FIXCER

ADHESIVES AND CHEMICAL PRODUCTS
FOR CONSTRUCTION

GUIDE

SWIMMING POOL BUILDING SOLUTIONS

zero problems pools

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zero PROBLEMS POOLS

Fixcer Solutions Guide for making your construction project fast, efficient and resistant

What are we facing when building a pool?

Pools are some of the most complex structures to build: they're exposed to water, weather changes, chemical products and structural contraction and expansion movements.

The **Fixcer Solutions Guide** is the answer to a double challenge: that of facing the complexity of the construction process, and our key objective: maximum resistance + zero-maintenance. As a result, we've obtained the 7 Fixcer keys for building zero-problems pools, which are in all our solutions:

PRECISION

All our products are designed and manufactured for the specific purpose of building pools. These are not all-purpose products we simply apply to the world of pools; Fixcer products are exclusively for pools.

You can't go wrong when using a Fixcer product.

EXPERIENCIE

For more than 25 years we have built at least 1,000,000m² of pools. **Every Fixcer solution has been tried and tested.**

EFFICIENCY

This guide is designed to help you find the right solution for every stage of building or renovating a pool. We know how to improve and streamline your project. **There's a Fixcer solution for every stage.**

FLEXIBILITY

We offer several different options, so you can adapt to the size of the budget.

We have the most suitable Fixcer solution for every kind of project.

SIMPLICITY

Fixcer solutions are designed to streamline and improve each and every one of the construction processes. All our products are easy to use and measure. **With Fixer solutions, you gain time and save money on other resources.**

SUSTAINABILITY

We manufacture in compliance with sustainability standards. **At Fixcer we understand that we are all responsible for the wellbeing of our planet.**

SUCCESS!

Work with Fixcer solutions and build zero-problems pools: no cracks, no fissures, no water loss.

Pools for a lifetime = satisfied customers.

Fixcer Solutions

100% guarantee + trust

Applus ISO 14001 Systems Certification

Applus ISO 9001 Systems Certification

01 SOLUTIONS FOR CONCRETE POOLS

CHOOSING A CONCRETE POOL

Why are concrete pools the best option?

POOLS THAT ARE STURDY, WATERTIGHT, SAFE, RESISTANT, DURABLE, DEPENDABLE AND SOUND

Concrete pools are the most resistant kind on the market. Using concrete, you can build a pool to last a lifetime. Unlike other materials, concrete doesn't deteriorate over time.
A ceramic finish then makes the pool unequivocally safe and comfortable.

WHAT YOU NEED TO KNOW BEFORE STARTING

Types of terrain

Many pools are built without having first determined the type of terrain on which they lie. Correctly identifying this is essential for knowing whether a flat base will do or whether piling will be required. First, we must determine the necessary level of ground penetration with a penetrometer and the compaction level using a Proctor test. With this data, management will then be able to decide which structure best suits our pool.

Water table

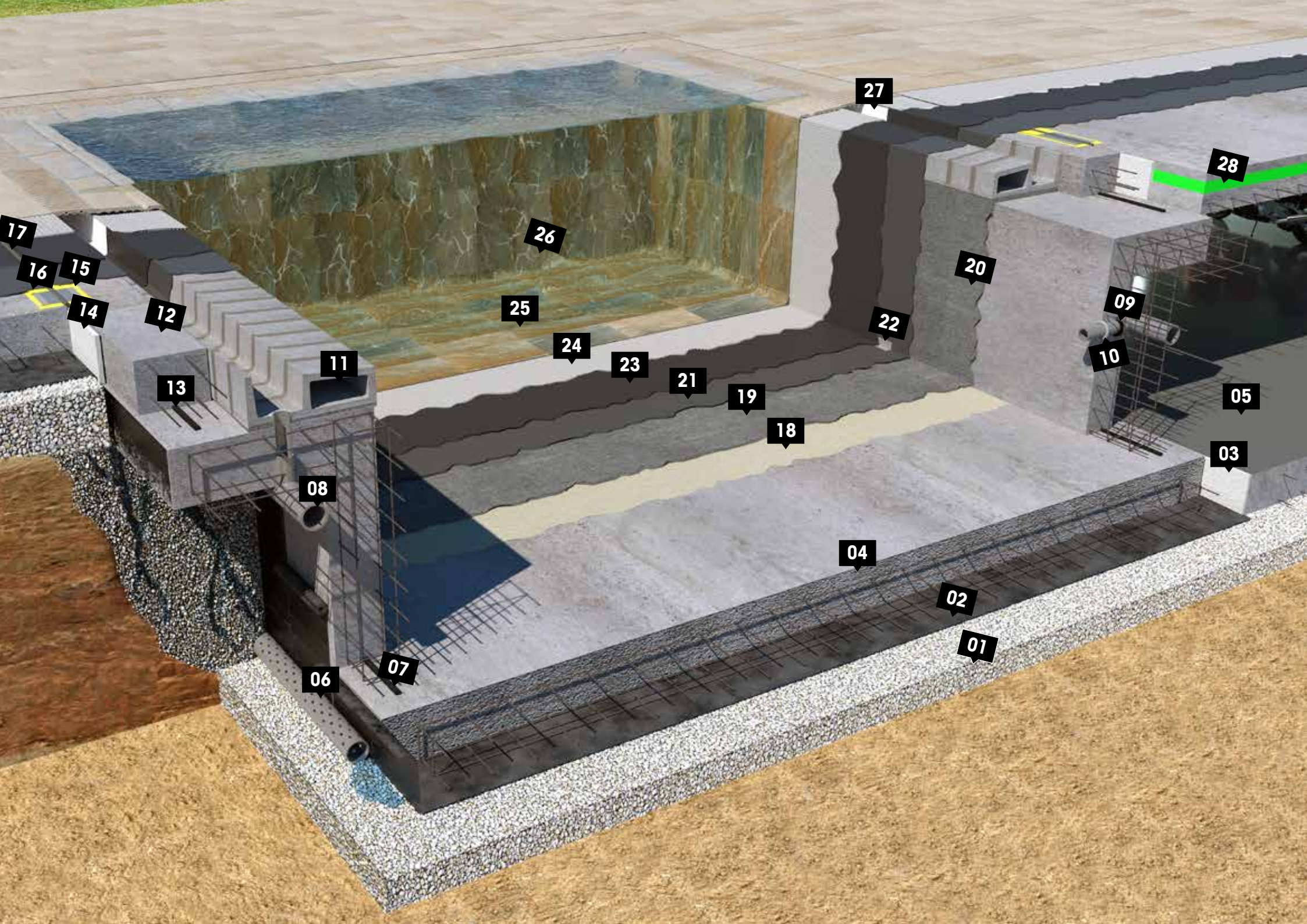
On occasion there may be underground water to take into account. If this water follows a run-off near out structure, it can be subjected to negative pressure from the water table. Being ready for it is the only solution.

Types of concrete

Concrete can be projected or poured into formworks. The structural calculations depending on the type of terrain, the measurements of the pool, the m3 of water, etc., will determine which type of concrete to use and the viability of one construction system or another.

The concrete tank is ultimately responsible for guaranteeing the pool's watertightness and it is therefore imperative that it complies with the existing concrete regulations (UNE-EN 206-1:2008) and that a preliminary study be performed to determine the minimum thickness of the base and walls and the type and sections of reinforcing steel to use.

01	NON-COMPRESSIBLE GRAVEL LAYER
02	**LÁMINA FREÁTICA**
03	POREXPAN IN THE EXPANSION JOINTS BETWEEN BASE SLABS
04	REINFORCED CONCRETE OF THE POOL
05	REINFORCED CONCRETE OF THE PARKING
06	TERRAIN DRAINAGE TUBE
07	**FUGA-STOP 25 X 20 MM** HYDRO-EXPANDING JOINT
08	WATER COLLECTION PIPE FOR OVERFLOW CHANNELS
09	INTERNAL SEALING WITH **FUGA-STOP MINI 20 X 10 MM**
10	EXTERNAL SEALING WITH **IMPRIMACION + SELLADOR S10**
11	COPING WITH **ROSA GRES S9 BLOCKS**
12	WALL BEHIND **THE ROSA GRES S9 BLOCKS**
13	HYDRO-EXPANDING JOINT **FUGA-STOP MINI 20 X 10 MM**
14	POREXPAN IN THE EXPANSION JOINTS BETWEEN BASE SLABS
15	**EPOXICOL** EPOXY ADHESIVE
16	WATERTIGHT EXPANSION JOINT WITH **FIX-TAPE 170 MM**
17	**SELLALASTIC FOAM** ELASTIC JOINT BASE
18	BONDING BRIDGE WITH **PRIMFIX** + Cement
19	**RECRECEM PRE-MIX** MORTAR FOR THE BASE
20	**FIX-REVOCO** MORTAR FOR THE WALLS
21	**HIDROELASTIC** 1ST WATERPROOFING LAYER
22	**BANDA IMPERMEABLE** EXTRA CORNER WATERPROOFING
23	**HIDROELASTIC** 2ND WATERPROOFING LAYER
24	**TECNOCOL GEL** HIGHLY ADHESIVE CEMENT GLUE
25	**CERPOXI** WATERTIGHT AND ACID-RESISTANT JOINT
26	**ROSA GRES** PORCELAIN STONEWARE FOR POOLS
27	**EPOXICOLOR POOL** WATER-AND ACID-RESISTANT PAINT
28	HIGH-DENSITY THERMAL INSULATOR
29	**SELLALASTIC** ELASTIC PUTTY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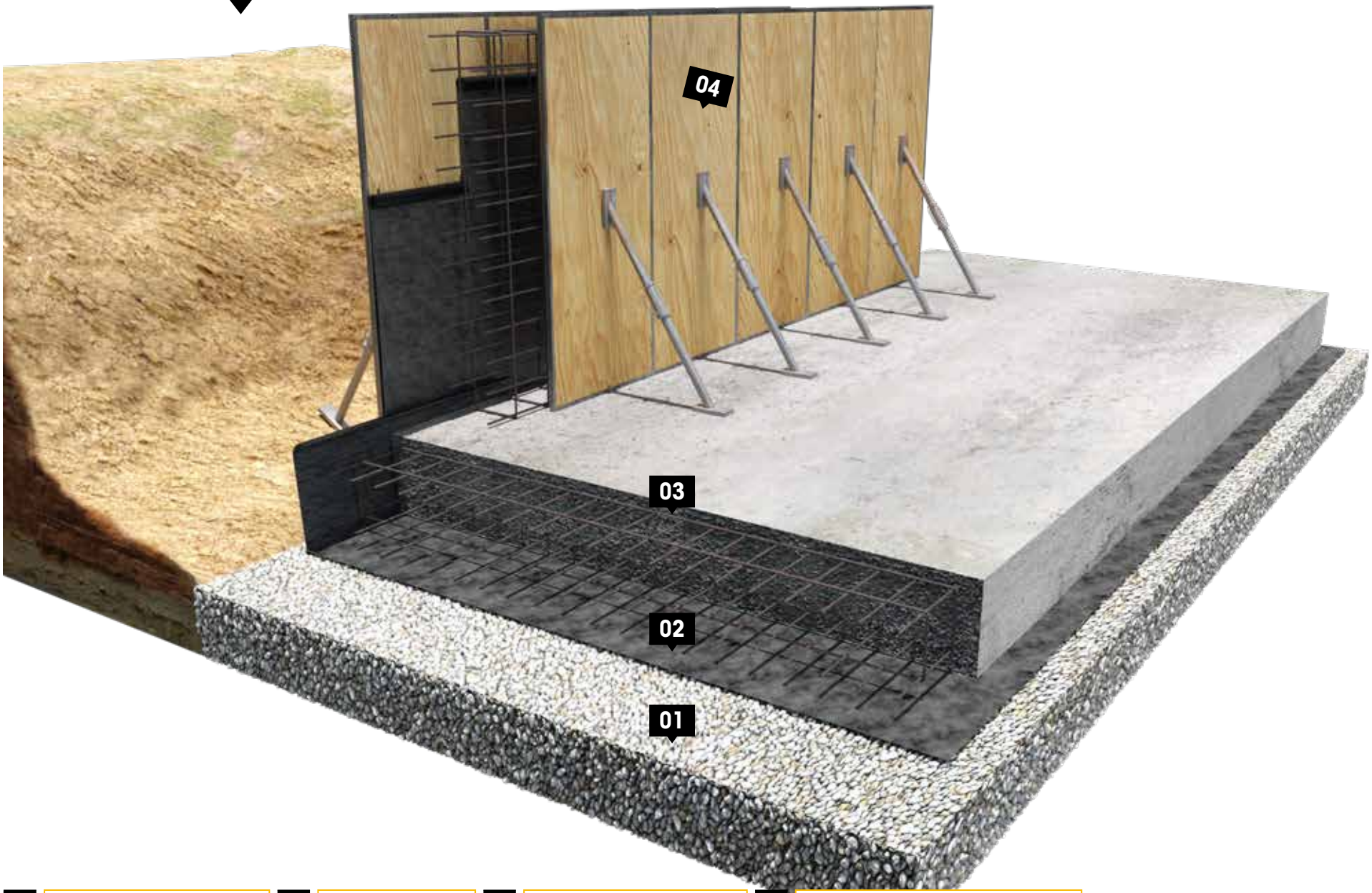
01

SOLUTIONS FOR CONCRETE POOLS

DAMP-PROTECTION SHEET MEMBRANE

How to prevent the negative pressure of the water from affecting a pool



01	NON-COMPRESSIBLE GRAVEL LAYER	02	PHREATIC MEMBRANE	03	POOL'S REINFORCED CONCRETE	04	POOL'S WOODEN/STEEL FORMWORK

PHREATIC MEMBRANE: USE AND PLACEMENT

To avoid negative pressure, we use the LAMINA FREATICA made using co-extrusion.

When put together, its many layers form a multi-level membrane, where each layer serves a different purpose.

The first layer is a flexible polyolefine membrane. It's a completely watertight polymer barrier.

The second layer is a modified polypropylene needle-punch non-woven coverage.
Th third layer is a self-adhesive strip of butyl rubber, highly elastic.

We recommend putting the LAMINA FREATICA in place before starting work on the pool's reinforced concrete, in order to prevent water from leaking into the structure as a result fo the terrain's negative pressure.

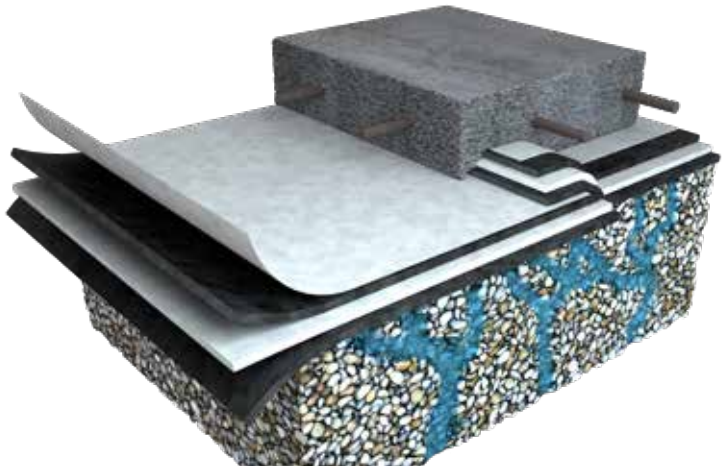
FIXCER SOLUTION

The LAMINA FREATICA's Fixcer has the following technical characteristics:

-It's a waterproof membrane to protect the subterranean concrete structures both in residential and industrial projects.

-It's a membrane suitable for homes, commercial centres, public works and overall any project that requires continuous contact between the membrane and the structure (foundation slabs and walls, pilings, disposable copings). It's also suitable for use in channels, tanks, purification systems or tunnels.

-Most importantly: it's a certified and approved sheet with the CE seal in accordance with DIN EN 13967, which ensures total tightness at negative pressure.



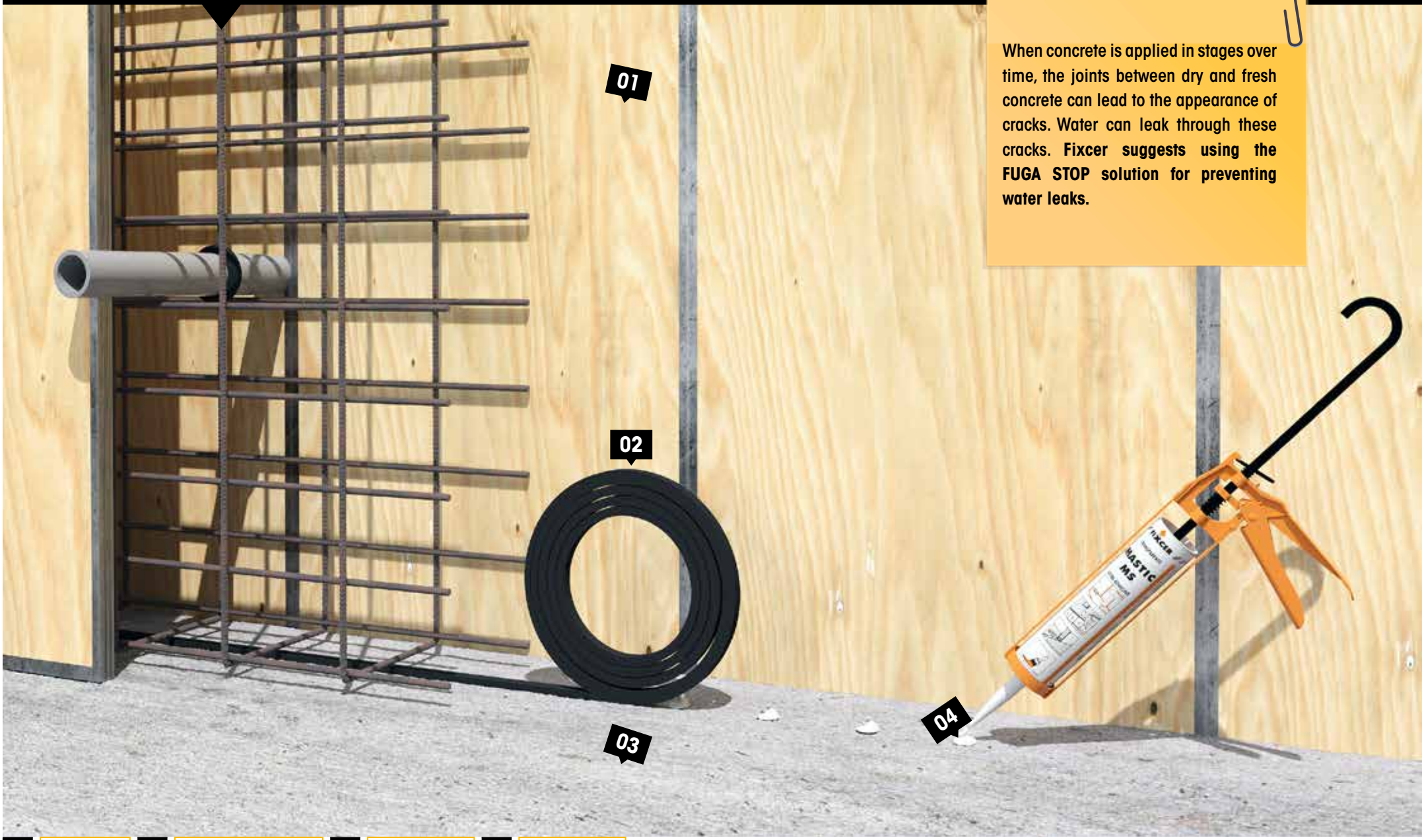
HOW IT WORKS FIX-VENTAJAS

- ✓ Can be applied without using a welding torch.
- ✓ Its watertightness can be tested with simple inspections.
- ✓ High mechanical resistance.
- ✓ High resistance to hydraulic loads.
- ✓ Highly flexible, thus bridging cracks.
- ✓ High chemical resistance against the terrain's natural aggressive agents.
- ✓ Suitable for salt water.
- ✓ Complete adhesion to concrete thanks to the layer of nonwoven fabric.
- ✓ Quick and easy application.

HYDROEXPANSIVE JOINTS

How to seal the joints between dry and fresh concrete

When concrete is applied in stages over time, the joints between dry and fresh concrete can lead to the appearance of cracks. Water can leak through these cracks. **Fixcer suggests using the FUGA STOP solution for preventing water leaks.**



01	FORMWORK	02	FUGA-STOP 25 x 20 mm	03	DRY CONCRETE	04	MASTIC MS

FIXCER SOLUTION

FUGA-STOP 25 x 20 mm

Modified bentonite joint

Its expansion is proportional to the amount of water it receives, thus preventing leaks. The rest of the joint then remains ready for when it comes into contact with water in the future.

MINIMUM COST

MAXIMUM SAFETY

HIGHLY EFFECTIVE LEAK PREVENTION

MASTIC MS

MASTIC MS is the ideal adhesive for a perfect grip using **FUGA-STOP 25 x 20 mm**.

HOW IT WORKS FIX-VENTAJAS

✔ **FUGA-STOP 25 x 20 mm** does not respond to concrete humidity during the formwork stage.

✔ **FUGA-STOP 25 x 20 mm** expands when it comes into direct contact with water on either end and acts only on the area from where the water is coming, sealing the crack.

✔ **FUGA-STOP 25 x 20 mm** offers maximum precision when compared to other joints, which only react to water once, using their full capacity and not only upon the affected area.

