

BISAZZA





**LAYING MOSAICS**

**BISAZZA**

MOSAICO



## 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 ten 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 about training courses and related initiatives organized by Bisazza for installers, contact:

### **Technical Assistance**

**e-mail: [installation.department@bisazza.com](mailto:installation.department@bisazza.com)**

The Technical Assistance and Installation Service, with its team of experts, is also happy to answer questions about laying mosaics and to 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 mosaics - through which the prestige and value of the Bisazza brand finds its full expression.

As tilers play an important role as partners in the process, 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. Contact the heated floor installer for information about specific procedures to follow for that floor. 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 floor<sup>1</sup> or other) remembering that each type of material requires appropriate preparation
- The substrate must present a perfectly smooth, even surface, and a mature, sound and stable structure. If the surface involved is a heated floor, apply a reinforced plastic membrane of the type used for water-proofing, to the substrate
- To ensure the best results, use only products that are technically and chemically suited to the substrate being tiled
- Make 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; adhere strictly to the safety instructions.
- When transporting, carrying and handling boxes of Bisazza mosaic tiles, keep them horizontal and store in a dry place sheltered from rain and damp.
- If the job entails blended colour or modular designs, before starting, carefully read the laying plan that is supplied by Bisazza and can be found in every box
- Where mosaic tiles are to be laid on a surface that is in permanent contact with water, before starting work we recommend treating the surface involved with suitable water-proofing (contact a company that manufactures chemical products for the building trade)
- Remember that a good tiler applies the mosaic with uniform spaces between the sheets for a harmonious overall effect.



## BISAZZA PRODUCTS FOR LAYING MOSAIC

The efforts of skilled and expert professionals alone are not enough when laying Bisazza mosaic 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 laying mosaic tiles and to provide perfect end results.

In effect, these include the **Installation Kit** and **Epoxy Installation Kit** which contain everything needed to lay and grout 2 square metres of 20x20 mm mosaic tiles.

For bigger jobs, **Ad Hoc** adhesive can also be bought in larger containers than those that come with the standard Installation Kit.

Bisazza also offers **ULTRA** latex to be added to Ad Hoc adhesive for use on swimming pools and outdoor fixtures.

APPLICATIONS	INSTALLATION KIT	EPOXY INSTALLATION KIT
Indoor	X	X
Swimming pools, sauna, etc.	+ ULTRA	X
Thermal or salt water pool		X
Outdoor	+ ULTRA	X
SURFACES	INSTALLATION KIT	EPOXY INSTALLATION KIT
Cement screed	X	X
Concrete	X	X
Untreated smooth plaster	X	X
Heated floor	X	X
Wood		X
Metal		X
Glass		X
Aluminium		X
Plaster board		X
Plaster board treated with primer	X	X
Polystyrene panels with cement finish	X	X
Lightweight cement panels	X	X

## INSTALLATION KIT



### **AD HOC (2.7 Kg)**

High performance white cement tile adhesive for laying Bisazza glass mosaics and floors.

### **FILLGEL PLUS UVR (3 Kg)**

Coloured washable epoxy filler for Bisazza glass mosaics.

## EPOXY INSTALLATION KIT



### **E GLUE (3.240 Kg)**

Bi-component epoxy adhesive for bonding Bisazza glass mosaics.

### **FILLGEL PLUS UVR (3 Kg)**

Coloured washable epoxy filler for Bisazza glass mosaics.



## ADHESIVE FOR BISAZZA GLASS MOSAICS



### AD HOC

High performance white tile adhesive for laying Bisazza glass mosaics and floors. Ad Hoc conforms to C2TES1 standards and uses nano-technology which provides great flexibility during laying. For use on cement, untreated smooth plaster and compatible water-proofed surfaces.

### APPLICATIONS

**Ad Hoc** mixed with water is suitable for heated floors, cement screeds, dry screeds and even porous concrete. Compatible surfaces:

- cement surfaces (concrete, untreated smooth plaster or screed).
- plaster board treated with primer
- compatible waterproofing surfaces (not permeable).

Recommended for laying Bisazza mosaic tiles for swimming pools and outdoor applications if mixed with ULTRA latex.

### TECHNICAL SPECIFICATIONS

**Ad Hoc** is a high performance white adhesive with the following specifications:

- pure white colour which does not alter the original tonality of Bisazza glass tiles
- easily worked creamy paste
- highly thixotropic meaning that when applied vertically or to a ceiling, does not congeal or prevent tiles being manoeuvred into position
- open time and correction times ideal for laying mosaics.

