

Floor Epoxy Coatings Application Process:

- Preparing new or old concrete:**

REMEMBER; Preparation is key!

The coating can only be as good as the surface it is bonding to.

Good floor preparation is essential and will ensure that your Retek Epoxy Floor Coating looks great and lasts for years.

Surfaces must be clean, dry and free from oil's, grease, rust, dirt and any loose particles.

New concrete should be allowed to cure for 28 day's (cold weather and humidity may have an effect on drying time). Power floated or hand troweled smooth (not polished), concrete is ideal for light traffic areas but diamond grind (surface grind) is ideal for long lasting performance on heavy traffic or abrasive areas. If concrete surface is not smooth use a concrete surface grinder.

New cement might have efflorescence which is a chalky white residue that can occur with any product containing cement, any dusting or chalking will also need to be sanded down to a hard smooth surface using a diamond grind (surface grind)

Examples of efflorescence:



- Previously Coated Concrete:**

If your floor has been previously coated and is not worn through, flaking or peeling, follow steps 1-7.

If previous coating is loose, or the bonding to the cement is in doubt, remove the coating from the cement by power washing / mechanically sanding or grinding.

Remember the epoxy coating is only as strong as the surface it is bonding to.

Therefore, Retek Epoxy Coatings cannot be held liable as it will be seen as preparation failure.

Floor Epoxy Coatings Application Process:

- **Step 1:**

Sweep the surface you want to apply the coating to, so that you can do a thorough inspection and identify problem areas and treat them as explained in steps 2 - 4.

- **Step 2:**

Identify any cracks, holes and joins in the surface. Please remember primer / epoxy / poly urethane is not intended to fill cracks / joints / level out an un even surface or hide imperfections in the substrate it is applied to. Concrete floors have joints and seams which allow for movement and expansion.

Fill Joints with joint sealer. Fill cracks and holes with polycell rockset or other recommended products from your local hardware (use manufacturer's instructions). After filler materials have cured, sand down to a flat surface with 60-80 grid sand paper.

- **Step 3:**

Wash the floor with Retek's power degreaser and thoroughly sweep and rinse out all the dust and dirt. (As a general first wash)

- **Step 4:**

While the floor is clean and damp, identify where there are signs of water beading or filming on the surface, which indicate a contaminant, such as oil or silicone.



If after the first wash you still identify contaminated areas use Retek's two phase heavy duty degreaser, and follow instructions on the label. Rinse the area and inspect again.

- **Step 5:**

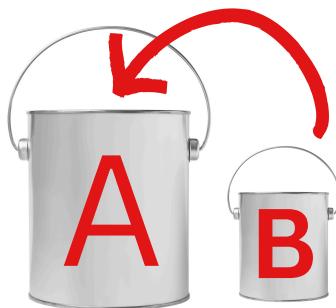
Rinse the floor two or three times Thoroughly with water and flush away all soils and debris. Soak up any standing water. Make sure the floor is clean and dry before you start with your coatings.

- **Step 6: Application (Retek's Epoxy Concrete Primer)**

Retek's Primer / Epoxy / Poly urethane consists of two parts; Part A (product), Part B (hardner) and should be mixed at the correct ratio indicated on the product label. Do not cross mix Primer / Epoxy / Poly Urethane hardners as they are not the same product.

Application of Epoxy Concrete Primer:

- Epoxy Primers are a preparatory coating you apply to provide better adhesion because they penetrate into the concrete substrate for a better bond. Epoxy primers also help to eliminate bubbles and pinholes that can form due to outgassing of the concrete.
- Add Primer Part B (hardner) to Primer Part A (product) and stir well with a flat paddle or electric mixer. Try not to air rate the mixture to prevent foaming. Stir frequently to keep the chemicals from separating during application.



- Once mixed, leave mixture to stand for 5 to 10 minutes and then start with the application. Ideal application temperature is 21'C.
- Pot Life - Once mixed use within 2 hours.
- Begin coating / trimming along wall edges and around objects where they meet with the floor with a 50mm / 75mm trim paint brush.
- Use a 225mm Hamilton's Mohair Epoxy Roller and apply the Epoxy Primer in a thick and even coat.
- Clean your tools with Retek's thinners. It is recommended to use a new roller with each coating. (Sometimes more cost effective to replace tools like rollers and paintbrushes after each coat).
- Wait +/- 12 hours to dry. (Drying times may vary depending on temperatures and humidity)

• Step 7: Application (Retek's Heavy Duty Epoxy)

- Add Heavy Duty Epoxy Part B (hardner) to Heavy Duty Epoxy Part A (product) and stir well with a flat paddle or electric mixer. Try not to air rate the mixture to prevent foaming. Stir frequently to keep the chemicals from separating during application.
- Once mixed, leave mixture for about 5 to 10 minutes and then start with the application. Ideal application temperature is 21'C.
- Pot life - Once mixed use within 2 hours.
- Depending on your floor requirements and colour choice apply one - two even coats of Retek's Heavy Duty Floor Epoxy / Poly Urethane.
- Wait 24 hours between epoxy coats.
- Wait 24 Hours for the floor to dry, test the floor before you walk on it. cooler weather may take longer to cure.
- 24 hours touch dry, 48 hours light traffic.
- Full curing time is 7 days.

Apply Grid / Non-Slip Beads:

- Follow steps 1 to 5 as preparation.
- Apply your Retek Epoxy Concrete Primer Coating and allow to dry. (Step 6)
- Apply your Retek Heavy Duty Epoxy Coating / Poly Urethane Coating and while the floor is still wet, sprinkle your grid / glass beads as heavily or lightly as desired.
- Allow 24 hours for the coating to dry.
- Wipe / sweep loose beads up with a soft broom.
- Apply a top coat to secure the beads in place.

Application of a top coat (Retek's Heavy Duty Epoxy / Retek Poly Urethane)

- Add Heavy Duty Epoxy / Poly Urethane Part B (hardner) to Heavy Duty Epoxy / Poly Urethane Part A (product) and stir well with a flat paddle or electric mixer. Try not to air rate the mixture to prevent foaming. Stir frequently to keep the chemicals from separating during application.
- Once mixed, leave mixture for about 5 to 10 minutes and then start with the application. Ideal application temperature is 21'C.
- Pot life - Once mixed use within 2 hours.
- Wait 24 Hours for the floor to dry, test the floor before you walk on it. cooler weather may take longer to cure.
- 24 hours touch dry, 48 hours light traffic.
- Full curing time is 7 days.