

Poolshield Relining

Duroplastic has recently introduced a guaranteed system for swimming pools that will give both the pool manufacturer and pool liner protection against blistering and osmosis. This comes from extensive tests in both the field and in laboratory tests.

POOLSHIELD APPLICATION GUIDE

1 SURFACE PREPARATION

1.1. All surfaces should be cleaned of all obvious contamination, dirt, grease etc. Before the application of any Poolshield coatings, grinding of the entire surface should be undertaken, using rigid disks, to a 36-80 grit profile. Care should be taken to thoroughly scour the substrate to provide adequate "tooth" for the coating system.

1.2 Check the pool for existing cracks and leaks and repair these with cement grout. Large cracks should be repaired with cement grout, which, when completely dry can be primed with Resin and covered with glass fibre surfacing tissue. Once the tissue has fully cured it is recommended that it be lightly sanded in order to give good adhesion to priming coat.

1.3 If the pool has been painted, then all traces of paint should be removed with a heavy duty paint remover. However, should this method fail to remove the paint then it is recommended that the pool be sandblasted. (Important: should a paint remover be used, allow it to dry, and then wash the pool down with water, allow to dry and wipe down with Resin.)

1.4 Clean the walls and bottom of the pool thoroughly and remove all traces of foreign residue.

1.5 IF substrate is Concrete, wash the concrete walls with a solution of 1% Hydrochloric Acid, allow this to dry then wash down with water. The walls and bottom of the pool should be completely dry before continuing. (Important when washing pool with acid, use rubber gloves and goggles to protect hands and eyes).

1.6 Ensure that the concrete is dry. Resins will not cure on damp surfaces. To allow the moisture absorbed in the concrete to evaporate, it is recommended that work on the pool should not commence unless the pool has been allowed to dry in the sun for a period of 72 hours.

2 APPLICATION OF POOLSHIELD PRIMER TO SURFACES.

2.1 Make sure all surfaces clean and ground as described above. Use clean uncontaminated air to blow clean.

2.2 Thoroughly mix Poolshield Primer according to spec. ie mix in 1.5 to 2 % Catalyst as per spec.

2.3 .Poolshield primer should be applied in Wet Film Thickness of at least 150-250 microns, with 300 microns being the maximum normally achievable. Surface should be allowed to dry for 1-2 hours

2.4 Use a synthetic short pile (Mohair) roller or wide 75mm brush (NOTE certain synthetic wool rollers will dissolve in polyester resin and should not be used). The primer is pigmented with a light colour of blue to identify that you have covered the surface.

2.5 Allow surface to cure until no longer tacky. Make sure tools are cleaned in Acetone.

3 APPLICATION OF POOLSHIELD HIGH BUILD

3.1 Mix Poolshield Glassflake according to specification (use MEKP LA3 catalyst 1.5 to 2 %). Ensure thorough agitation of catalyst.

3.2 Poolshield Glassflake may also be rolled and brushed satisfactorily , however a airless spray system may be used.

3.3 Allow Poolshield Glassflake to dry for minimum of 3 hours or overnight. Finish sand surface to remove all high tex or raised spots with 180-220 grit abrasive. Larger areas are best sanded with dual action sanders. Finish sand with 220 grit abrasive - 320 grit if sanded by hand.

3.4 A second application of Poolshield Glassflake may be necessary if surface is broken through in many areas.

3.5 After final sanding, blow clean entire surface with dry, filtered air or brush with. Do not allow surface to be contaminated prior to gloss application. Proceed to topcoat application as soon as possible, to avoid contamination. If impractical to continue however, surface can be left at this stage for extended time.

When the entire pool has been coated , allow for a minimum of 2 hours to dry before continuing.

3.7 Variations in temperature of the environment and the concrete substrate will affect the gelation and curing of Resin. Low early morning temperatures, or low winter temperatures will extend gelation and curing times of the priming layers and longer periods between completion of priming and commencement of laying up will be necessary. Typical minimum periods which should be allowed between priming and lamination at various temperatures and using various catalyst concentrations are listed in the specifications. NB: Do not exceed 3%MEKP.

4 TOPCOAT APPLICATION

4.1 Sand Glassflake HiBuild smooth as per above, and solvent wipe the surface using Acetone

4.2 Mix parts Topcoat/ Catalyst according to spec.

4.3 Inspect the laminate surface for irregularities and repair these before continuing. Ensure that the degree of cure of the laminate is satisfactory prior to commencing finishing. A minimum Barcol Hardness value of 35 to 40 is required before finishing commences.

4.4 The resin topcoat is pigmented surfacing resin which has been formulated to allow good coverage with a single application. Should it be necessary to coat over a dried film it should be sanded before application of the top coat. Failure to do this will result in poor adhesion to the top coat.

4.5 Poolshield Topcoat should be catalysed with the required amount of MEKP for the prevailing temperature, the amount which is catalysed should be that which can be easily used within the anticipated working time of the resin (as determined in Spec sheet).

4.6 The catalysed resin should be applied at the rate of 500 gms/m² by paint brush or lambswool roller, using long even strokes(Only one coat is necessary . If two coats are required the complete first coat needs to be lightly sanded down).

4.7 Once completed, the Poolshield topcoat finishing layer should be allowed a minimum of 72 hours to cure before filling of the pool.

4.8 If the decorative ceramic mosaic tiles are already in position, the question of where and how to stop the laminate is important. For best results on durability, the laminates should be complete and whole in every position under the water and should terminate well above the water level. One method of stopping the lining where the decorative mosaic tiles are left on is to cut a groove (using a grouting disc) approximately 2-3mm thick and 8-10mm deep in to the concrete right around the pool just below the mosaic tiles. The laminate is then taken up the line and in to the groove such that the groove is filled with glass flake resin.

4.9 Ideally the mosaics should be lifted before the pool is lined and replaced once the lining has been completed. If the mosaics are to be applied on to the laminate it is recommended that:

- The area to take the mosaics be carefully sanded to give an even wax-free and dirt-free surface.
- The mosaics are stuck on to the laminate using either an epoxy adhesive such as Duroplastics DP55
- Once the mosaics have been stuck on the adhesive agent fully cured, the spaces etc may be filled with white cement in the normal manner.

All statements, technical information and recommendations contained in this publication are based on tests believed to be reliable, but their accuracy and/or completeness are not guaranteed. The user shall determine the suitability of the product for his particular purpose and shall assume all risk and liability in connection therewith.