### IMPORTANT

- Ad Hoc is recommended for laying tiles on freshly plastered surfaces.
- If a substrate is particularly absorbent or powdered, we recommend applying a suitable primer first.
- Not suitable for laying tiles on plaster-based surfaces unless a suitable primer has been applied first.
- Not suitable for swimming-pools with salty or thermal water.
- Not suitable for installation of transparent or semi-transparent mosaic tiles in swimming-pools or humid areas.
- Wait at least 20 days from completion of tiling before allowing contact with water. If the job is tiling a swimming pool or an outdoor application, we recommend using BISAZZA ULTRA latex instead of water.
- Store AD HOC in a cool dry place.
- Not suitable for laying mosaic tiles with artistic techniques.

### SAFETY INSTRUCTIONS

- Product for professional use.
  - Keep out of the reach of children.
  - Irritant for eyes, respiratory tract and skin.
  - 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.

Packaging	2.7 kg bag 15 kg bag
Mixing proportions	2.7 kg of AD HOC + 1.6 litres of clean water 2.7 kg of AD HOC + 1.7 litres of Ultra latex
Storage	Store in a cool and dry place in original sealed packet. The expiry date is printed on the packet.

APPLICATION DATA	AD HOC	AD HOC + ULTRA
Conforms to standards	C2TE S1*	C2TE S2*
Application temperature	from +5° C to +35° C	from +5° C to +25° C
Open time	approx 30 minutes	approx 30 minutes
Mixture working time	approx 90 minutes	approx 60 minutes
Walkable	after 8 hours	after 10 hours
Groutable	after 8 hours*	after 10 hours*
Operational temperature range	from -30° C to +80° C	from -20° C to +80° C
Drying times (for tubs, swimming pools, outdoor applications)	/	20 days

at +23°C and 50% RH.

\* Wait until the adhesive dries before grouting.

## 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 using it. The user assumes all liabilities from use of the product.

## ADHESIVE COVERAGE ADHOC - powder (Kg/m<sup>2</sup>)

TROWEL	AD HOC 15 KG
3.5 mm	1.25
5 mm	1.65

The coverage figures shown above include two 1 mm skim coats

## \*NOTE

C = Cement

2 = Improved with additional characteristics

T = With limited slip

E = Extended open time

S1 = Deformable adhesive

S2 = Highly deformable adhesive



## COLOURED FILLER FOR BISAZZA GLASS MOSAICS



### FILLGEL PLUS UVR

Special coloured epoxy filler for Bisazza glass mosaics.

### APPLICATIONS

For grouting Bisazza mosaic tiles on floors and coverings.

- Suitable for indoor and outdoor applications.
- Also suitable for damp and permanently damp conditions.
- Particularly suited for use with heated pools or salt water, or where complete hygiene is required.

### TECHNICAL SPECIFICATIONS

**FILLGEL PLUS** is a thixotropic product containing 2 epoxy resin components, silica sands and special additives with excellent resistance to wear and superb application and cleaning characteristics.

When applied properly, FILLGEL PLUS provides grouting with the following characteristics:

- smooth, compact final surface.
- uniform, resistant colours.
- resistance to water and most chemical agents.
- optimum hardness and ability to withstand heavy traffic.
- no cracks or crazing.
- excellent bonding to sheets.

### 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 PLUS is not water-proofing.**
- Do not dilute FILLGEL PLUS with water or any solvent to make it more fluid: this will invariably have an adverse effect on the performance of the product.
- To prevent affecting the performance of the product, all of the two components must be mixed.
- Do not use portions of the product.
- After some times, clearer colours tend to turn yellow, when used outside.
- In case of application of grout 1104 Neutro Base in swimming-pools or in extremely humid areas, the grout preparation must be carried out carefully as this tint is colourless and semi-transparent.
- 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.
- Wait until the adhesive dries before grouting.
- Do not cover any grouted surface for 4 days.

### SAFETY INSTRUCTIONS

- Product for professional use.
- Keep out of the reach of children.
- Irritant for eyes, respiratory tract and skin.
- May cause sensitisation by skin contact.
- In the event of contact with eyes, wash immediately with plenty of water and consult a doctor.
- Wear suitable clothing, gloves and protective glasses.
- If possible, use in well ventilated areas.
- Do not use for pools containing fish.

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

Packaging	Part "A" and Part "B" - A total of 3 Kg to be mixed at the time of use
Storage	Store in a cool and dry place in original sealed packet. The expiry date is printed on the packet.
<b>APPLICATION DATA</b>	<b>FILLGEL PLUS</b>
Classification as per EN 13888	European Standard EN 13888 RG Class
Max workability time	Max 50 minutes from mixing
Application temperature	from +15°C to +30°C
Operational temperature	from -15° C to +70° C
Walkable	after 24 hours. At lower temperatures, times are longer•
Drying time	after 7 days. At lower temperatures, times are longer• In pools and humid environments, wait for 14 days.

at +20°C and 50% RH. • in the meantime, prevent standing water.  
RG = Reactive Sealant

#### 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 using it. The user assumes all liabilities from use of the product.