APPLICATION

01 Make sure at least 7cm of concrete are covering **FUGA-STOP 25 x 20 mm** all round.

02 Adhere **FUGA-STOP 25 x 20 mm** using **MASTIC MS**.

FUGA-STOP 25 x 20 mm

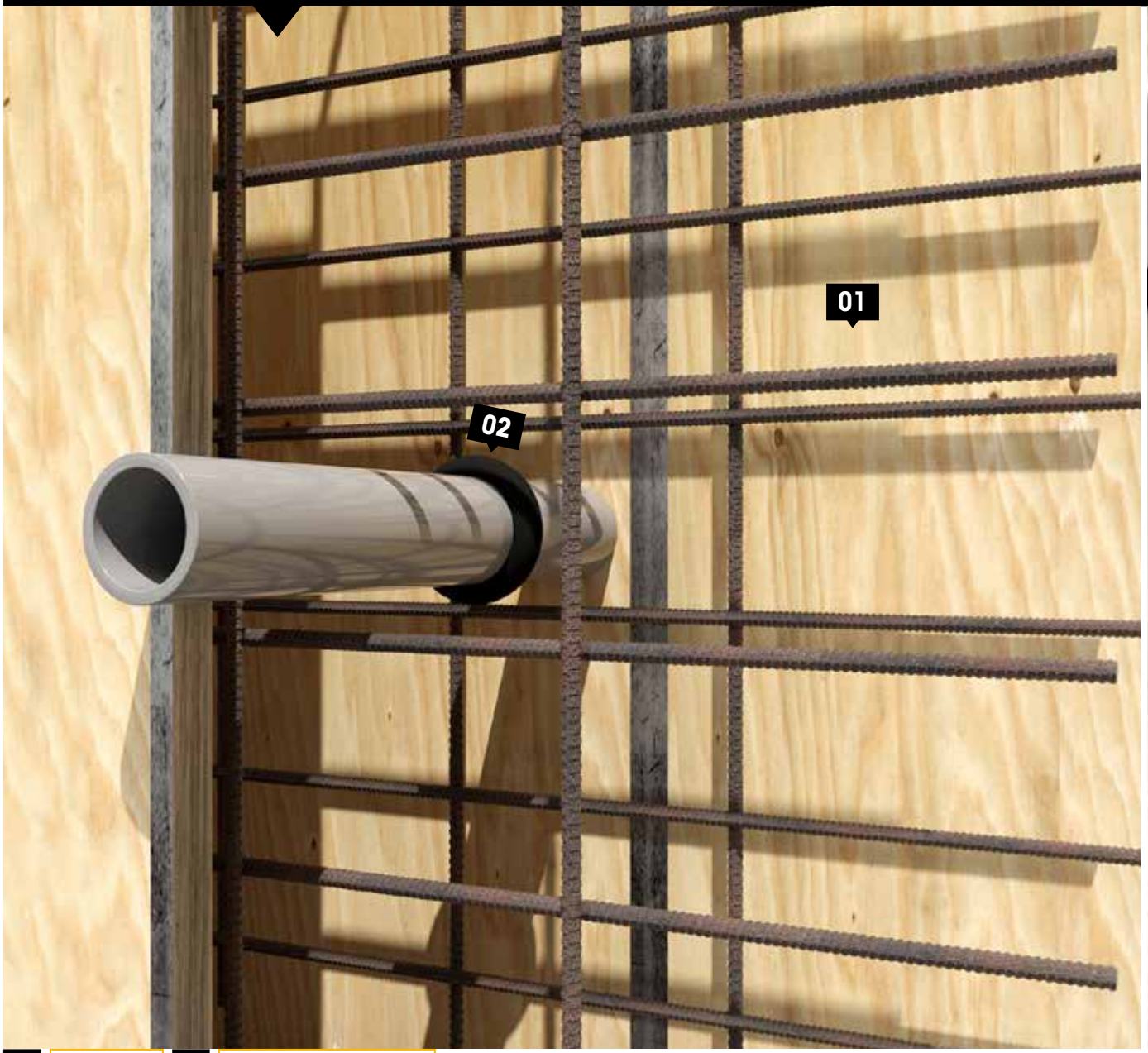
Application of **FUGA-STOP 25 x 20 mm**

FUGA-STOP 25 x 20 mm once in place

> **“FUGA-STOP 25 x 20 mm OFFERS MAXIMUM PRECISION AS IT ONLY ACTS WHERE THE LEAK IS LOCATED”**

INTERNAL SEALING FOR PVC TUBES

How to prevent leaks in tubes, skimmers and drain sumps



If the external sealing of a pool's tubes hasn't been correctly performed, water may leak from the joint between PVC and concrete. Fixcer suggests using **FUGA-STOP MINI 20 x 10 mm** to seal the possible source of the leak.

01 FORMWORK 02 FUGA STOP MINI 20 x 10 mm

FIXCER SOLUTION

FUGA-STOP MINI 20 x 10 mm

Modified bentonite joint

Its expansion is proportional to the amount of water it receives, thus preventing leaks. The rest of the joint then remains ready for when it comes into contact with water in the future.

MINIMUM COST

MAXIMUM SAFETY

HIGHLY EFFECTIVE LEAK PREVENTION

MASTIC MS

MASTIC MS is the ideal adhesive for a perfect grip using **FUGA-STOP MINI 20 x 10 mm.**

HOW IT WORKS FIX-ADVANTAGES

✔ Should water leak from the joint between PVC and concrete, the water will come into contact with **FUGA-STOP MINI 20 x 10 mm** making it expand to seal the possible source of the leak.

"USING FUGA-STOP MINI DELIVERS BETTER RESULTS THAN GLUING AND SANDING THE TUBE"

APPLICATION

01

Warp **FUGA-STOP MINI 20 X 10 mm** like a ring around the tube.

02

Secure **FUGA-STOP MINI 20 x 10 mm** using the special adhesive **MASTIC MS.**

03

Make sure there are at least 4cm of concrete all around **FUGA-STOP MINI 20 x 10 mm**

01

SOLUTIONS FOR CONCRETE POOLS

EXTERNAL SEALING FOR PVC TUBES

How to prevent leaks in tubes, skimmers and drain sumps

When it's not possible to internally seal the PVC tubes we can seal the surface of all the joints. **Fixcer** suggests combining **IMPRIMACION + SELLADOR S10**.

ULTRA ELASTIC

MAXIMUM SAFETY

FIXCER SOLUTION

IMPRIMACIÓN SELLADOR S10

Liquid and transparent polyurethane sticks to absorbent or semi-absorbent surfaces.

SELLADOR S10

Polyurethane filler for ultra-elastic and 100% watertight sealing on all PVC-concrete joints and ABS-concrete joints. Dries quickly at about 1.5mm/24 hours (+20ºC; +65%RH).

HOW IT WORKS FIX-ADVANTAGES

✔ El **SELLADOR S10** is an extraordinarily elastic filler (more than 800%).

✔ It is ideal for absorbing the vibrations of the pool's water pumps.

APPLICATION

01

Use a hammer to open up the area around the tube in the shape of a V.The opening around the tube must be at least 25mm wide and 25mm deep.

02

Apply **IMPRIMACIÓN SELLADOR S10** with a brush. Leave to dry at least 1 hour and not more than 4 hours.

03

Apply **SELLADOR S10** using a designed for this purpose.

04

Apply **SELLADOR S10** On the side of the concrete then apply more **SELLADOR S10** on the side of the PVC.

05

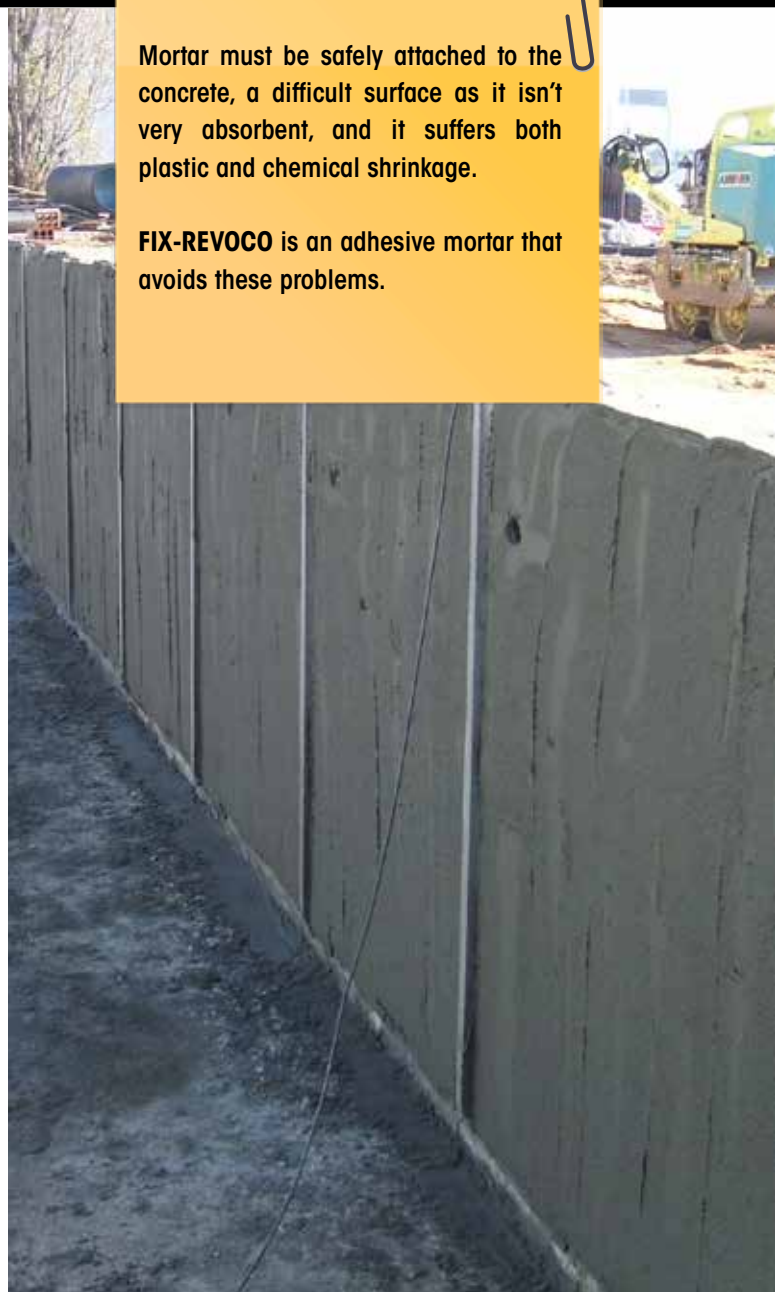
The filler must penetrate deeply and touch the s des of the concrete.

MORTAR FOR WALLS

How to correctly apply mortar to the walls

Mortar must be safely attached to the concrete, a difficult surface as it isn't very absorbent, and it suffers both plastic and chemical shrinkage.

FIX-REVOCO is an adhesive mortar that avoids these problems.



FIXCER SOLUTION

FIX-REVOCO

Adhesive mortar prepared with compensated granulometry sand that doesn't contain expansive sands or clays: it can be applied without primers and without a bonding bridge directly onto the concrete.

FIX-REVOCO PROYECTABLE

Adhesive mortar prepared with compensated granulometry sand. Ideal for high production performance. Applied without primers or bonding bridge.

HOW IT WORKS FIX-ADVANTAGES

✓ Resists the constant presence of humidity thanks ot its compensated granulometry sand.

✓ Dries in less time than most other mortars on the market.

✓ With **FIX-REVOCO** or **FIX-REVOCO PROYECTABLE** one doesn't have to wait 7 days / cm of thickness for it to dry. You can start laying tiles or waterproofing after only 24 hours!

APPLICATION

It is a pre-dosed product, avoiding errors when mixing on site. Its application is like that of traditional mortars and does not require special tools.

MORTAR FOR THE BOTTOM OF THE TANK

How to correctly apply mortar to the bottom of the tank

If the mortar covering the bottom of the tank isn't perfectly applied and stuck to the concrete base, the base may not adhere properly. **RECRECEM PRE-MIX** is the safest and most durable option.

FIXCER SOLUTION

PRIMFIX

Adhesive latex for making bonding bridges before applying **RECRECEM PRE-MIX**.Mix with cement in a proportion of 1:1.

RECRECEM PRE-MIX

Non-adhesive mortar made with compensated granulometry sand
Can be used for making any level of thickness on the bottom of the pool. First apply the bonding bridge **PRIMFIX** + Cement.

HOW IT WORKS FIX-ADVANTAGES

✓ **RECRECEM PRE-MIX** is the ideal mortar for making level bases in pools.

✓ **Resists the constant presence of humidity thanks ot its compensated granulometry sand.**

✓ Dries in less time than most other mortars on the market. With **RECRECEM PRE-MIX** one doesn't have to wait 7 days / cm of thickness for it to dry.You can start laying tiles or waterproofing after only 24 hours!

APPLICATION

01 Always apply a bonding bridge first with **PRIMFIX + Cement** in a proportion of 1:1.

02 Immediately apply pre-dosed mortar **RECRECEM PRE-MIX** previously mixed with water.

SPECIAL FOR POOLS

QUICK DRYING

01

02

4 100% watertight waterproofing systems

THE MOST AFFORDABLE FLEXIBLE SOLUTION
MAXIMUM WATERTIGHTNESS

For concrete pools on stable terrain where there are no vibrations.

HIDROFIX

THE SUPER FLEXIBLE OPTION
MAXIMUM WATERTIGHTNESS

Its high flexibility makes it ideal for areas near roads or high traffic that can cause vibrations.

IMPERTOT

Find the Perfect Solution for your project !

THE SUPER FLEXIBLE AND SUPER ELASTIC SOLUTION

MAXIMUM WATERTIGHTNESS

The most cost-effective solution! Resists and bridges 1.25mm cracks at -5º or 1.07mm cracks at -20ºC.

HIDROELASTIC 1200

MAXIMUM WATERTIGHTNESS, DURABILITY AND CHEMICAL RESISTANCE

MAXIMUM WATERTIGHTNESS

Essential for pools in attics, on unstable or seismic zones, or made with concrete blocks. Resists all present or future structural movements.

LAMINA PROOF

OPTIONS FOR WATERPROOFING + BONDING + GROUTING

The 3 essential steps and customised solutions

zero problems pools

1 WATERPROOFING

1st OPTION	2nd OPTION	3rd OPTION	4th OPTION
HIDROFIX	IMPERTOT	HIDROELASTIC	LAMINA PROOF
FLEXIBLE CEMENTITIOUS SOLUTION	SUPER-FLEXIBLE CEMENTITIOUS SOLUTION	ELASTIC CEMENTITIOUS SOLUTION	ROT-PROOF FILM

2 TILE ADHESIVE

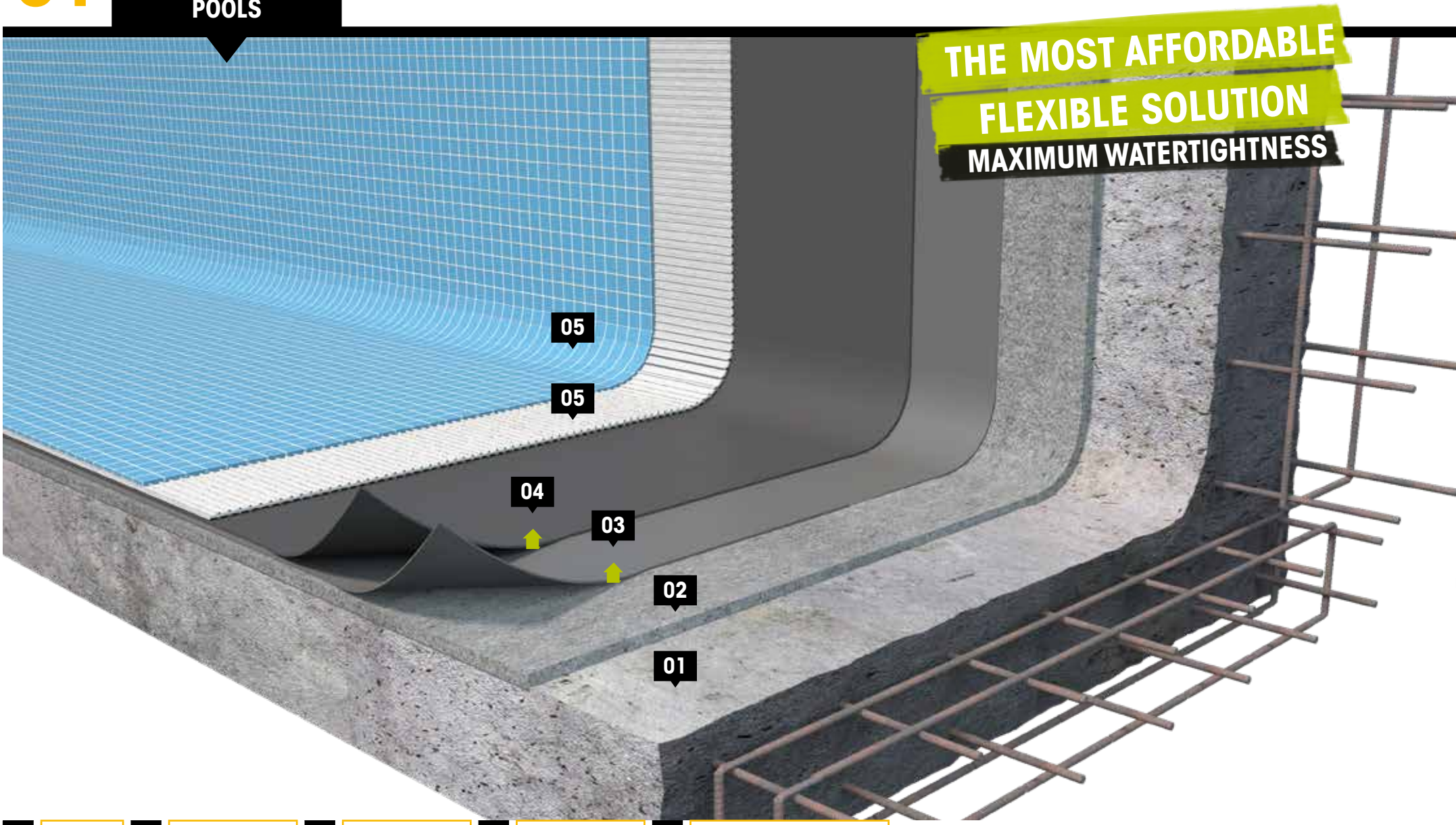
FIXSET GEL	TECNOCOL GEL
HIGH ADHESION ADHESIVE CEMENT	HIGH ADHESION FLEXIBLE ADHESIVE CEMENT

3 GROUTING OF CERAMICS

FIXSET GEL	TECNOCOL GEL	IDEAL POOL	CERPOXI	PROFESSIONAL PX
ECONOMIC SOLUTION	ECONOMIC SOLUTION	MEDIUM RESISTANCE	MAXIMUM CHEMICAL RESISTANCE	MAXIMUM CHEMICAL RESISTANCE + FLUIDITY

01 SOLUTIONS FOR CONCRETE POOLS

WATERPROOFING AND TILE LAYING SYSTEMS



01	CONCRETE or GUNITE	02	MORTAR	03	1ST WATERPROOFING LAYER	04	2ND WATERPROOFING LAYER	05	CEMENT GLUE
			FIX REVOCO (p. 17)		HIDROFIX		HIDROFIX		FIXSET GEL

HIDROFIX

FOR CONCRETE POOLS ON STABLE TERRAIN WITH NO VIBRATIONS

SINGLE-COMPONENT cementicious mortar. Flexible and 100% watertight.

HOW IT WORKS FIX-ADVANTAGES

- ✔ Works with or without fibreglass mesh.
- ✔ Resists positive pressures of up to 3bar and negative pressures of up to 1.5bar.
- ✔ Bridges 0.75mm cracks at -5° C.
- ✔ With **HIDROFIX** he waterproofing doesn't need to be reinforced with fibreglass.

