AQUAZIP FAST

DATA SHEET

Two-component elastic cement membrane, quick drying even at low temperatures, for waterproofing and protecting concrete and masonry structures, terraces and balconies subject to positive or negative hydrostatic pressure



- Interior/Exterior
- Interior/exterior flooring
- In pools
- Two-component
- Metal trowel
- Spray
- Roller
- Brush

Specifications

- Excellent adhesion on various types of substrate (concrete, mortar, screeds, existing flooring, stone, ceramic, brick and marine plywood).
- Waterproofing agent applied in liquid form, classified CM-O1P in accordance with EN 14891, to be used under ceramic tiles bonded with adhesives.
- Suitable for protection (PI) of concrete structures (principle 1 of EN 1504-9:2008) against the risk of penetration of carbon dioxide.
- Suitable for moisture control (MC) of concrete structures (principle 2 of EN 1504-9:2008).
- Suitable for increasing the resistivity (IR) of concrete structures (principle 8 of EN 1504-9:2008).
- Crack-bridging ability by embedding FASSANET 160 alkali resistant fibreglass mesh into the first layer of still-wet material.
- Tiles can be applied after around 4 hours from application of the final coat, at a temperature of +20°C or higher, and within 24 hours at low temperatures, down to +5°C.
- Also suitable for new substrates that are still damp, as long as they have cured.
- Can be exposed to rain after just a few hours, even at low temperatures (down to +5°C) and with high humidity.

Composition

Two-component waterproofing agent, quick drying, resistant to positive or negative hydrostatic pressure, made from cement binders, fine graded aggregate, chemical additives and special alkali-resistant synthetic polymers designed to improve workability, adhesion and elasticity of the membrane, even at low temperatures.

Supply

- 36 kg kit (A+B):
  - Component A: special sacks with protection against moisture, approx. 20 kg
  - Component B: approx. 16 kg cans

Use

- Waterproofing terraces and balconies before laying new ceramic or stone tiles.
- Waterproofing of hydraulic structures such as pools, tanks, canals and reservoirs.
- Waterproofing of surfaces exposed to the weather, subsequently treated with products suitable for resisting sunlight.
- Waterproofing and protection of concrete walls subject to positive and negative hydrostatic pressure.
- Waterproofing and protection against carbonation of concrete structures subject to moderate structural stress and bending deformation.
- Waterproofing and protection of horizontal and/or vertical surfaces and/or surfaces with complex geometries subject to moderate structural stress and/or bending deformation.

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Certifications and regulations

AQUAZIP FAST meets the performance requirements for class CM-O1P of EN 14891:2012 - (Liquid-applied water impermeable products for use beneath ceramic tiling bonded with adhesives).
AQUAZIP FAST complies with the principles defined by EN 1504-9:2009 ("Products and systems for the protection and repair of concrete structures. Definitions, requirements, quality control and evaluation of conformity") and the requirements of EN 1504-2 ("Products and systems for the protection and repair of concrete structures"), protection against ingress (PI), moisture control (MC) and increasing resistivity (IR). AQUAZIP FAST has obtained GEV EMICODE EC 1Plus classification, a voluntary mark relating to emissions of volatile and semi volatile organic compounds (VOC and SVOC) issued by GEV (Gemeinschaft Emissionskontrollierte Verlegewerkstoffe, Klebstoffe und Bauprodukte), which attests the product's very low emissions of volatile organic compounds.

Substrate preparation

Before applying AQUAZIP FAST, the application surface must be cured, level and flat, intact, without stagnant water, dimensionally stable and mechanically resistant. Any traces of oil, grease, wax, paints, varnishes, efflorescence etc. must be removed beforehand, as well as any crumbling or loose parts.
For use on renders intended for subsequent tiling, ensure that they are well bonded and have adequate surface strength, in accordance with UNI 11493-1.
Before proceeding with the waterproofing work, all critical points must be treated beforehand, such as:

- any cracks in the substrate;
- corners, edges and vertical overlaps;
- expansion joints and/or structural joints;
- conduits, drains, grilles;
- gutter joints, pipe unions and drain pipes;
- steps and thresholds;
- skylights;
- system piping and through elements.

