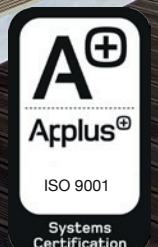


ace
coatings

Swimmingpools





The company

ACE COATINGS

is a Spanish chemical company dedicated to the development and manufacture of state-of-the-art coatings for waterproofing and protecting structures against environmental degradation, wear and explosions.

Present in the European market since 1998, and in South America since the establishment of our subsidiary in Chile in 2014, we specialize in polyurea technology, which allows us to offer efficient, long lasting and environmentally friendly solutions to the most demanding sectors in the most degrading conditions.

Our flexible production system allows us to supply large volumes as well as to manufacture special developments on demand, always with the highest quality standards.

We permanently invest in innovation and remain faithful to our usual corporate old principles:

- Transparency in our relationships.
- Commitment to our collaborators.
- Work excellence.
- Respect for the community and the environment

ACE Coatings solutions

We offer

efficient and long lasting systems for the coating and waterproofing of: Swimming pools, water parks, fountains or waterfalls which main properties are:

- Fast curing hot spray waterproofing system.
- Continuous membrane with no joints or overlaps, which fully adheres to multiple substrates.
- Elastic coating resistant to extreme temperature changes, with great crack bridging capacity.
- Hygienic and bacteriologically stable.





Application procedure

Substrate preparation + ACE Polyurea spraying

CONCRETE

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- 01.** Check that the concrete is fully cured (28 days) and substrate is firm and has $>1.5 \text{ N/mm}^2$ tensile strength and $>25 \text{ N/mm}^2$ compressive strength. Depending on its condition, a shotblasting or diamond sanding to open the pore and remove laitance will be might be necessary. Achieve a concrete surface profile of ICRI CSP-3 to CSP-5. Check that it has the leveling required by the client and in case of uneven walls apply quality mortar (R3-4) with an adherence primer to smooth out the surface.

 - 02.** Cracks larger than 1.5 mm will be filled with epoxy mortar and bug holes and fissures will be filled elastic putty.

 - 03.** Joints will be treated with elastic polyurethane putty ACE MP 4035 and/or ACEBOND elastic bands.

 - 04.** A half-round formation is to be made at the joint between vertical walls and the floor using a felxible mortar or polyurethane putty.

 - 05.** Fill in the bottom of the drains and skimmers with plastic or paper and masking tape and protect as well any other areas around the pool that are not going to be treated. If the drain elements are not installed, the holes will not be covered.

 - 06.** Apply ACE PRIMERFLEX or one of the ACE EPOPRIMER range primer with a roller or airless equipment and once dry respecting the repainting times specified in the product technical data sheet (TDS), then spray the ACE polyurea membrane with an average 2 mm thickness.

 - 07.** Depending on the finish, aggregates will be bonded on the last layer of polyurea if the swimming pool is to be finished with ceramic tiles.



**Example of poyurea
application on concrete**



Substrate preparation + ACE Polyurea spraying

CERAMIC TILES

- 01.** Clean the entire surface with pressurized water, paying especial attention to the joints cleaning. If necessary, you may use a brush or stripper to remove any traces of moss or rust until the cleaning and decontamination of the entire surface is guaranteed. Leave to dry until there is no moisture reading in the joints.
- 02.** Check for cracked or loose parts and either replace or glue them if necessary. Fill cracks with epoxy putty or mortar.
- 03.** Fill in the drains with plastic or paper and masking tape and protect as well any other areas around the pool that are not going to be treated. If the drain elements are not installed, the holes will not be covered
- 04.** Apply one of the ACE EPOPRIMER range primer with a roller or airless equipment and once dry, respecting the repainting times specified in the product technical data sheet (TDS), then spray the ACE polyurea membrane with an average 2 mm thickness.
- 05.** Depending on the finish, aggregates will be bonded on the last layer of polyurea if the swimming pool is to be finished with ceramic tiles.

