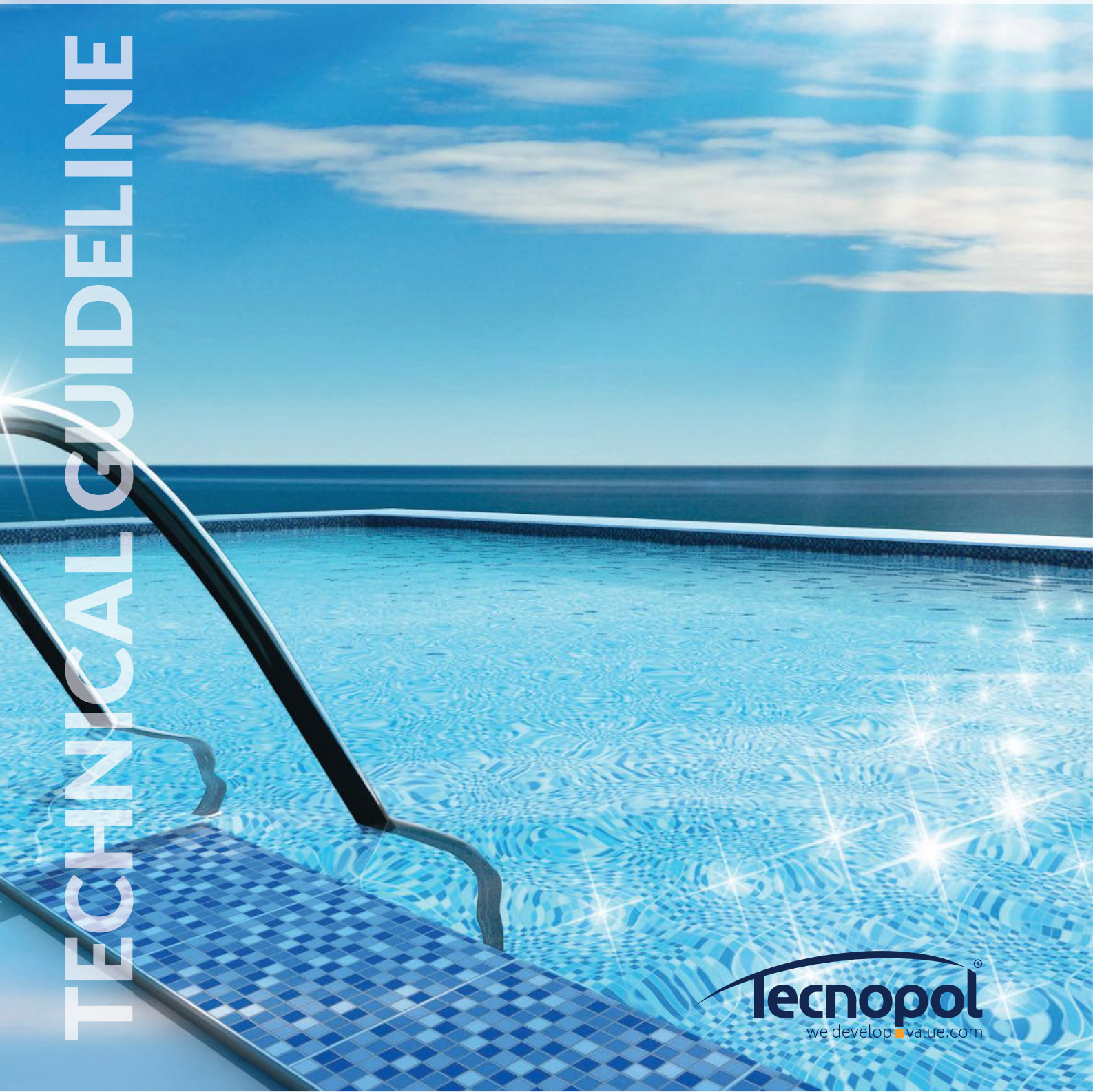
tecnocoat

WATER PARKS & POOLS
WATERPROOFING SYSTEM

POLYUREATEC

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TECHNICAL GUIDELINE



Tecnopol®
we develop value.com





WATER PARKS & POOLS
WATERPROOFING SYTEM

Thanks to its versatility, **TECNOCOAT P-2049** liquid waterproofing system can be applied in several uses from the most common such as roofing, industrial areas or civil works elements to on applications in wet areas such as swimming pools, aquatic parks, aquariums and in general, areas with chlorinated or salt water for the cleaning and disinfection and with human use; achieving a totally continuous coating, without joints, and carried out on a multitude of supports.

Used in new construction or rehabilitation of old aquatic complexes, it reduces construction costs and offers a greater waterproofing solution with versatile and high quality finishes.

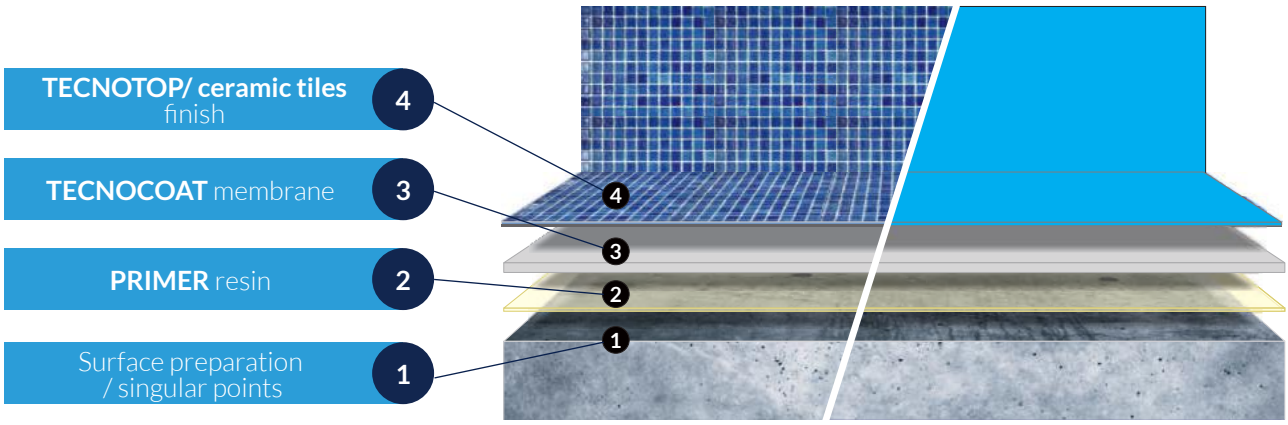
The esthetic finishes can be made in our pure polyurea membrane are varied, including finishes with different colors, and achieving anti-slip surfaces according to existing regulations.