Concrete

The concrete substrate must guarantee a minimum compressive strength of 25 MPa and a tensile strength of at least 1.5 MPa. For new castings, the substrate must be sufficiently dry and cured.
Any areas or sections of deteriorated concrete must be repaired beforehand using suitable Fassa Bortolo structural cement mortars.
The substrates must be prepared beforehand by shot peening, sand blasting, scarifying or mechanical abrasion cycles (diamond abrasive disc) in order to remove any roughness, traces of dirt, loose parts, encrustations, concretions, traces of paints, cement laitance or other contaminants, in order to make the substrate slightly rough and absorbent and not jeopardise adhesion of the subsequent waterproofing cycle.
In the event of damaged or degraded parts, exposed reinforcing bars or voids, repair using suitable Fassa Bortolo structural mortars. To correct slope lines or level off depressed areas (dips and imperfections), use GAPER 3.30; for applications subject to high stress (for example, tanks, swimming pools, etc.), apply GAPER 3.30 mixed with a mixture of AG 15 diluted in water at a ratio of 3:1 (3 parts water and 1 part AG 15) on the surfaces.



Existing flooring

Verify adhesion of the existing flooring to the substrate by tapping the surface. Any detached and/or partly detached tiles must be removed, and the voids must be repaired using GAPER 3.30.
If missing or badly damaged, the grout in the joints on the existing flooring must be repaired.
To clean the existing flooring, perform mechanical abrasion with a diamond grinding disc in order to remove all traces of dirt, loose parts, encrustations, concretions, paint residues, cement crusts or other contaminants and make the surface slightly rough and absorbent in order to improve and increase adhesion of the new product. Immediately after cleaning, remove the dust from the substrates using a suitable industrial vacuum cleaner.



It is recommended not to use a high-pressure washer to clean the existing flooring, as this will lead to more water in the underlying substrate.



After cleaning, the slope lines must be checked and verified. In fact, any imperfections and/or irregularities present on the substrate, such as dips or depressions, may lead to areas where rainwater stagnates. To repair these sections, apply FASSAFLOOR PRIMERTEK ULTRA to the surfaces and, once dry, then lay GAPER 3.30, mixed with a solution of AG 15 diluted 3:1 in water (3 parts water and 1 part AG 15).

Cement substrates (mortars and screeds)

For wall applications, make sure that the plaster is well bonded to the substrate, surface-resistant and free of dust, paints or flaking parts. For subsequent bonding of ceramic or stone coverings, ensure compliance with UNI 11493-1 and UNI 11714-1.
For application on floor screeds, make sure that the screed is mechanically resistant, dimensionally stable, compact with good surface hardness, cured, clean and free of cracks and stagnant water.
Any cracks or repair areas on the screed must be structurally sealed using FASSAFLOOR EPOXY REPAIR epoxy adhesive, following the procedure described in the datasheet.
For screeds or surfaces with low surface strength, scarify beforehand using an abrasive disc until obtaining a strong base and, after careful cleaning, if necessary treat the substrate with PRO-MST primer.
It is preferable not to wash the surfaces using water, so as to avoid adding more water to the underlying substrate.
Use GAPER 3.30 to level or smooth off the surfaces and correct the slopes.
Before applying the AQUAZIP FAST system on substrates exposed to strong sunlight, it is recommended to slightly moisten the application surfaces, avoiding the formation of stagnant surface water.

Retaining walls

AQUAZIP FAST is applied on retaining walls only after having prepared, repaired and levelled the masonry substrate.
In general, for work on old masonry, completely remove any layers of plaster or finishes present on the surface so as to expose the structure.
Carry out the masonry repairs to eliminate cracks, cavities or any gaps between bricks and blocks using appropriate FASSA mortars based on the required thickness. The substrates must be solid and intact, in order to ensure subsequent levelling.
Given the variety of possible substrates and conditions, smooth off uneven walls using a suitable cycle recommended by Fassa Bortolo technical service.

Old coatings

When applying the AQUAZIP FAST system on vertical surfaces, first remove any traces of resinous paints or coatings that are degraded and/or coming loose. Ensure that the substrates are clean and free of grease or contaminants that may affect adhesion of the AQUAZIP FAST waterproofing system.
It is always recommended to carry out preliminary tests to verify adhesion of the waterproofing system to existing substrates.

