

**GLASS TILES
INSTALLATION**

BISAZZA

GLASS TILES

OUR COMMITMENT TO INSTALLERS

Bisazza's commitment can be seen not only in the fact that it creates and manufactures high quality, prestige materials, but also in the attention it dedicates to installers, with a range of products and tools designed to encourage faultless workmanship.

But this is not all. An installers' program has been devised, based on a central core of Bisazza courses, with the aim of coaching professionals to a high level of proficiency. Bisazza has trained more than a thousand people over the last five years, from Italy and elsewhere and, to this day, continues with its commitment to imparting the skills that are so essential to the correct interpretation of the quality and excellence traditionally embodied in the company's products.

For information on training courses and related initiatives organized by Bisazza for installers, contact:

Technical Assistance and Installation Service
e-mail installation.department@bisazza.it

The Technical Assistance and Installation Service, with its team of experts, is also happy to answer questions on laying and fixing and offer solutions at any time.

THE IMPORTANCE OF PROFESSIONAL STANDARDS

Customer satisfaction depends, to a considerable extent, on the selection of professional contractors able to guarantee good workmanship when performing basic tasks - as when installing Glass Tiles - through which the prestige and value of the Bisazza brand finds its full expression.

Installers play an important role as partners in the process, and this catalogue - a guide to the essential ingredients of a professional job - is dedicated to them.

Before proceeding further, however, we would like to focus on one or two key points that cannot be ignored if good results are to be achieved.

1) Heated floor. Once the screed has cured, it must be tested before tiling operations can commence. This will usually involve conducting a complete heating/cooling cycle over a period covering a complete week: the heating is turned on at the minimum setting for two days, and the temperature increased thereafter by 5 °C every two days up to the maximum permissible, which is also maintained for two days; then start taking the temperature down 5°C every two days until the minimum is reached, leaving the heating on during the laying. This procedure is necessary in all seasons, including summer.

- Before starting any job, make a careful assessment of the substrate (plaster, marble, metal, wood, heated floor¹ etc.), remembering that each type of material requires the appropriate preparation.
- The substrate must present a perfectly smooth, even surface, and a mature, sound and stable structure. It is important that tiles should never bridge any expansion joints incorporated into the substrate, and similarly, that the clearance space left between floor slab and surrounding walls is left free.
- To ensure best results, use only products technically and chemically suited to the type of substrate being tiled.
- Be sure that the instructions given on packaging and technical data sheets for Bisazza products are followed to the letter, and apply this general rule for all other products utilized; keep strictly to the safety instructions.
- When transporting, carrying and handling boxes of Bisazza Glass Tiles, keep them horizontal and store in a dry place, sheltered from rain and moisture.
- Similarly, Bisazza Glass Tiles should be stored horizontally and in a dry place.
- Place the tiles in the rooms or areas where they are to be installed at least 48 hours before commencing work, so that they can be conditioned to the temperature of the substrate.
- Tiling operations should be carried out in ambient temperatures of between 15 °C minimum and 30 °C maximum.
- For best results, a gap of approximately 2 millimetres should be left between one tile and the next.
- Where surfaces being tiled are exposed to direct sunlight (rooms with large windows, for example), suitable precautions need to be evaluated on a case-by-case basis.

BISAZZA PRODUCTS AND TOOLS FOR LAYING BISAZZA GLASS TILES

The efforts of skilled and expert professionals alone are not enough when laying and fixing Bisazza Glass Tiles; special materials and tools are also needed. With this in mind, combining the results of its own analysis and research with feedback from installers, the company has formulated a series of special products and designed a number of tools intended specifically to facilitate the process of installing Glass Tiles and to optimize end results.

In particular, these include the adhesive **Go 1** and the latex **Go 2**, to be mixed together, a notched trowel with 5 mm teeth for skimming and spreading the adhesive, a diamond disc for cutting the tiles, a float to ensure firm adhesion of the tiles to the substrate and the **Bisazza Installation Kit**, containing a tub of **Fillgel** epoxy grout and a 2 litre bottle of **Shine** detergent.



BISAZZA TILES ADHESIVE



GO 1 + GO 2

Bi-component quick bonding adhesive for Bisazza tiles for interiors. To be used on cement substrate, plaster and plasterboard treated with primer.

GO 1

High performance, fast bonding and hydrating white cement base powder for mixing with GO2 as two-part adhesive for laying Bisazza agglomerate tiles. Internal use.

GO 2

Synthetic rubber latex for Bisazza cement base adhesive, to be mixed exclusively with GO 1.

TYPICAL APPLICATIONS

GO 1 mixed exclusively with **GO 2**, is an adhesive for interiors only, for laying Bisazza agglomerate tiles on:

- cement substrates
- plaster
- plasterboard treated with primer.