CE
EN 1504-2



Water parks & pools

General outline



BENEFITS

1. **Fully adhered systems:** protection of the structural support element and eliminates any risk of water leakage (CE marking under EN-1504-2).
2. **Complete and absolute protection** of the construction element.
3. **Zero slope application,** it works under ponding water.
4. **Direct application to the existing substrate:** waste generations limited, which contributes to an improvement in the construction sustainability.
5. **Faster setting up:** labor time reduction, cost optimization.
6. **Cost reduction:** not need to apply mortar coats to protect it.
7. **Several finishing** (colors and surface textures), according to the existing slippery international approvals and regulations.
8. **Resistance to chlorine or salt** (average for clearing system).

Application parameters
Preliminary considerations

For the optimum application of the **TECNOCOAT** system (adherence, required use, decorative finish and/or applicable regulations) conditioning aspects, such as weather and physical properties of the substrate, need to be identified.

SURFACE HUMIDITY/WATER

Humidity on the substrate can affect the membrane's adherence. Humidity or the presence of water in/on the substrate hamper adherence, which will have a negative effect on the result of the system. It is recommended that their system is not applied before the concrete curing process has finalized (28 days)

It is essentially the application of the product is aware of and takes into consideration this aspect, carrying out the corresponding verifications in all areas of the substrate in order to decide on the type of primer to be used, or whether or not another treatment is required. (vapor barrier)

The different types of humidity or the presence of water in/or the substrate or their characteristics may be as follows:

- **Liquid water/moisture:** There must not be any water present, whatever the type of substrate, as the will completely annul the membrane's adherence (in some cases, use **PRIMER WET**, please, check our technical department)
- **Hydrostatic water:** The existence of rising damp, (water coming up through the element), is not compatible with continuous membrane WATERPROOFING SYSTEM and, therefore, this situation will have to be resolved via onsite application of water-vapor permeable hydraulic materials or the installation of floating floors, etc.
- **Dew point:** This is a factor to take into consideration at the start of applying systems such as ours, which for the most part are used outside and deepended, as mentioned, on a level of control of the substrate humidity. The appearance of humidity from dew depends on the air and substrate temperature and the relative ambient humidity. To prevent this, the substrate's temperature should be 3 degrees Celsius above that corresponding to the dew point (see the universal dew point charts).

SUBSTRATE AND AMBIENCE TEMPERATURES

These are two conditioning aspects that could affect the membrane curing process, along with that of the ambient temperature.

- Ambiance range of temperatures: 3ºC to 45ºC
- Substrate range of temperatures: 5ºC to 40ºC

Although, based on our experience and due to the chemical nature of some of the products that make up the system, we do not recommend working at ambiance temperatures below 3ºC.

SUPPORT'S PHYSICAL CONDITIONS

Coating performance is dependent on adequate surface preparation and application.

The optimal surface preparation will increase the bonding on the surface, and this is essential for three reasons:

- Good bond allows the structure and coating to work as one and maintain stability.
- Prevents salt and contaminated water from leaking through the concrete (extremely important in steel, to protect from rust and corrosion).
- Avoid the formation of pinholes on membrane in the moment of the application.



Phreatic water presure not allowed.

1a. Surface Preparation

CONCRETE

The concrete surface, where we go to apply our waterproofing system, needs to be prepared, as follows:

- Remove oils, greases, silicones or other contaminants.
- Fill the depressions on the surface (caused during the concrete pouring process), using **PRIMER EP-1010** epoxy mortar. Fill fissures and cracks using **MASTIC PU**.

Finally, a mechanical preparation is needed, to get a uniform roughened surface and to remove the laitances, using one of these systems, thus achieving a flat surface with a continuous roughness (CSP 4 to 6), following the ICRI recommendations.

People applying the system must decide in each case the most suitable method, depending on the conditions of the substrate or surface or the desired result (always in combination with the primer to be used).

To complete these processes prior to application, the substrate must be cleaned using dry systems (vacuum cleaner).

METAL

Most of these metallic surfaces (pre-lacquered metal sheets, copper, zinc, galvanized sheets, etc.) will require blast cleaning, particularly when the area to be treated is vertical or sloped. This process can be carried out using either a dry blast of **SILICA SAND** or water. The method used will depend, to a large extent, on the metal and its fragility.

1.- BLAST CLEANING

The most usual methods used for this type of preparation are dry and wet blasting.

PROCESSES TO ELIMINATE THE LAITANCE ON THE CONCRETE

Grinding/Milling:
Using a rotary machine with specialty grinding wheels with tungsten carbide; this method is suitable for removing concrete paste and other hard substances. It causes surface erosion by rubbing with stones or hard sanding discs. This removes the softest parts of the surface, for example surface laitance, which sometimes occurs during concrete pouring or curing. But is not suitable for soft existing coatings or when the friction caused heat meets this product.

Sandblasting:
Generally employs sand or a sand type of abrasive shot by compressed air through a nozzle. Sandblasting is recommended for horizontal, vertical, and overhead use. This method is recommended for removal of the surface of concrete, existing sealers, and hard coatings. Creation of dust may be prohibited by environmental regulation. Vacuum mechanisms are available to remove dust from the air. Wet sandblasting is available that complies with environmental regulations. Remove shot material, dust, and mud residues according to environmental regulations. This method of surface preparation, while highly effective, has lost utility where environmental regulation has restricted its use.

