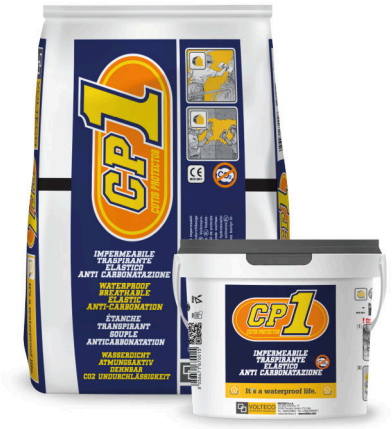
CP1



UNI EN 1504-2

PRODUCT DESCRIPTION

CP1 is a white, waterproof, breathable, elastic, cement-based finishing primer ideal for the protection of both concrete and brick façades, increasing the durability over time of both the underlying structure and subsequent finishes.

PRODUCT APPLICATION

In protection and waterproofing works:
- Plasters, even if cracked and with phenomena of water absorption
- Exterior insulation systems, on either on relative reinforced levelling or on existing finishing coats
- Balcony bands
- Edges of gutters
- Parapets
- Chimneys
- Reinforced concrete surfaces and masonry in general
- Facades with ceramic coating

ADVANTAGES

- Breathability and impermeability in a single solution
- Extremely effective anti-carbonation barrier to protect the concrete
- High protection in case of exposure to marine aerosols
- Excellent barrier to the entry of aggressive agents for improved living comfort

• Resistant to the formation and proliferation of fungi, algae and mould
• Excellent adhesion on different types of cement-based surfaces and existing coatings
• Resistant to U.V. radiation
• Easy workability and finish
• Increases durability of topcoats by preventing exfoliation phenomena

PREPARATION AND APPLICATION

Preparing the surfaces

Surfaces with the presence of mould, algae and fungi

Thoroughly high-pressure clean the surfaces to remove any micro-organisms, wait for them to dry and apply an undiluted coat of PROCLEAN disinfectant treatment (see relative data sheet).

After at least 2-3 hours it will be possible to apply CP1.

New plastered or concrete structures

Clean the surface from fouling, dust and form oil by brushing or pressure blasting.

When the surface is dry, apply the specific PROFIX 20 primer (see related technical sheet) and wait for complete absorption before applying CP1.

Old plastered or concrete structures

Scarify any surfaces where there are loose parts, even if partially detached, efflorescence and dust or grease.

Then high-pressure clean.

Clean the exposed reinforcement bars and passivate them with SANOFER (see relevant data sheet). Repair deteriorated parts with a Volteco mortar cycle (see the relative technical data sheets).

Apply the specific primer PROFIX 20 to all dry surfaces, including the ones that have been re-built, and wait for complete absorption before applying CP1.

Surfaces with ceramic coating

Clean the surface from fouling, dust and anything else by brushing or pressure blasting.

Remove any loose tiles during detachment by levelling the surface via suitable Volteco mortar.

If there is a marked tile leak, plaster with the same CP1 or with suitable Volteco mortar.

Preparing the mixture

Pour the liquid component into a container, gradually add the powder component, while mixing with a drill-mixer for about 2 minutes and/or until the mixture is smooth and lump-free.

The mixing time, referred to the use of a mixer drill with max 400 rpm and a 14 cm helical whisk, can vary by changing the rpm or size of the mixing whisk.

Remove any deposits under the lid, pour them into the mixture and mix.

During mixing remove any dust settled on the substrate or edges of the container pot.

In case of high temperature, after mixing, leave the mixture to rest long enough for it to be correctly worked.

Correct the workability of the product if required, add up to 1% of water and homogenise with a drill-mixer.

Application

Once the surface is dry, i.e. when PROFIX 20 primer is completely absorbed by the surface, apply the first layer of

CP1 with a metal or plastic trowel, approximately 1.5 mm thick, continuously wet on wet so as to prevent shading on the restored areas.

After at least 4 hours and not before the material is dry when touched, apply the second layer of CP1, approximately 0.5 mm thick.

Sprayed application

The product can also be applied with a pneumatic pump or plastering machine with levelling wand after separately mixing the product (for further information please contact the Volteco technical service).

Marked cracks and facades with ceramic coating

If there are evident cracks apply the special flexible mesh, FLEXONET or XNET (see the relative technical data sheets), as a reinforcement strip, by embedding it in a layer of product that will act as a base coat.

In case of facades with ceramic coating or if FLEXONET or XNET must be applied to cover large surfaces, the sheets must be placed one next to the other and not overlapping.

Finishing

CP1 allows a smooth finish to be achieved.

The finishing phase is achieved by using a medium-fine grain float made of hard plastic or hard sponge with a rounded edge.

In either case, it must be slightly dampened with water.

