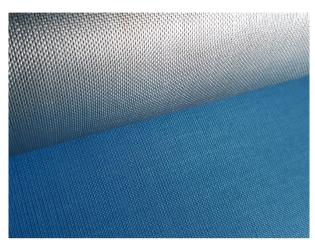


TESTING SYSTEM FOR ELECTRONIC TESTING OF WATERPROOFING MEMBRANES AS PER ASTM D7877-14

For swimming pools



Controlit® GSP (for synthetic swimming pool cover) underlays

Supply only (loose laid or glued installation, in conjunction with the laying of the waterproofing layer, by the Company performing the system installation in order to highlight and monitor any damage to the waterproofing layers, thus avoiding the infiltration of liquids between the waterproofing layers and the base that could compromise the future impermeability of the system) of *Controlit® GSP*, woven and impregnated fiberglass fabrics, coated in nanotechnology with stainless steel particles

and treated with anti-fungal and anti-bacterial additives, supplied in rolls of 50m and width of 1.65m.

Technical parameters

- Yarn tex (DIN EN 12654)
- Sized warp EC 9-68 Z 20
- Weft EC 9-68 Z 20
- Coating Stainless steel nanoparticles
- Electrical resistance < 1000 Ohm/sq
- Surface Treatment Anti-fungal and anti-bacterial additives
- Weight (DIN EN 12127) 165 +/- 10 g/m2
- Thickness (DIN EN ISO 5084) 0.16 +/- 0.02 mm
- Tensile strength not less than (EN ISO 13934 1)
- Warp 2500 N/5cm
- Plot 2500 N/5cm
- Tested and approved by manufacturers of electronic integrity control systems (ELD) both low voltage EFVM sec. ASTM D7877-14.7 and high voltage HVMT sec. ASTM D7877-14.9
- Installation with lateral & horizontal overlaps equal to 10 cm.

Controlit® Connection Contact

Supply only (installation by the Company performing the execution of the system) of stainless-steel contact points type *Controlit* ® *connection contact*, including sealing material in PVC sheet, heat shrinkable sheet and protective cap. Installation as per the specific instructions given in the manufacturer's user manual. Max distance between contact points 50m (100m in the case of verification done with Buckleys equipment).



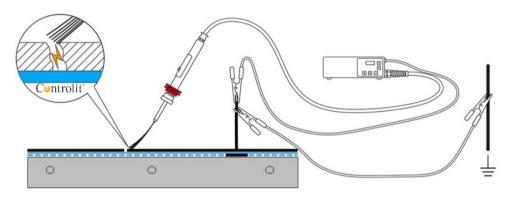
Testing of the swimming pool watertightness

The execution of final testing of the swimming pool by means of electronic ELD system (Electronic Leak Detection), is made as per ASTM D7877-14, internationally recognized standard.

The control will be carried out with HVMT (High Voltage Membrane Testing) technology as per part. 9 of the same standard at the end of the laying of the waterproofing membrane for the verification of the integrity of the system before carrying out the subsequent processing.

At the end of the work, before final testing, all the covers must be tested by the selected company (the Company performing the execution of the system).

HVMT - High Voltage Membrane Testing



On the surface on the roof system, which must be dry, a direct current voltage, calculated according to the thickness of the waterproofing material (Dielectric

Strength), is applied with brush of determined width, connected to the central unit, which is also connected to Controlit® conductive underlay via the appropriate Controlit® Connection Contact points

The detection of imperfections / damages is based on the detection of the passage of current, in the form of a high-voltage arc, between the surface of the waterproofing system and the conductive underlay Controlit®.

The location of the defect will be noticed both visually (high-voltage arc) and by sound (on the central unit).

With the same equipment it is also possible to check the details and vertical parts of the swimming pool.