Scarifying:
Generally employs a rotary or drum machine. This method utilizes specialty blades or impact devices to break the surface of concrete or coatings. Several passes over the same area may be required to remove existing surface completely. In the case of elastomeric surface coatings, blade shaving may be the only effective method of removal where water use is a problem. Most sealers and coatings will not allow removal by acid etching. Most elastomeric coatings have a tendency to “bounce” shot blasting.

Shot blasting:
It involves the projection or direct impact of steel grit of different sizes on the concrete’s surface. This process produces very little dust. Shot is generally recoverable. Some water cleaning or vacuuming may be required after use of this method. This is effective for removal of concrete surface paste, sealers, and hard coatings. Speed over an area and number of passes over an area determine depth of removal. Edging and small spaces are not susceptible to this type of removal without small specially designed equipment.

Dry blasting is carried out using portable equipment that has a pressurized hose inside a larger evacuation hose. The external hose collects the blasting grit after blasting, taking it to the central unit for recovery and recycling, with which this equipment can be used for sizable projects outside with specialized means without any problems.

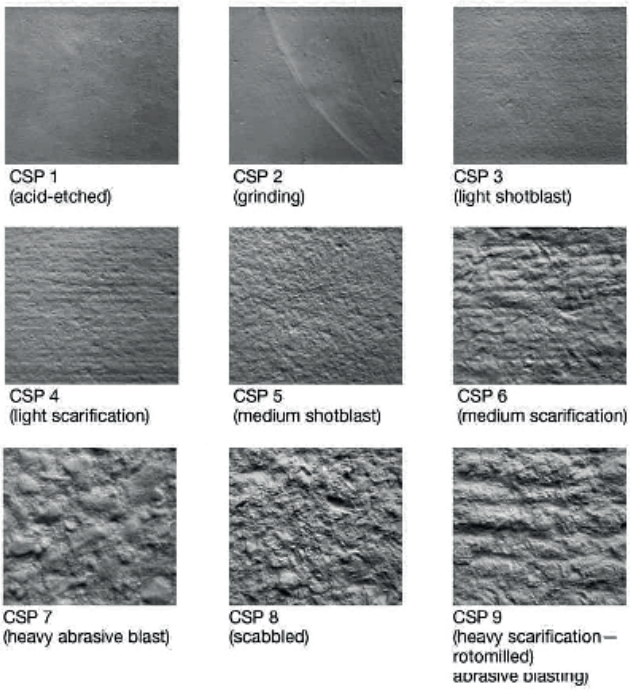
Wet blasting, abrasive particles are added to an aqueous medium to form a kind of slurry mixture. This aqueous mixture is continuously shaken to prevent its solidification and pumped using compressed air via one or several nozzles pointed at the surface to be treated. The liquids most commonly used to suspend the abrasive particles are water-based additives, such as oxide inhibitors, moistening agents and anti-clogging and anti-solidification compounds.

Note: the liquids most commonly used to suspend the abrasive particles are water-based additives, such as oxide inhibitors, moistening agents and anti-clogging and anti-solidification compounds.

In most of the cases (tanks or reservoirs) to prevent corrosion or rust, especially after an abrasion process is recommended passivate: applying oxidation inhibitors before to application of the primer's waterproofing system.

In some cases, if you did a special sandblasting achieving a SSPC SP-10 or similar, you could apply directly the membrane without using a primer before (always check the adhesion before).

Ensure that there isn't the presence of contaminants such as oils, greases, silicones... (as additives used in the pouring process of the concrete).



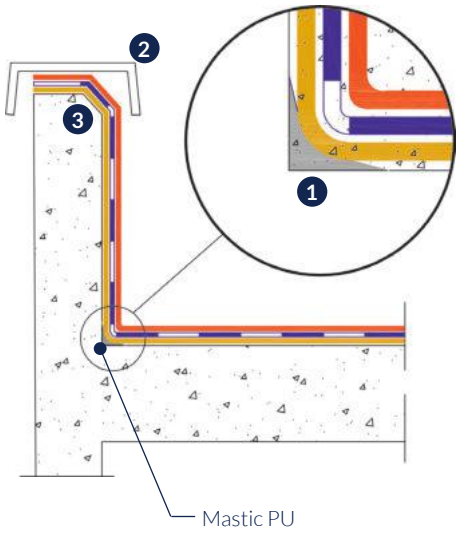
Finishing profiles according to ICRI







1b. Singular points

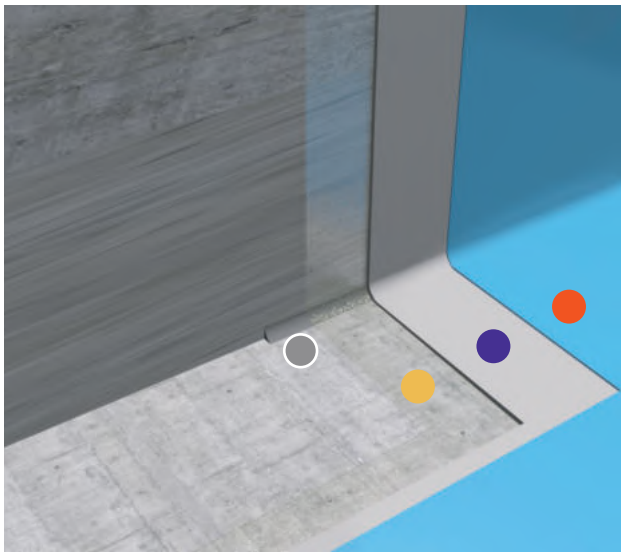


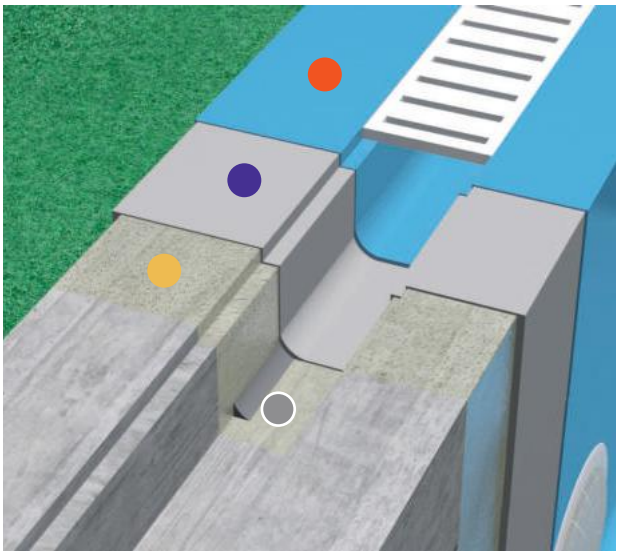
VERTICAL SURFACES
(FLASHING, UPSTANDS, SHARP EDGES)