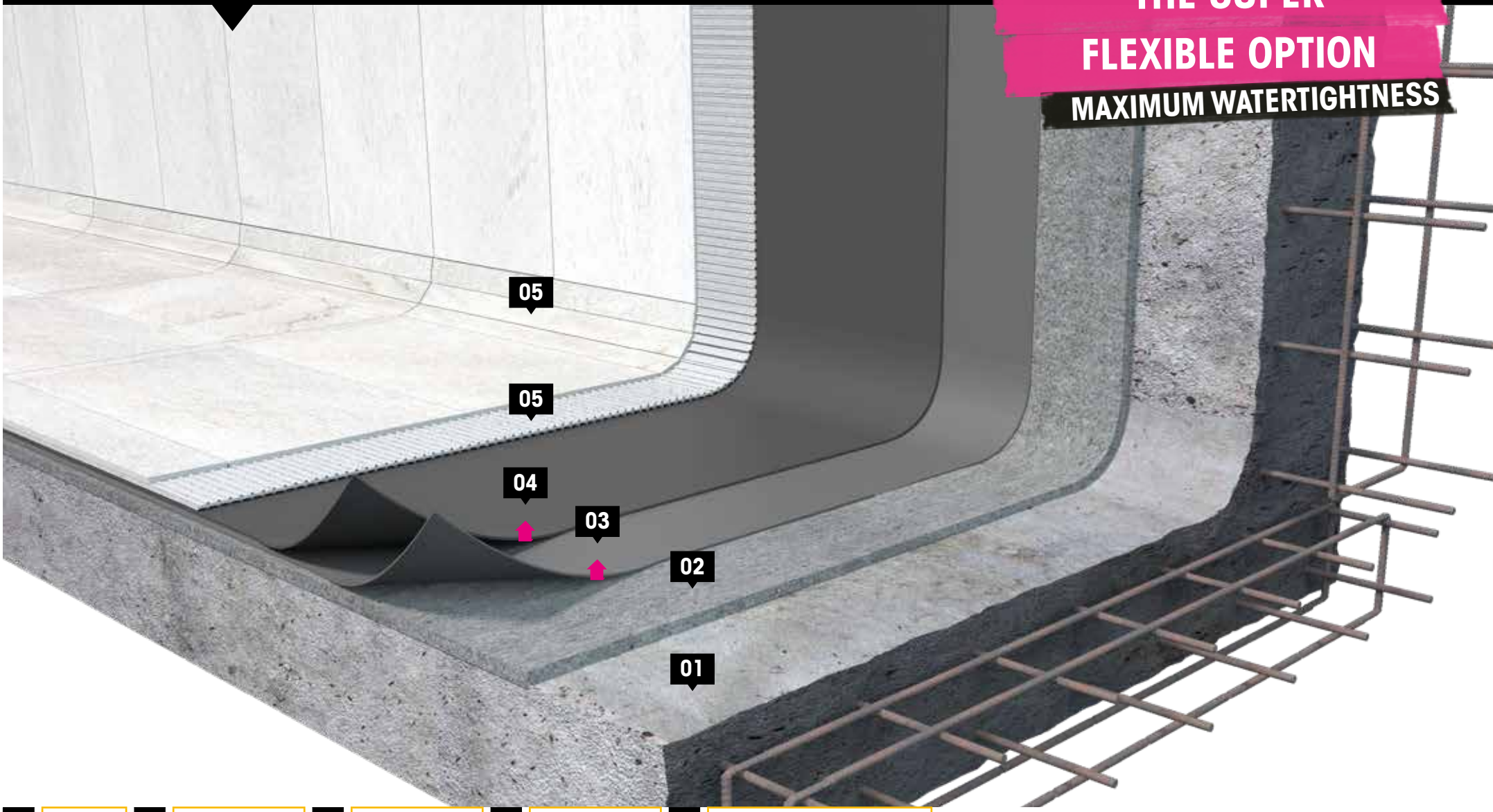
FIXSET GEL

SINGLE-COMPONENT cement glue
with GEL texture for laying glass mosaic or ceramic tiles. It's also ideal for grouting tiles in pools with traditional chlorine chlorination.

WATERPROOFING AND TILE LAYING SYSTEMS

THE SUPER FLEXIBLE OPTION

MAXIMUM WATERTIGHTNESS



01	CONCRETE or GUNITE	02	MORTAR	03	1ST WATERPROOFING LAYER	04	2ND WATERPROOFING LAYER	05	CEMENT GLUE
			FIX REVOCO (p. 17)		IMPERTOT		IMPERTOT		FIXSET GEL

IMPERTOT

FOR POOLS IN AREAS NEAR ROADS OR HIGH TRAFFIC THAT CAN CAUSE VIBRATIONS

Two-component cementicious mortar.
Flexible, 100% watertight.

HOW IT WORKS FIX-ADVANTAGES

✔ The two-component format avoids mistaking dosages on site as the product is completely pre-dosed.

✔ **IMPERTOT** does not need reinforcing with fibreglass mesh.

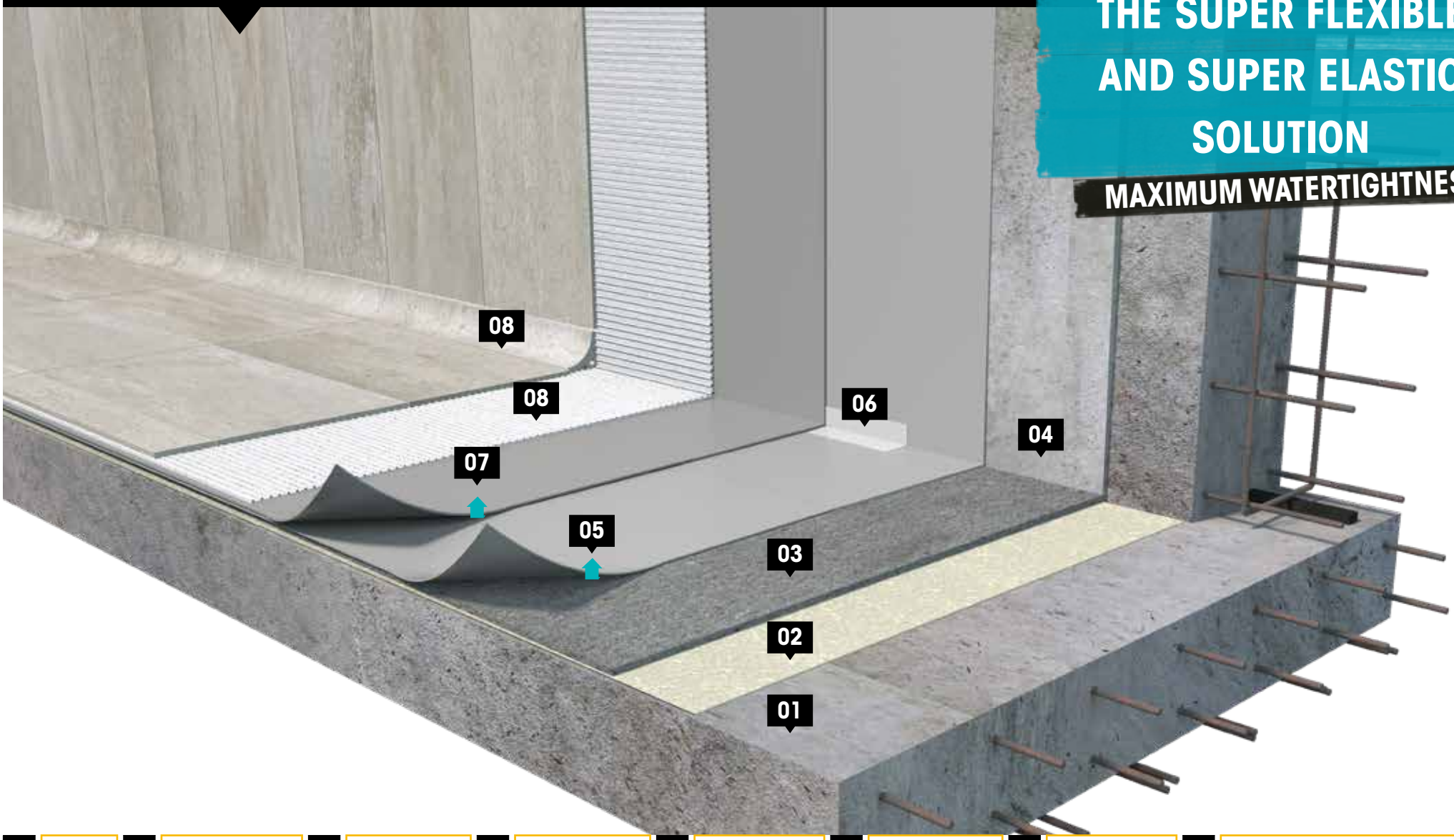
FIXSET GEL

SINGLE-COMPONENT cement glue
with GEL texture for laying glass mosaic or ceramic tiles. It's also ideal for grouting tiles in pools with traditional chlorine chlorination.

WATERPROOFING AND TILE LAYING SYSTEMS

THE SUPER FLEXIBLE AND SUPER ELASTIC SOLUTION

MAXIMUM WATERTIGHTNESS



01	CONCRETE or GUNITE	02	BONDING BRIDGE	03	MORTAR / BOTTOM	04	MORTAR / WALLS	05	1ST WATERPROOFING LAYER	06	REINFORCEMENT STRIP	07	2ND WATERPROOFING LAYER	08	CEMENT GLUE
			PRIMFIX + Cement (p. 19)		RECRECEM PRE-MIX (p. 19)		FIX REVOCO (p. 17)		HIDROELASTIC 1200		BANDA IMPERMEABLE 120/70		HIDROELASTIC 1200		TECNOCOL GEL

HIDROELASTIC 1200

THE MOST COST-EFFECTIVE SOLUTION! RESISTS AND BRIDGES 1.25MM CRACKS AT -5º OR 1.07MM CRACKS AT -20ºC

Waterproofing. **Two-component cementicious** pre-dosed and super elastic.

HOW IT WORKS FIX-ADVANTAGES

- The two-component format avoids mistaking dosages on site as the product is completely pre-dosed.
- Most cost-effective option on the market.

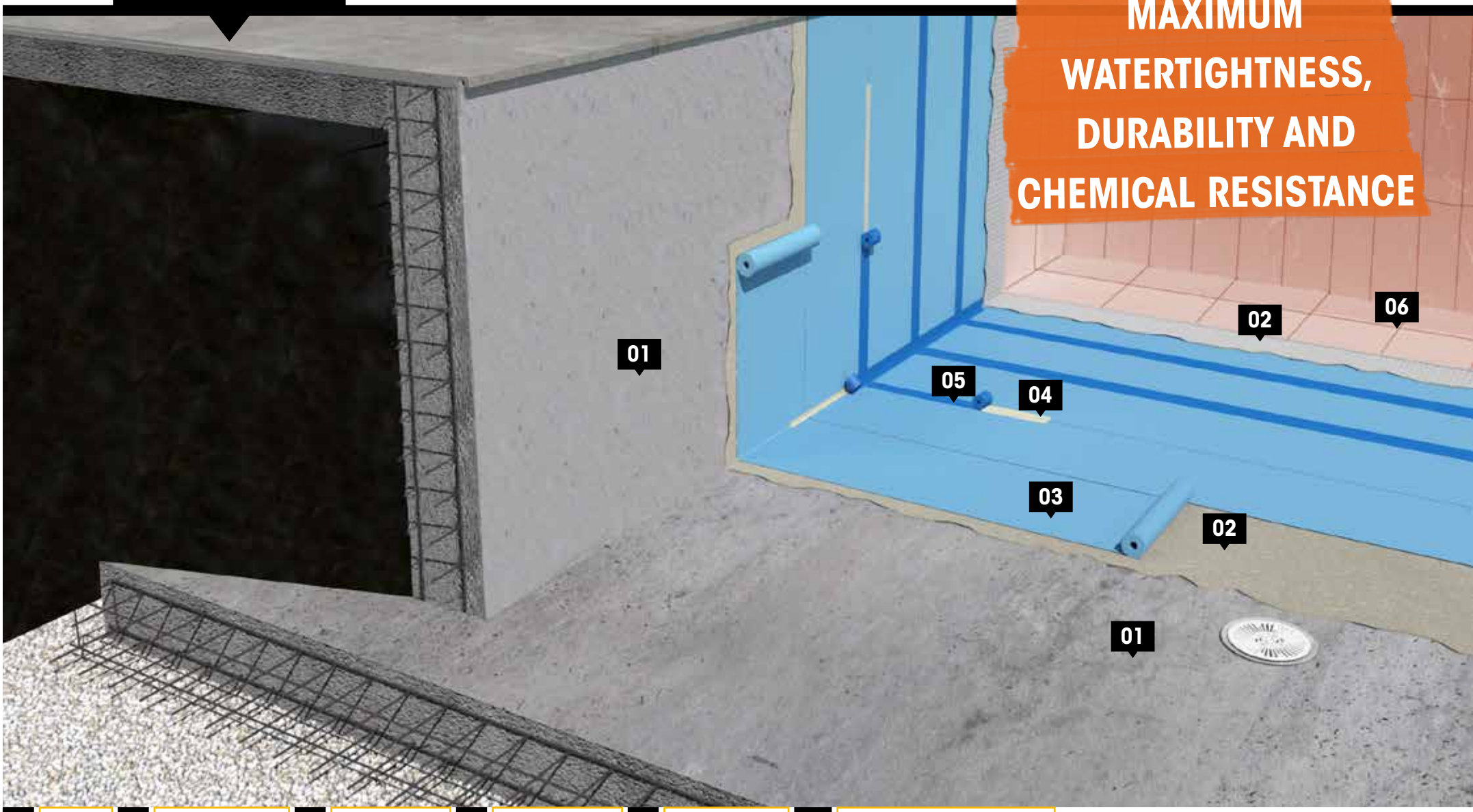
TECNOCOL GEL

HIGHLY ADHESIVE and flexible C2TES1 single-component cement glue with GEL texture for laying glass mosaic or ceramic tiles. It's also ideal for grouting tiles in pools with traditional chlorine chlorination.

01 SOLUTIONS FOR CONCRETE POOLS

WATERPROOFING AND TILE LAYING SYSTEMS

MAXIMUM WATERTIGHTNESS, DURABILITY AND CHEMICAL RESISTANCE



01	02	03	04	05	06
CONCRETE or GUNITE	CEMENT GLUE	WATERPROOFING	EPOXY ADHESIVE	OVERLAPS	GROUTING EPOXY MORTAR:
	TECNOCOL GEL	LAMINA PROOF	EPOXICOL	BANDA SOLAPES	CERPOXI or PROFESSIONAL PX

WATERPROOFING

LAMINA PROOF

ESSENTIAL FOR POOLS IN ATTICS, ON UNSTABLE OR SEISMIC ZONES, OR BUILT WITH CONCRETE BLOCKS

Watertight, semi-elastic PVC sheet for on-site waterproofing

HOW IT WORKS FIX-ADVANTAGES

- ✓ 100% watertight and semi-elastic solution.
- ✓ Bridges even support cracks.
- ✓ Ideal for pools in attics and/or pools with multiple water leaks.
- ✓ The joints between different sheets are easily sealed with EPOXICOL.
- ✓ Easily glue ceramics using only cement glue.

LAYING CERAMIC OR MOSAIC TILES

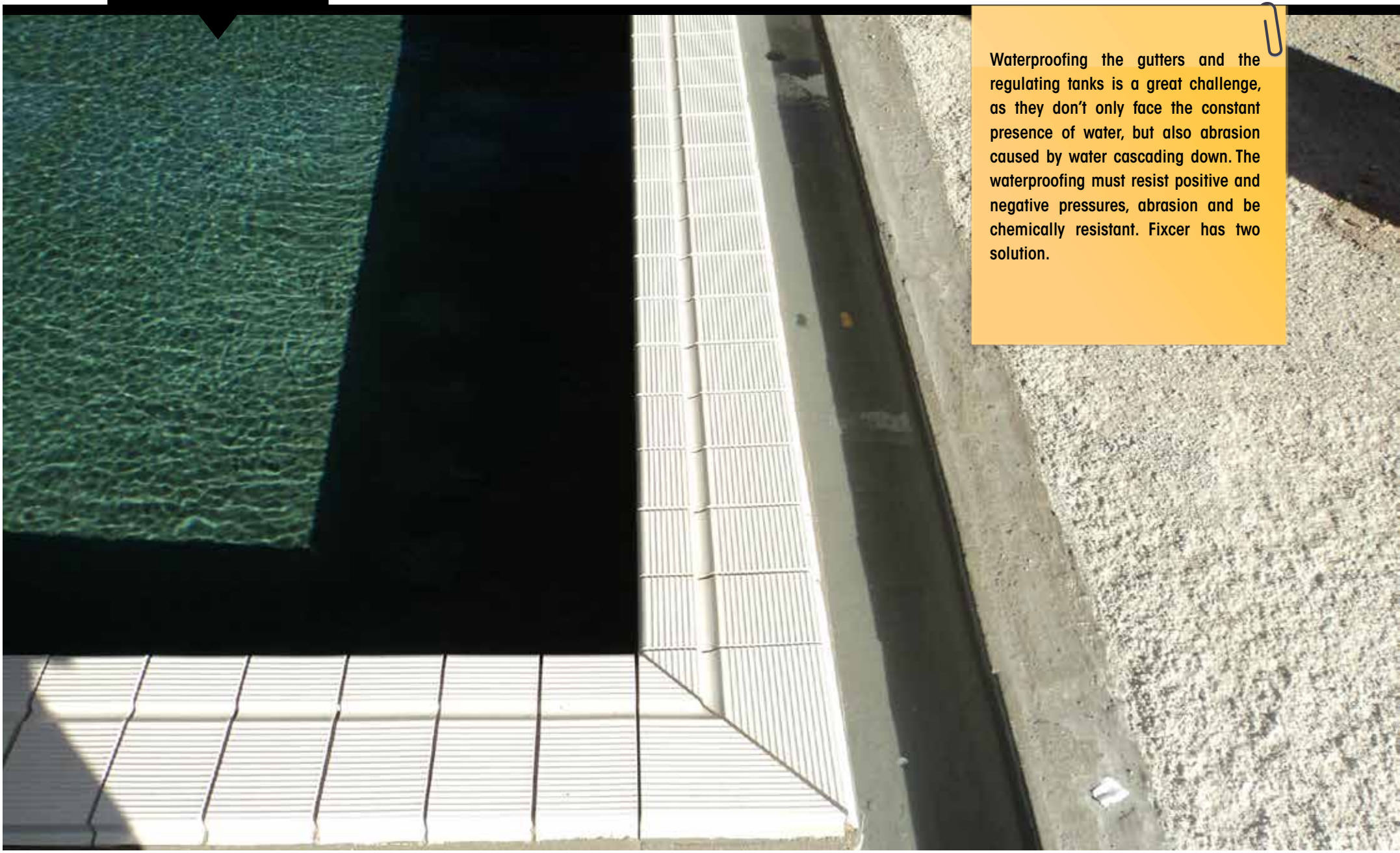
TECNOCOL GEL

HIGHLY ADHESIVE and flexible

C2TES1 single-component cement glue with GEL texture for laying glass mosaic or ceramic tiles. It's also ideal for grouting tiles in pools with traditional chlorine chlorination.

GUTTERS AND REGULATING TANKS

How to waterproof gutters and regulating tanks and make them 100% watertight



Waterproofing the gutters and the regulating tanks is a great challenge, as they don't only face the constant presence of water, but also abrasion caused by water cascading down. The waterproofing must resist positive and negative pressures, abrasion and be chemically resistant. Fixcer has two solution.

FLEXIBLE FIXCER SOLUTION

HIDROFIX

DOES NOT REQUIRE FIBREGLASS MESH

Single-component cementicious mortar. Flexible and 100% waterproof.

HOW IT WORKS **FIX-ADVANTAGES**

- ✓ Works with or without fibreglass mesh.
- ✓ Resists positive pressures of up to 3 bar and negative pressures of up to 1.5 bar.
- ✓ Bridges 0.75mm cracks at -5° C.
- ✓ Its single-component format makes it easy to adapt the mixing water to the weather conditions during the application process.

SUPER-FLEXIBLE FIXCER SOLUTION

IMPERTOT

DOES NOT REQUIRE FIBREGLASS MESH
PRE-DOSED

Two-component cementicious mortar. Super-flexible, 100% waterproof

HOW IT WORKS **FIX-ADVANTAGES**

- ✓ Works with or without fibreglass mesh.
- ✓ Highly flexible waterproofing.
- ✓ Resist positive pressures of up to 3bar and negative pressures of up to 1.5bar.
- ✓ Bridges 0.75mm cracks at -5ºC.
- ✓ The pre-dosed two-component format prevents dosage errors on site.

COMPLEMENTARY PRODUCT

EPOXICOLOR POOL

PRE-DOSED IN WHITE

AFTER HIDROFIX OR IMPERTOT IT'S THE PERFECT ACID-RESISTANT PROTECTION FOR WATERPROOFING

Reactive EPOXY paint.

HOW IT WORKS **FIX-ADVANTAGES**

- ✓ Liquid, pre-dosed paint.
- ✓ Fully anti-sag paint.
- ✓ Easy application with a short nap roller.
- ✓ With a minimum of two coats, we achieve a high chemical resistance.

SEALING JOINTS

Why is grouting the most important step?

CONTROLLING THE WATER'S PH LEVELS

Joints are in contact with water. Joints suffer the chemical attacks of pH controllers and algaecides and even salt water corrosion. That is why it's important to choose the right type of joint for the water to which it will be exposed.

Pool water's correct pH (neutral) should be somewhere between 7.0 and 7.2. If the pH rises, chlorination stops working as well as it should; the water turns alkaline and fills with algae and excessive amounts of lime. If the pH drops, it turns acid, irritating the skin, eyes and mucous membranes of its users. If the acidity is notable (pH drops to 5.0 or below), the cement in the joints and the metals suffer corrosion. Acid water attacks cement mortar joints. That is why we always recommend using an acid-resistant material for your pool's joints.

MAIN WATER TREATMENT SYSTEMS

Chlorination

Chlorine is introduced to the pool's water in gaseous, liquid, granulated or capsule form for the chlorine to disinfect the water. The pool's pH levels must be controlled with chemical products.

Salt water chlorination

Common salt (sodium chloride) is introduced to the pool and using an electric device the sodium separates from the chlorine. This way, the chlorine disinfects the water and then bonds again with the sodium, repeating the cycle indefinitely. The concentration of salt in the water is 4-6 gr/lt. The pool's pH levels must be controlled with chemical products.

Ozonation

Ozone is introduced to the pool's water. Ozone is a disinfecting agent that prevents the formation of harmful bioproducts such as chloramines. Ozone is produced using an ozone lamp.

When treating the water with ozone, one must complement it with an additional water treatment system. There are two possibilities: chlorine, using 5-10% of the amount used in the traditional method and controlling the pH level; or copper-silver ionisation.

