



# Idrosilex Pronto

**Osmotic cementitious mortar suitable for waterproofing concrete structures**



## WHERE TO USE

- Repairing underground masonries subject to water and moisture seepage in situations with negative pressure up to 1 atmosphere.
- Waterproofing basins, reservoirs, concrete or masonry tanks.
- Waterproofing concrete or masonry tanks containing treated sewage water.
- As further smoothing and waterproofing compound of underground walls before laying a bituminous membrane.

## Some application examples

Waterproofing:

- interior and exterior cellar walls;
- damp areas;
- swimming pools;
- lift-rooms;
- underground passages;
- foundation walls;
- irrigation canals.

## TECHNICAL CHARACTERISTICS

**Idrosilex Pronto** is a pre-blended powder, composed of a cement-based compound,

selected graded aggregates, and special synthetic resins according to a formula developed in the MAPEI research laboratories. When mixed with water, **Idrosilex Pronto** becomes a fluid mortar that can be applied by trowel, brush or by spray with excellent adhesion to the substrate for complete waterproofing, even in the presence of slight negative pressure.

**Idrosilex Pronto** corresponds to the principles defined in EN 1504-9 (“*Products and systems for protecting and repairing concrete structures: definitions, requirements, quality control and conformity assessment. General principles for the use of products and systems*”) and the requirements of EN 1504-2 coating (C) according to the MC and IR principles (“*Protection systems for concrete surfaces*”).

## RECOMMENDATIONS

- Do not use **Idrosilex Pronto** for solving internal condensation problems (use dehumidifying renders, improve ventilation to the area or provide adequate insulation).
- Do not use on plasters, plasterboards, painted walls, plywood, chipboard, asbestos cement.
- Do not mix **Idrosilex Pronto** with additives, cement or aggregates.

# Idrosilex Pronto



Grey Idrosilex Pronto mixed with water



Application of Idrosilex Pronto by spray gun in hydroelectric canal

- Do not use on flexible or unstable surfaces.
- In no case should **Idrosilex Pronto** be applied to a substrate that shows signs of stagnant water on the surface.
- Do not mix **Idrosilex Pronto** with more water than is specified.
- Do not use the product if the packaging is damaged.

## APPLICATION PROCEDURE

### Preparing the substrate

The surface to be waterproofed must be perfectly clean and sound. Remove crumbly or loose parts, dust, cement laitance, form release agents, varnishes and paint by mechanical brushing, sanding or high water pressure.

Renderers must be perfectly anchored to the substrate. Seal cracks in the substrate and repair damaged parts with products from the **Mapegrout** line. Completely soak the substrate with water.

Wait for the evaporation of the excess water. If necessary, in order to accelerate the operation, use a sponge or compressed air.

### Preparing the mortar

Pour 4.4-4.8 litres of water into a suitable container and slowly add the **Idrosilex Pronto** while blending with a mechanical mixer.

Mix thoroughly for some minutes, taking care to blend in all the unmixed powder deposited on the sides and bottom of the bucket, until the mortar is completely blended (free from lumps).

Leave the mortar to stand for approximately 10 minutes, remix and apply.

### Applying the mortar

Apply **Idrosilex Pronto** with a brush, trowel or spray.

Application by brush requires 2-3 coats. Make sure the previous coat is sufficiently dry before applying the next (generally 5-6 hours depending on the temperature and the absorption of the substrate. In order to have perfect adhesion between the coats, it is recommended not to exceed 24 hours).

To achieve proper application, particular care to cover corners and coves is required.

When application is by trowel, it is recommended to treat the substrate with **Idrosilex Pronto** using a brush for the first coat. When application is by spraying, a normal rendering machine (including rendering machine with bowl-type spray gun) can be used making sure to mix the product beforehand. After having soaked the substrate, apply the mix by spray in two layers. Apply the second one when the first has partially hardened. In all cases the final thickness of **Idrosilex Pronto** must be approximately 2-3 mm.

The properties of the hardened layer of **Idrosilex Pronto** are such that it can be used only for rigid waterproofing.

**Idrosilex Pronto** cannot be exposed to any type of traffic. When applied onto floors or surfaces subject to accidental falling of objects that may cause damage, it must be protected with a 4-5 cm thick cementitious screed.

## Precautions to be observed during application

In hot weather, on windy or very sunny days, it is recommended to spray the surface with water to prevent rapid evaporation of mixing water.