Swimming pools, cisterns and/or tanks

All discontinuities, repair areas, any through elements or pipes and systems present on the application surfaces must be sealed beforehand using suitable products such as AQUAZIP JOINT and AQUAZIP HYDROSEAL. Concrete must be properly prepared as described under “Concrete”. Level off vertical and horizontal surfaces using GAPER 3.30, mixed with a solution of AG 15 diluted 3:1 in water (3 parts water to 1 part AG 15).
All critical points such as internal corners, external corners, connections between vertical-to-horizontal and vertical-to-vertical surfaces etc.

Bituminous substrates (bituminous membranes, asphalt, etc.)

When waterproofing old bituminous substrates, first verify that these are intact and watertight. Then apply a separating layer consisting of a “macro-perforated” LDPE sheet (minimum thickness 0.10 mm - holes with diameter ≥40 mm and perforation percentage ≥15% compared to the surface of the film) on the repaired and restored bituminous surface, followed by a “micro-perforated” LDPE sheet. Then create a quick drying mesh-reinforced cement screed (for example FASSAFLOOR SV 472 PRO). The thickness of the screed must not be less than 5 cm.



Vertical overlaps

Before starting the waterproofing work on horizontal surfaces, remove render base upon masonry and parapets until structure is revealed, in order to create a lodging for the vertical overlaps of the new waterproofing system. The openings must be at least 15-20 cm above the level of the new flooring. The openings must be levelled off using GAPER 3.30.





The AQUAZIP ELASTOBAND will be positioned along the connections between the horizontal plane and the vertical overlaps. The strip must be laid continuously on the application surfaces, first applying an at least 2 mm thick layer of AQUAZIP FAST waterproofing membrane, to a width exceeding the strip and making sure to leave the centre part free. For perfect sealing of the corners, use the appropriate preformed elements.
In the event of vertical overlaps over polymer-modified bitumen membranes, the ADHESIVE STRIP FOR AQUAZIP SYSTEMS can also be used, consisting of a self-adhesive elastic sealing tape made from butyl rubber, and lined on both sides by polypropylene fibre non-woven fabric.
The adhesive strip must be applied directly to the substrate, free of dust and above all perfectly dry. For application on porous and/or absorbent substrates, treat these beforehand with AQUAZIP FAST; once dried, apply the ADHESIVE STRIP FOR AQUAZIP SYSTEMS. For the treatment of the corners, simply cut the strip up to the centre and fold it over. For application it is recommended to remove half of the protective film and then apply the tape to the substrate. The remaining protective film should then be removed and strong pressure applied on the tape, also using a small silicone pressure roller.
If the substrates are not perfectly dry, it is recommended to apply the strip on a perfectly-dry first layer of AQUAZIP FAST waterproofing material.

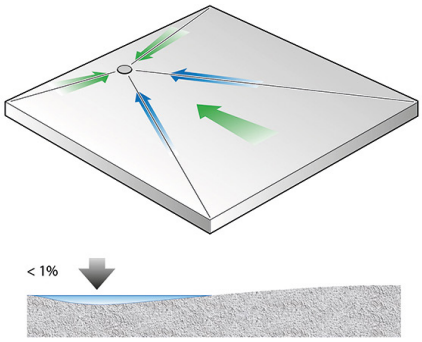


The AQUAZIP FAST waterproofing system will also be applied on the vertical overlaps and, after suitable curing, covered with a layer of KI 7 or KZ 35 ZOCCOLATURA SOLFATORESISTENTE, lime-and-cement-based base coat plasters for exteriors and interiors, mixed with a solution of AG 15 diluted 3:1 with water (3 parts water to 1 part AG 15), synthetic resin dispersion for cementitious products. The base coat plaster must be fine-float finished, embedding wide-weave synthetic plaster reinforcing mesh during application.

Slope lines

To avoid the formation of stagnant water on the application surface and guarantee the performance and durability of the waterproofing system, the screeds must be suitably prepared, in particular ensuring an adequate slope.
For terraces, balconies and exterior paving, the application surface must be developed and/or checked so that the slope towards the rainwater drains is not less than 1.5%. This value, in order to ensure the correct flow of water, is generally considered sufficient even in the event of possible settling of the different layers.
It is not recommended to create slopes of less than 1%, as depressions and stagnation of rainwater may form on the surface, with possible infiltration.