#### FILLGEL PLUS UVR COVERAGE (Kg/m<sup>2</sup>)

MOSAIC	FILLGEL PLUS
20x20 mm	1,45
10x10 mm	1,45
VARIATIONS	1
OPERA 25* (25x25 mm)	1,6
OPERA 15 (15x15 mm)	2,3
5X5* (50x50 mm)	1
OPUS ROMANO 12	1,2
VINTAGE	1

#### FILLGEL PLUS UVR COVERAGE (Kg/m<sup>2</sup>)

MOSAIC	FILLGEL PLUS
DECORATIONS USING ARTISTIC TECHNIQUE	1 - 1,45
WAVE	1,45

\*5 mm trowel

#### NOTE

For orders of greater than 50 m<sup>2</sup> the coverage of Fillgel plus drops by 0.1 kg/m<sup>2</sup> for all mosaic formats except 5X5.

The figures above refer to "by the book" laying and to the correct use of Bisazza tools.

## EPOXY ADHESIVE FOR BISAZZA GLASS MOSAICS



### E GLUE

High performance thixotropic epoxy adhesive for BISAZZA glass mosaics and plates

### APPLICATIONS

For laying Bisazza mosaic tiles outdoors on differing substrates:

- cement surfaces (concrete, smooth untreated plaster or screed)
- wood, metal, glass

Since eGlue is resistant to water absorption and steam diffusion, it can be used in humid areas such as showers and steam rooms, or in submerged areas such as swimming-pools and fountains.

### TECHNICAL SPECIFICATIONS

- white, low odour.
- no vertical slip.
- good mechanical resistance.
- excellent adhesion to different types of surface.
- good resistance to chemical agents.

### IMPORTANT

**E GLUE** is not waterproofing.

- Take care not to let eGlue fill expansion joints.
- Do not dilute eGlue with water or any solvent to make it more fluid: this will invariably have an adverse effect on the performance of the product.
- To prevent affecting the performance of the product, all of the two components must be mixed.
- Do not use portions of the product.
- If used outdoors, the product tends to yellow.
- The workability times vary considerably in relation to environmental and substrate conditions.
- To be used on perfectly dry surfaces.

### SAFETY INSTRUCTIONS

- Product for professional use.
- Keep out of the reach of children.
- Irritant for eyes, respiratory tract and skin.
- May cause sensitisation by skin contact.
- In the event of contact with eyes, wash immediately with plenty of water and consult a doctor.
- Wear suitable clothing, gloves and protective glasses.
- If possible, use in well ventilated areas.

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

Packaging	Part "A" and Part "B" - A total of 3.24 Kg to be mixed at the time of use
Storage	Store in a cool and dry place in original sealed packet. The expiry date is printed on the packet.
<b>APPLICATION DATA</b>	<b>E GLUE</b>
Classification as per EN 12004	R2T*
Application temperature	from +15° to +30°
Open time	2 hours
Correction time	3 hours
Walkable	after 24 hours
Groutable	after 12 hours*
Operational temperature range	from -20°C to +80°C
Drying times (for tubs, swimming pools and outdoor application)	after 7 days.

at +23°C and 50% RH.

\* Wait until the adhesive dries before grouting.

### 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 using it. The user assumes all liabilities from use of the product.

### BISAZZA E-GLUE COVERAGE (Kg/m<sup>2</sup>)

Skim	0.9
Reinforcing skim	1.4
Laying	1.6

\*NOTE

R = Reactive adhesive

2 = Improved

T = Slip resistant

## EXPANDING LATEX ADHESIVE

**ULTRA**

Expanding latex adhesive to be mixed exclusively with **Ad hoc** to improve product characteristics.

**APPLICATIONS**

**ULTRA** is formulated for fixing BISAZZA mosaic tiles to indoor or outdoor surfaces that are subject to a wide range of temperature changes thanks to its inherent resistance to bad weather and frost.

**ULTRA** mixed with Ad hoc improves adhesion to absorbent and non-absorbent mineral surfaces and can be used on heated floor screed, balconies, terraces, prefabricated concrete, outdoor façades and swimming pools.

**TECHNICAL SPECIFICATIONS**

- mixed with AD HOC forms a creamy paste.
- makes the hardened product deformable and flexible.
- no vertical slip with extended open time.

