



Prima
PAVIMENTI SPECIALI

PRIMA IDRO®
DRAINING CONCRETE OUTDOOR
CONTINUOUS FLOORING



DRAINING CONCRETE, THE GREEN SOLUTION.

Prima Idro®

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WATER PASSES THROUGH CONCRETE.



PRIMA IDRO®

ECO-SUSTAINABLE CEMENTITIOUS DRAINING SYSTEM

When it comes to designing or renovating the outdoor floor of a public or private space, be it a square, a pedestrian area, a public park or common areas paths within flat complexes, the most complicated aspect of the design is choosing the **most appropriate material and measures to drain rainwater**.

Essentially, right from the idea is to choose **certified materials** at the design stage that **concretely contribute** to improving outdoor spaces, avoiding as much as possible the creation of new impemeable (such as asphalt and concrete) and/or unstable (such as self-locking and loose gravel) surfaces.

Draining concrete, as the word implies, is a very porous concrete that is permeable to liquids. These floors are an ecologically sustainable solution to solve the problems related to the new development or upgrade of some urban areas, compatible with the values of respect and protection of the environment, by naturally helping the reintegration of groundwater and reducing the inflow of the same to the road surface.

All parties must be aware that during installation, concrete may have grout in the mixture.

The operating mechanism is simple: the water that arrives at the surface of Prima Idro® passes through the entire structure, reaches the subsoil and regenerates the groundwater. Part of the water is returned to the environment through evaporation, improving the thermohygrometric conditions of the site.

Prima Idro® **effectively meets the requirements of sustainability** and stability over time, allowing a drastic reduction in water collection structures, **reducing the overall cost of the project, construction and subsequent maintenance**.



WHERE

Prima Idro® respects the environment and guarantees complete permeability. It is an environmentally sustainable solution applicable in various contexts:

- Drainage of road surfaces
- Pedestrian and bicycle paths
- Secondary and access roads
- Alleys and roads in areas of nature conservation or historical interest
- Paths near sports facilities and golf courses
- Parking areas
- Industrial and commercial yards





PERMEABLE AND DRAINING SURFACE.



PRODUCT TECHNICAL DATA

- Medium thickness 10 cm pedestrian - 115 cm driveable (≤ 35 quintals) 20 cm driveable (> 35 quintals)
- Color base color: natural gray, pigmentazione a richiesta.
- Max diameter aggregate from 6 to 11 mm – from 8 to 22
- Compression resistance at 28 days $> 15 \text{ Mpa N/mm}^2$
UNI EN 12930-3
- Fresh density $> 1650 \text{ kg/m}^3$ about
- Porosity $\geq 15\%$
 $< 25\%$
- Draining capacity (medium value) $5,78 \cdot 10^{-3} \text{ m/s} \geq 150\text{-}180 \text{ liters/m}^2/\text{minute}$
UNI EN 12697-40
- Free surface area (draining) $\geq 20\%$
- Free surface area (draining) $\geq 1 \text{ Mpa}$
- Material Yield 18 kg/m^2 spess. 1 cm** about
- Product appereance Bulk

* Depending on the type and level of constipation achieved

** Value for average constipation



Draining
System



Frost
Resistance



Non-slip



Eco-Friendly



High
Resistance

STRATIGRAPHIES



- Draining Concrete - 10 cm
- Granulated or crushed 3/6 mm* – pea thickness 3 cm
- Gravel layer Thickness: 15-20 cm Crushed quarry stone or granules, both free of fine material (earth, sand, etc.) Aggregate grain size: 70-15 mm*
- Geotextile
- Ground

Prima Idro® permeable concrete - Pedestrian and cycle path

* Nominal values



- Draining Concrete - 15 cm (up to 35 quintals)
Thickness >20 cm (over 35 quintals)
- Granulated or crushed 3/6 mm* – pea thickness 3 cm
- Gravel layer Thickness: 15-20 cm Crushed quarry stone or granules, both free of fine material (earth, sand, etc.) Aggregate grain size: 70-15 mm*
- Geotextile
- Ground

Prima Idro® permeable concrete - Version for traffic.

* Nominal values



BENEFITS



COMPLETELY AND IMMEDIATELY DRAINING

The open-pored structure allows natural infiltration of rainwater into the subsoil. The minimum drainage rate of Prima Idro® is about 150-180 liters / m² / minute. The water table is regenerated.

ENVIRONMENTAL BENEFITS

Prima Idro® helps reduce pollutants in runoff water. Water is retained by the top of the roadway, preventing it from being carried into waterways. The maximum flow rate through the sewer system is reduced.

ECONOMIC BENEFITS

Prima Idro® is a valid alternative to the construction and subsequent maintenance of underground pipes for the collection, channeling and drainage of stormwater on paved surfaces, reducing the need for large cisterns by serving as a collection and retention area.

HEAT ISLAND EFFECT

The surface cools faster because the porous material facilitates the passage of air.

RESISTANCE AND SAFETY

Resistance to freeze-thaw cycles (snow-covered drainage concrete is able to eliminate it much faster than conventional flooring).
It significantly improves traffic safety during rain. High porosity allows faster melting of snow.

DRIVABLE AND PEDESTRIAN

It has high mechanical strength and is suitable for both pedestrian and vehicular traffic.

MAINTENANCE

Simple ordinary and extraordinary maintenance and lower operating costs.



IMPROVEMENT OF SURFACE QUALITY

COLOR RANGE

Prima Idro® is available in natural grey or sample colors.



Natural Grey

Yellow



Brown

Red



Prima Idro®
Secondary access road.



Prima Idro®
Pedestrian path in residential area.



Prima Idro®
Permeable concrete support, suitable for
per draining natural gravel finishes like
Prima Drain Stone®

SOME OF OUR CUSTOMERS

















CONTACT DETAILS

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Whitelist
Azienda imprenditoriale alla criminalità organizzata



OS 6 Classe IV
OS 26 Classe IV
OG 1 Classe III
OG 3 Classe II

