FASSAFILL MEDIUM

DATA SHEET

Water repellent cement-based sealant for grouting joints from 2 to 12 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 MEDIUM is a cement-based sealant containing special cements, graded sands and hydrophobic additives.
FASSAFILL MEDIUM features broad-spectrum protection against growth of algae and mould species

Supply

- Small packs of approx. 5 kg in boxes of 5
- Tints: available in 28 colours (see table of colours)

Use

FASSAFILL MEDIUM is a cement-based sealant used to fill joints from 2 to 12 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 MEDIUM 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 MEDIUM, 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 18-20% 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 MEDIUM 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 MEDIUM.
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 recommended for expert users.
- Do not use FASSAFILL MEDIUM 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 to verify cleanability 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 MEDIUM 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 MEDIUM 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 MEDIUM must only be used in its original state, without the addition of other materials, except for LATEX DR 843 where specified.

Storage

Keep the product dry in its sealed packaging for no longer than 24 months. Once the shelf life has expired, it must be disposed of in accordance with current legislation.

Quality

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

Colour range

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in-CLASSIC

F01 White	
F03 Light grey	
F05 Ice	
F07 Manhattan	
F09 Quartz grey	
F11 Grey	
F13 Sand	
F15 Anthracite	
F17 Black	

in-WOOD

F19 Pergamon	
F21 Jasmine	
F23 Beige	
F25 Anemone	
F27 Light sand	
F29 Powder pink	
F31 Caramel	
F33 Brown	
F35 Ruby	

in-COLOURS

F37 Amaranth	
F39 Terracotta	
F41 Dark brown	
F43 Magnolia	
F45 Aqua green	
F47 Green	
F49 Lemon	
F51 Anise	
F53 Crocus	
F55 Ultramarine	

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	18-20%
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 service	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
Air emissions in accordance with French Regulation	A+ (used alone or mixed with LATEX DR 843).

Environmental certifications and sustainability schemes	
LEED V4.1 protocol	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 emissions

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
For joints more than 12 mm wide	FASSAFILL LARGE
Sealing in rooms subject to heavy stress	FASSAFILL MEDIUM + LATEX DR 843
Flooring to be buffed	FASSAFILL MEDIUM + 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	FASSAFILL EPOXY - FASSAFILL RAPID

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

Tile size in mm			D = joint size			
A	B	C	2 mm	4 mm	8 mm	12 mm
20	20	4	1260	2520	-	-
50	50	4	504	1008	-	-
50	50	8	1008	2016	-	-
75	150	6	378	756	1512	2268
100	100	6	378	756	1512	2268
100	100	8	504	1008	2016	3024
100	100	10	630	1260	2520	3780
100	200	6	284	567	1134	1701
100	200	10	473	945	1890	2835
150	150	6	252	504	1008	1512
150	150	10	420	840	1680	2520
200	200	8	252	504	1008	1512
120	240	12	473	945	1890	2835
250	250	12	302	605	1210	1814
250	250	20	504	1008	2016	3024
250	330	8	177	354	709	1063
300	300	8	168	336	672	1008
300	300	10	210	420	840	1260
300	300	20	420	840	1680	2520
300	600	10	158	315	630	945
330	330	10	191	382	764	1145
400	400	10	158	315	630	945
450	450	12	168	336	672	1008
500	500	12	151	302	605	907
600	600	12	126	252	504	756
600	600	5	53	105	210	315
600	600	3	32	63	126	189
900	900	10	70	140	280	420
1200	1200	12	63	126	252	378

[(A+B)/(AxB)] x C x D 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 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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