**IMPORTANT**

- Do not let ULTRA dry on the skin.
- Remove any dry excess with soap and water.
- Protect the eyes against splashes.
- Store unopened in a dry place at less than 30°C.
- Protect from frost.

Read the Bisazza Ultra safety card and product label before use.

**LATEX COVERAGE ULTRA (Kg/m<sup>2</sup>)**

MOSAICO	ULTRA
20x20 mm	0,8
10x10 mm	0,8
VARIATIONS	0,8
OPUS ROMANO 12	
OPERA 25* (25x25 mm)	1,05
OPERA 15 (15x15 mm)	0,8

**LATEX COVERAGE ULTRA (Kg/m<sup>2</sup>)**

MOSAICO	ULTRA
5X5* (50x50 mm)	1,05
VINTAGE	0,8
DECORATIONS USING ARTISTIC TECHNIQUE	-
WAVE	0,8

\*5 mm trowel

Packaging	9.5 kg drum
Mixing proportions	15 kg of AD HOC + 9.5 Kg of ULTRA
Storage	Store in a cool and dry place in original sealed packet. The expiry date is printed on the packet.
APPLICATION DATA	ULTRA
Classification as per EN 12004/12002	C2TE S2*
Application temperature	from +5°C to +25°C
Open time	approx 30 minutes
Mixture working time	approx 60 minutes
Walkable	after 10 hours
Groutable	after 10 hours
Operational temperature range	from -20°C to +80°C
Drying times (for tubs, swimming pools and outdoor application)	after 20 days.

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 using it. The user assumes all liabilities from use of the product.

#### \*NOTE

C = Cement

2 = Improved with additional characteristics

T = With limited slip

E = Extended open time

S2 = Highly deformable adhesive



### BISAZZA TOOLS AND ACCESSORIES FOR LAYING MOSAIC

As part of their mosaic laying product strategy Bisazza has also designed specific tools and accessories that tilers can order by contacting the company (tel. +39 0444 707511, fax +39 0444 492088) or local retailer. In detail, these tools include: a notched trowel for skimming and spreading adhesive; a square tipped trowel for correcting gaps; a float that ensures good adhesion of the sheets to walls and is also useful for grouting; tile snips and a diamond tipped cutting disc ; a polyester felt scrubber for cleaning and an open pore cellulose sponge.



#### SPECIAL POLYESTER SPONGE

##### SCRUB

Special white scrubber specifically for removing any excess **FILLGEL PLUS** during grouting.

##### INSTRUCTION FOR USE

Before the grout starts to harden, wet the surface with water and buff with the **SCRUB** in small circles on the tiles until the excess grout forms an emulsion. Spray with water each time the emulsion seems dry and struggles to form. Following this, use the **SPONGE** to remove the excess grout

**COVERAGE** about 1 for every 4 m<sup>2</sup> of mosaic.



#### CELLULOSE SPONGE

##### SPONGE

Special open pore cellulose sponge.

Specifically for smoothing **FILLGEL PLUS** after the removal of excess grout using the **SCRUB**.

##### INSTRUCTION FOR USE

For removing the paper backing from mosaic tiles and for the final cleaning of **FILLGEL PLUS** during grouting.

**COVERAGE** about 1 for every 4 m<sup>2</sup> of mosaic.





# **LAYING INSTRUCTIONS**

## LAYING 20x20 mm MOSAICTILES PRE-ASSEMBLED ON A MESH BACKING



### 1 CHECKING AND PREPARING THE MATERIALS

Before starting work, check the boxes containing the Bisazza mosaic tiles and make sure that 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.



### 2 SKIMMING

This step is needed to render the substrate perfectly white, smooth and uniform for tiling (a substrate of a different colour may adversely affect the look of the job). If using a cement plaster, use Bisazza **Ad Hoc** adhesive mixed with water. In the event of tiling on plasterboard, a suitable primer must be applied to the wall before the adhesive (contact a company that manufactures chemical products for the building trade). Once the adhesive has been prepared, spread it uniformly with a smooth trowel. It must be allowed at least 5 hours to dry.



### 3 DRAWING THE STARTING LINE

Lay the sheets on the ground, measure the total size of three of them placed side by side in such a manner that the distance between one sheet and another is the same as that between one tile and another. Use a laser level to trace the lines that will guide the correct position of the sheets on the surface with the same distance between them as from the three sheets mentioned above.



4a

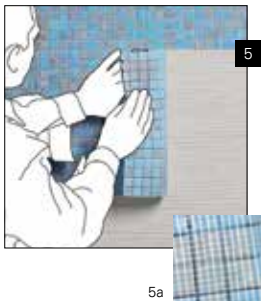
4

## PREPARING THE ADHESIVE



Prepare the Bisazza Ad Hoc adhesive by mixing with water and use the 3.5 mm notched Bisazza trowel to spread it on the prepared surface only. 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.