**Poyurea
application on
ceramic tiles**





Steel and polyester

Substrate preparation + ACE Polyurea spraying

STEEL AND POLYESTER

- 01.** Mechanical treatment of the surface (shotblasting, sanding...) to eliminate traces of rust, previous paintings, pore opening cleaning and get a profile of >75 microns in steel.
- 02.** Repair with epoxy or polyester mortar any fissures and cracks.
- 03.** Cover the drains with plastic or paper and masking tape and protect as well any other areas around the pool that are not going to be treated. If the drain elements are not installed, the holes will not be covered
- 04.** Apply one of the ACE EPOPRIMER range primer with a roller or airless equipment, and once dry respecting the repainting times specified in the product technical data sheet (TDS), then spray the ACE polyurea membrane with a minimum average thickness of 2 mm.
- 05.** Depending on the finish, aggregates will be bonded on the last layer of polyurea if the swimming pool is to be finished with ceramic tiles.

Range of primers

ACE EPOPRIMER RANGE:

Two-component epoxy primers which great adhesion on concrete, polyester, steel, natural stone or ceramic tiles.

EPOPRIMER 100 is 100% sólids and helps to improve substrate conditions and seal concrete pore.

EPOPRIMER 52WB and **EPOPRIMER WET** can be used on wet surfaces.

EPOPRIMER is solvent base and best recommended for steel and non-porous susbtrates like glass ceramics or mosaic ceramic tiles

The minimum repainting time at 25 °C is about 16 hours.

Always consult and respect information indicated in the product technical data sheet (TDS)

ACE PRIMERFLEX PLUS:

Two-component elastic polyurethane primer, 100% solids and fast curing that seal pores and helps improving substrate conditions with great adhesion to mortars and concrete.

The minimum repainting time at 25 °C is 3 hours and the maximum is 36 hours. . Always consult the product technical data sheet (TDS)



Finishes

ACE UV POLYUREA does not require any top-coat for the UV protection as it is an aliphatic system, but it can be coated with ACE SP FLEX when an antiskid finish is required and to improve scratch resistance. Also use ACE aliphatic Top-coats to paint line markings and decorations.

ACE PU-100 and ACE 7052 HE require a UV protection as they are aromatic systems, and they can be either coted with a UV protection top-coat or a ceramic tiles; please follow these steps depending on the case:

ALIPHATIC TOP-COAT FINISH

Once the ACE polyurea membrane is cured:

- 01.** Check that the membrane is clean and does not have any pores. Remove sagging that may affect the aesthetic finish and in less that 48h then, apply with one or two layers of 0,200 kg/m² of top-coats ACE ALIFLEX or ACE SP FLEX by roller or airless equipment. When applying two coats, always respect the repainting times specified in the product technical data sheet (TDS). Like all coatings and paints, the application must be made on firm and dry substrates which temperature is < 35°C and >3 °C higher than the dew point, air temperature higher than 10 °C and RH <80%.
- 02.** Also use ACE aliphatic Top-coats to paint line markings and decorations and to give antiskid finish, when needed, sprinkling aggregates between two layer of the top coat.
- 03.** Once the top-coat is applied, respect the times indicated in the product TDS before filling up the pool with water to guarantee the complete evaporation of the solvents or suitable curing of the system.



Tips and Warnings

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- 01.** If the mosaic ceramic tile is presented in a mesh it may also be bonded with four silicone points per piece as points of anchorage.