The procedure must be performed by applying a certain pressure on the tool to achieve the desired degree of finish, moving in circular movements and spreading the product evenly on the surface.

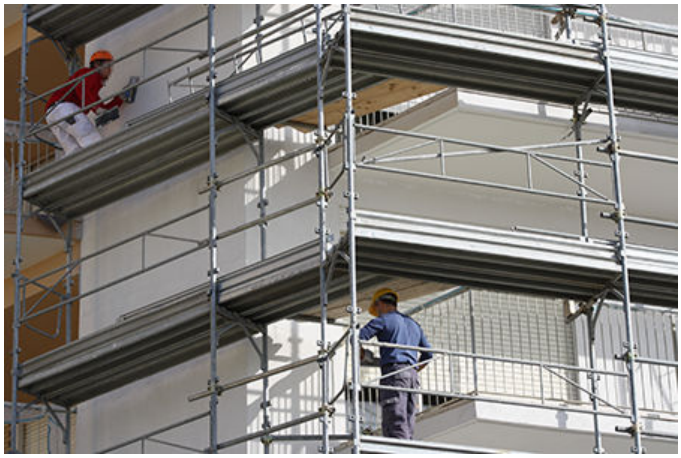
This must be performed immediately if a plastic float is used or as soon as the product is applied and is dry dust free when touched, if a hard sponge float is used.

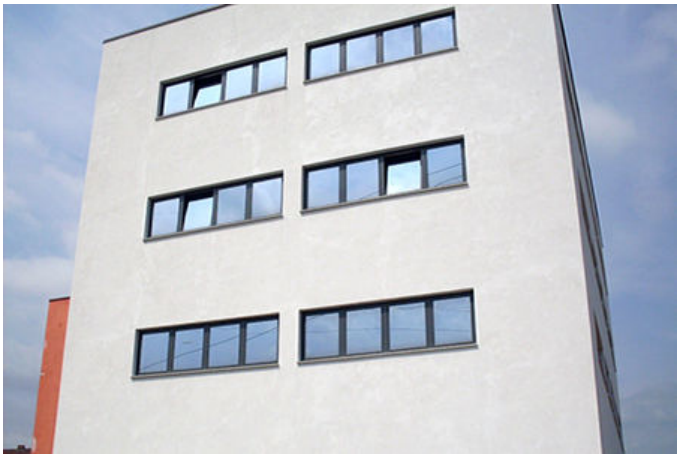
To facilitate trowelling, if CP1 tends to harden, the surface can be lightly sprayed with water.

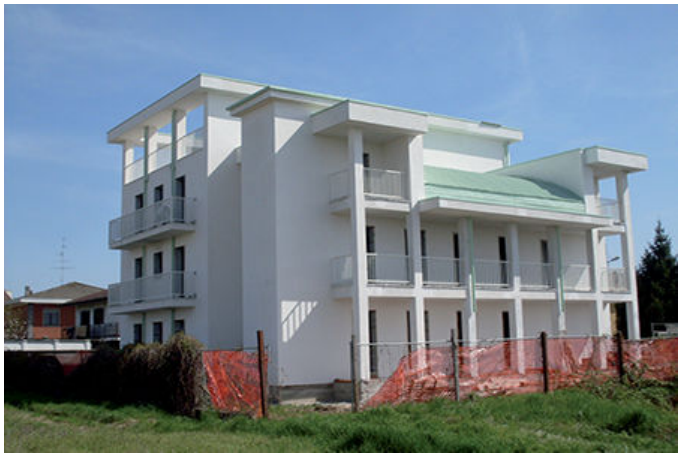
In any case, clean the trowel frequently.

Alternatively it is possible to apply the finish with a dry electric float or, to obtain an ”etched” effect, with a synthetic sponge roller.

When curing is complete, (at least 3 days after application of the product at normal temperature and humidity conditions, +20°C and 60% RH) CP1 can be finished with PAINT AIR, PAINT PROTECTION or CP0 (see relative technical sheet).







References available at www.volteco.com

CONSUMPTION AND YIELD

2.5 kg of CP1 produce a thickness of 2 mm/m^2.

PACKAGING AND STORAGE

CP1 is packed in 15 kg bags (powder) + 5.7 kg pails (resin).

The product must be stored in a dry place without being exposed to frost and heat (maximum temperature: 40°C) or direct exposure to the sun before being applied.

WARNINGS - IMPORTANT NOTES

Do not alter the powder/resin mixing ratio.

Low temperatures, high environmental humidity, fog and rain within 3 days following application, could prolong the curing process, which would lead to a delay in the painting process.

Do not apply the product if the temperature is higher than +30°C or lower than +5°C or if it is expected to drop below this temperature within 24 hours.

Do not apply the product in direct sunlight.