The adhesive must always be soft and moist: apply with the trowel at an angle of 45° to the substrate and make sure to apply it evenly without leaving excess adhesive at the joints. When tiling walls, we recommend that the last "combing" is horizontal. When applying the adhesive, take great care to ensure the best possible adhesion by "kneading" the adhesive on the substrate before the final "combing." Lastly, remember that if tiling an area that is permanently subjected to the presence of water (e.g. tubs and swimming pools) it is best to waterproof the surface beforehand with a specific protective sheath and to add **Ultra** latex to the **Ad Hoc** adhesive.

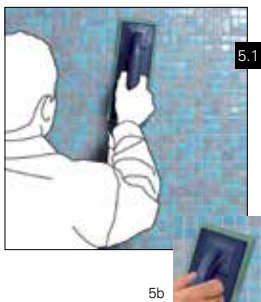


5a

5

## LAYING THE MOSAIC

The tiles are pre-assembled on mesh backing which is placed in **DIRECT** contact with the adhesive. Make sure that the densest lines of the mesh are pointing vertically. Please Note: the distance between sheets must be the same as that between one tile and the next so that when the job is complete, there are no obvious discrepancies in distance. The mosaic, regardless of format, does not need expansion joints. If there are joints on the substrate, they must be made allowance for and sealed with suitable flexible products.



5b

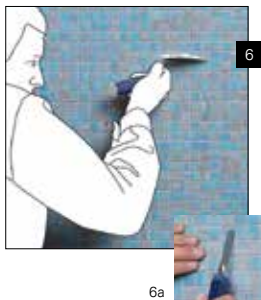
5.1

## GOOD ADHESION



During laying, before the adhesive has dried, tap the sheets into position with a rubber Bisazza trowel to ensure they bed properly and uniformly in the adhesive.





6

## CORRECTING GAPS



During laying, before the adhesive has had time to harden, there is still time to adjust the gaps between one sheet and the next so as to provide uniform gaps. To do this, cut the sheet with a cutter and increase or decrease the gap between sheets slightly using the Bisazza correcting trowel. This is one of the most delicate stages of the application process but provides results well worth the effort. Leave to set for 24 hours.

6a



7

## GROUTING



Before grouting, remove any powder and excess adhesive from the gaps and surfaces of the sheets. Prepare the Bisazza epoxy Filgel Plus grouting by pouring all the contents of the hardener ("Part B" - kg 1) into the paste ("Part A" - kg 2). Make sure to empty the whole container. Mix both components slowly with a mixer at low speed (600 rpm), continue until completely blended then use immediately. On walls, always begin grouting from the bottom to prevent water later used for washing (see point 8) from penetrating the still unfilled gaps. Scoop the grout up with a trowel and place it on the Bisazza rubber float. Begin grouting by moving the float diagonally to the sheet of tiles working from the bottom up in a skimming action until the gaps are completely filled. Take care not to leave excess grout on the tiles. Always use suitable protective gear.

7a



8

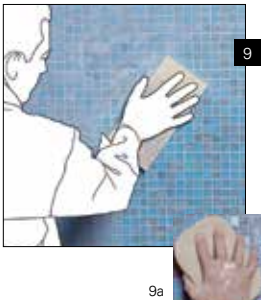
## CLEANING



Once the grout has been applied, there is a limited time span for starting cleaning (see clock) before the grout begins to harden. Start the cleaning procedure by wetting the surface to be cleaned with water spray. Use the white felt Bisazza Scrub (or similar) to wipe the tiles. Any excess grout will form an emulsion and the gaps will be left smooth. Wet the Bisazza Sponge (or similar) and use it to remove the emulsion. Repeat this procedure as often as necessary until the surface is completely clean and make sure that no grout residue remains on the tiles. The felt scrub and sponge can be used time and time again as long as they are thoroughly rinsed in clean water.

Always use clean water for such tasks.

8a



9

## FINAL CLEANING



6 hours/30°C  
8 hours/20°C  
12 hours/15°C

To definitively remove any steaks and make the mosaic shine, repeat all the cleaning procedures mentioned above and observe the same times and conditions as above. Always use clean water for these tasks. Do not cover the surfaces for at least 4 days after grouting to allow the product to harder evenly.