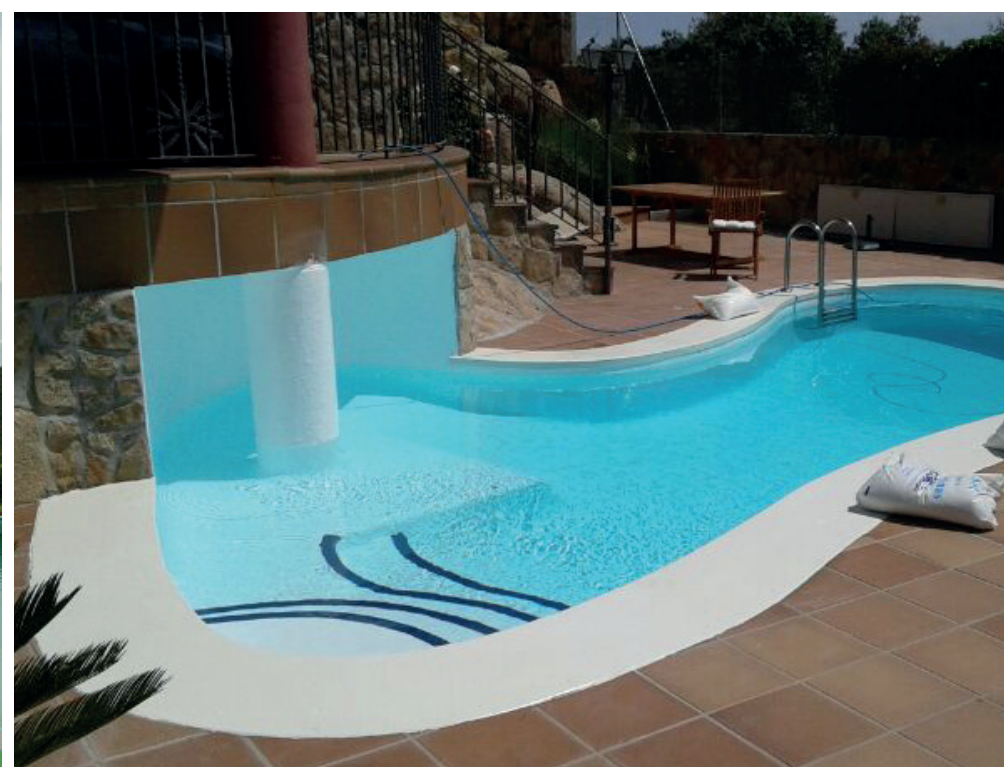
If the ground is unstable (e.g. clay soils, volcanic,) and the pool is not fully stabilized, finishing with mosaic ceramic tiles may not be recommended, since ACE polyurea systems are very elastic and in its movements could the tiles can be detached unless a very flexible adherence mortar is used
 - 02.** Depending on the depth of the pool, it may be necessary to project some aggregates or microspheres to prevent slipperiness to the bottom and construction stairs. It can be applied on the ACE polyurea membrane as described before, or between two layers of the top-coat. Aggregate size recommended 0.4-0,8 mm width.
 - 03.** If the soil is very porous and there is permanent water on the ground, it will be necessary to waterproof the exterior walls and bottom of the pool and make a water barrier on the ground to avoid problems by condensation in the future.
 - 04.** When the drainage elements or skimmers are not placed in the basin, it is recommended to project the membrane inside the hole, then place the pieces and seal the around area with flexible waterproof sealers like ACE MP 4035.
 - 05.** To apply tiles on the membrane recommended aggregate to use is silica sand with average grain size of 0,7-1 mm and remember not to spray aggregate with a gun until the membrane has at least 2 mm thickness.
 - 06.** Beware condensation and always check that the substrate temperature is 3°C over the dew point before applying primers to the substrate, before applying polyurea on primers and before applying top-coats on polyurea.

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- 07.** Use wired double-sided tape for precision cuts and in hard-to-reach or delicate areas.
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- 08.** Swimming pools should not be emptied for large periods of time
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- 09.** Use cleaning and disinfectants products as indicated by their manufacturer and do not release chlorine tablets directly to the pool or overdose the amount of disinfectant prescribed.
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- 10.** In case of a top-coat finish of the swimming pool to be in contact with hard or very waters and it is strongly recommended to install a softening system or use a flocculating agent.
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- 11.** Being extremely durable, the top-coat could need to be recoated after some years or if it has been damaged or removed in order to avoid the polyurea membrane be in direct contact with chlorinated water.
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Gallery







HEADQUARTERS

ACE COATINGS S.L.
Campo Sagrado, 11
33205 Gijón - España (Spain)

+ 34 985 323 328
+34 684 651 367



ACE COATINGS LATAM SPA
Av. Apoquindo 3885
Las Condes - Santiago de Chile



www.acebyartcoat.com



info@acebyartcoat.com
info@acecoatings.com