TECHNICAL SPECIFICATIONS

GO is a two-part adhesive composed of a white powder containing special hydraulic binders and silica sand (GO 1), and a synthetic rubber latex (GO 2). **GO** is fast bonding and hydrating, properties indispensable for fixing and laying Bisazza agglomerate tiles. Floors and walls are ready for use after just 24 hours and floors can be walked on after 4 hours.

GO exhibits practically no shrinkage and has excellent adhesion, as well as superior resistance to impact and vibration, thermal shock and ageing.

IMPORTANT

Do not use **GO** on:

- walls and floors subject to significant background movement (particleboard or wood composition, asbestos cement, etc.)
- metallic surfaces
- old gloss and/or emulsion paint finishes
- not suitable for mosaic tiling on gypsum based substrates, unless suitably primed and stabilized.

GO 1 Keep away from moisture. Powder containing special hydraulic binders which, when brought into contact with perspiration or other body fluids can produce an alkaline reaction resulting in slight irritation. Use suitable gloves and protective eyewear.

GO 2 Keep away from frost. Avoid contact with skin and eyes.

BISAZZA ADHESIVES COVERAGE (kg/sqm)

SUBSTRATES	GO 1 + GO 2
Cement substrates	GO 1 Kg 4 + GO 2 Kg 1
Plaster	GO 1 Kg 4 + GO 2 Kg 1
Plasterboard treated with primer	GO 1 Kg 4 + GO 2 Kg 1

	GO 1	GO 2
Packaging	22.5 kg bags	5.5 kg can
Storage time	12 months	24 months
Mixing proportions	22.5 kg of GO 1 to 5.5 kg of GO 2 Equivalent to 24.5 parts of GO 2 to 100 parts of GO 1	

APPLICATION DATA*	GO 1 + GO 2
Confirms to standards	European EN 12004 - C2F
Mixture working time	45 minutes
Application temperature	from +10°C to +30°C
Open time	approx. 20 min.
Groutable	after 3 hours
Walkable	after 4 hours
Able to bear weight	after 24 hours
Operational temperature range	from -30°C to +90°C

*at + 23°C and 50% RH.

WARNING

Whilst the information and directions given above are based on the experience of the company to date, they must be taken nonetheless as purely indicative. Always check that the product is suitable for the intended application before proceeding to use it. The user assumes all liabilities deriving from utilization of the product.

COLOURED GROUT FOR GLASS TILES



BISAZZA FILLGEL

Special epoxy filler for Bisazza glass tiles.

TYPICAL APPLICATIONS

For grouting Bisazza Glass Tiles on any surface.

TECHNICAL SPECIFICATIONS

FILLGEL is a tixotropic two-component epoxy-resin-based product with silica sand and special components, with excellent resistance to wear, easy to apply and easy to clean.

The following advantages are obtained when used correctly:

- smooth, compact final surface
- uniform, resistant colours
- water resistant
- optimum hardness and ability to withstand heavy traffic
- no cracks or crazing
- excellent bonding to Glass Tiles.

IMPORTANT

- Do not use for grouting surfaces subject to continuous contact with oleic acid.
- Take care not to cover expansion joints, which should be sealed with appropriate products.
- **FILLGEL** is not waterproofing.
- Do not dilute **FILLGEL** with anything to make it more fluid: this will inevitably have an adverse effect on the performance of the product.
- Slight variations in colour can occur from one batch of material to another.
- The workability times vary considerably in relation to environmental and substrate conditions.

SAFETY INSTRUCTIONS

- Product for professional use.
- Keep out of the reach of children.
- Recommend for use only in well-ventilated areas.
- Irritant for eyes, respiratory tract and skin.
- May cause sensitisation by skin contact.
- Use protective clothing, gloves and goggles.
- Toxic to aquatic organisms.
- This material and its containers must be disposed of at collection points for hazardous or special waste.
- In the event of contact with eyes, wash immediately with plenty of water and consult a doctor.

Before use, read the information on the package and safety card.

Packs	Part "A" and Part "B" a total of 3 kg, to be mixed at time of use
Shelf life	24 months in original packs/containers stored in a cool dry place
APPLICATION DATA*	
Conformity to standards	EN 13888 Class RG
Mixing proportions	Part A: Part B = 2 : 1
Max. washable time	45 minutes from the time of mixing
Application temperature	from +12°C to +30°C
Walkable	24 hours. Longer times at lower temperatures
Able to bear weight	4 days. Longer times at lower temperatures
Operational temperature range	from -20°C to +100°C

*at + 23°C and 50% RH.

WARNING

Whilst the information and directions given above are based on the experience of Bisazza to date, they must be taken nonetheless as purely indicative. Always check that the product is suitable for the intended application before proceeding to use it. The user assumes all liabilities deriving from utilization of the product.