## Cleaning

**Idrosilex Pronto** can be removed from tools with water before it hardens. Once hardened, cleaning becomes difficult and can be carried out only mechanically.

## CONSUMPTION

1.6 kg/m<sup>2</sup> per mm of thickness.

It is advised:

- for slight moisture penetration: 2-3 kg/m<sup>2</sup>;
- for reservoirs or structures where stagnant water is present: 4-4.5 kg/m<sup>2</sup>;
- for water with a pressure of up to 1 atmosphere: 6-7 kg/m<sup>2</sup>.

## PACKAGING

20 kg bag - grey powder.

## STORAGE

**Idrosilex Pronto** may be stored for up to 12 months in its original packaging in a dry place.



**Idrosilex Pronto: single component, normal-setting, osmotic cementitious mortar for protecting and waterproofing concrete: conforms to the requirements of EN 1504-2 coating (C) according to the MC and IR principles**

## TECHNICAL DATA (typical values)

### PRODUCT IDENTITY

Consistency:	powder
Colour:	grey
Maximum size of aggregate (mm):	0.4
Bulk density (kg/m <sup>3</sup> ):	1,300
Dry solids content (%):	100

### APPLICATION DATA (at +20°C - 50% R.H.)

Colour of mix:	grey or white
Mixing ratio:	100 parts of <b>Idrosilex Pronto</b> with 22-24 parts of water 4.4-4.8 litres of water per 20kg bag (grey)
Consistency of mix:	fluid - applicable by trowel
Density of the mix (kg/m <sup>3</sup> ):	1,750
Application temperature range:	from +5°C to +35°C
In service temperature range:	from -30°C to +90°C
Pot life of mix:	approximately 1 hour
Application of successive layer:	after 5 hours, and no later than 24 hours
Waiting time before putting into service:	7 days

### FINAL PERFORMANCE (with 23% mixing water - thickness 2.5 mm)

Performance characteristics	Test method	Requirements according to EN 1504-2 coating (C) (MC and IR principles)	Performance
Compressive strength (MPa):	EN 12190	not required	> 6 (after 1 day) > 15 (after 7 days) > 25 (after 28 days)
Flexural strength (MPa):	EN 196/1	not required	> 2.0 (after 1 day) > 4.0 (after 7 days) > 6.0 (after 28 days)
Bond strength on concrete (substrate in MC 0.40) according to EN 1766 (MPa):	EN 1542	for rigid systems without traffic: > 1.0 with traffic: > 2.0	≥ 2 (after 28 days)
Impermeability expressed as coefficient of permeability to free water (kg/m <sup>2</sup> ·h <sup>0.5</sup> ):	EN 1062-3	W < 0.1	W < 0.05 Class III (low permeability) according to EN 1062-1
Permeability to water vapour - equivalent air thickness S <sub>D</sub> - (m):	EN ISO 7783-1	Class I S <sub>D</sub> < 5 m Class II 5 m < S <sub>D</sub> < 50 m Class III S <sub>D</sub> > 50 m	S <sub>D</sub> < 1 Class I (permeable to water vapour)
Reaction to fire:	Euroclass	according to value declared by manufacturer	E



**Application of Idrosilex Pronto by trowel**



**Application of white Idrosilex Pronto by spray gun in highway tunnel**

# Idrosilex Pronto

All relevant references for the product are available upon request and from [www.mapei.au](http://www.mapei.au)

Wear protective gloves and goggles. For further and complete information about the safe use of our product please refer to our latest version of the Material Safety Data Sheet.

PRODUCT FOR PROFESSIONAL USE.

## WARNING

*Although the technical details and recommendations contained in this product data sheet correspond to the best of our knowledge and experience, all the above information must, in every case, be taken as merely indicative and subject to confirmation after long-term practical application: for this reason, anyone who intends to use the product must ensure beforehand that it is suitable for the envisaged application: in every case, the user alone is fully responsible for any consequences deriving from the use of the product.*

**Please refer to the current version of the Technical Data Sheet, available from our web site [www.mapei.com](http://www.mapei.com)**



Bertini hydroelectric canal - Como - Italy. Surfaces treated with Idrosilex Pronto

## SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

Idrosilex Pronto is irritant; contains cement, that in contact with sweat or other bodily fluids can produce an irritant alkaline reaction and allergic reactions to those predisposed.



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