Copper-silver ionisation

Silver ions are produced to act as algaecides, disinfectants and flocculants, providing the water with a very clear transparency and reducing the consumption of chlorine and chemical products. This system complements but **does not replace the previously mentioned water treatment systems.**

Salt water chlorination + copper-silver ionisation

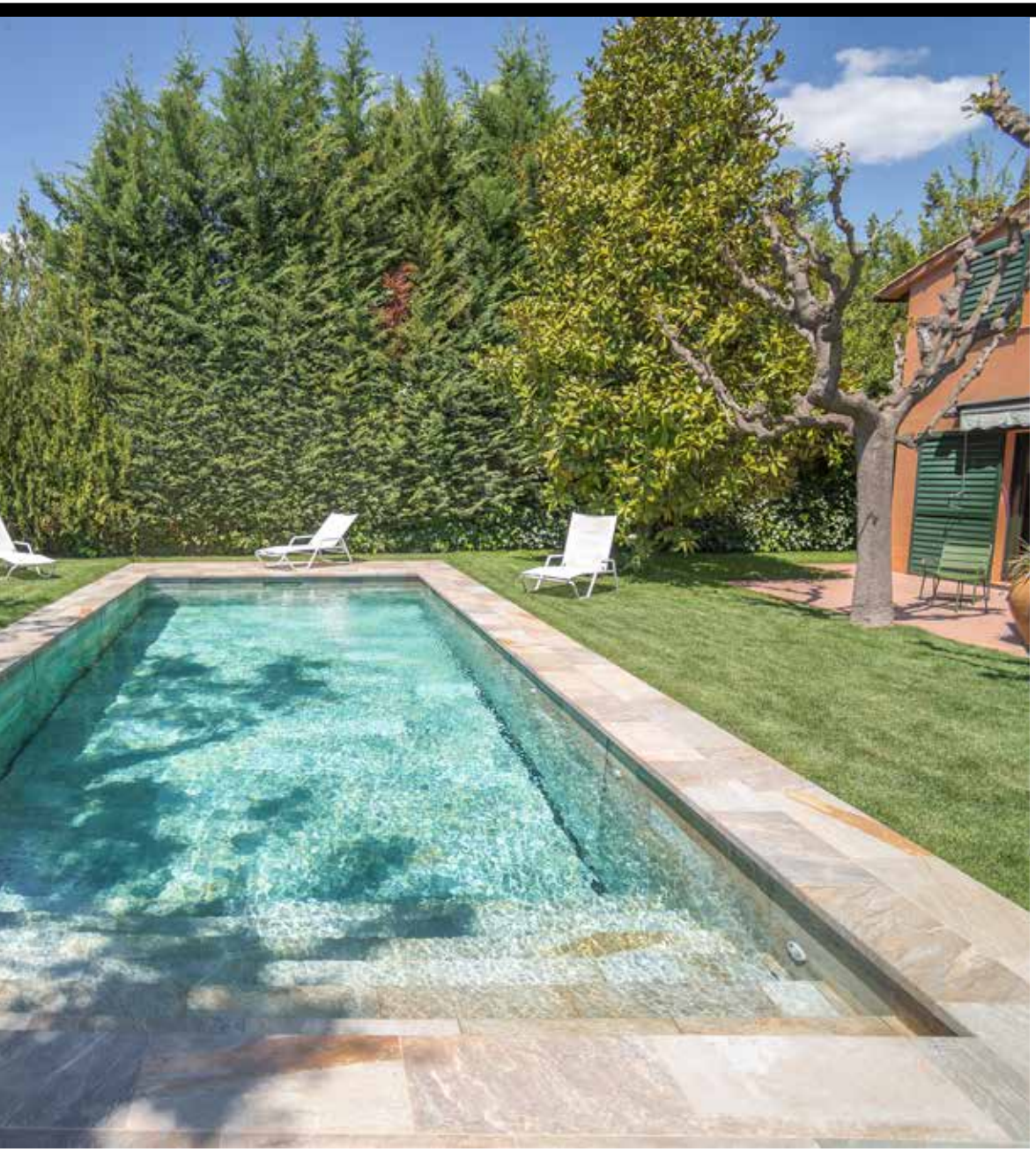
The pool's pH levels must be controlled using chemical products.

Ozonation + chlorination

The pool's pH levels must be controlled using chemical products.

Ozonation + copper-silver ionisation

The pool's pH levels don't have to be controlled.



HOW TO CHOOSE: CEMENT OR EPOXY JOINTS

Fixcer manufactures cement-based and epoxy-based grouting products.

All Fixcer grouting products can be used for both traditionally chlorinated and saline chlorinated pools.

In order to make the best decision, it is best to understand the key differences between cement-based and epoxy-based products.

COMPARISON OF GROUTING PRODUCTS	
CEMENT-BASED GROUTING	**EPOXY-BASED GROUTING**
It is more economical	Requires more investment
Needs more maintenance	Less maintenance required
It is a sufficient grouting for pools with a traditional purification system	It is the optimal grouting for pools with traditional purification systems
It can be used for salt purification but the optimal recommended product is epoxy grout	It is the recommended grouting for saline purification pools
Easier and faster to implement	Application requires professional workmanship
It is the ideal grout for workers who are allergic to epoxy	The use of gloves and safety goggles is essential for its application

FIXCER SOLUTION

IDEAL POOL

Resistant to weak acids

HOW IT WORKS FIX-ADVANTAGES

- Health-friendly mortar based on special hydraulic binders.
- Available in 8 pre-dosed colours.
- Wear resistant. Stain and efflorescence free colours.
- Fast-setting: easy application, cleaning and maintenance

APPLICATION

01 It is essential to clean all joints before applying the product.

02 Mix IDEAL POOL with 25% clean water. Leave to stand for 2 minutes. Stir to obtain a uniform mass ready for application.

03 Fill the joints with sufficient pressure; immediately collect all the excess.

04 When the surface of the joints becomes opaque (15-30 minutes), finish the surface with a slightly damp sponge.

AVAILABLE COLOURS

CEMENTITIOUS GROUTS

00 Blanco
01 Beige
08 Gris claro
09 Gris cemento
10 Antracita
11 Negro
46 Piedra
48 Marrón arena

8 COLOURS

FIXCER SOLUTION

CERPOXI

Three-component acid-resistant epoxy mortar for grouting.

ACID-RESISTANT

HOW IT WORKS FIX-ADVANTAGES

- Available in 26 pre-dosed colours, ideal for grouting chlorinated and salt water chlorinated pools.
- 100% waterproof and watertight.
- Optimal chemical resistance and high mechanical resistance.

for

CHLORINATED WATER AND SALT WATER CHLORINATION

MAXIMUM DURABILITY

APPLICATION

01 All joints must be washed before applying the product.

02 The product should ideally be mixed at +20ºC. At lower temperatures, submerge the bottles in hot water. Mix the two liquid parts and then add the powder.

03 Apply **CERPOXI** to completely fill in the joints.

04 Immediately remove and clean the leftover grouting.

05 **Wait AT LEAST 7 days before filling the pool with water!** The joint must be completely dry.

AVAILABLE COLOURS

EPOXY GROUTS

00 Blanco
02 Beige oscuro
03 Beige natural
04 Marrón claro
08 Gris claro
09 Gris cemento
10 Antracita
11 Negro
14 Verde agua
15 Verde ácido
16 Verde giada
30 Translúcido
70 Amarillo oscuro
71 Ocre
72 Tierra
73 Rojo oscuro
74 Caramelo
75 Chocolate
76 Verde Oliva
77 Esmeralda
78 Azul celeste
79 Azul marino
82 Elondo
83 Mongoy
84 Cerezo claro
85 Arce

FIXCER SOLUTION

PROFESSIONAL PX

Three-component acid-resistant epoxy mortar for laying tiles and grouting.

GLUE + GROUT

HOW IT WORKS FIX-ADVANTAGES

- Available in 26 pre-dosed colours, ideal for grouting chlorinated and salt water chlorinated pools.
- 100% waterproof and watertight.
- Optimal chemical resistance and high mechanical resistance.
- Liquid consistency with no running whatsoever.

for

CHLORINATED WATER AND SALT WATER CHLORINATION

MAXIMUM DURABILITY

APPLICATION

01 All joints must be washed before applying the product.

02 The product should ideally be mixed at +20ºC. Al lower temperatures, submerge the bottles in hot water. Mix tho liquid parts and then add the powder.

03 Apply **PROFESSIONAL PX** to completely fill in the joints.

04 Immediately remove and clean the leftover grouting.

05 **Wait AT LEAST 7 days before filling the pool with water!** The joint must be completely dry.

AVAILABLE COLOURS

00 Blanco
02 Beige oscuro
03 Beige natural
04 Marrón claro
08 Gris claro
09 Gris cemento
10 Antracita
11 Negro
14 Verde agua
15 Verde ácido
16 Verde giada
30 Translúcido
70 Amarillo oscuro
71 Ocre
72 Tierra
73 Rojo oscuro
74 Caramelo
75 Chocolate
76 Verde Oliva
77 Esmeralda
78 Azul celeste
79 Azul marino
82 Elondo
83 Mongoy
84 Cerezo claro
85 Arce

02

SOLUTIONS FOR POLYESTER POOLS

HOW TO RENEW YOUR POLYESTER POOL

How to permanently lay ceramic or mosaic tiles on polyester with fibreglass

Polyester is stiff and flexible at the same time, it has low absorption, its surface is smooth, and it can even present osmosis phenomena. It's by no means a 'simple' support.

FIXCER SOLUTION

PROFESSIONAL PX

100% watertight acid-resistant epoxy mortar **PROFESSIONAL PX** mortar is pre-dosed and available in 26 colours.

26 COLOURS!

RENEWING POOLS SAFELY AND WITHOUT LARGE CONSTRUCTIONS

See PROFESSIONAL PX's available colours on p. 37

HOW IT WORKS FIX-ADVANTAGES

PROFESSIONAL PX has a liquid consistency with no running whatsoever, ideal for laying and grouting glass mosaic or ceramic tiles on polyester supports.

APPLICATION

Before you begin: Preparing the support is as important as the product itself. It's essential there be no leftover dust from the sanding. **Dust is an adhesive's number one enemy.**

Sand down.

Clean with transparent acetone.

Vacuum.

Place and grout the ceramic or the mosaic tiles.

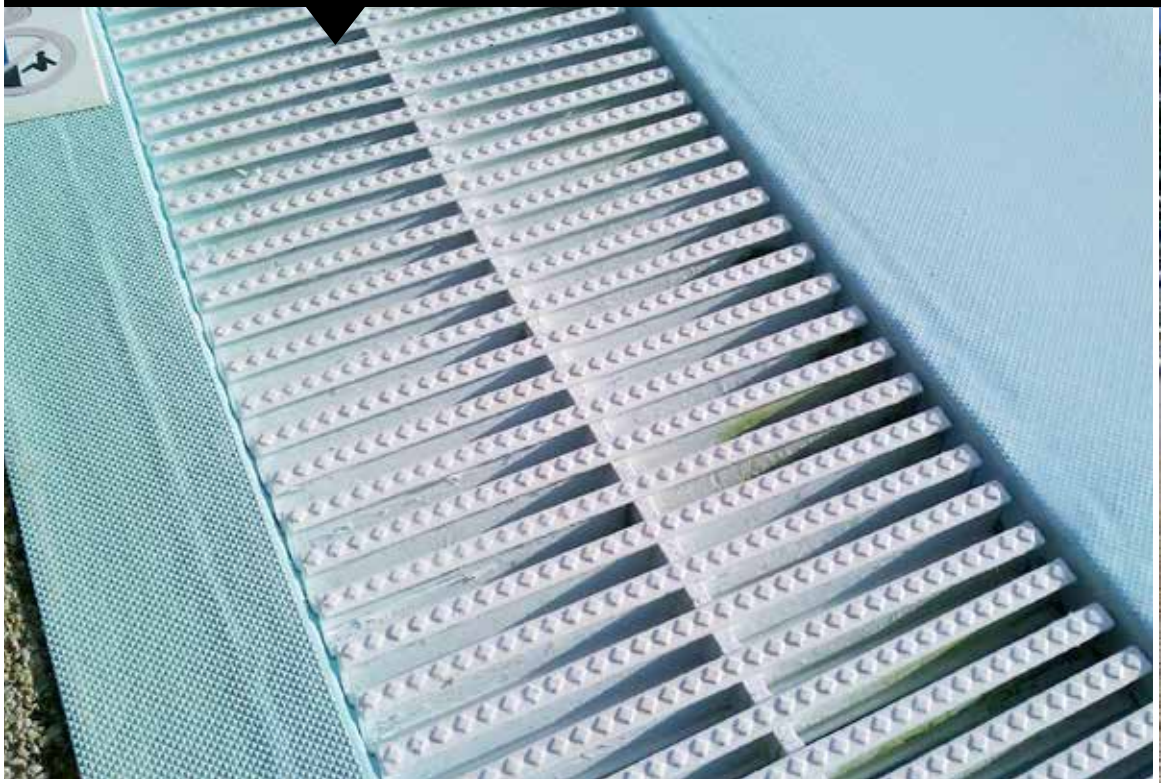
> "PROFESSIONAL PX GUARANTEES MAXIMUM ADHERENCE AND CHEMICAL RESISTANCE ON POLYESTER"

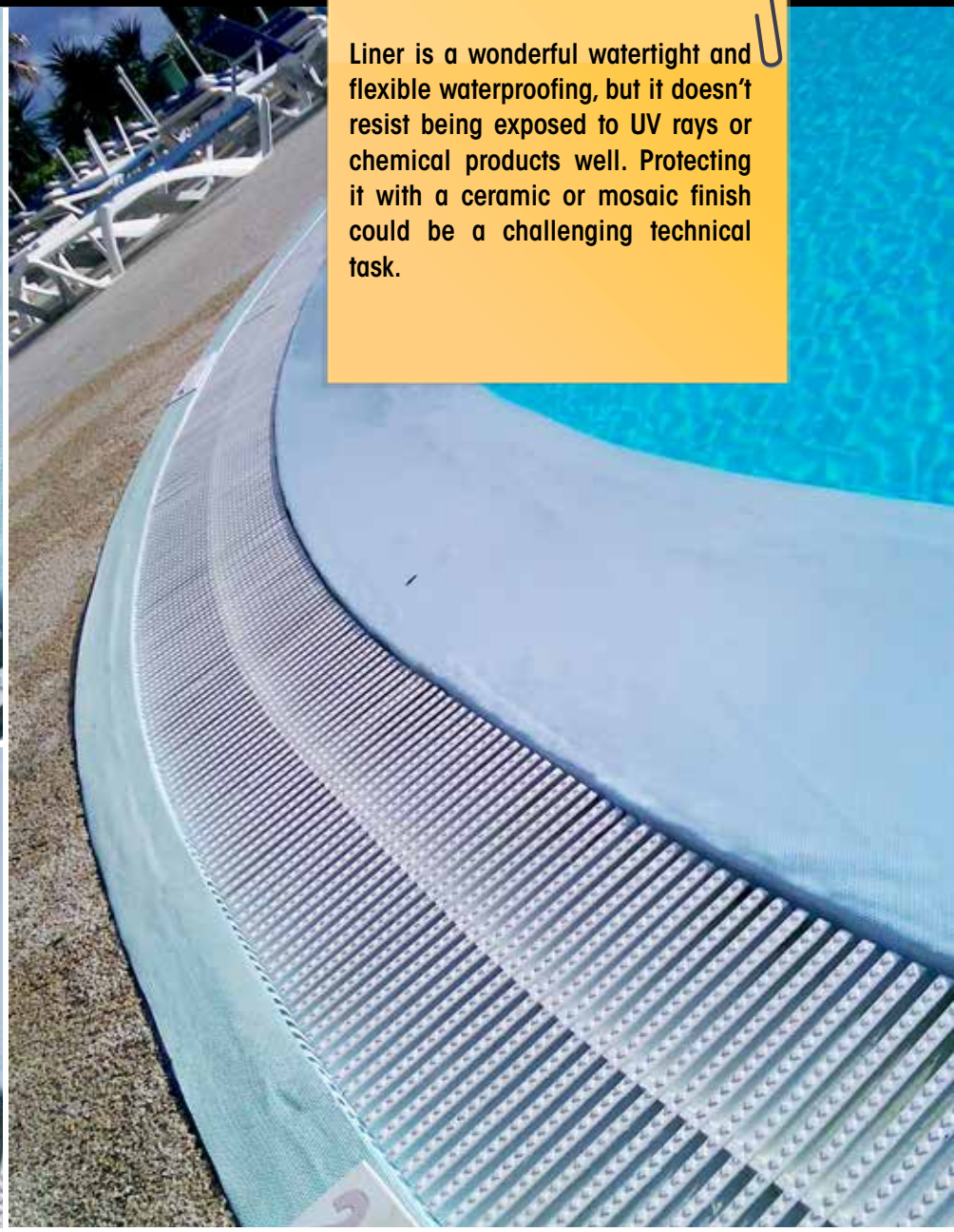
02

SOLUTIONS FOR LINER POOLS

HOW TO RENEW YOUR LINER POOL

How to lay ceramic or mosaic tiles on a permanently attached PVC liner





Liner is a wonderful watertight and flexible waterproofing, but it doesn't resist being exposed to UV rays or chemical products well. Protecting it with a ceramic or mosaic finish could be a challenging technical task.

FIXCER SOLUTION

ELASTICER

Hybrid epoxy-polyurethane adhesive available in three textures: normal, liquid and thick layer. Pre-dosed, ultra-elastic and adhesive product for laying ceramic tiles on PVC after previously priming with **PRIMER** for **ELASTICER**.

COMPLEMENTARY PRODUCTS

PRIMER PARA ELASTICER

CERPOXI

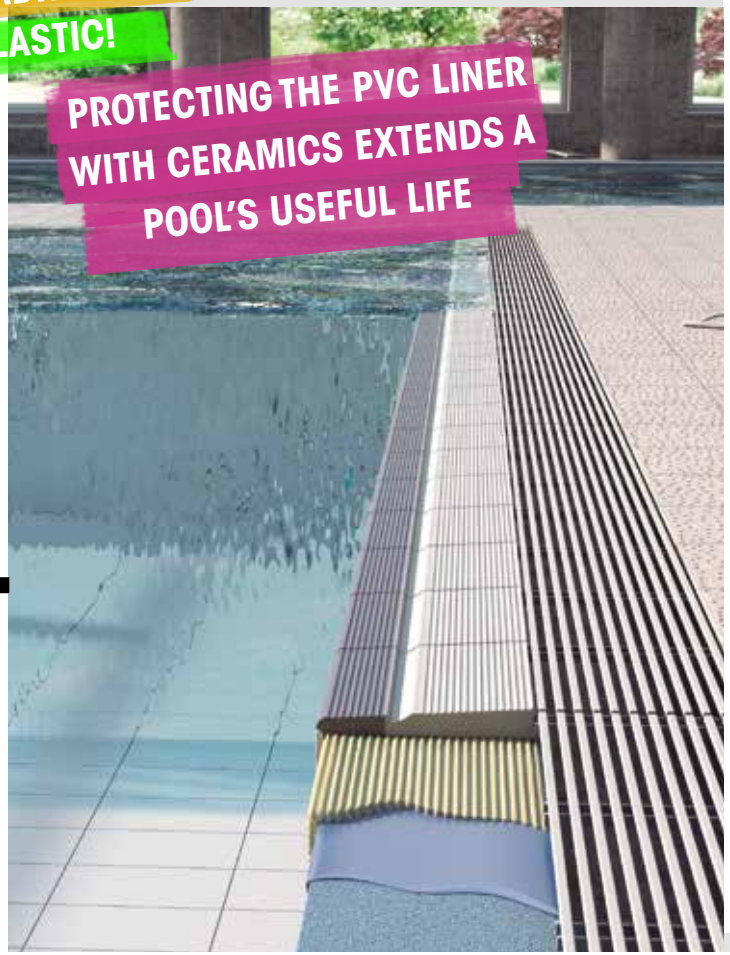
PROFESSIONAL PX

HOW IT WORKS FIX-ADVANTAGES

The epoxydic component makes **ELASTICER highly adhesive** and the polyurethane component makes it **very elastic.** That's why it is the ideal adhesive for laying tiles on PVC or on any other kind of support that may be subjected to vibrations.

HIGHLY ADHESIVE!

SUPER ELASTIC!



PROTECTING THE PVC LINER WITH CERAMICS EXTENDS A POOL'S USEFUL LIFE

APPLICATION

01

Apply **PRIMER ELASTICER** with a cloth, rub, leave to dry.

02

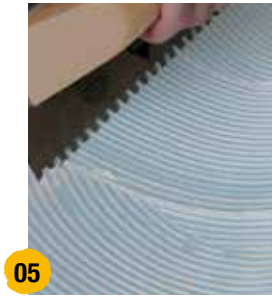
Prepare the 3-component **ELASTICER**.

03

Mix the 2 liquids of the 3-component **ELASTICER**.

04

Add the 3-component's powder to the liquid and mix.