BISAZZA FILLGEL AVERAGE COVERAGE

GLASS TILES SIZE (cm)	JOINT (mm)	COVERAGE (kg/m ²)
29,85 x 29,85	2	0,14
60 x 60	2	0,08

BISAZZA SPECIAL DETERGENT FOR GLASS TILES



SHINE

Bisazza special detergent for Glass Tiles. **Ready-to-use.** Specifically formulated for cleaning **BISAZZA FILLGEL** epoxy grout. Does not develop toxic or harmful vapours. Cleans thoroughly without damaging the finish on the tile. Cleans joints grouted with **BISAZZA FILLGEL** without damaging the grout.

IMPORTANT

Do not use on porous surfaces. When using near porous materials, fully protect the surfaces against any contact whatsoever with **SHINE** or solutions containing it. Always test the action on any surfaces other than Bisazza tiles or mosaic grouted with **BISAZZA FILLGEL**.

PACKAGING AND COVERAGE

SHINE comes in 2 litre containers. Cleaning **BISAZZA FILLGEL**: 1 litre of **SHINE** will clean about 2,5 square metres of tile.

STORAGE

SHINE, if kept in its original container in a dry place, can be stored for 36 months.

WARNING

- Professional strength product.
- Do not mix with other products.
- Store out of reach of children. Do not swallow. If swallowed, call a doctor immediately and show him or her the container or label. If the product comes into contact with the eyes rinse immediately with large quantities of water and call a doctor. Keep the product in its original container.

RESPONSIBILITY

While the information given above is correct to the best of our knowledge, it is nevertheless purely indicative and must always be verified beforehand. Before using the product, always ascertain whether or not it is suitable for the application. Users assume all responsibility for damage resulting from incorrect use.

CELLULOSE SPONGE



SPONGE

Special open cell cellulose sponge. Specially formulated for smoothing **BISAZZA FILLGEL** after removing excess with the **BISAZZA SCRUB** felt pad.

INSTRUCTIONS FOR USE

For cleaning **BISAZZA FILLGEL** grout during grouting.

CONSUMPTION: 1 every 4 square meters of tile.

SPECIAL POLYESTER FELT PAD



SCRUB

White polyester felt pad specially formulated for removing the excess **BISAZZA FILLGEL** during grouting.

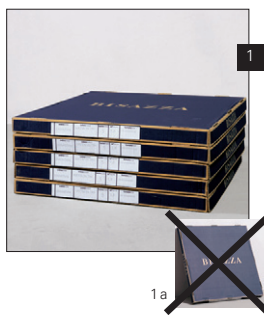
INSTRUCTIONS FOR USE

Before the grout starts to set, dip the **SCRUB** pad into **BISAZZA SHINE** and, without wringing it out, scrub it over the tiles in a circular motion until all the excess grout has formed an emulsion over the surface. Dip the **SCRUB** pad back into the Bisazza Shine whenever it becomes difficult to form an emulsion. After this, remove all traces of the grout emulsion with the **BISAZZA SPONGE**.

CONSUMPTION: 1 every 2 square meters.

**LAYING AND FIXING
INSTRUCTIONS**

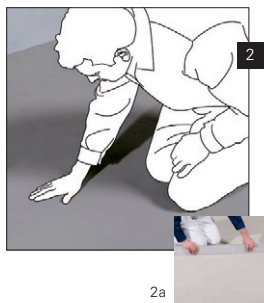
LAYING GLASS TILES ON FLOORS



1 CHECKING AND PREPARING THE MATERIAL

Check the boxes containing the Bisazza tiles, making sure there is sufficient material to complete the job. Every box is marked with the production batch number, colour, order number and other details to be referenced should more of the same material be needed. Above all, always remember to store the boxes horizontally.

1a



2 CHECKING THE SUBSTRATE

Before starting any job, make sure the surface to be tiled is not crumbly or flaky. The screed must be perfectly flat, especially as Bisazza tiles are not self-supporting but made of flexible material, and will therefore follow the contours of the substrate. Also, the screed must be properly cured, with a residual moisture content less than 3% and sufficient resistance to compression for the intended use of the surface. The temperature of substrates must be kept between +15 °C and +30 °C from the start of tiling operations and for at least 10 days after work has been completed.

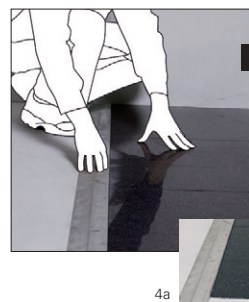
2a



3 SMOOTHING

This step is needed to render the substrate perfectly smooth and uniform for tiling. The surface must be absolutely clean: the slightest particle of dirt could prevent the tile from bonding faultlessly to the substrate. In the case of a cement screed, skim with Bisazza adhesive, mixing the two products **GO 1** and **GO 2** in the recommended proportions (see table on page 27). After preparing the adhesive mix, spread uniformly using a plain trowel (steel float). The skim coat should be left to dry for at least 24 hours.

