

Water-Tite 101 All Purpose

Product Description

Pioneer Pro Water-Tite 101 All Purpose is one-component cement based crystalline capillary, water-repellent, micro-mortar waterproofing system. The active chemicals are activated by water to produce insoluble crystals that penetrate concrete and block the substrate capillaries and hairline cracks. It is mixed with potable water to a slurry consistency and is applied for interior and exterior use in protecting masonry and concrete structures.

Key Features

- Integral waterproofing chemistry
- Permanently active
- Very economical
- For internal and external applications
- For use in contact with potable water
- Waterproofs porous substrates
- Non-flammable
- Inorganic and environment friendly

Product Specifications / Typical Properties / Physical Characteristics

Table 1: Physical Properties (Uncured)*

Parameters	Results
Components	Cementitious blend of moisture-activated chemicals
Appearance	Grey Powder
Particle Size	0 - 0.5 mm
Bulk density	1.34 g/cm ³
Powder to Water Ratio	3:1

Table 2: Physical Properties (Cured)*

Parameters	Results
Compressive Strength	460 psi
Adhesion on Concrete	20 - 30 psi (Cohesive failure)
Water Bead Test	Exhibits lotus effect
Water Ponding Test	No water ingress
Coverage	0.4 - 0.5 kg per m ² per coat

Note: Typical data only. Information on this data sheet should not be used for writing specifications.

Applications

Pioneer Pro Water-Tite 101 All Purpose can be applied on both new and old structures either on the water-retaining side or on the negative side. Pioneer Pro Water-Tite 101 All Purpose is recommended for the following typical applications:



- Water treatment or sewage structures
- Basement walls
- Irrigation of tunnels
- Supporting walls and columns
- Tunnels, silos, water tanks
- Foundation slabs inside
- Underground garages

Application Procedure

Surface Preparation

- Surfaces to be treated must be free from dust, oil, grease, paint, and other foreign matter.
- Remove existing coatings, smooth surfaces or laitance by acid etching, water blasting or sand blasting.
- Structural defects such as cracks, faulty construction joints and honeycombing should be routed out to sound concrete and repaired with Pioneer Pro Water-Tite 100.
- Saturate route area and leave damp for application of Pioneer Pro Water-Tite 101 All Purpose.
- For smooth substrates to ensure adhesion, mix 1 part Pioneer Pro Bondcrete 400 and 1 part water and immediately apply the product to the substrate to ensure better adhesion on smooth surfaces.

Mixing.

Mix 4.54 kg can Pioneer Pro Water-Tite 101 All Purpose with 1.5 liters of clean water or 25 kg bag with 8.3 liters of water. Mix thoroughly with slow speed drill equipped with recommended mixing paddle until a creamy consistency is achieved. Allow the mix to rest for 3 to 5 minutes to allow for chemical reaction. It should then adhere to the brush without dripping. If mixture thickens, re-stir using a spatula to reduce consistency. Do not add extra water. It is recommended to mix only the amount that can be used in 30 minutes.

Application.

Prior to the application of Pioneer Pro Water-Tite 101 All Purpose, saturate the concrete surface with water to promote reaction. Pioneer Pro Water-Tite 101 All Purpose slurry coat may be applied with a brush or broom. Be sure to work slurry into the openings, rough surfaces, joints and routed out areas. Apply second coat, when required, when first coat has taken an initial set of 4 to 8 hours depending on the temperature.

For dry shake application on newly formed concrete, use Pioneer Pro Water-Tite 101 All Purpose as is, directly from the container. Wearing rubber gloves, distribute the powder evenly by hand over freshly poured concrete 1.25 to 1.35kg/m² per application before final trowelling works. It is best to distribute the powder at half the recommended rate in one direction, and the other half at a right angle to the first application. Release the powder as close to the wet concrete as possible to prevent material from blowing away. Two applications are recommended with a roughened finish on the first application providing adequate adhesion of the second application.

Finishing.

Float slab and trowel to final finish. When the last coat has stiffened, float it to desired texture with a sponge, wood float or roller for aesthetic purposes.

Curing.

Proper curing procedures are important to ensure the durability and quality of the coating. To prevent surface cracking, do not apply the product under direct sunlight conditions.

Freshly applied Pioneer Pro Water-Tite 101 All Purpose treatment must be protected from extreme weather conditions such as rain or high temperature for a period of not less than 48 hours after application.

For water retaining structures, Pioneer Pro Water-Tite 101 All Purpose treatment should be cured for fourteen days before filling with liquid.

Cleaning.

Clean all tools and equipment used while coating is still in its uncured state. Use water to clean tools and spillspills.

Application Equipment

- Brush or broom
- Hand-held mixing drill

Packaging

- 4.54 kg can
- 25 kg bagl

Storage

Store in sealed containers in a cool, dry, ventilated place. Keep away from rain and direct sunlight.

Shelf Life

12 months from the manufacturing date.

Health and Safety Precautions

Pioneer Pro Water-Tite 101 All Purpose may contain chemicals that may cause irritation to the skin and eyes. Personal protective equipment must be worn when using the product. Any contact to the skin or eyes should be washed off for at least 15 minutes under running water. Upon accidental release, avoid contact with material. Dampen material with water to control dusting. Scoop up and transfer to appropriate container for disposal. Flush spill area with water. Pioneer Pro Water-Tite 101 All Purpose is non-flammable.

KEEP OUT OF REACH OF CHILDREN.**Warranty and Disclaimers**

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