

GUARANTEE

ASTRALPOOL UNIPLUS – UNIBASIC REINFORCED MEMBRANE FOR POOLS

This document provides you with a guarantee for the water tightness of your reinforced membrane for a term of **10 years** from its date of installation, provided that the fault in water tightness is due to a manufacturing defect of the pool waterproofing membrane.

This guarantee is limited to the replacement of the coating material. It does not cover the costs of removing and fitting the coating, or any losses or damages.

The membrane must have been fitted by an accredited specialist who meets the current technical standards in place and the legal provisions that are in force. The reinforced sheeting must have been fitted according to the ASTRALPOOL UNIPLUS - UNIBASIC installment procedure.

This guarantee is not valid for problems caused by external mechanical forces or one-off events, such as the impact of physical, chemical, organic and weather factors. This guarantee does not cover any defects in the color either, such as stains or the wear of the pattern on printed membranes, that have been caused by use or due to the use of different batch numbers on the same surface.

For this guarantee to be valid, the terms and conditions of payment must have been met by all parties involved and any potential defects must have been reported by way of registered letter, which must have been received before the expiry of the guarantee period and subject to these shortcomings having been checked by our service engineers before repairs are carried out. Together with the invoice, an original adhesive label or a photocopy of an adhesive label on one of the rolls of the ASTRALPOOL UNIPLUS - UNIBASIC membranes used in the construction of the pool (one adhesive label per roll) must be kept.

Should the guarantee be used, the incident must be reported to FLUIDRA immediately so that our service engineers are able to check the material and cause of the damage. FLUIDRA shall cover the cost of replacing the faulty material, provided that it has been demonstrated that the fault was due to its manufacture. If a fault of this type is spotted, installation must be stopped. If installation continues, even though there is a clear defect, FLUIDRA shall not honor the product guarantee.

Should the service engineers designated by FLUIDRA have to travel without there being a reason to make use of the guarantee, we reserve the right to charge the travel expenses.

Sant Cugat del Vallès (Barcelona), 01/03/2024

INSTRUCTIONS FOR INSTALLATION AND USE

ASTRALPOOL UNIPLUS - UNIBASIC

1. Safety must come first! Check the safety datasheet when liquid PVC, glue or any other chemical product is used. Heat welding produces irritant gases, so it must be carried out in a suitably ventilated space. If the watertight membranes become damp, they may be slippery: take suitable precautions. Before the coating of the pool has been completed, check the regulations in force on the use of non-slip membranes and the requirements on water treatment.
2. The rolls of membrane must be kept in their original packaging and stored in a horizontal position. Any damage caused by the packaging must be repaired immediately, as if stored for long spells of time in damaged packaging this can cause defects in the quality of the membrane, especially in its flatness.
3. The watertight membrane must not be fitted where it may come into contact with tar and oil, as this may stain it. If sticky tape or glue is used, check its compatibility with the membrane beforehand. The framework must be clean. Old framework must be treated with a Framework Disinfectant. Ensure that groundwater and water from aquiferous layers cannot filter through the back of the membrane, as if this happens it could cause a bacterial infection. We strongly recommend the use of a GEOTEXTILE during installation to have maximum protection against staining.
4. For best bonding, it is recommended to weld at outdoor temperatures of above 15 °C.
5. Before beginning installation, ensure that the sheeting that is going to be fitted on the same surface level is from the same production batch. This will ensure that the colors of the different strips will match.
6. Unless the water to be used to fill the pool is tap water (general water supply) or from a trusted source, the water must be chemically treated to ensure that it does not contain dissolved metals such as iron, copper and manganese. The precipitation of these metals on the membrane could stain it.
7. The pool's water level should be kept at the same level when used for bathing. In the winter, when the pool water is not treated using chemicals, the water level may rise (rain) or drop (to protect the pool from ice). Empty or partially empty pools must be protected by a cover to avoid contamination, harmful solar radiation and **evaporation. We recommend using CTX-800 Water Saver to prevent and reduce evaporation.**
8. The reinforced membranes must be fitted pre-stressed (half-rounded or setback for angles and corners), so that the pressure of the water is able to eliminate all folds and irregularities. Our membranes comply with current regulations, whose service temperature is 32 °C. If the corners are properly set back/stressed and approved by our technical department, the pool can work at a constant temperature of up to 35 °C.
9. Stabilized chlorine (by-products of sodium dichloroisocyanurate) must be added at a concentration of 0.7–1.2 mg/l (free chlorine, DPD test kit), pH 7.2–7.6. **We recommend using the AstralPool chlorine test kit to measure these concentrations.**
10. Non-stabilized chlorine (free chlorine obtained from salt chlorination, sodium hypochlorite, etc.) should be added at concentrations of 0.3–0.8 mg/l, pH 7.2–7.6. In this case, a stabilizer must be added (between 20 and 30 mg/l) to restrict the water's oxidizing power and redox potential. => **We recommend using AstralPool's Chlorine Stabilizer**