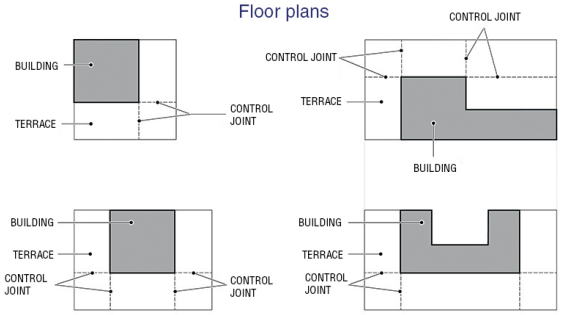




Joints

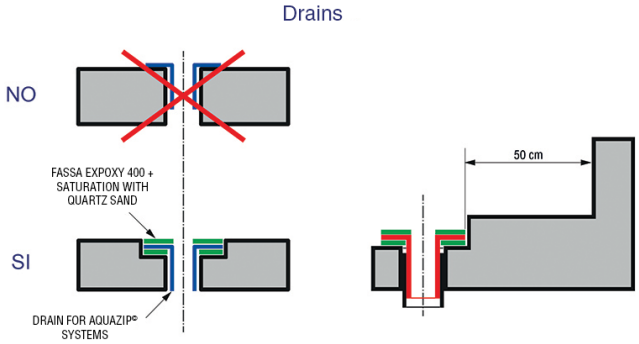
In accordance with UNI 11493-1 and UNI 11714-1, expansion joints on screeds are obligatory and must extend above the new flooring. The joints must subdivide the surface into square or rectangular blocks, and therefore be made at protrusions or in irregularly-shaped environments (i.e. "L", "U", etc.). For exterior applications, the maximum surface area that can be created without dividing the screed is 9-10 m², as specified by application standards UNI 11493-1 and UNI 11714-1. If, due to the tile format used, continuity of the joints cannot be ensured in any other way, the tiles must be cut.
Any expansion joints on the surface being treated, as well as other critical points (joints between floors and vertical surfaces, internal and external corners, skylights, through pipes, grills, gutter and downpipe joints, railing posts, etc.) must be suitably sealed using a combination of AQUAZIP FAST with the various AQUAZIP ELASTOBAND accessories (strip, corner, edge, etc.).
At structural joints, on the other hand, FASSA TPE 170, a waterproof strip made from thermoplastic elastomer on polypropylene non-woven fabric, must be used. The FASSA TPE 170 strip will be fixed to the substrates using FASSA EPOXY 400, interrupting the waterproofing system at the joints.

Control joints: positioning
Floor plans



Rainwater drains

To allow adequate flow of rainwater, place the new drains inside a lodging that is suitably lowered from the application surface. The drains must have a suitable volume/capacity based on the surface area.
For further information on this subject, refer to the specific standard UNI EN 12056-3:2001 (Gravity drainage systems inside buildings - roof drainage, layout and calculation).
For correct application of rainwater drainage systems, refer to the product datasheets for FRONT DRAIN and VERTICAL DRAIN FOR AQUAZIP SYSTEMS.



Mixing and application

Mixing ratio

Component A: Component B = 20: 16 by weight.
- Component A: special sacks with protection against moisture, approx. 20 kg
- Component B: approx. 16 kg cans

Mixing

AQUAZIP FAST must be mixed using a mechanical mixer at low speed (~500 rpm). Carefully mix component B before use and then slowly add component A, continuing to mix thoroughly for around 3 minutes, to obtain a uniform and smooth mixture.
Allow the mix to stand for a few minutes to release any entrapped air.
Do not add water or other additives to the mixture.
The mixture should be prepared using a complete package of component A and one of component B, in order to guarantee the correct proportions between the two components.

Application

AQUAZIP FAST must be applied to the substrate in several coats, using a metal trowel, brush, roller or by machine. The total application thickness should be at least 3 mm in 2 layers.
For application by trowel, use a notched metal trowel (4x4 mm). Use the smooth side of the trowel to apply the waterproof coating, pressing hard on the substrate to ensure maximum adhesion, then go over the waterproof coating using the notched part of the trowel.
Apply FASSANET 160 alkali-resistant fibreglass mesh onto the first layer of AQUAZIP FAST before this has dried, making sure that it is completely embedded, avoiding the formation of voids in the waterproof coating. Immediately afterwards, smooth over AQUAZIP FAST with the flat side of the metal trowel, so as to obtain a uniform thickness. The reinforcing mesh must be cut to measure beforehand and overlap by at least 10 cm at the joints, interrupted in correspondence with the AQUAZIP ELASTOBAND accessories and BANDELLA ADESIVA PER SISTEMI AQUAZIP (AQUAZIP ELASTOBAND accessory adhesive strip), ensuring an overlap of at least 4 cm along the edges of these accessories.
Once the first layer has set (about 2 hours at +20°C and 65% RH), apply a second coat of AQUAZIP FAST, making sure to create a continuous and uniform layer that covers the first coat perfectly, always working in the same direction, preferably crosswise to the first layer, to ensure complete coverage of the substrate.