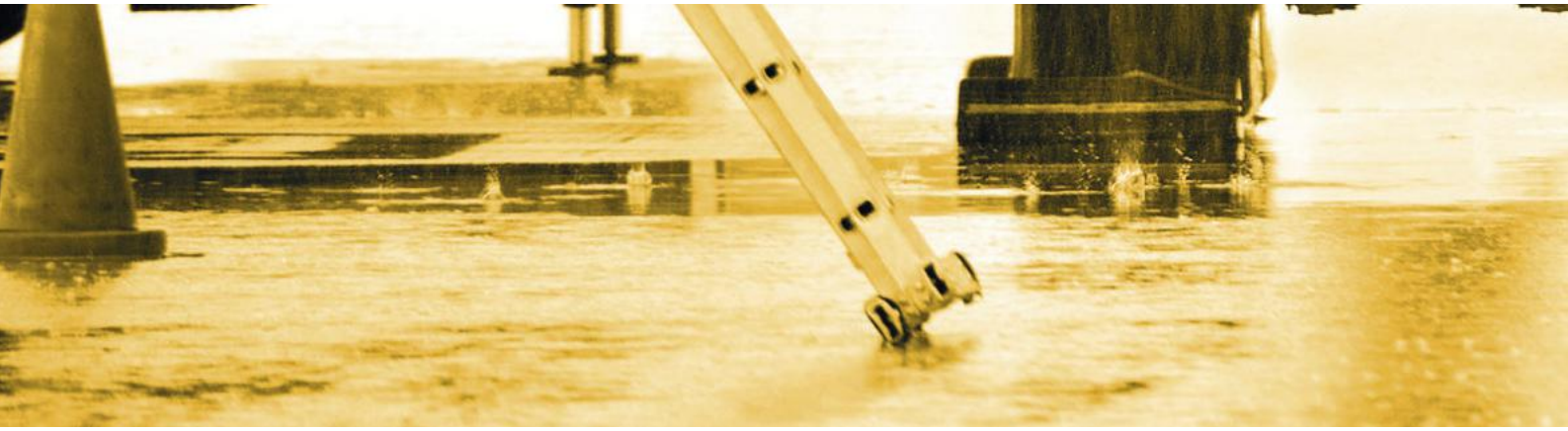
1. Coving at the point of contact, to provide a good surface for the vertical rotation of the membrane, using MASTIC PU, or common mortar.

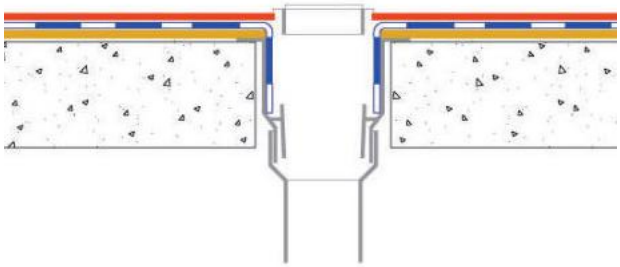
2. Final membrane's edge, to ensure that not water rain, filter out within the membrane and the wall.

3. In turns or sharp edges on the top of the wall, it should cut them about 45 ° to avoid breakage due to an internal punching.





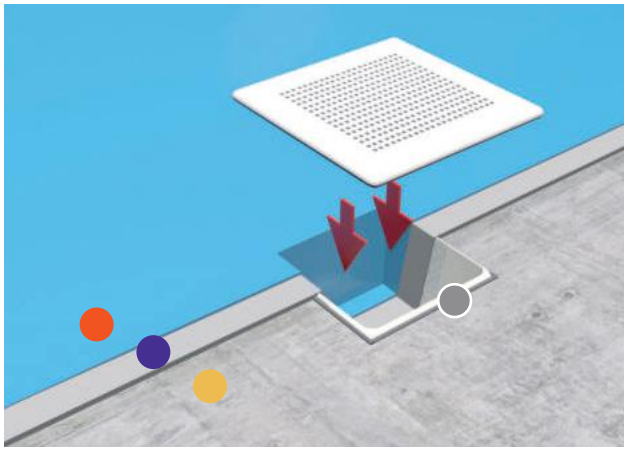


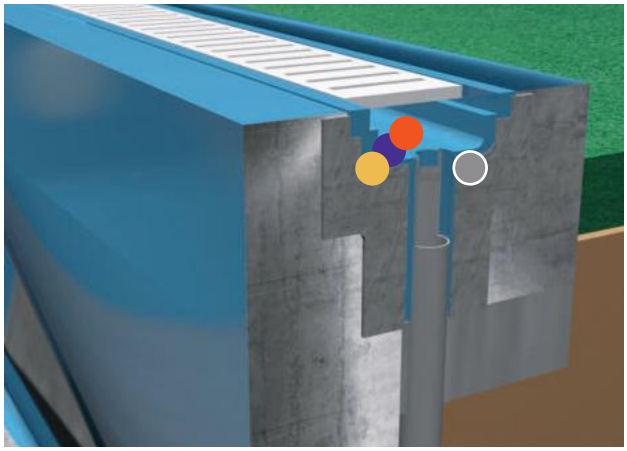


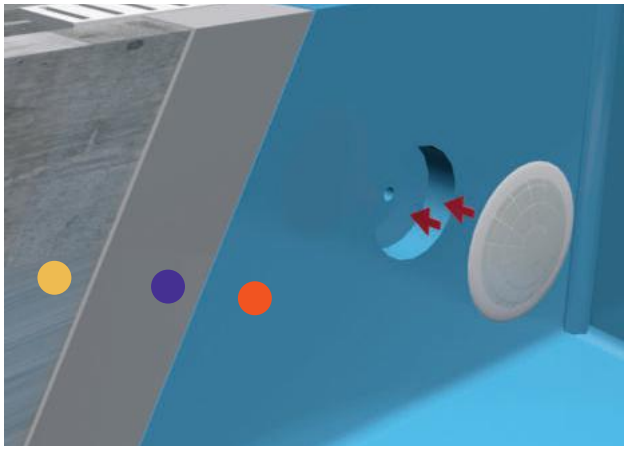
DRAINS

Drains and vertical water drainage should be given a generous coating of the membrane over their entire surface up to the mouth of the drainpipe. To aid in this operation, our **MASTIC PU** may be used to fill in the edges of the drainpipe at its point of contact with the slab.