05

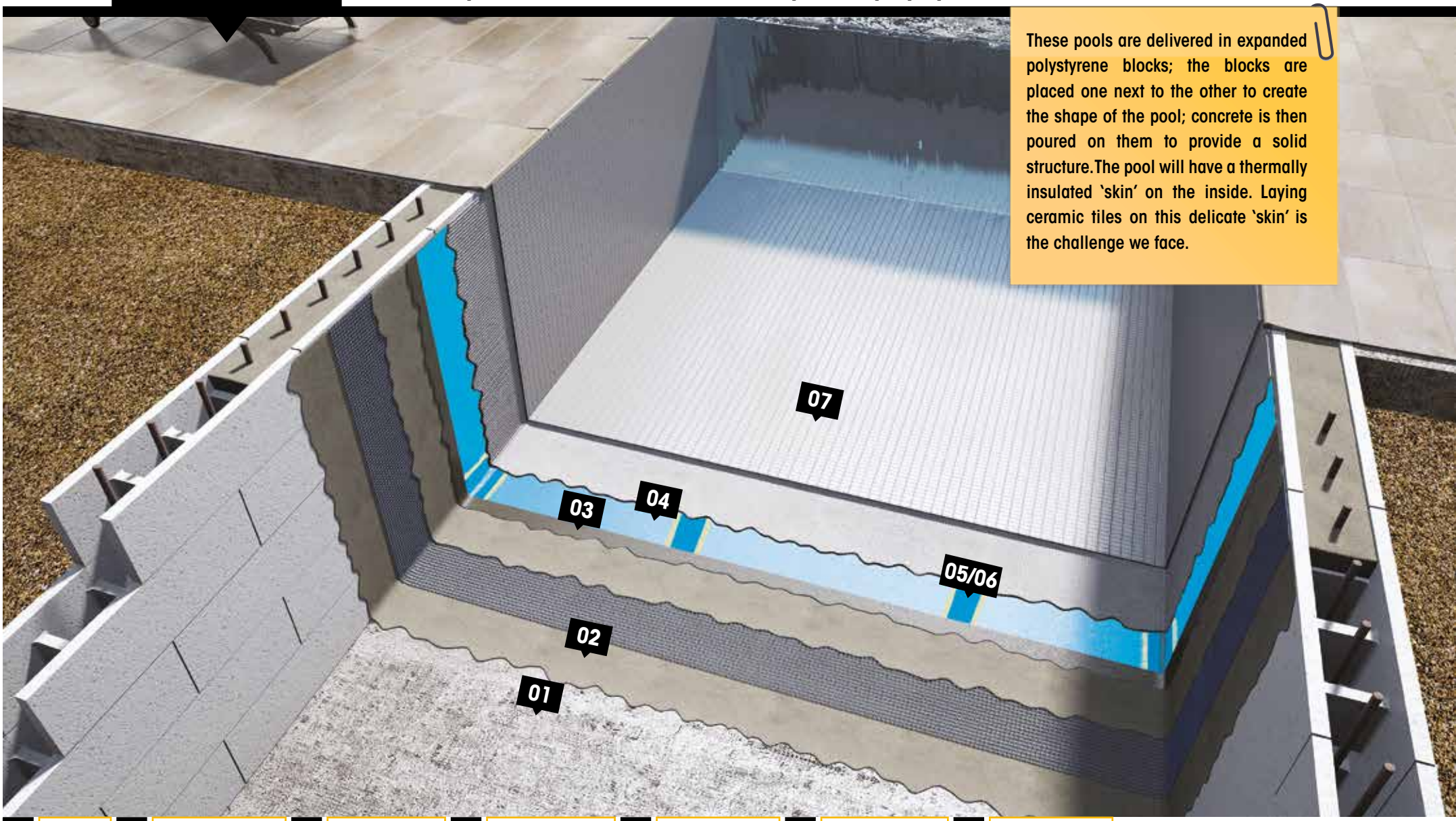
Lay the ceramic or mosaic tiles using **ELASTICER**.

06

Grout the ceramic tiles with **CERPOXI** or **PROFESSIONAL PX**.

HOW TO RENEW YOUR EXPANDED POLYSTYRENE POOL

How to lay ceramic or mosaic tiles on expanded polystyrene



These pools are delivered in expanded polystyrene blocks; the blocks are placed one next to the other to create the shape of the pool; concrete is then poured on them to provide a solid structure.The pool will have a thermally insulated 'skin' on the inside. Laying ceramic tiles on this delicate 'skin' is the challenge we face.

01	02	03	04	05	06	07
CONCRETE or GUNITE	PREVIOUS LAYER	CEMENT GLUE	WATERPROOFING	EPOXY ADHESIVE	OVERLAPS	GROUTING EPOXY MORTAR
	FIXMAX S2 GEL + NET-MORTER-110	TECNOCOL GEL	LAMINA PROOF	EPOXICOL	BANDA SOLAPES	CERPOXI or PROFESSIONAL PX

FIXCER SOLUTION

FIXMAX S2 GEL

NET-MORTER 110

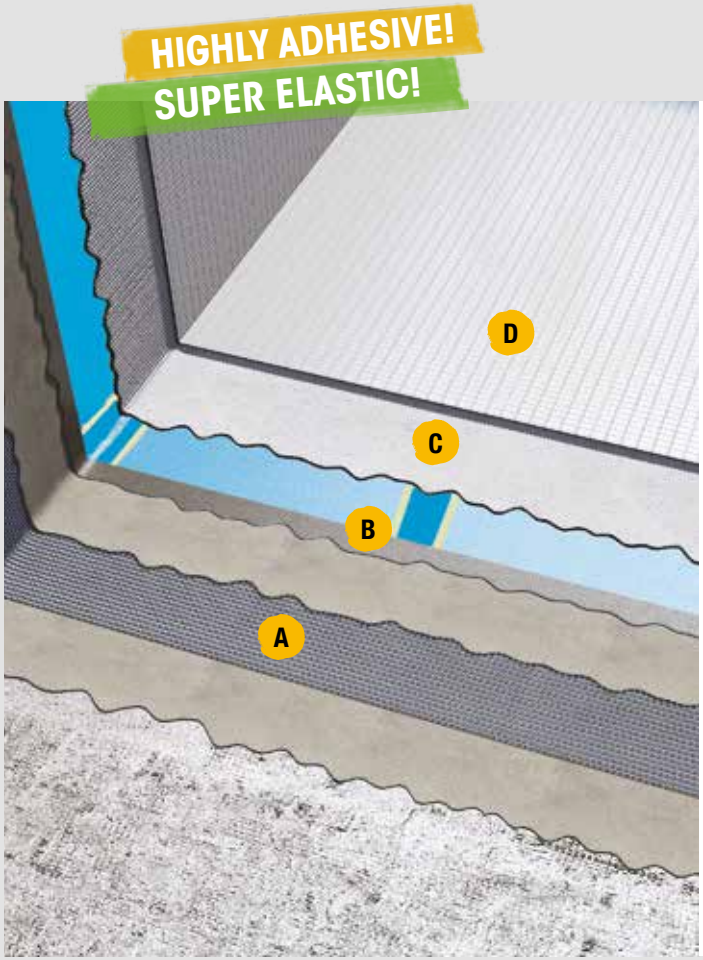
SINGLE-COMPONENT cementitious adhesive.

COMPLEMENTARY PRODUCTS

LAMINA PROOF | TECNOCOL GEL | PROFESSIONAL PX

HOW IT WORKS FIX-ADVANTAGES

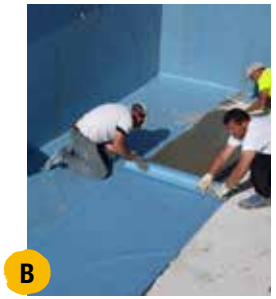
- **Highly adhesive** and **flexible**.
- Classified **C2TES2** according to **EN 12004**.



APPLICATION

Using **FIXMAX S2 GEL** and the **NET-MORTER-110** mesh, form a layer over the expanded polystyrene obtaining an ideal surface on which to first apply the waterproofing and then the final covering.

A Apply two thin layers of **FIXMAX S2 GEL** placing the **NET-MORTER-110** fibreglass mesh between them.



B After 24 hours apply the **LAMINA PROOF** with **TECNOCOL GEL**. See the application instructions in 29 page

C After 24-36 hours adhere the covering using **TECNOCOL GEL**.

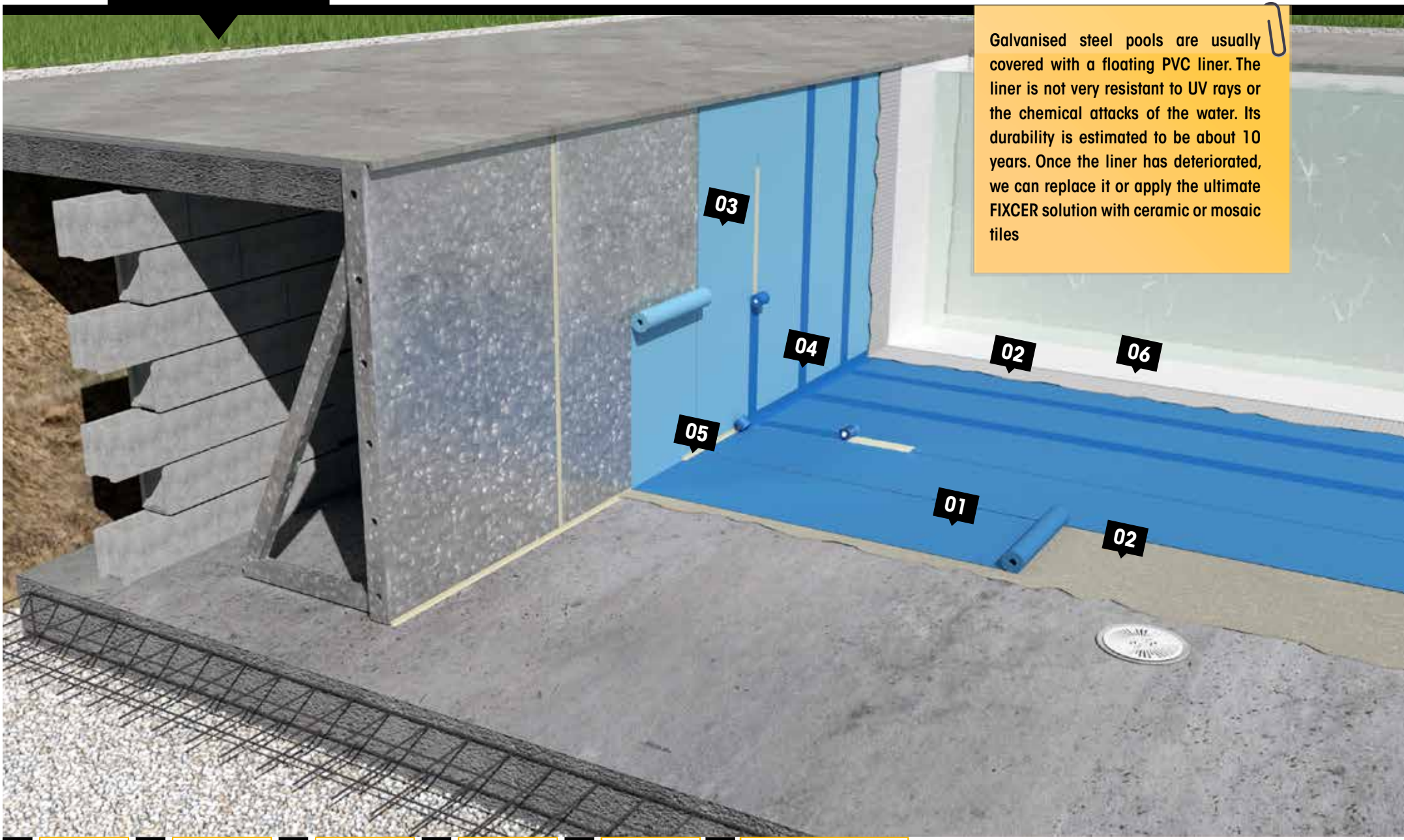
D Lastly, grout using the **PROFESSIONAL PX**.

02 SOLUTIONS FOR GALVANISED STEEL POOLS

HOW TO RENEW YOUR GALVANISED STEEL POOL

How to place mosaic tiles on galvanised steel

Galvanised steel pools are usually covered with a floating PVC liner. The liner is not very resistant to UV rays or the chemical attacks of the water. Its durability is estimated to be about 10 years. Once the liner has deteriorated, we can replace it or apply the ultimate FIXCER solution with ceramic or mosaic tiles



01	LÁMINA PROOF	02	TECNOCOL GEL	03	LÁMINA STEEL	04	BANDA SOLAPES	05	EPOXICOL	06	CERPOXI or PROFESSIONAL PX

FIXCER SOLUTION

LAMINA STEEL LAMINA PROOF BANDA SOLAPES

Flexible Textile Sheets

Covered with a specific textile material that can be covered directly with ceramic of glass mosaic tiles

COMPLEMENTARY PRODUCTS

TECNOCOL GEL | EPOXICOL | CERPOXI | PROFESSIONAL PX

View more information on our website

HOW IT WORKS FIX-ADVANTAGES

✔ The self-adhesive version goes directly onto galvanised steel panels of the pool's walls. The non-self-adhesive version must be placed using **TECNOCOL GEL** directly onto the concrete of the pool bottom.

✔ **BANDA-SOLAPES** is made of the same material as the **STEEL** and **PROOF** sheets but is 14 cm wide for the overlaps between sheets. **BANDA SOLAPES** must be placed on either side of the **LAMINA** using the 100% watertight and acid-resistant adhesive **EPOXICOL.**

APPLICATION

01 Clean the walls with transparent acetone and remove all the dust from the concrete base.

02 Place the self-adhesive sheet **STEEL** on the walls. They don't need to overlap.

03 Place the LAMINA PROOF sheet on the bottom of the pool using the cement glue TECNOCOL GEL. They don't need to overlap.

04 On the walls, and on the bottom, and on the wall-floor union, place BANDA SOLAPES on both sides of the sheets using the adhesive EPOXICOL.

05 Place the covering using **TECNOCOL GEL.**

06 Grout the ceramic tiles using **CERPOXI** or **PROFESSIONAL PX.**

02

SOLUTIONS FOR POLYUREA POOLS

HOW TO GLUE CERAMIC ON TOP OF POLYUREA

An easy solution for gluing on top of a difficult surface

Waterproofing with polyurea requires the use of a strong adhesive to fix the ceramic or glass mosaic. Polyurea is a waterproofing substance that is both watertight and highly repellent to any cement-based adhesive. It is therefore essential to use a reactive adhesive such as FIXADUR

FIXCER SOLUTION

FIXADUR

Polyurethane adhesive
with outstanding adhesion
for the toughest applications

COMPLEMENTARY PRODUCTS

CERPOXI

PROFESSIONAL PX

HOW IT WORKS FIX-ADVANTAGES

✔ **FIXADUR** is a maximum adhesive:
- Maximum adhesion, maximum security
- Maximum durability, maximum guarantee

✔ **FIXADUR** is the adhesive to use on the most difficult surfaces:
- Non-absorbent substrates such as linoleum, PVC, polyester, EPDM rubber, steel, old ceramics and cold and hot polyurea.
- It is also ideal for sticking material to difficult surfaces such as gypsum, fibre cement, cured wood, chipboard, glass.

✔ **FIXADUR** is a state-of-the-art waterproof adhesive formulated to provide maximum stresses in any installation.

✔ Totally waterproof (100%).

✔ Excellent adhesion to most substrates.

✔ Maximum mechanical strength in a very short time.

✔ Extraordinary flexibility.

✔ Highly resistant to ageing.

APPLICATION

ON MORTAR SUBSTRATES:

The mortar must be perfectly set. There must be no moisture.

ON GLUED PVC SUBSTRATES:

Clean the PVC with PRIMER FOR ELASTICER; rub and allow to dry for 2 minutes

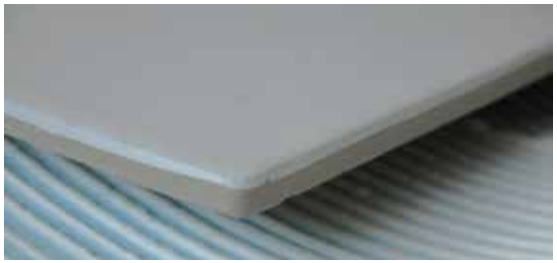
ON METAL SUPPORTS:

Clean the metal with FIXAQUA SOLVENT; rub and allow to dry for 2 minutes

ON GYPSUM SUPPORTS:

Pre-prime with HIDROPRIMER and allow to dry for at least 3 hours

APPLICATION OF FIXADUR ADHESIVE:

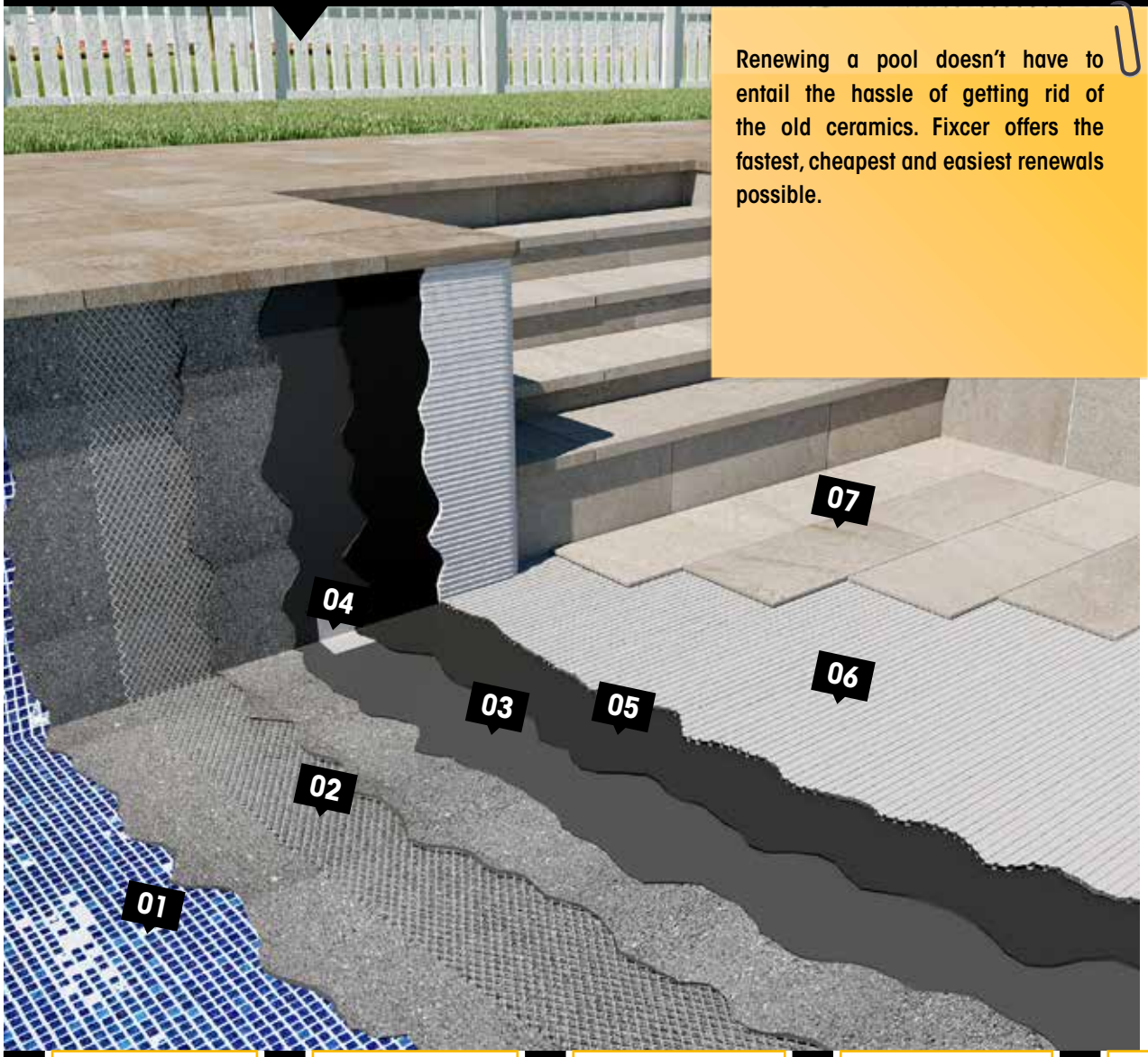


In all cases, mix the three components with an electric mixer at 400 rpm for 2 minutes and apply with a toothed trowel according to the size of the piece to be laid

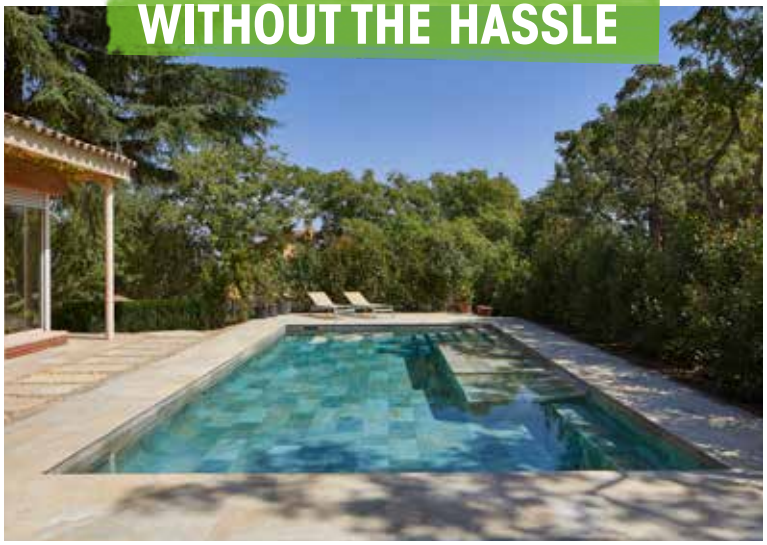
HOW TO LAY NEW CERAMIC TILES WITHOUT FIRST REMOVING THE OLD ONES

Refurbishing a swimming pool in two easy steps

Renewing a pool doesn't have to entail the hassle of getting rid of the old ceramics. Fixcer offers the fastest, cheapest and easiest renewals possible.



POOL RENEWALS WITHOUT THE HASSLE



01	WELL-ATTACHED OLD CERAMIC TILES	02	PREVIOUS LAYER	03	1ST WATERPROOFING LAYER	04	REINFORCEMENT STRIP FOR THE CORNERS	05	2ST WATERPROOFING LAYER	06	CEMENT GLUE	07	GROUTING EPOXY MORTAR
			FIXMAX S2 GEL + NET-MORTER-110		HIDROELASTIC 1200		BANDA IMPERMEABLE 120/70		HIDROELASTIC 1200		TECNOCOL GEL		CERPOXI or PROFESSIONAL PX

FIXCER SOLUTION

FIXMAX S2 GEL NET-MORTER-110

Single-component cementitious adhesive
Highly adhesive and flexibility classed **C2TES2** according to **EN12004**.

