

## GUARANTEE

### RENOLIT ALKORPLAN2000–3000–TOUCH–CERAMICS & NON–SLIP REINFORCED MEMBRANE

By means of this document RENOLIT guarantee that ALKORPLAN1000, 2000 and 3000 PVC-P reinforced membranes will remain watertight for a period of **10 years** from the date of delivery, provided that the watertightness failure is due to a manufacturing defect of the reinforced membrane of the pool.

This warranty is limited to the replacement of the liner material and does not include the cost of removing and installing the membrane or any other loss or damage.

The membrane must be installed by an accredited specialist in accordance with the current state of technology and the applicable legal provisions. The installation of the reinforced liner must have been carried out in accordance with the RENOLIT ALKORPLAN installation procedure.

This warranty does not cover problems due to external mechanical or extraordinary factors such as physical, chemical, organic or weather-related effects nor does it cover faults in the colour, such as stains or erosion of the pattern printed on the liner, due to usage.

The validity of this warrant is subject to fulfilment of the payment terms between all parties and the notification of all faults by registered letter, received before the expiry of the warranty period. Such faults must be approved by our technical staff before making any repairs. The original adhesive label of the material must be kept as proof along with the invoice, or a photocopy of the adhesive label of one of the RENOLIT ALKORPLAN membranes rolls used to build the pool (one adhesive label per roll).

In the event of raising a claim under the warranty, you should notify RENOLIT of the incident immediately so that our technicians can check the material and the cause of the damage. If the RENOLIT technical staff have to travel and there are no grounds for claiming under the warranty, the company reserves the right to claim payment of travel expenses.



Sant Celoni (Barcelona), 03/01/2020

## INSTRUCTIONS FOR INSTALLATION & USE

### RENOLIT ALKORPLAN2000–3000–TOUCH–CERAMICS & NON–SLIP

1. Safety first and foremost! Consult the safety data sheet when applying the liquid PVC, glue or any other chemical. Thermofusion welding gives off irritant gases and adequate ventilation is necessary. Watertight liners that are damp may be slippery; take the necessary precautions. Before completing the lining of the pool, check the legislation regarding the use of non-slip liners and the requirements regarding water treatment.
2. Reinforced membrane rolls must remain in their original packaging and they must be laid horizontally. Damage caused to the packaging must be repaired immediately, as if the liner is stored in damaged packaging for a long period of time, this could lead to a deterioration in the quality of the liner, particularly with regard to its surface flatness.
3. Do not install the membrane in places where it could come into contact with tar pitch and oils which will cause staining. When using glue or adhesives, first ensure they are compatible with the liner. The structural support must be clean. Old structures should first be treated with RENOLIT ALKORPLUS Surface Disinfectant. Make sure that no ground water can penetrate behind the liner, as this could cause a bacterial infection.
4. Before starting to install the reinforced membrane, make sure that the sheets to be installed in one plane are from the same manufacturing batch. This will guarantee that the colours of the different strips match each other correctly.
5. If the pool water is not “tap” water (water mains) or from a reliable source, it must be treated with appropriate chemicals to ensure that it does not contain dissolved metals such as iron, copper, manganese, etc. Deposits of such metals on the liner could cause staining.
6. The level of the pool water must remain stable during bathing sessions. In the winter, when the pool water is not treated with chemicals, the flotation line may rise (rain) or fall (protecting the pool against ice). Empty or partially empty pools must be protected with a cover, to prevent contamination and aggression due to solar radiation.
7. Reinforced membranes must be laid tightened (half pipe or in setting of angles and corners), so that the water pressure can eliminate all folds or irregularities. Our liners comply with the applicable legislation which stipulates a maximum service temperature of 32 °C. The correct in setting/tightened of the corners during the installation, and after approval by our technical department, makes it possible to work with a constant temperature of no more than 35° C.
8. Stabilised chlorine (derived from sodium dichloroisocyanurate) must be added in a quantity of 0.7-1.2 mg/l (available chlorine, DPD measurer), pH 7.2-7.6.
9. Non-stabilised chlorine (free chlorine obtained from saline chlorination, sodium hypochlorite) must be added in a proportion of 0.3-0.8 mg/l, pH 7.2-7.6. In this case a contribution from 20 to 30 ppm of stabilizer is imperative to limit the oxidizing power of the water or the REDOX potential.
10. Excess chlorination of the pool may cause the liner colour to fade. Dark colours are more prone to fading than light ones. An increase in the water temperature, makes the chemical balance of the pool water more difficult to control and can accelerate colour degradation.
11. In order to have stable pH, it is advisable to keep the TAC / Alkalinity between 100 and 175 ppm of CaCO<sub>3</sub>.



12. Bromine derivatives, which are a less volatile alternative than chlorine ones, may be used in heated pools. The recommended bromine level is 1-2 mg/l. pH 7-8. Excess bromine in the pool water may cause the liner to turn Brown, which is more much visible with light colours.
13. In pools treated with ozone, the residual ozone in the water must be below 0.01 mg/l.
14. Chemicals that contain copper must not be used, as they may stain the liner. We recommend using the RENOLIT ALKORPLUS Anti-Stain product to remove all the dissolved copper from the water
15. The presence of copper in the water, together with certain sunscreens, may cause yellowish stains along the waterline that are difficult to remove along the flotation line. These stains will always be more visible with light colours. It is not necessary to add alguicidal or copper products beforehand. In some cases the mains water already contains traces of copper. To reduce the level at least to 0.02 mg/l ( $\pm 10\%$ ), a sequestering agent must be added.
16. Chemicals for treating water must be dissolved before adding them to the pool water and they must never be in direct contact with the membrane. When using slow-dissolving chlorine tablets deposited in the skimmer basket, the recirculation pump must be operated regularly. During the winter never let chlorine products in the skimmers, the concentration would cause discoloration and fine folds on the membrane.
17. Solar radiation mainly affects the horizontal parts not covered by the pool water, such as the first steps, overflow areas, etc. These areas must be lined with a product that is extremely resistant to UV radiation. In such cases, our ALKORPLAN2000, ALKORPLAN3000, ALKORPLAN TOUCH and ALKORPLAN CERAMICS products with protective varnish are the best option.
18. The pool design must allow the optimum circulation of the water – install the skimmers in the appropriate part of the pool, taking the prevailing wind direction into consideration to prevent the build-up of oil and dirt along the waterline, which could cause permanent staining.
19. Oil deposits must be removed regularly with an alkaline or degreasing agent, such as RENOLT ALKORCLEAN degreaser, whereas acid products are more suitable for removing lime scale (5% hydrochloric acid). Our ALKORPLAN2000, ALKORPLAN3000, ALKORPLAN TOUCH and ALKORPLAN CERAMICS ranges offer optimum protection against stains.
20. Avoid the use of abrasive products and materials when cleaning the surface of the liner as this will erode prints and the protective lacquer.
21. The components used to produce Alkorplan reinforced membranes conform to all relevant non-toxic certification. However, in most cases, the formulations contain biocidal products to increase their useful life. They must not be used in ponds containing fish or other aquatic species.
22. The RENOLIT ALKORPLAN products are designed as part of a system and they are only completely effective in combination with each other. This is another good reason for using our ALKORPLUS Surface Disinfectant product and the ALKORPLUS geotextile sheet with antibacterial treatment, to eliminate negative interactions with other products.