(1-2 hours)
- Amount of xylene required depends on the severity of the bubbling, and the thickness of the sealer
- If bubbles remain, repeat the process.