COMPLEMENTARY PRODUCTS

FIX-SABÓ

GRESNET

HIDROELASTIC

TECNOCOL GEL

CERPOXI
or PROFESSIONAL PX

HOW IT WORKS FIX-ADVANTAGES

Using the **FIXMAX S2 GEL** and the **NET-MORTER-110** mesh, form a layer upon the old ceramics, resulting in an ideal surface for waterproofing and then laying the new ceramic or glass mosaic tiles.

Apply **FIXMAX S2** GEL on the clean old ceramic tiles with a flat trowel.

Place the **NET-MORTER 110** mesh on the layer of **FIXMAX S2 GEL.**

Immediately cover the fibreglass mesh with more **FIXMAX S2 GEL.**

APPLICATION

01

Clean the old ceramic tiles with the **FIX-SABO** detergent diluted in water in a proportion of 1:20 and rinse.

02

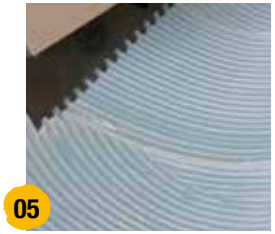
Finish cleaning the old ceramic tiles with the cleaning acid **GRESNET** diluted in water in a proportion of 1:5. Rinse.

03

Apply two thin layers of super flexible cement **FIXMAX S2 GEL**, placing between them the reinforcement fibreglass mesh **NET-MORTER 110**.

04

SECOND WATERPROOFING only if necessary for the pool. If not, skip to step 5.
After 24 hours, apply 2 layers of **HIDROELASTIC** and let each layer dry for about 4 hours before applying the next.



05

fter 24-36 hours, lay the tiles using the cement glue TECNOCOL GEL.

06

Lastly, grout using the acid-resistant epoxy mortar **CERPOXI** or **PROFESSIONAL PX**.

HOW TO SEAL MICROCRACKS

How to fix leaks through micro-fissures in the concrete

When a 60m3 pool loses up to 80 litres of water a day, we can try to seal the micro-fissures that have formed on the concrete without emptying the pool and before turning to other more aggressive measures.

FIXCER SOLUTION

NO-CRACKS

Super liquid additive. Add to the pool's water in recirculation mode without passing it through the filter.

HOW IT WORKS FIX-ADVANTAGES

✔ It acts in 48-72 hours by reacting with the hydrated cement's calcium hydroxide to form insoluble micro-crystals that block the micro-cracks, preventing future water loss.

FISSURE WITH WATER BEFORE APPLYING NO-CRACKS

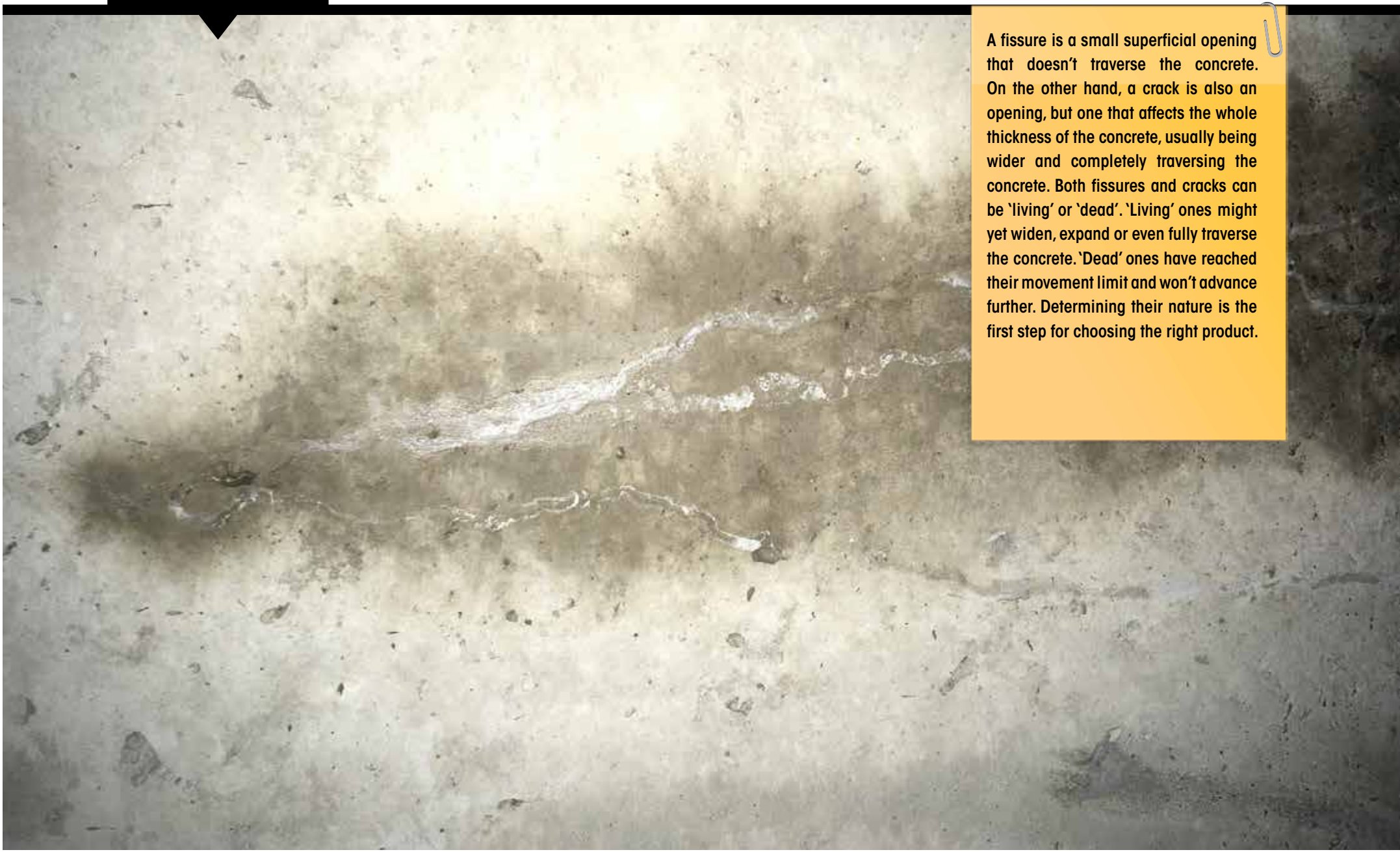
THE SAME FISSURE AFTER APPLYING NO-CRACKS

APPLICATION

Its dosage is 1-2 litres for every 60 m^3.

HOW TO SEAL CRACKS

How to seal cracks and fissures



A fissure is a small superficial opening that doesn't traverse the concrete. On the other hand, a crack is also an opening, but one that affects the whole thickness of the concrete, usually being wider and completely traversing the concrete. Both fissures and cracks can be 'living' or 'dead'. 'Living' ones might yet widen, expand or even fully traverse the concrete. 'Dead' ones have reached their movement limit and won't advance further. Determining their nature is the first step for choosing the right product.

FIXCER SOLUTION

SELLADOR S10

FOR LIVING CRACKS

Polyurethane filler
Ideal for applying an ultra-elastic and 100% watertight seal on 'living' fissures or cracks

IMPRIMACIÓN SELLADOR S10

Liquid and transparent polyurethane
that adheres to absorbent or semi-absorbent surfaces.

HOW IT WORKS FIX-ADVANTAGES

✔ In all cases, begin by opening up the concrete around the fissure or crack, forming the shape of a V.

✔ Then prime using **IMPRIMACIÓN SELLADOR S10**. Lastly, seal the gap with this filler.

See its APPLICATION on page 15.

FIXCER SOLUTION

EPOXICOL

FOR DEAD OR STILL CRACKS

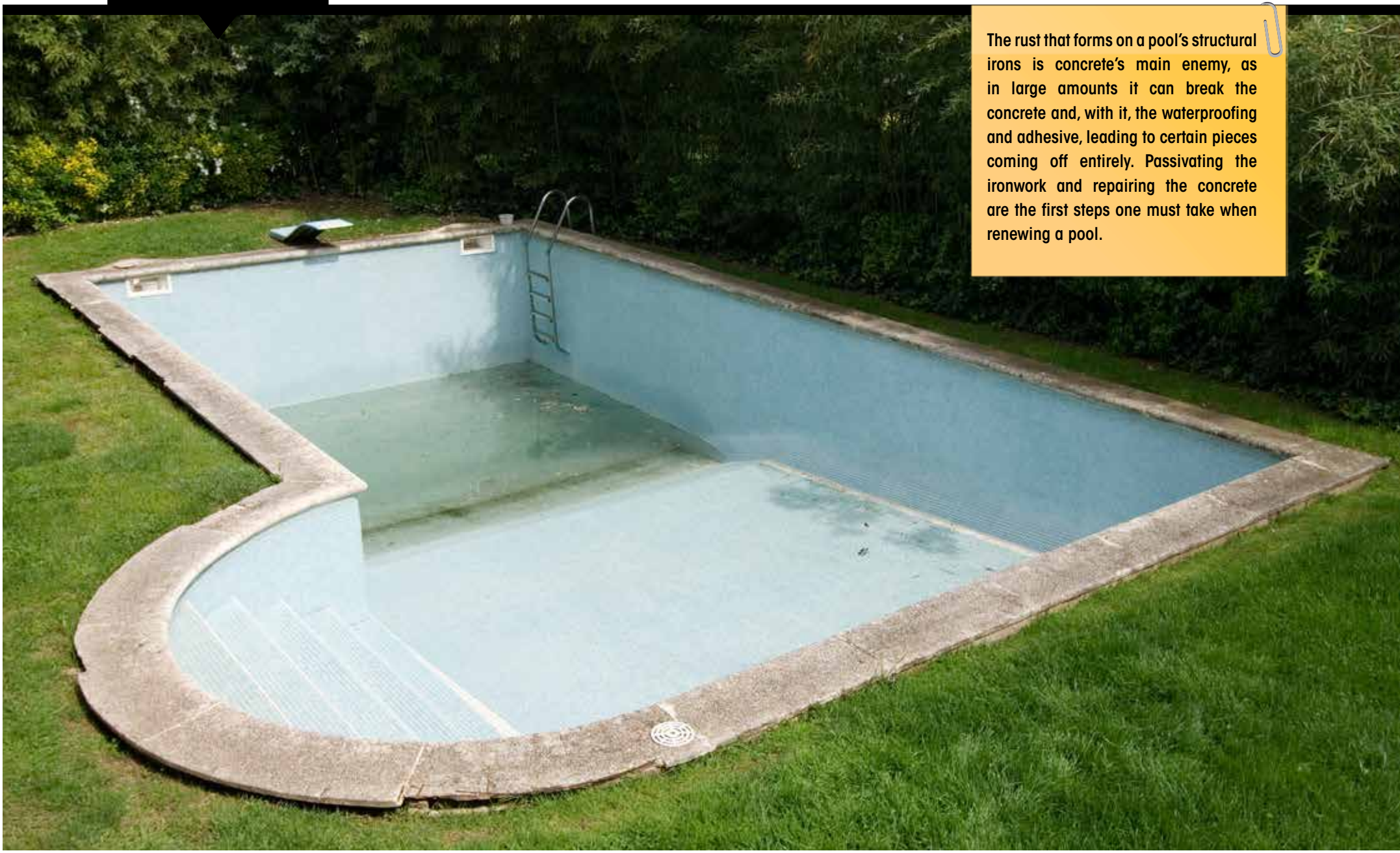
Acid-resistant epoxy adhesive
Ideal for sealing 'dead' cracks or fissures.

HOW IT WORKS FIX-ADVANTAGES

✔ In all cases, begin by opening up the concrete around the fissure or crack, forming the shape of a V. Then, without priming, fill in the whole gap using this adhesive.

HOW TO REBUILD DETERIORATED CONCRETE

Rebuilding concrete in two easy steps



The rust that forms on a pool's structural irons is concrete's main enemy, as in large amounts it can break the concrete and, with it, the waterproofing and adhesive, leading to certain pieces coming off entirely. Passivating the ironwork and repairing the concrete are the first steps one must take when renewing a pool.

FIXCER SOLUTION

FIX-REPAR ANTI-OXID

DOES NOT REQUIRE REMOVING ALL THE RUST

Single-component powdered mortar for mixing with water.

FIXCER SOLUTION

ANTI-OXID LIQUID

Ready-to-use liquid additive: open the bottle and apply.

FIXCER SOLUTION

FIX-REPAR R2 o R4

Single-component fibre-reinforced mortar
Their creamy thixotropic textures make them easy to apply as iron-covering mortars.

HOW IT WORKS FIX-ADVANTAGES

- They can be applied directly onto the rust, without having to completely remove it. It then modifies the pH of the ironwork's environment, thus passivating it.

HOW IT WORKS FIX-ADVANTAGES

- Transparent gel-like liquid for protecting ferrous reinforcements.
- The easiest, most affordable solution for passivating iron.

HOW IT WORKS FIX-ADVANTAGES

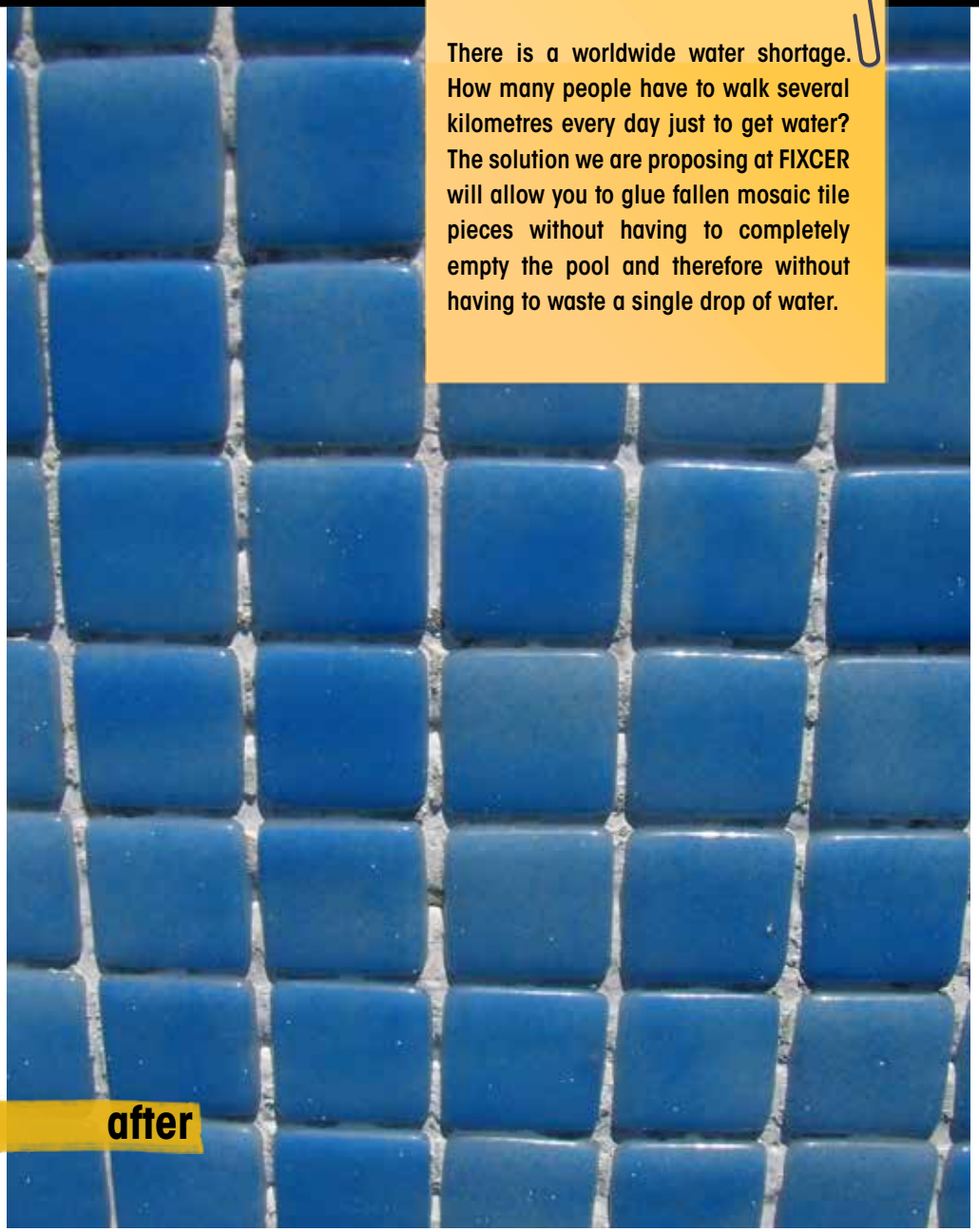
- They provide a compressive strength of up to 25MPa or 45MPa, respectively.
- R2 and R4 can be used on both walls and floors.
- Usually walls require a lower compressive strength (R2) and the floors, a higher compressive strength (R4).

03

SOLUTIONS FOR RENEWING POOLS

HOW TO GLUE GLASS MOSAICS UNDER WATER

How to glue mosaic tile pieces without having to completely empty the pool



There is a worldwide water shortage. How many people have to walk several kilometres every day just to get water? The solution we are proposing at FIXCER will allow you to glue fallen mosaic tile pieces without having to completely empty the pool and therefore without having to waste a single drop of water.

FIXCER SOLUTION

PX UNDERWATER

Specific adhesive that polymerises with or without the presence of water

HOW IT WORKS FIX-ADVANTAGES

- Excellent mechanical resistance.
- High wear resistance.
- High adhesion.
- High resistance to UV radiation.
- Very good chemical resistance.

APPLICATION

01 Adhesive specifically for bonding and grouting of individual pieces of underwater glass mosaic tile.

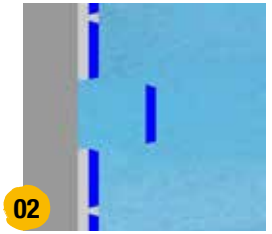
02 Allows the gluing of individual pieces, i.e. that are surrounded by other pieces that will act as anchors for the new piece glued in with **PX UNDERWATER.**

03 2 in 1 product: we use the excess material that protrudes from the joints for grouting.

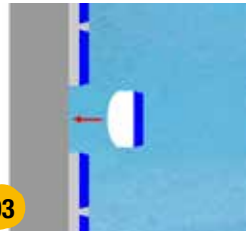
04 **PX UNDERWATER** is a specific adhesive that polymerises with or without the presence of water.

APPLICATION

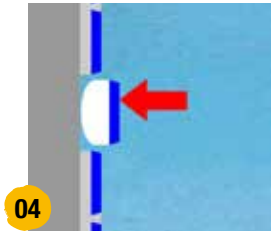
01 Three-component mortar. Mix mechanically with an electric stirrer.



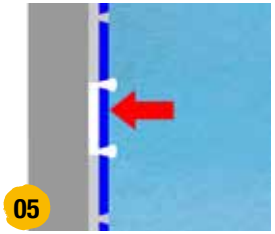
02 Completely empty the hole where the new piece will go.



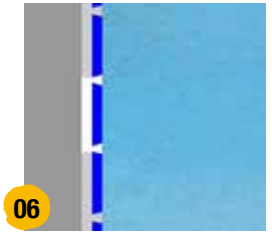
03 Apply a large amount of **PX UNDERWATER** to the back of the piece to be glued.



04 Put the piece in place and press with a lot of force...



05 .... until the product protrudes through the joints between pieces.