In the case of metal drainpipes, the membrane will be applied in a continuous layer extended inside the drainpipe.







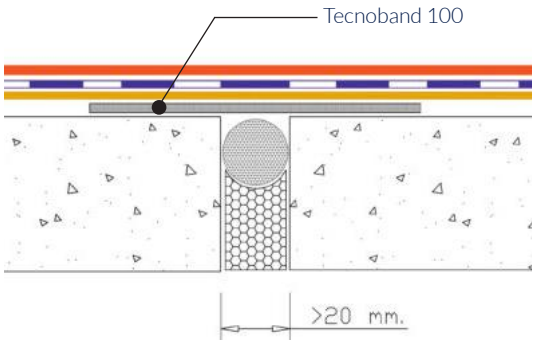
OTHERS

In general, apply the system as far as possible within any cavity, tube or pipe.

Smooth any edge with mechanical methods or MASTIC PU.

Disassemble any removable parts and install them again on top of applied system.

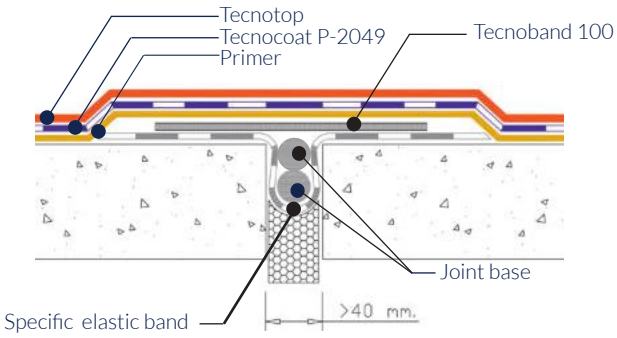




JOINTS

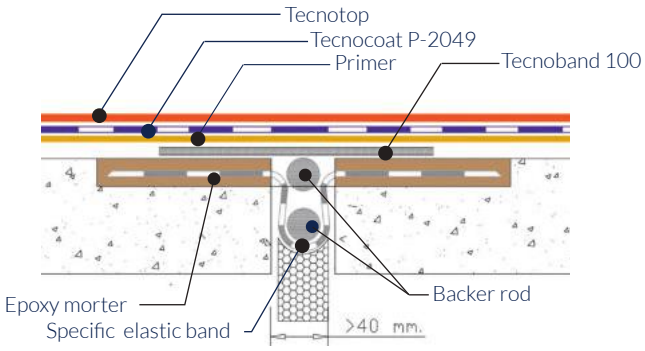
Width size ≤ 20mm: the gap should be opened up sufficiently, cleaned and filled in with **MASTIC PU** (never use silicones) elastic polyurethane Mastic.

Width size >20mm: cleaned and filled in with **MASTIC PU** (never use silicones) elastic polyurethane as well as applying a top seal with **TECNOBAND 100** butyl self-adhesive perimeter band and an upper protection of a geotextile layer in order absorb movements in the joint.



EXPANSION JOINTS

In the case of expansion joints, the stress to be absorbed is greater and, therefore, this element should be treated as a structural element and using a **specific elastic band**. . They should be applied and installed in the areas subject to structural movements according to the TDS.





2. Primer resin

The use of primers when applying the complete **TECNOCOAT** membrane system is important and essential and it is indicated in the approval and certification documentation available of **TECNOCOAT P-2049** (ETA, DTA and BBA).

MAIN PERFORMANCES

- Seal the Surface.
- Increase bonding.
- Fill irregularities to the existing surface.
- Surface moisture absorption, present in the surface during the application process.

APPLICATION METHODOLOGY

1. Check expiry time (existing on the pail label).
2. Open the pails and check visually the product.
3. Prior to mixing, stir component A separately to homogenize it.
4. Add the component B into the component A pail (make sure the component B is fully emptied into the component A).
5. Mix both components using a low speed electric mixer (300 to 400 r.p.m.).
6. Apply by short nap roller, brush or squeegee. The number of coats depends on the physical surface conditions; in most of cases is necessary to apply 2 crossed coats. Wait for the tack free time between coats. You can use airless equipment too, but the pot- life time must be checked to clean the equipment within the indicated time.



This process requires a flat, clean and dry substrate and as hard as possible.



In the tables below you can see the main properties of available primers to use in this system. Pay attention to the “accepted surfaces” and “maximum surface dampness” to do the best choice of primer resin.

	primer EP-1010	primer EPw-1070	primer EP-1040
Main use	Surfaces in low-damp conditions	Surfaces in medium-damp conditions	Metal surfaces
Accepted surface	Concrete / Ceramic Tiles	Concrete, asphalt	Metal / Ceramic tiles / Concrete
Components No.	2	2	2
Product base	Epoxy 100% solids	Epoxy water based	Epoxy 100% solids
Density	± 1.50 g/cm^3	± 1.00 g/cm^3	± 1.05 g/cm^3
Solids content	100 %	> 60 %	100 %
Concrete adherence	> 2 MPa	> 2 MPa	> 2 MPa
Yield per coat	± 250 g/ sqm	± 100 g/ sqm	± 150 g/ sqm
Initial drying time	50 minutes	5 ~ 6 hours	60 minutes
Recoat time	3 ~ 24 hours	6 ~ 48 hours	4 ~ 48 horas
Temperature of use	5 ~ 35 °C	5 ~ 35°C	5 ~ 35°C
Maximum surface dampness	4%	± 10 %	4 %
Dilution on water	NO	5 ~ 20 %	NO