Application conditions

- substrate temperature: min. + 5°C / max. + 35°C;
- ambient temperature: min. + 5°C / max. + 35°C.

The total application thickness must be not less than 3 mm, with a maximum recommended thickness for each coat of 2 mm.
Typical consumption: approximately 1.45 kg/m² for each 1 mm thickness.

Applying the covering

For application of ceramic or stone coverings, it is recommended to use highly-elastic cement adhesives classified S1 or S2 in compliance with EN 12004, such as AD 8 with FASSACOL LATEX S2, AZ 59 FLEX, AT 99 MAXYFLEX or FASSACOL EASY LIGHT S2 additives. If quick setting products are required, RAPID MAXI S1 can be used.
In accordance with the UNI 11493-1 and UNI 11714-1 application standards, apply a compact layer of adhesive where required. This requirement must be considered, for example, in the presence of high mechanical and/or thermo-hygrometric stresses, with particular types and formats of tiles or where there are special requirements for durability and safety. Check a sample to make sure that the adopted application technique allows correct wetting of the back of the tile or panel.
For sealing joints, it is recommended to use FASSAFILL cementitious grouts, or if high chemical resistance is required, epoxy-based sealants such as FE 838 or FASSAFILL EPOXY.
It should be noted that the UNI 11493-1 application standard does not allow for "jointless" tiling (joint width less than 2 mm) in general. For all floors, an open-joint installation must always be specified, with joints at least 5 mm wide, as this is the most effective solution to prevent the risks associated with high stress due to temperature and humidity on the tiles in outdoor environments.
Seal all expansion joints with FASSASIL NTR PLUS, using expanded polyethylene backing rod FASSAFOAM to correctly size joint depth, selected according to joint width.

Elastic sealing of skirting board

Apply a strip of elastic sealant against the floor, detaching the skirting board by several millimetres from the surface (at least 2 mm in accordance with UNI 11493-1 and UNI 11714-1). For elastic sealing of skirting boards, use FASSASIL NTR PLUS, a high-performance neutral-curing silicone sealant; sealing of the skirting (both above and below, between skirting and tile) must also be carried out using FASSASIL NTR PLUS.

Drying times

AQUAZIP FAST must be completely hardened before being covered.
After application of the second coat, wait 4 to 24 hours for the product to cure, depending on the humidity and temperature conditions, before applying the new ceramic covering.

Cleaning the equipment

Immediately after using AQUAZIP FAST, clean all tools and equipment with water before the product hardens.
The hardened material can only be removed mechanically.

Warnings

- Product for professional use only.
- Do not use AQUAZIP FAST:
  - on substrates saturated with water;
  - on bituminous and/or mineral asphalt surfaces;
  - on insulating materials (lightweight substrates, foamed concrete, expanded or extruded polystyrene panels, etc.);
  - on drivable or walkable surfaces without ceramic and/or stone coverings or subject to structural stresses;
  - on vertical surfaces to be left exposed, if not protected with suitable products able to guarantee resistance to UV radiation;
  - in direct contact with chlorinated pool water; apply a tile or mosaic covering;
  - in the event of imminent rain;
  - in the presence of strong ventilation or substrates exposed to direct sunlight; in this case, protect the waterproofed surface with damp cloths.
- Immediately after application of AQUAZIP FAST, protect the treated surface against rain for at least 24 hours.
- Immediately after application of AQUAZIP FAST, protect the treated surface against rain, frost and/or rapid drying for at least 48 hours.
- AQUAZIP FAST cannot be float-finished and therefore, in the event of possible imperfections on the resulting surface, after complete hardening, the surface can be abraded slightly to remove any irregularities. Any abrasions on AQUAZIP FAST before it has completely hardened could cause damage to the waterproofing system, limiting its characteristics.
- The hardening of AQUAZIP FAST is slower in the presence of high humidity.
- If it is necessary to coat the waterproofing system with paints or solvent-based products, preliminary tests must be carried out to verify that the solvent does not affect the integrity of the waterproof coating.
- For correct application, please see the technical documents for each individual product specified.
- If using inside swimming pools, water-tightness of the pool must be checked before installing the tiles.
- If using product on roofs, the roof stratigraphy must feature a sealing element, with the function of making the roofing system resistant to rain or irrigation water. This element must be made from prefabricated membranes (polymeric-bitumen, synthetic, ...), applied in compliance with the application standards in force or the manufacturer's instructions; the connected accessories and suitable water collection and disposal systems must also be provided.
- Thresholds must be installed, without exception, only after having laid the waterproofing sheet under the threshold. Otherwise the water-tightness of the threshold cannot be ensured. If the interior floor screed has already been created, its thickness can be used as a raised retaining element for fixing the AQUAZIP ELASTOBAND. If the screed has not yet been laid, use an "L" profile. A water drip profile must be created at the bottom of the outside section of the threshold step.
- The fronts of terraces and the drainage edges of exterior tiled surfaces may run the risk of retaining the water in contact with the edge of the tiling, with consequent durability problems due to penetration of water into the substrate underneath the tiling. To prevent this risk, special ceramic pieces equipped with drip guard systems must be used.