06 Immediately clean the remains of PX UNDERWATER.

POOL DECKS

KEYS TO THEIR CORRECT CONSTRUCTION

THESE ARE THE

5

ESSENTIAL GOALS WHEN BUILDING A POOL DECK

1. **STRUCTURAL STABILITY**
2. **POWER SAVING**
3. **SAFETY**
4. **WATERTIGHTNESS**
5. **DURABILITY**

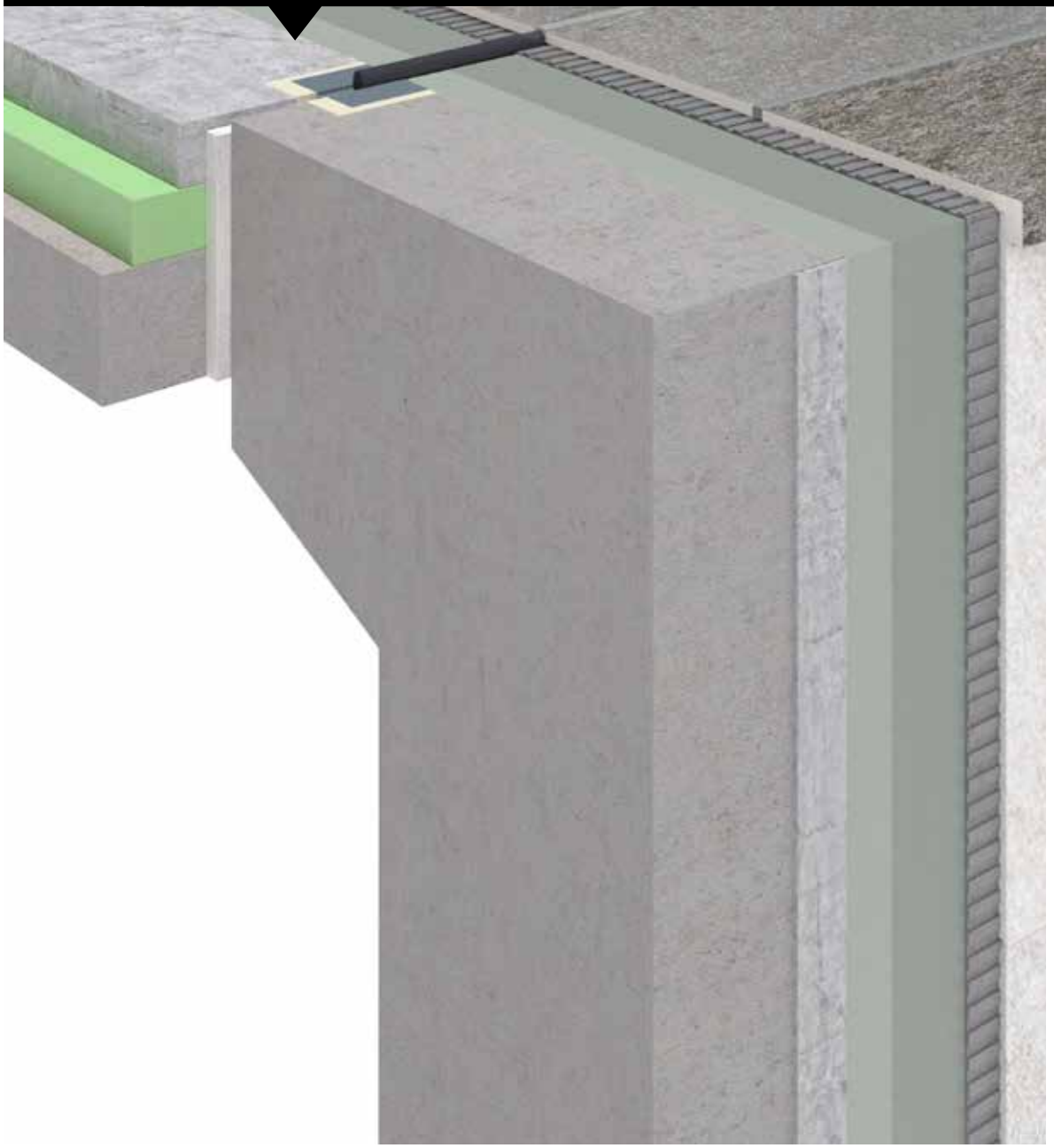
TO ACHIEVE THEM WE MUST PERFORM THE FOLLOWING STEPS

2

- ✓ **Build the base slab**
- ✓ **Seal the moving joints**
- ✓ **Apply mortar for the slopes**
- ✓ **Waterproof and lay the decks**
- ✓ **Grout the anti-slip ceramic tiles**
- ✓ **Seal the expansion joints**

THE MOVING JOINTS

How to build a 100% watertight moving joint



The location of the moving joints must comply with point 7.8. of the regulation **UNE 138002**, which in turn mentions the specifications of point 3.4. "Thermal action" from DB-SE-AE of the Technical Building Code (Structural Safety and Actions in Building). Given the importance of this section, the location and type of joints used must be defined in the executive project.

Depending on the projected type of joint (expansion, contraction, structural, watertight, perimetric, etc.) **Fixcer** provides a wide and varied range of proposals for building and sealing it.

Generally, we must avoid transmitting tensions between the pool's tank and the deck's concrete slab. These tensions could cause damage to the ceramic covering. The pool's tank must be structurally independent from the deck's concrete slab. To make these two structures independent from one another, we construct a moving joint between them.

When the joint is structural and watertight, we must allow it to be able to move, while also preventing liquid water leaking through it, which could affect our gym, parking, etc. **Fixcer provides a solution for guaranteed success.**

FIXCER SOLUTION

FIX-TAPE 170 mm

Ultra-elastic strip (600%).

EPOXICOL

Epoxy, acid-resistant adhesive that joins the FIX-TAPE 170mm to the concrete, monolithically (unbreakable).

HOW IT WORKS FIX-ADVANTAGES

✔ Watertight, elastomeric, thermoplastic, easy to connect with hot air at +320ºC and chemically resistant. Place on both sides of the joint using the epoxy adhesive **EPOXICOL**.

✔ Makes the structural expansion joint 100% watertight thanks to the waterproof nature of the **FIX-TAPE 170mm.**

✔ Can be sealed with heat.

✔ Its extraordinary elasticity (600%) absorbs all differential movements between the different concrete structures, guaranteeing the expansion joint remain watertight.

APPLICATION

01

Place the strip in the centre of joint and create a bellow we'll fill with **SELLALASTIC FOAM.**

02

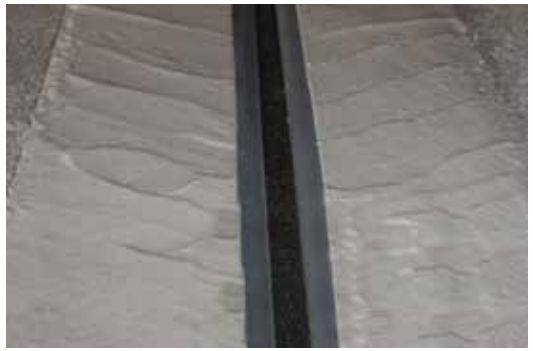
Place masking tape 2cm away from the strip.Then apply a 1-2mm-thick layer of **EPOXICOL** that reaches the masking tape.

03

Adhere the **FIX-TAPE** and immediately place more **EPOXICOL** on top and on both sides.

04

Remove the self-adhesive strip from both sides and remove the masking tape.



A completed moving joint with guaranteed watertightness.

MORTARS FOR SLOPES

How to safely and quickly level the deck

The final thickness of the mortar will depend on the calculation of the slopes and whether there is a need to thermally insulate the base slab with extruded polystyrene. The construction management team will determine these thicknesses.

FIXCER SOLUTION

PAVIFORT

Screed made with compensated granulometry sand. With **PAVIFORT** you can make a paving of any thickness.

PRIMFIX

Adhesive latex for making bonding bridges before applying **PAVIFORT.** Must be mixed in a proportion of 1:1 with **cement.**

HOW IT WORKS FIX-ADVANTAGES

✓ **PAVIFORT** is a mortar with a high compressive and bending strength.

✓ Its composition makes building pool decks a lot quicker and safer.

✓ **Dries very quickly. Can be walked on in a few hours. In 24h, the ceramic tiles can be laid.**

✓ **PAVIFORT** is a mortar that doesn't shrink, meaning that it doesn't create tensions and cracks like conventional mortars.

APPLICATION

For final thicknesses of less than 4cm, first apply the bonding bridge **PRIMFIX + Cement.**

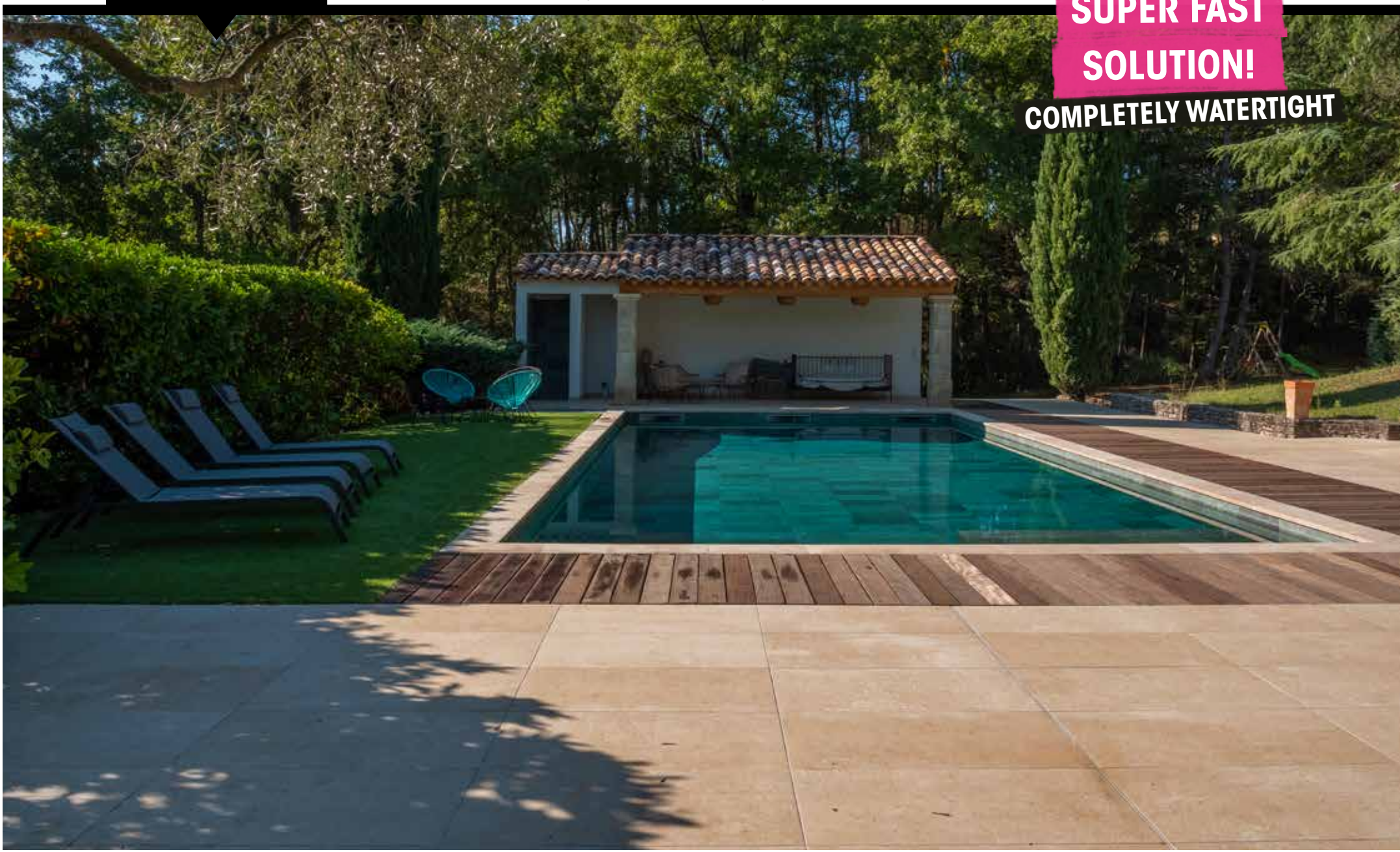
For final thicknesses of more than 4cm, apply a layer of polyethylene to act as a vapour barrier and decoupling layer.

04

SOLUTIONS FOR POOL DECKS

WATERPROOFING AND LAYING TILES ON THE DECKS

How to waterproof and guarantee watertightness



FIXCER SOLUTION

WATERPROOFING AND LAYING CERAMIC TILES

WATERPROOFING AND LAYING CERAMIC TILES URGENTLY

HIDROFACIL

WATERPROOFING
READY IN 4 HOURS

Elastic waterproof paint, ready-to-use, single-component and quick-drying

HIDROFACIL + FIXAFLEX GEL

For standard placements lay the ceramic tiles using FIXAFLEX GEL

HIDROFACIL + FIXARAPID FLEX

LAY
CERAMIC TILES
URGENTLY

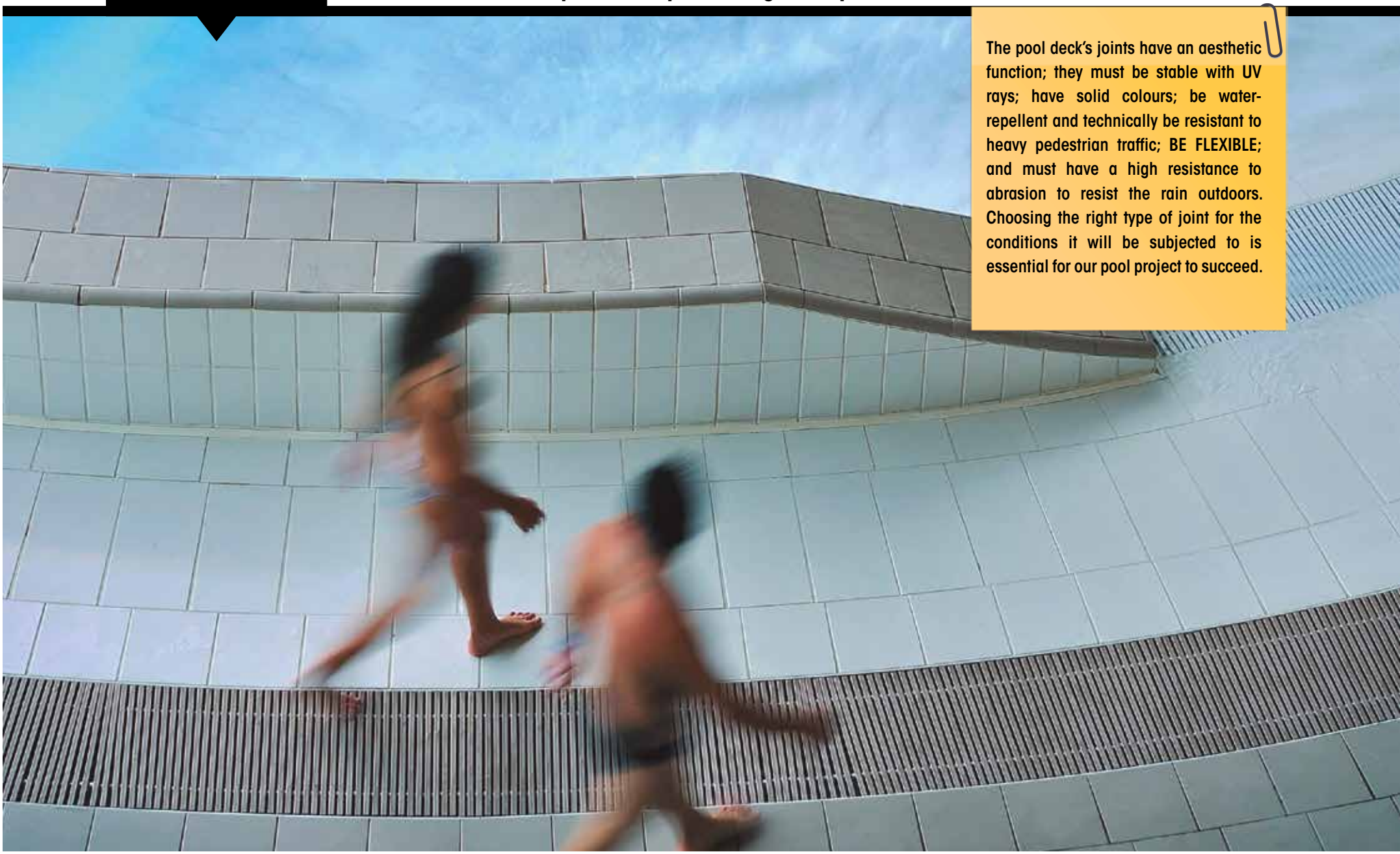
For very urgent placement lay the ceramic tiles using FIXARAPID FLEX.

HOW IT WORKS FIX-ADVANTAGES

- ✓ Ready-to-use waterproofing: open the can and paint using a roller, a brush or an airless.
- ✓ Ideal for terraces, pool decks, shower plates and humid areas.
- ✓ 100% watertight and single-component.
- ✓ Quick drying.
- ✓ Must always be protected with a final covering of ceramic tiles.

GROUTING THE ANTI-SLIP CERAMIC TILES

The last and most important step: how to grout a pool deck



The pool deck's joints have an aesthetic function; they must be stable with UV rays; have solid colours; be water-repellent and technically be resistant to heavy pedestrian traffic; BE FLEXIBLE; and must have a high resistance to abrasion to resist the rain outdoors. Choosing the right type of joint for the conditions it will be subjected to is essential for our pool project to succeed.

FIXCER SOLUTION

EUROCOLOR FLEX

Coloured mortar, water-repellent and fungicidal.

- Single-component.
- Flexible. Fungicidal. Water-repellent. Super-fine.
- Available in 8 colours. Pre-dosed.
- Ideal for grouting 0-to-16mm-wide joints on pool decks.
- Resistant against weak acid attacks.

More information on page 71

FIXCER SOLUTION

IDEAL COLOR

HIGH-TECH mortar for sealing joints from 0 to 6 mm. Water repellent. Colors without stains or efflorescence.

- Single-component.
- Water repellent. Fungicide. Super-fine. Fast setting.
- Available in 34 colours.
- Ideal for grouting 0-to-6mm wide joints.
- Made with special hydraulic cement: colors without stains or efflorescence.

More information on page 70

FIXCER SOLUTION

CERPOXI

Acid-resistant epoxy mortar, 100% watertight

- 100% watertight.
- Pre-dosed.
- Available in 26 colours.
- Resistant against acid attacks.
- Ideal for grouting 0-to-10mm-wide joints on pool decks.

More information on page 38

FIXCER SOLUTION

PROFESSIONAL PX

Acid-resistant epoxy mortar, 100% watertight and very liquid.

- 100% watertight.
- Pre-dosed.
- Available in 26 colours.
- Liquid consistency, no running.
- Ideal for grouting 0-to-10mm-wide joints on pool decks.

More information on page 39

Grouting of pool deck's joints

CEMENTITIOUS GROUTS

FIXCER SOLUTION

IDEAL COLOR

HIGH-TECH mortar for sealing joints from 0 to 6 mm. Water repellent. Fungicide. Fast setting. Without fissures.

HOW IT WORKS FIX-ADVANTAGES

- Health-friendly mortar made with special hydraulic aggregates.
- Available in 34 pre-dosed colours.
- High mechanical resistance. Colours with no efflorescence.
- Fast setting mortar: easy application, cleaning and maintenance.

APPLICATION

01 All joints must be washed before applying the product.

02 Mix IDEAL COLOR with 22% clean water. Let sit for 2 minutes. Then mix again to obtain a uniform mass ready for application.

03 Apply IDEAL COLOR to completely fill in the joints.

04 When the joint surface becomes opaque, which usually takes place after 15-30 minutes, you can proceed with the surface finish of the joint with the help of a slightly damp sponge.

AVAILABLE COLOURS

- **0** Blanco
- **40** Blanco Mimi
- **67** Vainilla
- **1** Baige
- **24** Lana
- **8** Gris claro
- **29** Perla
- **68** Gris plata
- **9** Gris cemento
- **10** Antarcita
- **11** Negro
- **25** Humo
- **26** Aluminio
- **27** Titanio
- **28** Plomo
- **46** Piedra
- **33** Desierto
- **48** Marrón Arena
- **47** Visón
- **34** Pardo
- **19** Roble
- **4** Marrón claro
- **45** Marrón medio
- **35** Venecia
- **36** Barro
- **37** Cedro
- **38** Nogal
- **5** Marrón oscuro
- **12** Azul piscina
- **32** Cobalto
- **23** Verde oscuro
- **69** Verde moka
- **7** Terracota
- **66** Rubí

34 COLOURS

FIXCER SOLUTION

EUROCOLOR FLEX

Single-component coloured mortar Flexible, fungicidal, waterproof and fine.

HOW IT WORKS FIX-ADVANTAGES

- ✓ Available in 8 pre-dosed colours, ideal for grouting chlorinated pools.
- ✓ Very fine finish and bright colours.
- ✓ High mechanical resistance, adherence and waterproofness.
- ✓ Resistant to weak acids, making it the go-to choice for grouting chlorinated pools.

APPLICATION

01 All joints must be washed before applying the product.

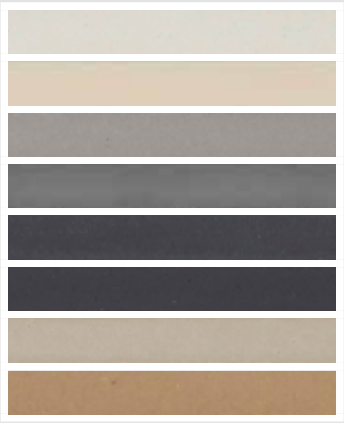
02 Mix **EUROCOLOR FLEX** with 27% clean water. Let sit for 2 minutes.Then mix again to obtain a uniform mass ready for application.