	primer PU-1050	primer PUc-1050	primer WET
Main use	The best option for concrete	For concrete in cold environments	Concrete subject to maximum damp
Accepted surface	Concrete	Concrete	Concrete / Ceramic tiles
Components No.	2	2	2
Product base	Polyurethane 100% solids	Polyurethane 100% solids	Epoxy 100% solids
Density	± 1.11 g/cm^3	± 1.11 g/cm^3	± 1.50 g/cm^3
Solids content	100 %	100 %	100 %
Concrete adherence	> 2 MPa	> 2 MPa	> 2 MPa
Yield per coat	± 150 g/sqm	± 150 g/sqm	± 450 g/ sqm
Initial drying time	60 minutes	60 minutes*	3 hours
Recoat time	3 ~ 24 hours	3 ~ 24 hours*	3 ~ 6 hours
Temperature of use	5 ~ 35 °C	5 ~ 15 °C	5 ~ 35 °C
Maximum surface dampness	± 4 %	± 4 %	± 98 %
Dilution on water	NO	NO	NO

*Yield can vary depending on the substrate condition.

3. Polyurea membrane

TECNOCOAT is an extremely durable, solid and hard-wearing product that, once applied, offers great stability and long-life. Thanks to its versatility and its drying time of between 3 and 5 seconds **TECNOCOAT P-2049** adapts to any surface, making it in the ideal product for application in uneven areas of any shape, whether curved or square.

TECNOCOAT P-2049 has certification ETA 11/0357, BBA 16/5340 and DTA 19/2665 including anti-roots penetration, at 25 years working life, minimum thickness of 1.4 mm (recommended thickness around 2 mm., consumption ±2.1 kg/sqm). This thickness can vary depending on the final use of the waterproofing system. There are other certificates and tests (abrasion, tear…), you can ask for them to the Technical Department.

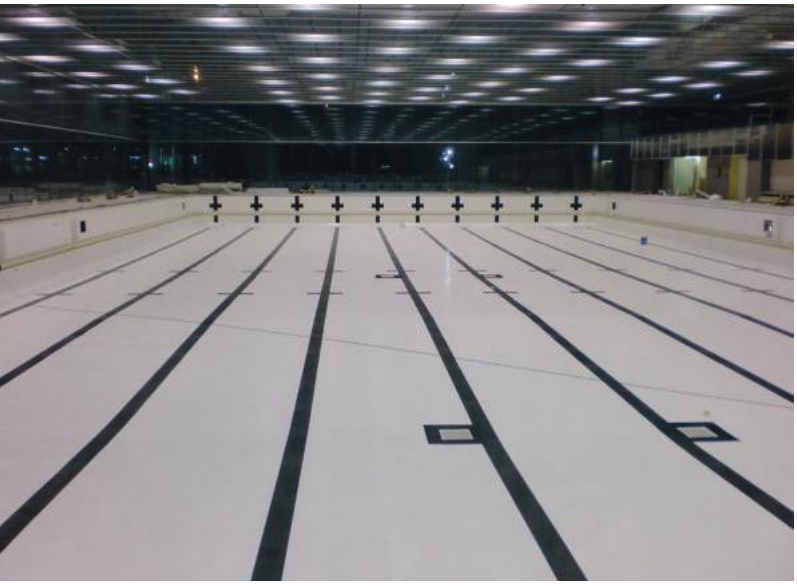
The packaging of the two products of the pure polyurea **TECNOCOAT** is served through two drums:

- SIDE A(ISOCYANATES): RED DRUM
- SIDE B(AMINES): BLUE DRUM (pigmented product)

TECNOCOAT P-2049 has certification ETA 11/0357, BBA 16/5340 including anti-roots penetration, at 25 years working life, a minimum thickness of 1.4 mm (recommended thickness around 2 mm, consumption ±2.1 kg/sqm). It holds a DTA 19/2665 Avis Technique certification for the French market intended for walkable roofs.

Shelf life is12 months at temperatures between 5°C to 35°C (41 to 95 ªF), provided it is stored in a dry place, keep away from direct sunlight, extreme heat, cold or moisture. Once the tin has been opened, the product must be used immediately. Once opening drum, B side must be agitated mechanically before inserting the transfer pumps and use.

For the repair and overlaps processes, please see the TDS.





APPLICATION METHODOLOGY

- Open both drums.
- Side (blue drum, amines): Stir/mix to homogenize the pigment inside because in most of the cases, pigment has settled. If you don't do this, previous action of mixing, it could happen color variances, foaming and sticky coating, so poor performance.
- Side A (red drum, isocyanates): prevents exposing to moisture once opened.
- Put the pumps into the drums and connect the hoses to the equipment.
- Start the equipment following the manufacturer instructions.
- Set up the hoses and machine temperatures (check the correct ones in the TDS).

The membrane is applied using spray equipment that takes the two components and it will form the final solid membrane (isocyanates and amines).

Spray gun application should be carried out applying the product always perpendicular to the substrate regardless of whether the surface is horizontal or vertical. This is extremely important as, otherwise, it will not be possible to apply the product completely and continuously, thus causing gaps in the layer and, therefore, incomplete seal. Apply crossed coat continuously as needed to achieve the desired thickness according to the final use or technical requirements. Do not apply more than 3-4 mm thickness in one single coat; there is a risk of cracks in the solid membrane because the high temperature.

tecnocoat P-2049

Recommended for...	 Concrete
Component No.	2
Density	± 1.10 g/cm³
Elongation	> 350%
Tensile strength	> 20 MPa
Concrete adherence	> 2 MPa
Hardness (shore A)	> 93
Hardness (shore D)	> 55
Initial drying time	3 ~ 5 seconds
Recoat time	max. 12 hours
Thickness (Yield)	2 mm (± 2.1 kg/sqm)
Fire reaction	Euroclass E
External fire behavior	Broof (t1) (t2) (t3) (t4)
Anti-root	Yes (EN13948)
Solids content	100%
VOC	0
Ponding water works	YES

	MACHINE SETTINGS
Heater isocyanate temperature	± 70-75 °C
Heater amines temperature	± 70-75 °C
Hose temperature	±70°C
Pressure	2500-3000 psi
Recommended mixing chamber	GU-07008-1 or GU-07008-2



After applying **TECNOCOAT P-2049** wash gently with neutral soap after 2 days and wait a minimum of 7 days before filling the tank.