AQUAZIP FAST must be used as supplied, without the addition of any extraneous materials.

Safety rules

Always refer to the safety datasheet containing the physical, toxicological and other data relating to operator safety.
Apply the product with suitable ventilation and away from sources of heat.
AQUAZIP FAST must only be used for the specified purposes in the manners described, and is intended exclusively for professional use.

Disposal and ecology

Do not dispose of the product and empty containers in the environment.
For further information, see the most recent safety datasheet.

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Maintenance work to be carried out on terraces and balconies

The following is a list of operations concerning periodic maintenance activities to be carried out at least twice a year (spring and autumn) on the surfaces of terraces, in order to prevent any problems from arising:

- remove any accumulated material (foliage, branches, various debris) from the surface, above all cleaning out the drains and gutters. The removed material must be taken away and not washed into drains;
- remove any vegetation that may have developed on the surface (paving, waterproof coatings, etc.);
- remove any growing branches from plants near the perimeter of the roof, to prevent falling leaves from obstructing drains. Branches or plants must be at least one metre from the end of the roof;
- check that all of the drains are fitted with suitable leaf strainers or gravel grids, making sure that these are not obstructed and that the water can flow freely, without obstructions or other impediments;
- make sure that the mechanical fixing elements for systems or machinery, if used, are not fixed to the surface interacting with the waterproofing system;
- periodically check the perfect tightness of expansion and/or structural joints on the surface, checking for any deterioration or detachment. In the event of problems, carry out the necessary repairs to the damaged areas;
- prepare a special logbook for recording all the inspections or repairs carried out and any other work performed;

If the waterproofed surface requires cleaning, this must be done as follows:

- wash manually with a solution of lukewarm water and suitable detergent;
- wash at low pressure with lukewarm or cold water and a suitable detergent;
- the spray nozzle must be kept at least 50 cm away from the surface being cleaned, avoiding excessive pressure;
- rinse with clean and cold water;
- the water temperature must not exceed 50°C;
- use only detergents or degreasers that when discharged are not harmful to flora and acquatic life.

Make sure that any metal guttering or other mechanical fixings systems applied vertically are perfectly anchored and sealed. Otherwise, carry out appropriate repairs or replacement of damaged items

Storage

Component A: store in its original packaging, in suitable, dry places, for no longer than 6 months.
Component B: store in its original packaging, in suitable, dry places, for no longer than 12 months. Protect from frost.
After expiry, the product must be disposed of in accordance with current regulations.

Quality

AQUAZIP FAST is subjected to accurate and continuous checks in our laboratories. The raw materials used are rigorously selected and controlled.

