

Duradek application to concrete

Duradek application to concrete - recommendations:

- 1) Slope: recommend $\frac{1}{4}$ " in 12" slope. $\frac{1}{8}$ " in 12" is minimum acceptable slope but any dished areas could pond water & "Ultra" 60 mil membrane field seams could also "dam" water. Running membrane in direction of slope can reduce possibility of water damming at seams.
- 2) Every effort must be made to eliminate ponding water. Ponding water shall be defined as water of any depth remaining 48 hours from last precipitation. Ponding water may decrease membrane life and accelerate fading due the amplification of ultra violet light. Areas of ponded water are excluded from Duradek's Manufacturers Warranty.
- 3) Deck flatness: deck surface to be relatively flat & smooth. If a 10 foot straight edge is placed any where on deck surface there should be no "dished" low spots greater than $\frac{1}{4}$ " deep.
- 4) Deck condition: surface must be dry, smooth & structurally sound. Repair voids and delaminated areas with acrylic modified cement. Expansion & control joints are designed to allow the concrete slab to move. Applying our membrane over a control joint (saw cut) could cause the membrane to blister at these areas. Do not apply our membrane directly over an expansion joint.
- 5) Concrete to be dry & cured: concrete to be fully cured & dry. Normal curing period is 28 days but can vary on types of concrete & additives used. Dryness is another issue. For concrete decks the concern is with vapor transmission.
- 6) Vapor transmission: There are several different tests that measure vapor pressure but the simplest test we recommend is: clean the existing coating completely to bare concrete topping, apply a 3 foot square piece of Duradek Ultra membrane to the prepared surface using our water based glue (either D763 or D763R), seal the edges of the membrane to concrete deck with urethane caulking, leave for 72 hours, remove membrane. Do several test areas at areas that had been previously repaired, high & low spots on decks. If the glue has not set (it will have turned to a clouded clear liquid), do not apply Duradek on this project!
- 7) Membrane adhesives: both water based & contact glues can be used if no sealers or coatings have been applied to the slab surface.
- 8) Test for sealers: to test for sealers pour cup of water on surface, if water does not absorb into the concrete & sits on the surface a sealer has been applied. If sealer or coating has been applied refer to [Duradek application to sealed or coated concrete - recommendations](#) below.

Note: Duradek is a supplier of waterproof deck membranes. Duradek does not assume responsibility for errors in design, engineering or dimensions. The Architect, Engineer, Specifier, Contractor or Owners' Representative must verify all dimensions, sizes, suitability of details & products.

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Duradek application to sealed or coated concrete - recommendations:

1. [Duradek application to concrete - recommendations \(above\) also apply to Duradek application to sealed or coated concrete - recommendations.](#)
2. If the existing coating can be completely removed then either Duradek water based adhesives or contact adhesives could be used to adhere the membrane. If coatings remains then contact adhesives shall be used unless VOC restricted (see local ordinances for compliance issues).
3. Adhesion test: if the existing sealer or coating cannot be completely removed, we require an adhesion test be conducted to determine if the existing coating will not be adversely affected by our contact glue. Water based glue cannot be used over a "sealed" surface. To test: apply a liberal amount of Duradek D811 contact adhesive to deck surface, allow to dry, apply D811 to back of 3 foot square piece of Duradek membrane, allow to become tacky, apply membrane to coated deck area, seal membrane edges to existing coating with urethane caulking, do several test patches at representative spots on deck, allow to sit for 72 hours. After this period, pull back membrane. If the glue has adversely reacted with the coating (it becomes soft, punky, blistered, etc.) do not apply Duradek membrane to coated deck. All existing coating have to be removed.
4. If the existing coated surface is deemed suitable to accept the Duradek membrane, we cannot guarantee that there would not be any membrane discoloration due to compatibility issues. Two coats of Zinser Binn primer/sealer applied to the coating can reduce the possibility of this occurring. Not withstanding applying the primer, Duradek will offer its standard manufacturer's warranty for our product applied over a coated surface but will not guarantee that there will not be a reaction that could affect the appearance of the membrane. The existing coating must be properly prepared before application of Zinser Binn primer/sealer.
5. Remove all loose, blistering or peeling coatings.
6. Repair voids and delaminated areas with acrylic modified cement.
7. When considering applying Duradek membrane to sealed or coated concrete contact Duradek Technical Department for consultation.

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