TECNOCOAT P-2049 is an aromatic polyurea so it must be protected from the UV rays.

4. Aliphatic TOPCOAT

Due to the fact that it is an aromatic membrane it is essential to protect it, as indicated under ETA 11/0357, BBA 16/5340 and DTA, from the UV rays. Therefore, **TECNOCOAT** must be protected using colored, opaque materials that form a barrier against the aggressive effects of UV rays, and in this specific use to protect against chlorine or salt water.

TECNOTOP can be applied with:

- airless spray gun
- short nap roller
- brush

When applied using an airless system, add max. 5% Desmosolvent to help it run more smoothly through the equipment.

APPLICATION METHODOLOGY:

1. Check expiry time (existing on the pail label).
2. Open the pails and check visually the product.
3. Prior to mixing, stir component A separately to homogenize it (pigment is inside).
4. Mix the pigment beforehand with component A (if this one is neutral version).
5. Add the component B into the component A pail (make sure the component B is fully emptied into the component A).
6. Mix both components using a low speed electric mixer (300 to 400 r.p.m.).
7. Apply by short nap roller, brush. The number of coats depends on the physical surface conditions; in most of cases is necessary to apply 2 crossed coats. Wait for the tack free time between coats. You can use airless equipment too, but the pot- life time must be checked to clean the equipment within the indicated time.

The consumption of **TECNOTOP** can vary according to the final use or warranty given by the applicator.

There are two possibilities to have an anti-skid surface:

- Mixing **TECNOPLASTIC** range of particles on the **TECNOTOP** resin
- Spreading **SILICA SAND** on top to **TECNOTOP**



These types of resins should be applied without any humidity or the presence of water on the substrate.

Likewise, re-application should be carried out once the first coat has dried and with a maximum use window of 24 hours at 23° C.

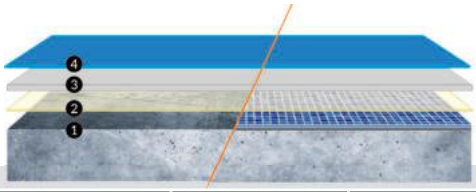
tecnotop 2CP

Components No.	2
Density	±1.20 g/cm^3
Solids content	± 71%
Pot Life	±1 hour
Dry Time	±2 hours
Recoat time	4 ~ 48 hours
Walkable / Passable	±12 hours
Concrete adhesion	>1.5 MPa
Yield	see next tables
Temperature of application	5 °C ~ 35 °C



Application summary

AQUA 1 · TECNOTOP FINISHING



	PRODUCT	TYPE OF SURFACE	EXISTING SURFACE HUMIDITY	APPLICATION METHOD	YIELD	THICKNESS
1	**Surface preparation**					
2*	**PRIMER EPw-1070**	Concrete/ Ceramic tiles	± 4%	• Apply by roller or electrical equipment.	150 ~ 300 g/sqm	135 ~270 µ
	PRIMER EP-1040	Ceramic/ Metal	± 4%	• Apply by roller or electrical equipment.	150 ~ 250 g/sqm	90 ~150 µ
	PRIMER EP-1020	Concrete	± 4 %	• Apply by roller.	± 200 g/sqm	190 µ
	PRIMER EP-1010	Concrete/ Ceramic	± 4 %	• One coat application by squeegee.	± 300 g/sqm	190 µ
	PRIMER PU-1050	Concrete	± 4%	• Apply by roller.	150 ~ 300 g/sqm	135 ~270 µ
	PRIMER PUc-1050	Concrete cold weather	± 4%	• Apply by roller.	150 ~ 300 g/sqm	135 ~270 µ
	PRIMER WET	Concrete/ Ceramic	± 98%	• One coat application by trowel.	450 ~ 500 g/ sqm	290 ~325 µ
3	**TECNOCOAT P-2049**	-		• Apply using TC-2049 spray equipment.	2.7 kg/sqm	2.5 mm
4	**TECNOTOP 2CP**	-		• Apply a first coat of colored TECNOTOP 2CP. by roller or electrical equipment.	± 150 g/sqm	90
	SILICA SAND	-		• Spread SILICA SAND on the wet surface. Once dried, remove the non bonded SILICA SAND (granulometry 0,3 ~ 0,8mm).	± 1 kg/sqm	-
	TECNOTOP 2CP	-		• Apply a second crossed coat of colored TECNOTOP 2CP.	± 500 g/sqm	120 µ

*Choose primer according surface type and humidity.

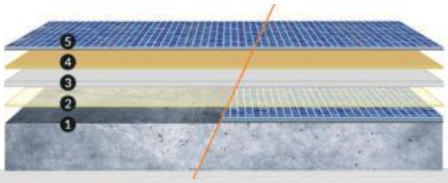
AQUA 2 · TECNOTOP + TECNOPLASTIC F/C FINISHING