10

## MAINTENANCE

For daily cleaning, we recommend neutral detergents. Do not use wax, oils, hydrofluoric acid, phosphoric acid (or orthophosphoric) or products which contain it. For special cleaning to treat calcium deposits, we recommend using a mildly acid detergent whereas in all other cases, use mildly alkaline products. Always follow the manufacturer's instructions when using these substances and always rinse the surfaces immediately after with plenty of clean water.

### IMPORTANT

a) **Fillgel plus UVR** guarantees uniformity of colour if applied correctly.

The presence of stains or variations in colour can be caused by factors not associated with the product such as:

- incorrect mixing of components A and B
- the addition of unwanted components during mixing of the grout (e.g. water, alcohol etc.)
- poor ventilation of the area involved which enhance the evaporation of liquids used for washing
- covering the tiled surfaces tiles with plastic sheets immediately after grouting or

before the **Fillgel plus UVR** has hardened

- washing the surfaces with overly aggressive detergents
- failure to observe the ideal temperature range for using the product
- the presence of residual water in the gaps before grouting

b) **IMPORTANT:** the excessive use of pencils, (pens, marker pens, etc.) is to be avoided as lines drawn by the tiler before even starting to lay tiles, may remain visible even after grouting. This applies particularly where light coloured grout is to be applied.

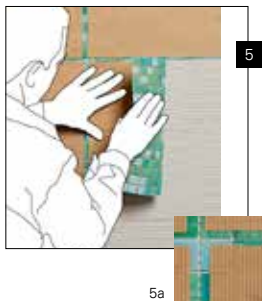
We always recommend the use of a laser level; if a laser is not available, draw very light lines with pencil only.

c) Do not use **Fillgel plus UVR** for grouting expansion gaps. Use flexible products that are specific for that purpose as mentioned above.

d) **Fillgel plus UVR** grout is water repellent but should not be considered as waterproofing.

## LAYING TILES PREASSEMBLED ON A PAPER BACKING

Unlike sheets of tiles pre-assembled on a mesh backing, in this case the paper which holds the pre-assembled tiles in place is on the side of the sheet which remains in sight. The paper backing is not placed in direct contact with the adhesive but is removed once the sheet of tiles has been laid. The procedures from skimming to applying adhesive are the same as described for previously for mosaic tiles on a mesh backing. The description of the procedures involved therefore starts from Step 5.



### 5 LAYING THE MOSAIC



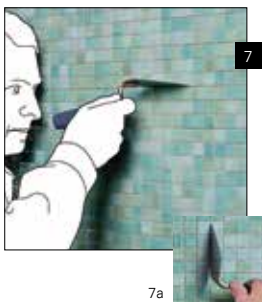
To facilitate the laying process, examine the paper backing carefully before starting: this backing has lines which are generally to be kept running in the same direction and, for walls, the vertical direction is best. The sheets are then applied directly to the adhesive with the paper facing the tiler. Take care with the distances between one sheet and the next: the gap between sheets should be uniform for a harmonious overall effect. While laying the tiles, properly tap the sheets into position with a Bisazza rubber float and smooth them out with the correcting trowel, so that they bed firmly into the adhesive for a smooth finish.



### 6 REMOVING THE PAPER BACKING



To remove the paper backing from the sheets, wipe it repeatedly with a damp sponge until the paper begins to peel off with ease. Be very gentle with the paper during this step as the adhesive is still fresh. Remove the paper by peeling it away diagonally from the bottom up and make sure that the sheets do not shift.



### 7 CORRECTING GAPS



During laying, before the adhesive has had time to harden, there is still time to adjust the gaps between one sheet and the next so as to provide uniform gaps. To do this, slide the sheets very gently to increase or decrease the gap between them using the Bisazza correcting trowel. This is one of the most delicate stages of the application process but provides results well worth the effort. Leave to set for 24 hours.



7

## PREPARATIONS FOR GROUTING

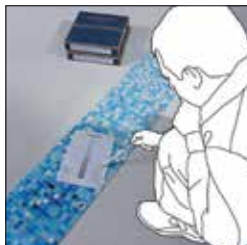
The following day, use a cutter to remove any adhesive that has escaped from the sheet and then wash the mosaic with a sponge dipped in lukewarm water to remove any remaining adhesive from the paper. If the residue is not completely removed, yellow stains may appear after grouting. Repeat the procedure as often as necessary until the sheets are perfectly clean. Take care not to let water get into ungrouted gaps. You can now start the grouting and cleaning steps which are the same as for mosaic tiles on a mesh backing.

## SPECIFIC WARNINGS FOR SOME FORMATS

### 10x10 mm

- Pay special attention to “combing” the adhesive so as to prevent it from escaping between the sheets, remove the paper backing very carefully and gently. Wet it first to prevent tiles from dislodging from the sheet.
- When using the correction trowel to adjust gaps, more care must be taken than is the case with 20x20 mm mosaic.