Technical Data

Yield	approx. 1.45 kg/m² per mm in thickness
Specific weight of the mix	approx. 1,400 kg/m³
pH of the mixture	> 12
Mix ratio	100 parts Comp. A and 80 parts of Comp. B
Application temperature	from +5°C to +35°C
Workability time of the mix	Approx. 45 minutes at +20°C and 65% relative humidity
Waiting time before applying tiles	Approx. 4 hours at +20°C and 65% relative humidity
Maximum thickness per coat	2 mm

	Component A	Component B
Appearance	Grey powder	White latex
Specific weight	1,200 g/l	1,020 g/l
Dry residue	100%	53%

Environmental certifications and sustainability schemes	
LEED V4.1 protocol	MR Credit – Construction and Demolition Waste Management
	EQ Credit – Low-Emitting Materials
	EQ Credit – Construction Indoor Air Quality Management Plan
BREEAM protocol	HEA 02 – Indoor Air Quality
WELL v2 protocol	X01 – Material Restrictions
	X06 – Voc Restrictions
GEV Classification	GEV EMICODE EC 1^{Plus} - very low emissions

Standard EN 14891	Normative requirements	Product performance
Impermeability to water under pressure (1.5 bars of positive pressure for 7 days)	No penetration	No penetration
Crack bridging ability at +23°C (mm)	≥ 0.75	≥ 0.8
Crack bridging ability at -5°C (mm)	≥ 0.75	≥ 0.75
Initial adhesion strength (N/mm²)	≥ 0.5	≥ 1.2
Adhesion strength after water immersion (N/mm²)	≥ 0.5	≥ 1.0
Adhesion strength after heat action (N/mm²)	≥ 0.5	≥ 2.0
Adhesion strength after freeze-thaw cycles (N/mm²)	≥ 0.5	≥ 0.8
Adhesion strength after contact with lime water (N/mm²)	≥ 0.5	≥ 0.9
Adhesion strength after immersion in chlorinated water (N/mm²)	≥ 0.5	≥ 1.0

Standard EN 1504-2 (PI-MC-IR)	Normative requirements	Product performance
Measurement of direct tensile adhesion strength, EN 1542 (N/mm²)	Flexible systems without traffic ≥ 0.8 N/mm²	≥ 1.0
	Flexible systems with traffic ≥ 1.5 N/mm²	
Measurement of direct tensile adhesion strength after freeze-thaw cycles, EN 13687-1 (N/mm²)	Flexible systems without traffic ≥ 0.8 N/mm²	≥ 1.0
	Flexible systems with traffic ≥ 1.5 N/mm²	
Static crack bridging, EN 1062-7 (mm)	From class A1 (0.1mm) to class A5 (2.5mm)	Class A3
Carbon dioxide permeability, EN 1062-6 (m)	Declared value	S_d = 229
Water permeability, EN 1062-3 (kg/m²·$h^{0.5}$)	< 0.1	< 0.05
Water vapour permeability, EN ISO 7783 (m)	Class I S_d < 5 m (permeable to vapour)	S_d = 2.68

Other performance specifications	Normative requirements	Product performance
Adhesion to concrete after 24 hours at +5°C and 50% RH (N/mm²)	Not required	≥ 0.4
Adhesion to concrete after 7 days at +20°C and 50% RH and 21 days in water (N/mm²)	Not required	≥ 0.7
Adhesion to concrete on a very wet surface (N/mm²)	Not required	≥ 1.2
Adhesion to gres after 7 days at +20°C and 65% RH (N/mm²)	Not required	≥ 1.6
Adhesion to gres after 28 days at +20°C and 65% RH (N/mm²)	Not required	≥ 2
Adhesion to marble after 28 days at +20°C and 65% RH (N/mm²)	Not required	≥ 1
Adhesion to cement tiles after 28 days at +20°C and 65% RH (N/mm²)	Not required	≥ 1.4
Impermeability to water under pressure (1.5 bars of negative pressure for 7 days)	Not required	No penetration

The above information refers to laboratory testing; it is possible that in practical applications on site these may differ considerably according to the conditions in which the material is applied. In any case the user must verify that the product is suitable for the intended application, taking all responsibility for its use. Fassa reserves the right to make technical modifications without notice.

Technical specifications regarding the use of Fassa Bortolo products for structural or fire prevention applications will only be officially valid if provided by Fassa Bortolo's "Technical Service" and "Research, Development and Quality System". If necessary, contact Technical Service in your country of reference (IT: area.tecnica@fassabortolo.com, ES: asistencia.tecnica@fassabortolo.com, PT: assistencia.tecnica@fassabortolo.com, FR: bureau.technique@fassabortolo.fr, UK: technical.assistance@fassabortolo.com).

Please note that for the aforementioned products, the assessment is required by the appointed professional, in accordance with regulations in force.

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