	PRODUCT	TYPE OF SURFACE	EXISTING SURFACE HUMIDITY	APPLICATION METHOD	YIELD	THICKNESS
1	**Surface preparation**					
2*	**PRIMER EPw-1070**	Concrete/ Ceramic tiles	± 4%	• Apply by roller or electrical equipment.	150 ~ 300 g/sqm	135 ~270 µ
	PRIMER EP-1040	Ceramic/ Metal	± 4%	• Apply by roller or electrical equipment.	150 ~ 250 g/sqm	90 ~150 µ
	PRIMER EP-1020	Concrete	± 4 %	• Apply by roller.	± 200 g/sqm	190 µ
	PRIMER EP-1010	Concrete/ Ceramic	± 4 %	• One coat application by squeegee.	± 300 g/sqm	190 µ
	PRIMER PU-1050	Concrete	± 4%	• Apply by roller.	150 ~ 300 g/sqm	135 ~270 µ
	PRIMER PUc-1050	Concrete cold weather	± 4%	• Apply by roller.	150 ~ 300 g/sqm	135 ~270 µ
	PRIMER WET	Concrete/ Ceramic	± 98%	• One coat application by trowel.	450 ~ 500 g/sqm	290 ~325 µ
3	**TECNOCOAT P-2049**	-		• Apply using TC-2049 spray equipment.	2.7 kg/sqm	2.5 mm
4	**TECNOTOP 2CP**	-		• Apply a first coat of colored TECNOTOP 2CP by roller or electrical equipment.	± 150 g/sqm	90
	TECNOPLASTIC F/C	-		• Apply 7-8% mixed with the previous coat of TECNOPOP 2CP.	1.5 ~ 2 kg/sqm	-
	TECNOTOP 2CP	-		• Apply a second crossed coat of colored TECNOTOP 2CP.	± 200 g/sqm	120 µ

*Choose primer according surface type and humidity.

AQUA 3 · CERAMIC TILE FINISHING



	PRODUCT	TYPE OF SURFACE	EXISTING SURFACE HUMIDITY	APPLICATION METHOD	YIELD	THICKNESS
1	**Surface preparation**					
2*	**PRIMER EPw-1070**	Concrete/ Ceramic tiles	± 4%	• Apply by roller or electrical equipment.	150 ~ 300 g/sqm	135 ~270 µ
	PRIMER EP-1040	Ceramic/ Metal	± 4%	• Apply by roller or electrical equipment.	150 ~ 250 g/sqm	90 ~150 µ
	PRIMER EP-1020	Concrete	± 4 %	• Apply by roller.	± 200 g/sqm	190 µ
	PRIMER EP-1010	Concrete/ Ceramic	± 4 %	• One coat application by squeegee.	± 300 g/sqm	190 µ
	PRIMER PU-1050	Concrete	± 4%	• Apply by roller.	150 ~ 300 g/sqm	135 ~270 µ
	PRIMER PUc-1050	Concrete cold weather	± 4%	• Apply by roller.	150 ~ 300 g/sqm	135 ~270 µ
	PRIMER WET	Concrete/ Ceramic	± 98%	• One coat application by trowel.	450 ~ 500 g/sqm	290 ~325 µ
3	**TECNOCOAT P-2049**	-	-	• Apply using TC-2049 spray equipment.	2,7 kg/sqm	2,5 mm
4	**PRIMER PU-1050 + SILICA SAND**	-	-	• Apply by roller a thin coat of PRIMER to ensure the adderence. • Spread SILICA SAND (granulometry 0.3 ~ 0.8mm) on the wet surface. • Once dry, remove the non bonded SILICA SAND.	± 150 g/sqm (PRIMER) ± 1 kg/sqm (SILICA SAND)	45~60 µ
5	**Ceramic**	-	-	• Place the tiles with specific mortar using the standard procedure.	-	-

*Choose primer according surface type and humidity.



Approved by official certification agencies

- **EOTA CERTIFICATES**
  European TECHNICAL ASSESSMENT (ETA 11/0357)
  TECNOCOAT P-2049 holds an ETA certificate (W3 25 working life years). This approval is based on a European technical approval guideline (EAD 030350-00-0402) which approves the suitability of the product for its specified use, based on compliance with the essential requirements as "Liquid Applied Roof Waterproofing Kit, based on pure Polyurea". Including plant roots penetration according to EN-13948 for use in green-roofs.

  European TECHNICAL ASSESSMENT (ETA 21/0942)
  This approval is based on a European technical approval guideline EAD 030675-00-0107 which approves the suitability of the product how "Liquid Applied Bridge Deck Waterproofing Kits" (under asphalt).

- **DTA "Avis Technique" for roofing**
  DTA 5.2/19.2665
  TECNOCOAT P-2049 holds the AVIS TECHNIQUE, technical certification for in situ resin-based liquid waterproofing system for inaccessible roofs, technical roofs and roofs accessible to pedestrians.

- **BBA CERTIFICATE**
  UK TECHNICAL ASSESSMENT (BBA 16/5340)
  TECNOCOAT P-2049 holds a BBA certificate for the British market (w3 25 working life years) and regulates aspects as weather resistance, reaction to fire, adherence to substrates, pedestrian and road traffic resistance to plant roots penetration and working life for over 25 years.

- **NSF INTERNATIONAL LABORATORIES APPROVAL and WRAS APPROVAL**
  APPROVED FOR CONTACT WITH WATER INTENDED FOR HUMAN CONSUMPTION (BS6920) and WRAS
  TECNOCOAT P-2049 passed all the tests conducted by the NSF laboratories and is now officially classified as safe and suitable for use in contact with water destined for human consumption, and holds the WRAS APPROVAL (Water Regulations Advisory Scheme) nº 1708543.

- **ASTM APPROVALS**
  Tested under various ASTM standards according to US regulations.

- **CE MARKING UNDER EN 1504-2 APPROVAL**
  PROTECTION AND REPAIR OF CONCRETE STRUCTURES
  TECNOCOAT P-2049 holds an EN 1504-2 certificate, the official European approval for products and systems designed for the protection and repair of concrete structures.

- **CONTACT WITH FOOD PRODUCTS CERTIFICATE**
  NO MIGRATION IN CONTACT WITH ETHANOL (UE REGULATION No. 10/2011 based on EN 1186.1:2002 and EN 1186.3:2002)
  The **TECNOCOAT P-2049** membrane holds a certificate issued by Applus declaring that migration in contact with ethanol is lower than the global limit permitted.



Legal Notes

- Check TDS and MSDS of all the materials before use.
- Technical data and any other information are true and accurate to the best of our knowledge.
- The use of these products is beyond the control of Tecnopol
- Consumptions can vary due surfaces, machine maintenance status or weather conditions
- This is a technical document, without legal value
- Proper application is the responsibility of the buyer
- The product properties may be changed without notice
- No liability, warranty of product performance is created by this document
- It's buyer's responsibility to determine what Tecnopol products are appropriate for each use
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NOTES

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