## LAYING 20x20 mm BLENDED COLOUR TILES PRE-ASSEMBLED ON A MESH BACKING



The colour blending consists of a series of mixed sheets (modules) with colours which fade into each other. Each module has eight sheets - numbered from 1 to 8 - from the lightest to the darkest colour.

Before applying the sheets, read the laying plan that comes with the materials.

The same laying instructions apply as for 20x20mm mosaic tiles pre-assembled on a mesh backing.



Before applying the sheets, read the **laying plan** that comes with the material.

The same laying instructions apply as for 20x20mm mosaic tiles pre-assembled on a mesh backing.



## LAYING MODULAR DESIGNS



The design shown in these illustrations are modular.

Each module consists of numbered sheets which make up the design and have an arrow on the paper backing that indicates the direction they are to be laid in.

It is absolutely essential to follow to the letter the laying plan provided. Before starting we recommend a “dry run” (see photo alongside) in which you lay the sheets on the ground (without adhesive) to get an overall view of the design and to make sure that you have sufficient material.

The same laying procedures apply for these as for mosaics of the same format and type of backing. In this case too, correcting any gaps is vital for an overall harmonious effect. Make sure that the gap between one sheet and the next is the same as that between one tile and the next.



Important: the modular design should be treated like wallpaper. Any join between one module and the next should be positioned out of view (e.g. behind or above a door) to make it as invisible as possible.





## FINISHING

Below we suggest several processes for finishing mosaics that have been pre-assembled on mesh and/or paper backings. The type of mosaic backing is not relevant and this example has been used in different situations regardless of the type of application illustrated. As we have seen before, the laying procedures, from preparing the substrate to skimming, have already been explained in previous sections.

### WALLS AT 90 DEGREES

#### WITH GLASS MOSAIC

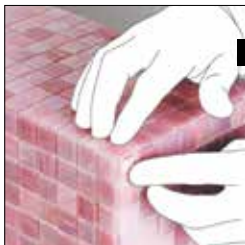


1

#### LAYING THE MOSAIC

Before all else, make sure that the corner sits at exactly 90°. To check that this is the case, place two sheets of tiles at 90° to each other. If the angle is a perfect right angle, these will match exactly.

Once the surfaces have been skimmed and the Bisazza adhesive applied, start laying the mosaic by positioning a sheet, or part thereof, on the surface to be tiled.



2

#### FINISHING

On completion, make sure that the sheets form a perfect right angle before the adhesive sets. Next you can the usual start grouting and cleaning procedures.

## WITH THE OPUS ROMANO MOSAIC



### 1 LAYING THE MOSAIC

Before all else, make sure that the corner sits at exactly 90°.

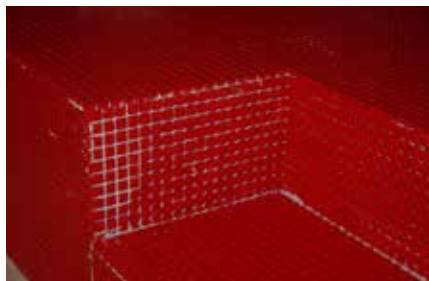
Once the surface has been skimmed and the Bisazza adhesive applied, start laying the mosaic by positioning one sheet, or part thereof, on the flat surface with the edge of the sheet protruding slightly over the lip of the wall to the width of the mesh which will be positioned vertically to create an overlap (see photo).

The depth of the mesh placed on the horizontal surface will be visible.



### 2 FINISHING

On completion, make sure that the sheets form a perfect right angle before the adhesive sets. Next you can the usual start grouting and cleaning procedures.



## DRILLING MESHES

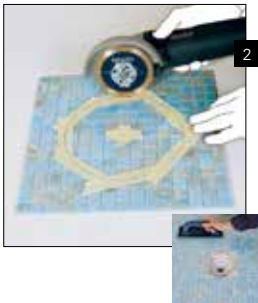
If for some reason you need to drill holes in the tiling, it is always best to do so when laying and grouting has been completed. Use a Widia drill tip for glass mosaic or Opus Romano tiles. Apply only light pressure to the drill and regularly pause then drill again so as to prevent the glass from over-heating and breaking.

## SHOWER TRAYS



### 1 PREPARATION

Once the substrate has been properly prepared, begin laying the mosaic starting from the area around the drain cover. Take a sheet of mosaic, place it in the middle of the shower tray and place the drain cover over it as a point of reference; fix adhesive tape to the paper (in the case of tiles pre-assembled on a mesh) and, starting from the middle of the drain cover, use a compass to draw a circle of the same diameter plus 5 mm (the width of a tile), which will then show you exactly where to cut the mosaic.



