FASSAFILL LARGE

DATA SHEET

Water repellent cement-based sealant for grouting joints from 5 to 20 mm, resistant to mould and algae.

Interior/Exterior

Interior/exterior flooring

In pools

Sack

Rubber trowel

Advantages

- Easy to apply and clean
- Water repellent
- Excellent abrasion resistance
- High colour stability
- Suitable for floors and coverings with heating/cooling systems
- Product with broad-spectrum protection against growth of algae and mould species

Composition

FASSAFILL LARGE is a cement-based sealant containing special cements, graded sands and hydrophobic additives.
FASSAFILL LARGE features broad-spectrum protection against growth of algae and mould species

Supply

- special sacks with protection against moisture, approx. 25 kg
- Tints: available in 14 colours (see table of colours)

Use

FASSAFILL LARGE is a cement-based sealant used to fill joints from 5 to 20 mm wide between all types of ceramic tiles: double-fired, single-fired, gres, porcelain gres, laminated gres, clinker and terracotta, marble, granite, agglomerate and vitreous, ceramic or marble mosaics.
FASSAFILL LARGE is used for interior or exterior grouting of floors and walls, except in highly aggressive chemical environments.
In all applications where increased performance in terms of mechanical strength, impermeability and adhesion is required, such as for grouting in pools, the product must be mixed with LATEX DR 843 as a complete replacement for the water.

Substrate preparation

Before grouting the joints with FASSAFILL LARGE, check that the covering has been laid in compliance with the application instructions and the regulations in force, and that all of the tiles are firmly bonded to the substrate.
Also make sure that the bedding mortar or adhesive used for bonding the covering is well cured, sufficiently hardened and dry, and that the specified waiting times have been complied with. This prevents residual rising damp, which can cause surface salt efflorescence and variations in colour of the grout.
The joints and the finish covering (ceramic, marble, etc.) must be cleaned beforehand to remove any adhesive residues, dust and loose parts, which must be carefully vacuumed up; in addition, the joints must be empty and free for at least 2/3 of the thickness of the tiles (or the entire thickness for thin tiles).
In very hot periods and with absorbent tiles, moisten the joints beforehand, avoiding pools of water.

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Mixing

Add 18-22% of clean water depending on the desired consistency, based on the application (floors or wall coverings). Mix by hand or mechanical stirrer at low speed to avoid incorporating excessive air, until obtaining a uniform and smooth mixture. The mix obtained can be worked for around 2 hours. Wait 5 minutes, mix again and completely fill the joints using a flexible rubber trowel or scraper. Work in a diagonal direction to the tiles, removing excess material with a trowel, again moving this diagonally in relation to the joints. After FASSAFILL LARGE has thickened and appears opaque on the surface (this occurs after a time that varies, depending on the porosity of the substrate, the thickness and the type of tile, and ambient conditions), clean with a slightly damp sponge, always moving this in a diagonal direction with respect to the joints and making sure to use two containers of water, one to clean the sponge and the other for cleaning the surface with clean water. Keep the sponge uniformly wet in order to avoid non-uniform surface colour. Cleaning carried out too early can cause excessive emptying of the joint and colour differences. Final cleaning of the joints can be performed using a clean, dry cloth.
LATEX DR 843 used as complete replacement for water improves the adhesion, mechanical strength and impermeability of FASSAFILL LARGE.
For acid-resistant surfaces, in the presence of cement grout residues or stains, it is recommended to clean with FASSA-CLEAN PLUS acid detergent.
For correct application, please see the technical documents for each individual product described above.

Warnings

- Product for professional use.
- Do not use FASSAFILL LARGE on damp substrates or surfaces affected by rising damp.
- On absorbent tiles with a porous surface or rough finish, always carry out a test grouting beforehand as to verify how the joint can be cleaned.
- In applications with LATEX DR 843, it is recommended to carry out a preliminary grouting test, for best aesthetic results; to avoid differences in joint colour, it is recommended to use the same mixing time and latex dosages in the different mixes. The colour may differ slightly from what is shown on the colour chart.
- Carefully add the mixing water to ensure colour uniformity. Excessive water may lead to formation of a white patina on the surface of the grout.
- Always use the same amount of water when preparing multiple mixtures. Mixtures prepared with different doses of water may not have uniform sealant colour.
- Do not clean the covering before the sealant has thickened, to avoid emptying the joints and altering the colour.
- Use clean water to clean the covering.
- Do not clean using a sponge that is too wet, and avoid leaving pools of water.
- Do not use FASSAFILL LARGE for expansion or movement joints, even when mixed with LATEX DR 843
- The fresh sealant must be protected against direct sunlight, rain and frost for at least 24 hours.
- If using LATEX DR 843, refer to the relevant datasheet.
- If the surface of the coating is dirty after finishing the joint, use FASSA-CLEAN PLUS acid cleaner, referring to the corresponding technical and safety datasheet, at least 7 days after completing the joint sealing operations.
- The colours on the FASSAFILL LARGE colour chart should be considered purely indicative, as they are affected by the porosity of the covering tiles.
- Avoid excessive differences in joint thickness so as to avoid variations in colour on the surface.
- Do not attempt to restore decreased workability by adding water to the mix.
- Respect expansion and movement joints.

FASSAFILL LARGE it must be used in its original state without the addition of foreign materials.

Storage

Keep the product dry in its sealed packaging for no longer than 12 months. Once the product has expired, it must be disposed of in accordance with the current legislation.

