

KEMPEROL MEMBRANE APPLICATION TIPS

MEMBRANE INSTALLATION DO'S:

1. **Do** mask off all areas not scheduled to receive membrane.
2. **Do** follow precautionary and emergency procedures as indicated on MSDS's.
3. **Do** use any personal protection equipment required by local, state and federal regulations.
4. **Do** adhere to all local, state and federal regulations concerning material waste disposal, transportation, environmental compliance and worker health and safety.
5. **Do** apply gauntlet-type rubber gloves and eye protection before commencing any work.
6. **Do** conduct surface dryness test before installing membrane. Application surfaces must be completely dry.
7. **Do** keep mixing area fully shaded from sun throughout the day, and protected from extreme heat and cold.
8. **Do** allow BR and V210 catalyst powder to dissolve completely into component A (black). This should take 20 minutes, but may take longer in cold weather.
9. **Do** mark the can label of BR and V210 component A as soon as catalyst has been added. Avoid making the mistake of under or over-catalyzing the resin, or adding catalyst twice.
10. **Do** add BR and V210 weather-related additives, if required, to component B (white). Mark the can label of component B as soon as the additive has been combined.
11. **Do** mark the BR and V210 mixing pail or stirring stick with fill lines to ensure a 1:1 mixing ratio.
12. **Do** use three separate mixers for BR and V210: one for component A, one for component B and one for mixing components A + B together.
13. **Do** add 2K-PUR accelerator (weather-related additive) if required, to component A (gray). Mark the can
14. label of component A as soon as the additive has been combined.
15. **Do** add 1K-PUR thinner to 1K-PUR resin as required to facilitate fleece saturation. Avoid making the mistake of adding too much thinner to the resin. Mark the can label as soon as the thinner has been combined.
16. **Do** use a HDPE (High density polyurethane) plastic bucket as mixing pail for all resins.
17. **Do** wipe power drills frequently with a clean, dry rag to avoid liquid resin getting into the motor and causing an electrical short.
18. **Do** pre-cut fleece as much as practical to provide a consistent treatment of similar items and to maximize an overall uniform appearance.
19. **Do** keep tools moving in the liquid resin. If the tools sit still for even a short while, they quickly stiffen and have to be discarded. For cleaning brushes and rollers, use a 5 in 1 tool.
20. **Do** wipe tool handles and hands as needed with a clean, dry rag to avoid drips and messy work.
21. **Do** use Simple Green non-toxic cleaner to clean uncured primer off hands and tool handles.
Call 1-800-228-0709 to find your local area distributor.
22. **Do** keep Simple Green and any oils and solvents away from materials, as they create bond-breakers.
23. **Do** apply membrane within 8 days of priming.

24. **Do** install all flashings and detail work first, then do the field. If a large job is divided into work areas, the flashings and details for an area are done first, then the fields for that area.
25. **Do** use a chalk line to mark fleece sections parallel to each other, to ensure even overlaps and straight edges at the terminations.
26. **Do** provide proper overlaps and terminations. The minimum overlap between sections of fleece (side and end laps) is 2" (5 cm). The minimum laps onto the substrate are 4" (10 cm) for horizontal terminations and 6" (15.3 cm) for vertical terminations.
27. **Do** make sure all air bubbles are worked out and no dry spots remain. Pay careful attention to corners and junctions to avoid air pockets and small openings. It is much easier to check your work as you go (and correct deficiencies before the resin begins to cure), than to cut out and re-apply membrane later.
28. **Do** flood the fleece edges at terminations with enough additional resin to provide a resin cant (without dripping).
29. **Do** ensure that BR and V210 membrane will have enough exposure ultra violet (UV) light. UV exposure (least 4 hours) is necessary for the membrane to cure properly.
30. **Do** use special UV lamps if the BR and V210 membrane will not be exposed to at least 4 hours of natural daylight. A fixture would have to be utilized which provides the equivalent of 8 high output UV tanning lamps, suspended no more than 24" (61 cm) from the membrane surface, for a minimum of one hour.
31. **Do** utilize ventilation for indoor applications.
32. **Do** allow membrane to cure completely before applying a topcoat. In cold temperatures membrane may require a longer time to cure.
33. **Do** take the time and attention needed to install the Kemperol membrane properly. Cutting out and repairing deficiencies is time-consuming and labor-intensive. It is easier to do a proper job the first time and avoid corrective work.
34. **Do** clean cured resin off tool handles with an MEK-based solvent.
35. **Do** make sure all resin pails and their contents have been cured before disposing of, and all mixers and tools are free of uncured resin as well.

MEMBRANE INSTALLATION DO NOT'S:

1. **Do not** store any foreign materials near the mixing area.
2. **Do not** store sand near the mixing area. Sand particles that get into the resin are a nuisance, and any amount can cause improper saturation of the fleece; sand particles that get into the electric drills can ruin them.
3. **Do not** store catalyst powder near the Cold Activator, C-3 Inhibitor, or water. The combination of the materials will result in a violent, corrosive chemical reaction.
4. **Do not** use Cold Activator when temperature is above 50 °F (10 °C). It will cause the resin to cure too rapidly and turn to waste. Wind chill must be considered when deciding if Cold Activator is needed. The wind cools off the mixed resin like blowing across the top of a cup cools off hot coffee.
5. **Do not** use C-3 Inhibitor when temperature is below 75 °F (24 °C). It will cause the resin to cure improperly, leading to membrane failure.
6. **Do not** mix more resin than can be applied in approximately 20 minutes. If excess resin is mixed, it will begin to gel before it can be applied and will have to be discarded. This material is very costly and waste adds quickly. Remember that the larger the mixed batch is, the faster the chemical reaction builds up heat, and quicker the resin will start curing.

7. **Do not** mix less resin than is required. Application tools stiffen quickly when not resin-filled and must be discarded. To make the most efficient use of tools and materials, work with as few interruptions as possible. It is recommended to skip the usual morning and afternoon breaks in favor of one long lunch break to minimize interruptions. For BR and V-210 membranes, catalyze the next workpack of resin just before the current one runs out to avoid delaying the application.
8. **Do not** apply membrane in inclement weather, including fog, or when any moisture source is present.
9. **Do not** apply membrane to a moist surface -- this will lead to membrane failure.
10. **Do not** apply membrane if primer has become dirty or dusty. Adhesion will be poor if any dust or debris has gotten between the primer and the membrane. If priming is insufficient due to dirt, debris or damage, repriming is necessary.
11. **Do not** use wet or soiled fleece. Using wet or soiled fleece will cause membrane failure.
12. **Do not** use brushes and rollers that have been cleaned with solvents, before they have been allowed to dry for a minimum of 24 hours.
13. **Do not** undersaturate the fleece. This will cause membrane failure. Correct saturation will leave no dry spots, and a slight texture of the fleece visible through the resin.
14. **Do not** oversaturate the fleece. Excess resin will simply peel away over time without the fleece to hold it.
15. **Do not** allow resin to drip or pond. Excess resin is a waste of expensive materials. Resin dripped on to porous surfaces not scheduled to receive membrane may be impossible to clean off.
16. **Do not** try to use resin that has started to gel. Once it begins to gel, it will not saturate the fleece properly.
17. **Do not** try to cut the fleece with dull or inadequate scissors. This results in distorted edges and sloppy details. Use a straight edge and pencil to provide clean, straight lines for cutting.

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