03 Apply **EUROCOLOR FLEX** to completely fill in the joints.

04 When you touch the joint and no material comes away on your fingers, remove all extra traces of grout.

05 The next day it is mandatory to re-wet the seals with a soft, slightly damp sponge.

AVAILABLE COLOURS



00 Blanco
01 Beige
08 Gris claro
09 Gris cemento
10 Antracita
11 Negro
46 Piedra
48 Marrón arena

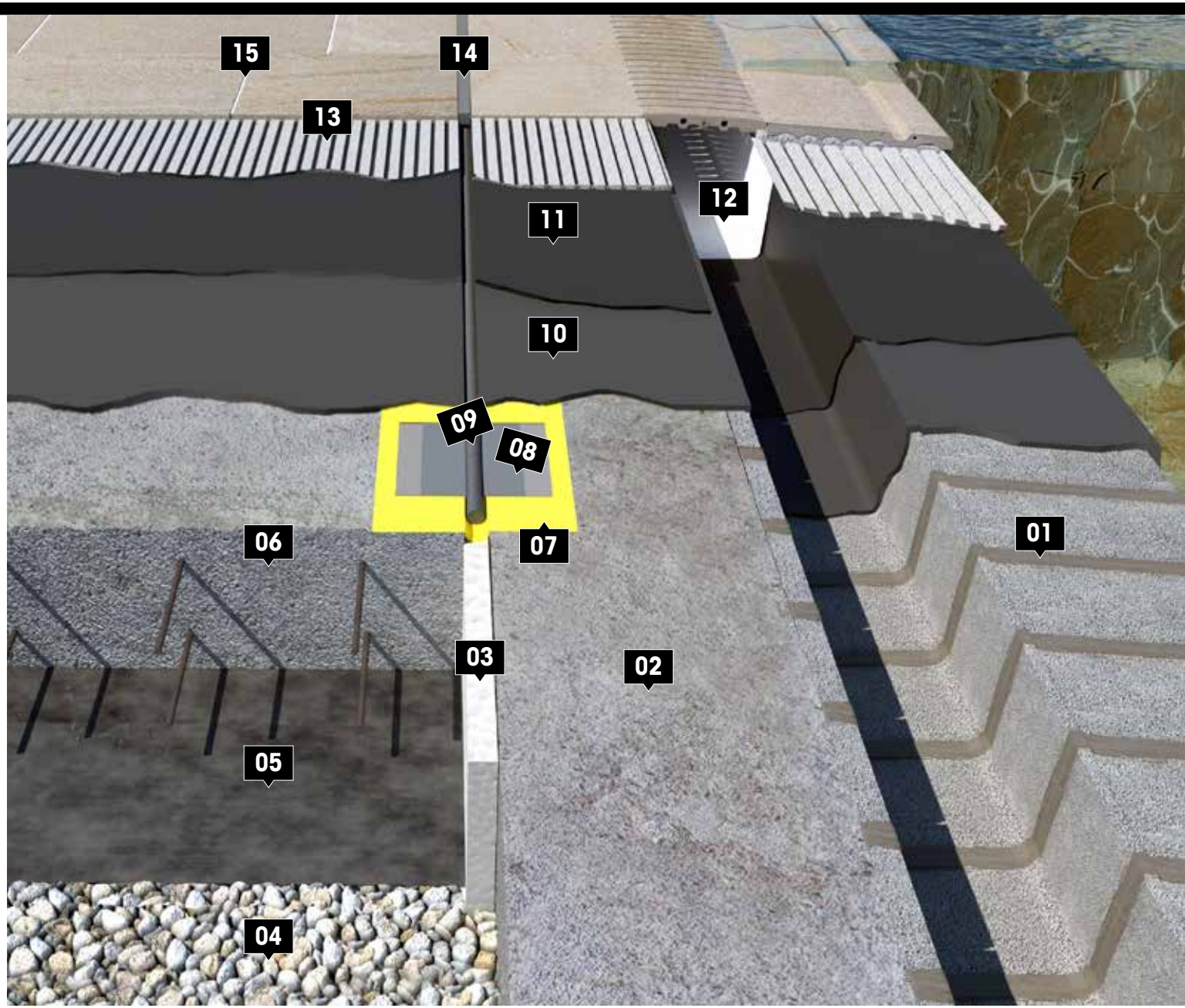
8 COLOURS

SEALING THE EXPANSION JOINTS

How to elastically seal an expansion joint

The location and layout of the ceramic covering's expansion joints will always coincide with the location of a moving joint, as explained before.

To seal these joints elastically, we'll use sealants that comply with regulations
EN ISO 11600 y UNE-EN 15651, parts 1 to 5.



01	COPING WITH **ROSA GRES S9 BLOCKS**
02	WALL BEHIND THE **ROSA GRES S9 BLOCKS**
03	POREXPAN IN THE EXPANSION JOINTS BETWEEN BASE SLABS
04	NON-COMPRESSIBLE GRAVEL LAYER
05	PHREATIC MEMBRANE
06	REINFORCED CONCRETE OF THE DECKS
07	**EPOXICOL** EPOXY ADHESIVE
08	WATERTIGHT EXPANSION JOINT WITH **FIX-TAPE 170 mm**
09	**SELLALASTIC FOAM** ELASTIC JOINT BOTTOM
10	**HIDROELASTIC** 1ST WATERPROOFING LAYER
11	**HIDROELASTIC** 2ST WATERPROOFING LAYER
12	**EPOXICOLOR POOL** WATER-AND ACID-RESISTANT PAINT FOR CHANNEL
13	**TECNOCOL GEL** HIGHLY ADHESIVE CEMENT GLUE
14	**SELLALASTIC** ELASTIC PUTTY
15	**CERPOXI** WATERTIGHT AND ACID-RESISTANT JOINT

FIXCER SOLUTION

SILICONA NEUTRA

WORKS WITHOUT PREVIOUS PRIMING

IDEAL FOR INTERIORS

Mould-resistant silicone, pure and solvent-free.

FIXCER SOLUTION

SELLALASTIC

WORKS WITHOUT PREVIOUS PRIMING

IDEAL FOR EXTERIORS

Highly elastic polyurethane putty

FIXCER SOLUTION

SELLALASTIC FOAM

MAXIMUM ELASTICITY AND DURABILITY

Closed cell polyethylene foam cord.

HOW IT WORKS FIX-ADVANTAGES

- ✓ Doesn't weaken, VOC-free.
- ✓ Putty specifically for sealing expansion joints in pools, changing rooms, bathrooms, and showers.
- ✓ Works without previously priming.
- ✓ Completely odourless.

HOW IT WORKS FIX-ADVANTAGES

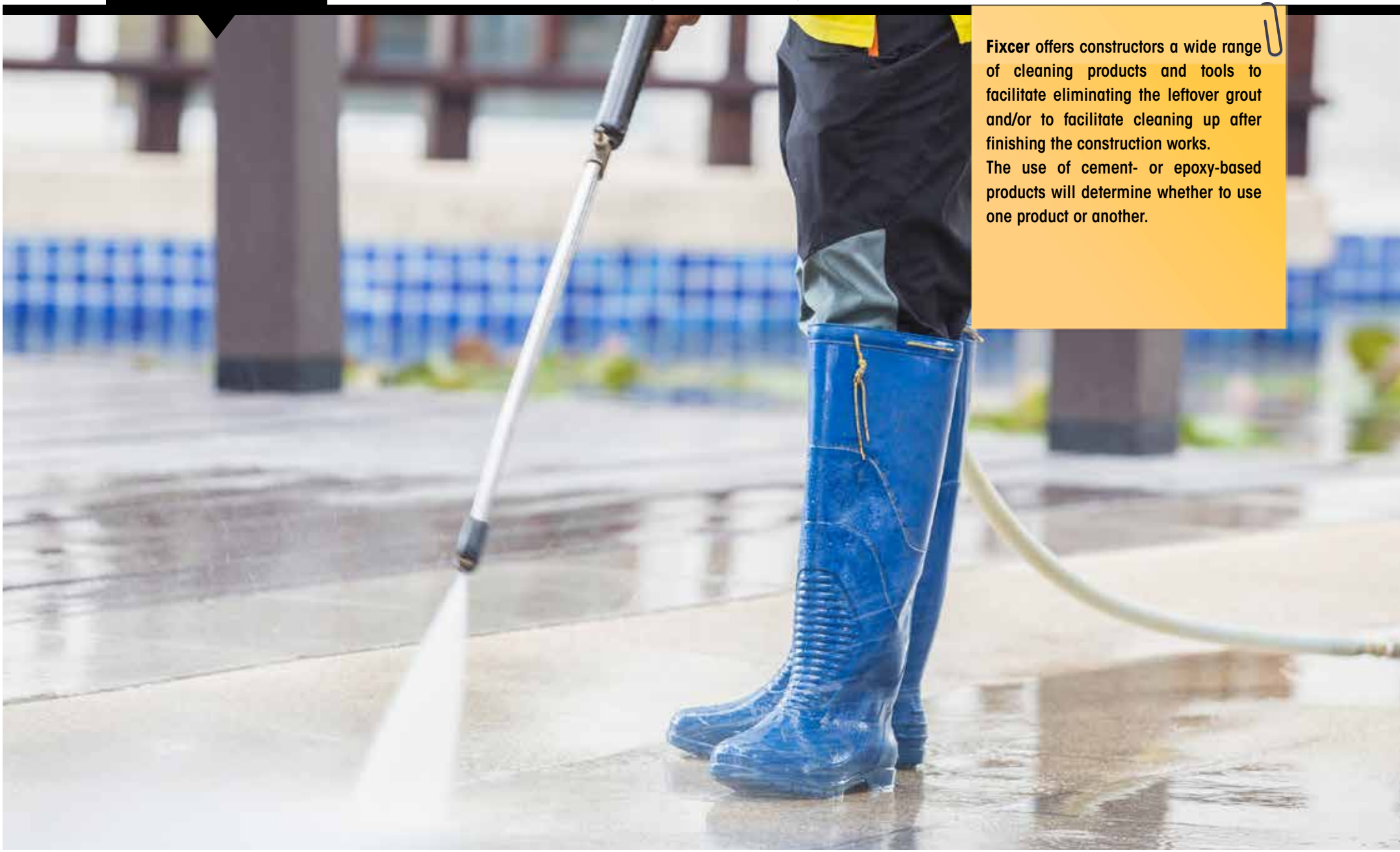
- ✓ **SELLALASTIC** ideal for sealing outdoor joints between ceramic tiles, between a ceramic tile and aluminum and between other similar components.
- ✓ Completely waterproof and watertight, can be applied without previously priming.

APPLICATION

- ✓ Ideal for filling in expansion joints before sealing with elastic putty..
- ✓ With **SELLALASTIC FOAM**, the depth of a moving joint will never be larger than its width.

CLEANING PRODUCTS

Essential products for cleaning after finishing the works



Fixcer offers constructors a wide range of cleaning products and tools to facilitate eliminating the leftover grout and/or to facilitate cleaning up after finishing the construction works.
The use of cement- or epoxy-based products will determine whether to use one product or another.

FIXCER SOLUTION

EPOXINET

Unique blend of organic solvents for emulsifying the fresh epoxy leftovers with water.

- ✓ The product to use while applying the epoxy joint.
- ✓ Facilitates eliminating epoxy from the paving and from the application tools.
- ✓ EPOXINET can be used diluted in a 3:1 ratio: 3 EPOXINET:1 water

FIXCER SOLUTION

EPOXI CLEANER

Cleaning detergent, extremely efficient for eliminating dry leftovers of epoxy joints.

- ✓ Apply directly, leave for 10-30 minutes and remove the epoxy leftovers.
- ✓ Its gel-like texture facilitates cleaning vertical walls.
- ✓ Its transparent colour doesn't alter the colour of the joint.

FIXCER SOLUTION

GRESNET

Cleaning acid, especially made with surfactants and corrosion inhibitors. Eliminates leftover cement and cement-based grouts stuck to the tile.

- ✓ Doesn't give off vapour and therefore doesn't attack stainless steel, chromium or mirrors.
- ✓ Always apply diluted in 10 parts of water.
- ✓ We recommend using it a week after placing the joint in order for it to only act upon the surface and avoid damaging the joints.

FIXCER SOLUTION

FIX-SABO

Multi-use degreaser, detergent, bactericide and fungicide for cleaning oil and grease stains ideal for periodic cleaning.

- ✓ Powerful industrial disinfectant. Doesn't attack the ceramic tiles nor alter their colour.
- ✓ The ideal detergent for periodically cleaning domestic and industrial paving, highly useful for degreasing kitchen paving.

GROUTING TOOLS

The right tool for each stage of the project

There are four essential tools for correctly applying, cleaning and finishing our grout on walls and paving.

FIXCER SOLUTION

FIX- ESPATULA HARD RUBBER

A hard rubber trowel that facilitates completely filling in the joints.

FIXCER SOLUTION

FIX-LLANA CLEANING TROWELL

A hard, white Scotch Brite that doesn't discolour while cleaning. By performing circular movements, we can easily remove all leftover grout.

FIXCER SOLUTION

FIX-LLANA WITH SPONGE

A highly absorbent sponge that can quickly clean up the leftover water after cleaning the ceramic tiles with **FIX-LLANA CLEANING TROWELL**.

FIXCER SOLUTION

FIX-BUCKET

A bucket specifically designed to make rinsing **FIX-LLANA CLEANING TROWELL** and **FIX-LLANA WITH SPONGE** less tedious.
An essential tool for a high-performance job.

3-IN-1
WATERPROOFING, ADHERING AND GROUTING

A TRIPLE SOLUTION FOR WATERPROOFING, BONDING AND GROUTING USING A SINGLE PRODUCT

TRIPLE F GEL is a single-component mortar Mixed with the right amount of water it can:

WATERPROOFING

✔ Complies with **EN 14891** and **EN 1504**. Works with or without ceramic finish. Ideal for the inside of the pool, the overflow channel and the regulating tank. Apply 2 coats, 1mm each, using a total amount of 2.5kg/m².
Waterproofing classified **CMP**.

ADHESION

✔ Complies with **EN 12004**. Ideal for laying ceramic or glass mosaic tiles on the waterproofing. It is flexible and highly adherent. Classified as **C2TES1**.

GROUTING

✔ Ideal for grouting in chlorinated pools. Amply fulfils the **CG2WA** requirements of **EN 13888**

TRIPLE F GEL
3 USES
IN A SINGLE PRODUCT
WATERPROOFING
ADHERES
GROUTS

SAVE TIME AND SPEED UP THE PROJECT

1 YOU NEED ONLY ONE STOCK

SIMPLE APPLICATION LESS CONFUSIONS

LESS WASTE CLEANER PRODUCT

HOW TO MAINTAIN A ZERO-PROBLEMS POOL

The maintenance of a pool built following all the steps is very simple: it will only be necessary to carry out an annual check-up to observe the general condition of the liner.

RECOMMENDATIONS AND NEXT STEPS

1) Annual visual inspection of the condition of joints, paving, gutters and waterproofed areas.

2) If we observe any anomaly, such as: fungus, algae, cracks, flaking or wear in the waterproofing, we will contact the construction company so that they can carry out the appropriate professional maintenance.

3) In all cases it is essential to have a specialised construction company to carry out the maintenance work. The swimming pool, due to its continuous contact with water and purification products, is one of the most complex buildings in existence and requires specific treatment.

4) It is very important to act in time so that problems do not escalate. This prevents water leaks, the inconvenience of emptying the pool and costly repairs.

5) Proper pool maintenance prevents water loss and helps to reduce water consumption.

6) If we follow these simple recommendations, our pool will remain perfect and beautiful for the rest of its life.

For any technical query we advise you to visit our website. At **www.fixcer.com** you will find detailed information on pool construction in video, text and downloadable pdf format.

If you wish to contact our technical team directly, write to us at **fixcer@fixcer.com** and we will be happy to assist you.

THE COMMITMENT OF THE CONSTRUCTION COMPANY

The pool construction company is the only expert in pool maintenance. Following the **UNE-EN-16582-1** standard, it is necessary to have an Operation and Maintenance Manual for your pool.

Being in the hands of pool professionals is the best guarantee of having a **ZERO-PROBLEMS** pool.

CONCRETE

FISSURE	Small superficial opening that doesn't traverse the concrete.
CRACK	Opening that affects the whole thickness of the concrete, usually being wider and completely traversing the concrete.
CONCRETE	Construction material composed of sand, grit, gravel, water and cement as a hydraulic binder.
HUMIDITY FROM STEAM CONDENSATION	It happens when a wall's surface temperature is lower than that of the ambient dew point. Usually happens on thermal bridges, rooms with poor ventilation, bathrooms, kitchens.
HUMIDITY FROM FILTRATION	Refers to liquid water accessing structures through cracks. Usually happens at the point where the walls and the base slab meet, as well as in construction joints.

MOVING JOINTS

COEFFICIENT OF LINEAR THERMAL EXPANSION:	Quotient that measures a physical body's relative change of length when said body changes temperature.
CONTRACTION JOINT	Joint that subdivides large surfaces (ceramics and screed) into smaller panels. Its function is to absorb the movements caused by retractions, changes of temperature and mechanical loads.
EXPANSION JOINT	Joint that affects the thickness of the ceramic covering to divide it into smaller regular areas. Its function is to reduce tensions derived from the expansions and contractions of the covering.
STRUCTURAL JOINT	Joint used in construction projects that divides the structure in order to allow its parts to move freely. This joint affects all the layers of the ceramic system.
STRUCTURAL WATERTIGHT JOINT	Structural joint used in construction projects that divides the structure with a twofold function: to allow its parts to move freely and to prevent all liquid products from penetrating the structure.
PERIMETRE JOINT	Joint used in changes of plane and in the limits of the parts to be covered in order to minimise the accumulation of tensions. It affects the ceramic covering and the mortar.

MORTARS

UNE 138002	Regulation that contemplates all "general rules for laying ceramic tile covers by adherence."
PRIMING:	Process by which a product is applied to a surface and then left to dry to later apply another product on top.
MORTAR:	Mix composed of aggregates, binders, water and additives with the right characteristics for complying with regulation EN998 on walls or EN13813 on paving.
BONDING BRIDGE:	Product applied to a surface upon which the next wet-on-wet product is applied before the first one dries.
REGULISING LAYER	Layer of mortar placed on a support to compensate for the variations of its flatness.

WATERPROOFING

EN 14891	Regulation waterproofing must comply with when using ceramic tiles as a final covering.
EN 1504	Regulation waterproofing must comply with when used to protect the concrete.
WATERTIGHTNESS	QUALITY BY WHICH A CONSTRUCTIVE ELEMENT IS PERFECTLY HERMETIC, KEEPING OUT SOLVENTS, AIR, SMELLS, ETC.
WATER-REPELLENCE	Concrete treatment for creating a water-repellent surface. This treatment doesn't form a continuous film on the surface it protects.
WATERPROOFING	Continuous layer that prevents water, air or smells from penetrating a surface. Some of those that prevent the passage of water can permeate water vapour diffusion.
ELASTIC WATERPROOFING	Waterproofing that recovers its original shape when the force altering its shape disappears.
FLEXIBLE WATERPROOFING	Waterproofing that can deform if submitted to a transversal tension.
OSMOSIS	When a solvent (e.g., water) comes into contact with a dilution (e.g., water + salts) through a semipermeable membrane, the molecules of the solvent pass through the membrane, causing a rise in volume and pressure on the side of the dilution.
NEGATIVE PRESSURE	Force per unit of surface exerted by water against waterproofing, when said waterproofing is on the opposite side of the structure it protects. In other words, the water passes through the structure before pressuring the waterproofing (also causing the steel rods to rust).
POSITIVE PRESSURE	Force per unit of surface exerted by water against waterproofing, when said waterproofing is in direct contact with the structure it protects.

CEMENT GLUES

ADHERENCE	Maximum force per unit of surface that can be measured by traction or shear resistance, identified with the letter C.
NO RUNNING	Property of an adhesive that prevents tiles placed on a vertical surface from sliding down, identified with the letter T.
TRANSVERSAL DEFORMATION	Deformation registered in the centre of a layer of hardened adhesive subjected to a three-point load, identified with the letter S.
DOUBLE GLUING	Placement technique that consists in spreading the cement glue over the reverse side of the pieces with a flat trowel and on the placement surface with a toothed trowel.
EN12004	Regulation bonding materials must comply with to be used for placing ceramic tile coverings.
FLEXIBILITY	Ability of a hardened adhesive to deform with the tension between the tile and the placement surface.
FAST SETTING	Property of certain adhesives to obtain the initial adherence results of a normal setting adhesive after 6 hours at most. Identified with the letter F.
POT LIFE	Longest time span during which an adhesive can be used after having been mixed.
OPEN TIME	Longest time span after applying the adhesive during which the tiles can be laid and still comply with the adherence specifications.

JOINT MORTARS

EN13888	Regulation joint mortars must comply with when used for sealing ceramic tile coverings.
FUNGICIDE	Chemical or biological substance used for preventing, inhibiting or eliminate fungi or mould.
GRANULOMETRY	Study of the distribution of the different dimensions of a compound, e.g., aggregates. A mortar is considered very fine when, for instance, none of its components is larger than 150 microns.
CHEMICALLY RESISTANT GROUT	Grout that is resistant to a certain type of chemical product in a certain concentration, at a certain temperature and during a certain amount of time in contact.
VOC	Volatile Organic Compounds: compounds that contain carbon and can easily turn into vapour or gas. These compounds react to nitrogen oxides and light, resulting in tropospheric ozone, a toxic and oxi-dising gas that can cause respiratory problems.

PURIFICATION SYSTEMS

CHLORINATION	Chlorine is introduced to the pool's water in gaseous, liquid, granulated or capsule form for the chlorine to disinfect the water. The pool's pH levels must be controlled with chemical products.
SALT WATER CHLORINATION	Common salt (sodium chloride) is introduced to the pool and using an electric device the sodium separates from the chlorine. This way, the chlorine disinfects the water and then bonds again with the sodium, repeating the cycle indefinitely. The concentration of salt in the water is 4-6 gr/lt. The pool's pH levels must be controlled with chemical products.
OZONATION	Ozone is introduced to the pool's water. Ozone is a disinfecting agent that prevents the formation of harmful bioproducts such as chloramines. Ozone is produced using an ozone lamp. When treating the water with ozone, one must complement it with an additional water treatment system. There are two possibilities: chlorine, using 5-10% of the amount used in the traditional method and controlling the pH level; or copper-silver ionisation.
COPPER-SILVER IONISATION	Silver ions are produced to act as algaecides, disinfectants and flocculants, providing the water with a very clear transparency and reducing the consumption of chlorine and chemical products. This system complements but does not replace the previously mentioned water treatment systems.
SALT WATER CHLORINATION + COPPER-SILVER IONISATION	The pool's pH levels must be controlled using chemical products.
OZONATION + CHLORINATION	The pool's pH levels must be controlled using chemical products.
OZONATION + COPPER-SILVER IONISATION	The pool's pH levels don't have to be controlled.

OTHER TERMS

PROCTOR TEST	Laboratory test used to determine the relation between the moisture content and the dry unit weight of a compacted terrain.
PILING	Deep foundation technique that consists in embedding pilings into the terrain, seeking the most resistant stratum, in order to bear the loads transmitted by the structure that needs sustaining.
PILINGS	Iron or reinforced concrete elements embedded into the terrain to transmit the load-bearing.

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