11. Adding too much chlorine to a pool may cause the color of the membrane to fade. => **to prevent this, use AstralPool's Chlorine-Bromine Neutralizer** Darker colors are more prone to fading than lighter colors. Increasing the water temperature but keeping the disinfectant at the same concentration will result in colors fading more.
12. In order to keep the pH stable, it is recommended to keep total alkalinity (TAC) at a concentration of between of 100 and 175 ppm of CaCO_3 . => **To achieve this, AstralPool Alka can be used to increase alkalinity levels when they are low and AstralPool Alka Minus when they are too high.** As bromine by-products are less volatile than those of chlorine, they can be used for heated pools. The recommended level of bromine is 1–2 mg/l, pH 7–8. Adding very high concentrations of bromine to pool water can cause the membrane to turn brown, which is much more noticeable on light colors. => **AstralPool's Chlorine-Bromine Neutralizer can be used to neutralize bromine levels**
13. In pools treated using ozone, the residual ozone in the pool water should be kept below 0.01 mg/l.
14. Chemical products that contain copper should not be used, as they can cause staining on the membrane. We recommend using a stain remover such as AstralPool's Super Limescale Remover to remove all the copper dissolved in the water.
15. The presence of copper in the water, in combination with some sunscreens, can give rise to yellowish stains along the water line that are difficult to remove. These stains will always be far more marked on light colors. This staining is not necessarily due algicides or products with copper having been used in the past. Sometimes, the water supply network already contains traces of copper. In order for the level not to rise above 0.02 mg/l ($\pm 10\%$), a sequestering agent should be added. **We recommend using AstralPool's Super Limescale Remover for this**
16. Chemical products for water treatment should be dissolved before adding them to the pool water and should never be in direct contact with the membrane. Should slow-dissolving chlorine tablets be used, place them in the skimmer basket. The recirculation pump should be run regularly. During winterization, chlorinated products must never be put in skimmers. The high concentration could irreversibly stain the sheeting, as well as forming creases in the membrane.
17. Sunlight mainly affects horizontal areas that are not covered by the pool water, such as the first steps into the pool and overflow channels. These areas should be fitted with a product that is highly resistant to UV radiation. In these cases, our range of ASTRALPOOL UNIPLUS products with protective resin is the best choice.
18. The design of a pool can optimize water circulation. Fitting the skimmers in the right place (leeward, facing a certain direction, etc.) prevents grease and dirt from building up on the water line, which could become a permanent defect on the membrane.
19. Any grease that builds up should be regularly cleaned using an alkaline agent, while acidic products are better suited for cleaning limescale (hydrochloric acid at 5%).
20. Avoid the excessive use of abrasive cleaning products and materials on the surface of the membrane, particularly on printed membranes.
21. Our membranes are certified to have as little impact as possible on the water. However, in most cases the sheeting has been treated with a biocide to increase its service life. The membranes should not be used in ponds with fish and other species.