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Quality

FASSAFILL LARGE is subjected to accurate and constant checks in our laboratories. The raw materials used are rigorously selected and controlled.

Colour range

in-CLASSIC

F01 White	
F03 Light grey	
F05 Ice	
F07 Manhattan	
F09 Quartz grey	
F11 Grey	
F15 Anthracite	
F17 Black	

in-WOOD

F19 Pergamon	
F21 Jasmine	
F23 Beige	
F25 Anemone	
F31 Caramel	
F33 Brown	

All Fassa Bortolo sealants used to fill joints between ceramic tiles and stone materials meet the requirements of EN 13888.

The colours reproduced are purely indicative and may vary for reasons due to printing, reproduction and conversion of the images.

It should also be noted that colour rendering is affected by several other factors, including, by way of example: natural light, which is not uniform or constant; artificial light, affected by the colour temperature of the light source or CCT - Correlated Colour Temperature; and the colour of adjacent surfaces. The display of colours by computers is also affected by the user's display settings.

For a more meaningful colour match, refer to the grouting samples provided in the colour chart.

In any case, the final colour obtained on site will depend on the processing, application and cleanliness of the sealant and the type and colour of the tiles adjacent to the joints, and may also be subject to changes over time, including for reasons relating to environmental conditions (humidity, light, etc.).

For all of these reasons, Fassa Srl offers no guarantee whatsoever relating to the colour of Fassa Bortolo sealants and the product's correspondence to the images and samples provided, as well as to the final result obtained on site, declining all liability pertaining to this attribute.

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Technical Data

Appearance	coloured powder
Mixing water	18-22%
Specific weight of the wet mortar	approx. 1,950 kg/m³
pH	> 12
Pot life	approx. 2 hours
Application temperature	from +5°C to +35°C
Yield	See the table
Time before grouting the joints on walls	Normal-setting adhesive 4-8 hours
	Quick-setting adhesive 1-2 hours
	Mortar 2-3 days
Time before grouting the joints on floors	Normal-setting adhesive 24-36 hours
	Quick-setting adhesive 3-4 hours
	Mortar 7-10 days
Walkability	24 hours
Ready for normal use	7-14 days
Temperature resistance	from -30°C to 80°C
Moisture resistance	excellent
Solar ageing resistance	excellent
Resistance to solvents, oils and alkalis	excellent
Acid resistance	not resistant to aggressive acid environments

Environmental sustainability certifications and protocols	
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
CAM protocol	2.5.1/3.2.8 – Indoor Emissions
GEV Classification	GEV EMICODE EC 1^{Plus} - very low emission

Flexural strength after 28 days	EN 12808-3	≥ 2.5 N/mm²	COMPLIANT WITH STANDARD EN 13888 CLASS CG2WA
Compressive strength after 28 days	EN 12808-3	≥ 15 N/mm²	
Flexural strength after freeze-thaw cycles	EN 12808-3	≥ 2.5 N/mm²	
Compressive strength after freeze-thaw cycles	EN 12808-3	≥ 15 N/mm²	
Abrasion resistance	EN 12808-2	≤ 1000 mm³	
Shrinkage	EN 12808-4	≤ 3 mm/m	
Water absorption after 30 minutes	EN 12808-5	≤ 2 g	
Water absorption after 240 minutes	EN 12808-5	≤ 5 g	

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Do not use for	Use instead
Particularly resistant grouting in areas undergoing high stress	FASSAFILL LARGE + LATEX DR 843
Flooring to be buffed	FASSAFILL LARGE + LATEX DR 843
Acid resistant grouting	FE 838
Acid-resistant sealing with excellent aesthetic performance	FASSAFILL EPOXY
Expansion joints	FASSASIL NTR PLUS – FASSALASTIC TIXO PU 40
Pools with electrolysed salt water disinfection	FASSAFIL EPOXY - FASSAFILL RAPID

Table of theoretical consumption expressed in g/m ² of FASSAFILL LARGE in relation to tile format and joint dimensions

Tile size in mm			D = joint size			
A	B	C	5 mm	10 mm	15 mm	20 mm
100	100	6	945	1890	2835	3780
100	100	8	1260	2520	3780	5040
100	100	10	1575	3150	4725	6300
100	200	6	709	1418	2126	2835
100	200	10	1181	2363	3544	4725
150	150	6	630	1260	1890	2520
150	150	10	1050	2100	3150	4200
200	200	8	630	1260	1890	2520
120	240	12	1181	2363	2544	4725
250	250	12	756	1512	2268	3024
250	250	20	1260	2520	3780	5040
250	330	8	443	886	1329	1772
300	300	8	420	840	1260	1680
300	300	10	525	1050	1575	2100
300	300	20	1050	2100	3150	4200
300	600	10	394	788	1181	1575
330	330	10	477	955	1432	1909
400	400	10	394	788	1181	1575
450	450	12	420	840	1260	1680
500	500	12	378	756	1134	1512
600	600	12	315	630	945	1260
600	600	5	131	263	394	525
600	600	3	79	158	236	315
900	900	10	175	350	525	700
1200	1200	12	158	315	473	630

[(A+B)/(AxB)] x C x D x 1500 x 1.05 = g/m²	A = tile length (in mm)
	B = tile width (in mm)
	C = tile thickness (in mm)
	D = joint width (in mm)

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 check 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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