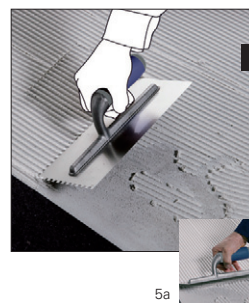
3a



4 DRAWING THE STARTING LINE

To lay the tiles correctly and neatly, position the first one against the wall and then, using a straight edge, draw the line on which the other tiles are to be laid.

4a



5 PREPARING THE ADHESIVE

When the substrate is perfectly dry, prepare the Bisazza adhesive by mixing together Go1 and Go2, and spread with the **Bisazza notched trowel**, covering an area the size of no more than 3-4 tiles. Use the smooth edge of the trowel first, then the notched edge, drawing the teeth across and "combing" the adhesive to produce a uniformly ridged bed. The tiles can now be positioned.

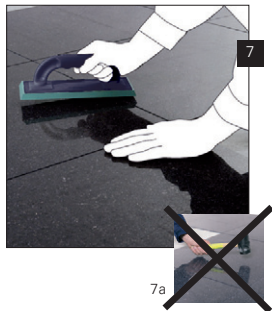
5a



6 LAYING

Back-butter each tile with the adhesive, using the smooth edge of the Bisazza trowel and making certain to cover the entire area completely and uniformly. Now set each tile on the surface, applying pressure from the middle outwards, so that the adhesive applied to the back makes full contact with the bed. The tiles are not self-supporting, and breakage could occur if voids are left when spreading the adhesive.

6a

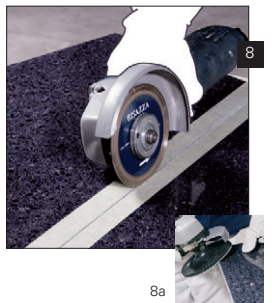


7 FIRM BONDING

After laying the first few tiles, repeat the steps described above, preparing a ridged bed to receive a further three or four tiles back-butter some more tiles and lay them. We advise using a 2 mm joint spacer.

With the tiles in place, tap them home with the Bisazza float (not with the rubber headed mallet) so that they bed firmly into the adhesive.

At 23°C the floor can be walked on after 4 hours and is serviceable after 24 hours; these times may lengthen significantly in lower temperatures and where substrates are not particularly absorbent.



8 CUTTING THE TILES

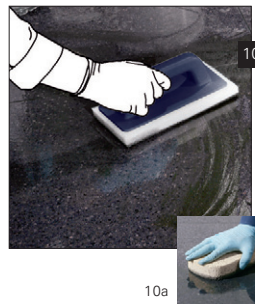
Where "portions" of tiles are used to fill up space, there are two different methods of cutting, one for edges exposed to view and one for concealed edges. In the first instance, use the **Bisazza diamond disc**; in the second, the tile cutter can be used, with the proper protective equipment.

In the event that the bevel needs to be restored to the tile, the recommended method is to use an angle grinder, with carborundum sandpaper applied to a flat velcro backing disc. The sequence of grits to use is: P120, P180, P220, P360.



9 GROUTING

Before grouting, remove any excess adhesive from the joints with a knife, vacuuming away the waste, and clean the surfaces of the Glass Tiles to remove any traces of the adhesive. Prepare the **Bisazza Fillgel epoxy grout** pouring the contents of part "B" into part "A" to make up a quantity that can be used within 20 minutes, measuring out the product carefully (refer to the technical specifications sheet for the quantities, page 29). Mix the two components with a mixer operating at low rpm, proceeding slowly and continuing until perfectly blended, then use straight away. Spread with the Bisazza float, being sure to distribute the product uniformly to avoid different shades between the tiles. Wear suitable clothing and protective gear.



10 CLEANING

Before the grout hardens, begin cleaning off the surface using Bisazza Shine. Prepare two buckets of Shine: dip the **Bisazza Scrub** into the first bucket and, without wringing, swab the surface of the tiles repeatedly with a circular motion to smooth the grout in the gaps and emulsify the excess. Next, dip the **Bisazza Sponge** into the second bucket and wipe down the surface, removing all residual traces of grout. Finally, when the grout is beginning to set, wet the sponge in clean water and wipe over the surface one last time to remove any streaks, leaving the mosaic bright and shiny. Any other streaks should be removed with Bisazza Shine and a Scrub when the grout has started setting. After cleaning, rinse the surface.



LAYING THE "DECORI" SERIES

The "Decori" series offers a wide range of patterns and colour combinations; follow the same laying instructions as for monochrome Glass Tiles. "Decori" tiles come ready for laying, with the decoration already inserted in the monocolour tile.