The presence of wind during application limits the time for the application and finishing process of the product.

During the application phases, it is advisable to use tarps on the scaffolding to create shade and provide protection against sunlight, wind and any rain.

Applications on particular surfaces (pre-existing coatings or paint) must be evaluated in each given situation by performing specific sample tests.

CP1 is not suitable for waterproofing gypsum-based plaster.

If diffused salinity or efflorescence is removed, carefully assess the surface resistance and the cause of such phenomena.

Wash tools and equipment with water immediately after use, preventing the product from forming a film.

Do not apply on surfaces subjected to negative hydraulic pressure.

The preparation and installation data refer to normal environmental conditions (temperature +20°C; relative humidity 60%).

PHYSICAL AND TECHNICAL SPECIFICATIONS

Specification	Values
Appearance	white powder - white latex
Workability time at +20°C	30'
Application temperature	from +5°C to +30°C
Working temperature	from -5°C to +50°C
Maximum aggregate size	0.7 mm
Specific weight	> 1.25 kg/l

Feature	Test method	Performance requirements UNI EN 1504-2	Declared performance (*)	Certified performance (**)
Elongation at breaking point	-	-	> 20%	-
Bond strength	UNI EN 1542	≥ 0.8 MPa	> 0.8 MPa	1.05 MPa
Resistance to accelerated ageing	UNI EN 1062-11	No swelling	-	Fulfilled requisite
Permeability to CO_2 (equivalent thickness Sd)	UNI EN 1062-6	Sd > 50 m	-	Sd 78 m
Capillary absorption	UNI EN 1062-3	≤ 0.1 $kg*m^{-2}*h^{-0.5}$	< 0.1 $kg*m^{-2}*h^{-0.5}$	0.03 $kg*m^{-2}*h^{-0.5}$
Water vapour permeability	UNI EN 7783-2	Class 1 - Sd ≤ 5 m	-	Sd 1.03 m
Crack Bridging Ability	UNI EN 1062-7 (static method)	A2 > 0.25 mm A3 > 0.50 mm A4 > 1,25 mm A5 > 2.50 mm	-	Class A4 1.3 mm
Crack Bridging Ability (product + Flexonet mesh)	UNI EN 1062-7 (static method)	A2 > 0.25 mm A3 > 0.50 mm A4 > 1,25 mm A5 > 2.50 mm	-	Class A5 2.9 mm
Crack Bridging Ability (product + Xnet mesh)	UNI EN 1062-7 (static method)	A2 > 0.25 mm A3 > 0.50 mm A4 > 1,25 mm A5 > 2.50 mm	-	Class A4 1.4 mm
Thermal compatibility Part 1 (adhesion after 50 un/freezing cycles)	UNI EN 13687-1	≥ 0.8 MPa	-	0.98 MPa
Reaction to fire	UNI EN 13501-1	Classification	-	Euroclass F

Feature	Certification
Environmental Product Declaration 0298 (EPD)	EPDItaly 0298 (30/05/2027) www.epditaly.it

The quoted data are obtained in a laboratory at +20°C and 60% RH.

* Performance thresholds guaranteed by VOLTECO

** Performance values certified by accredited third parties

WATCH VIDEOS AND INSIGHTS

Safety Data Sheets	Declaration of performance	Specifications	Technical drawings and BIM	EPD Declaration	YouTube Video

SAFETY

Refer to the related Safety Data Sheet.

CE 1381	**VOLTECO S.p.a** Via delle Industrie, 47 - 31050 Ponzano Veneto (I)
10 **DOP 0009** **EN 1504-2:2005** **1381-CPR-1160** **CP1** Protection systems of the concrete surface. Coating for protection against the risks of penetration (PI), for humidity control (MC) and increased resistivity (IR)	
Reaction to fire: Class F Water vapour permeability: Class I Carbon dioxide permeability: Sd ≥ 50 m Capillary absorption and permeability to water: < 0.1 $kg*m^{-2}*h^{-0,5}$ Adhesion: ≥ 0,8 N/mm^2 Thermal compatibility: • Part 1: Un/freezing cycles: ≥ 0.8 N/mm^2 Crack bridging properties (method A): Class A4 Performance after exposure to the action of artificial atmospheric agents: Test passed Methods of conditioning before testing (7 days at 70°C): Not relevant Linear shrinkage: Not relevant Coefficient of thermal expansion: Not relevant Cross cut: Not relevant Slip resistance: Not relevant Antistatic behavior: Not relevant Adhesion on wet concrete: Not relevant Hazardous substances: See SDS	

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LEGAL NOTES

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It may vary and the installer is therefore required to update his/her information prior to each application by referring to www.volteco.com.

The above clarifications extend to the pre-post-sales technical/commercial information of the commercial network.