### 2 LAYING THE MOSAIC

Cut the lines drawn on the mosaic using a diamond tipped cutting disc. Go gently and repeat the action often so as to prevent the mosaic from over-heating and breaking; prepare the Bisazza adhesive and then start laying by placing the sheet obtained in the middle of the shower tray. Continue arranging whole sheets around the cut one until arriving at its edge.



### 3 FINISHING

Once you have finished laying, the section around the drain cover still has to be covered. Prepare individual tiles from the sheet and use mosaic pliers to cut them to shape and finish the job off with the diamond disc to give them a trapezoid shape in such a way that they sit perfectly side by side in a circle. It is very important to leave a small gap of about 4 mm around the drain cover that will be filled with a flexible sealant after grouting has taken place. This is very important for expansion caused by heat that the materials will experience during use. You can now go ahead with grouting, cleaning and applying the sealant.



## STEPS - BENCHES - ROUNDED EDGES

### PRELIMINARY STEPS PREPARING STRIPS OF TILES FROM WHOLE SHEETS

In the case of mosaic pre-assembled on a mesh, prepare the quantity of mosaic strips needed and use a cutter to cut vertically following the direction of the line which appears thickest.

With the various strips now ready, carefully cut the thread of the mesh that is protruding at the side then prepare the tiles of each strip by cutting a small part of the mesh between one tile and the next to form a flat curved surface.

In the case of mosaic pre-assembled on a paper backing, prepare the material by cutting the sheets into strips of tiles following the lines on the paper using a smooth trowel. Cut the backing well and only leave the a small amount of paper in the middle of the tiles so that the edges are visible and allow the rounded edges to form a curve.

## STEPS



### **DRAWING THE STARTING LINE**

Laying must always start from the highest step. Before applying the Bisazza adhesive, it is a good idea to create a reference point for the work. Use a pencil to draw a horizontal line on the riser that is parallel to the plane of the first step. Remember to make the line very light so that it is invisible after grouting, especially if using light coloured grout.



### **LAYING THE MOSAIC**

After applying the adhesive, start laying the mosaic horizontally starting from the top of the riser at the pencil line. Continue working up using strips and single tiles as required.



3

### CORRECTING GAPS

When you get to the tread, it is useful to have a reference to make the job easier and of higher quality: first place the strips at both ends of the surface to be tiled. As the surface gradually gets smaller, use a trowel to apply the adhesive. Now use the square tipped trowel to correct the tiles in such a way that the gaps between one tile and the next are uniform. Continue laying by placing one tile at a time beginning alternatively with one on the right then one on the left sides of the step.



4

### CUTTING THE TILES

As you make progress with the tiling, you will need to fill the small gaps that appear between one tile and the next on the curved surface, at corners or in other awkward places. You can use mosaic pliers to cut the tiles to the right size; if the gap to fill is less than half a tile, we recommend that you remove another whole and fill the space with two suitably cut tiles instead of just one very small one. The aesthetic improvement is well worth the trouble. If on the other hand you have to cut a whole sheet transversely or follow the line of a curve, first use a coloured marker to trace a line on a sheet of mosaic then go ahead and cut with the Bisazza diamond disc cutter.



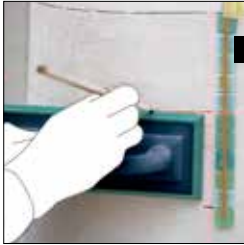
5

### THE END RESULT

Continue laying the tiles along the riser of the next step. And so on... When the work has been completed, use the correction trowel to make any adjustments necessary to the gaps between one tile and the next. After this, you can start the grouting and cleaning procedures as explained in previous pages.

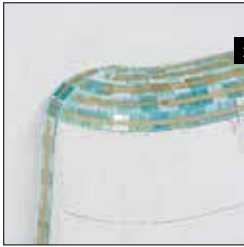


## BENCHES



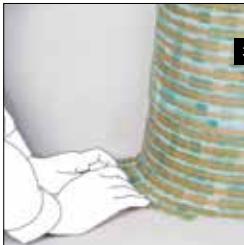
### DRAWING THE STARTING LINE

As the object to be tiled has a particularly difficult shape, it is important that the surfaces involved are properly skimmed until they are smooth and regular. Once this has been done, you can start by laying the first two strips on the backrest - one horizontally and one vertically as shown in the photo - in such a way that they form the main points of reference. After every five vertical tiles, make a mark with a pencil then use the laser level to create a reference grid for laying. Use the pencil again to very lightly trace the horizontal and vertical lines cast by the laser.



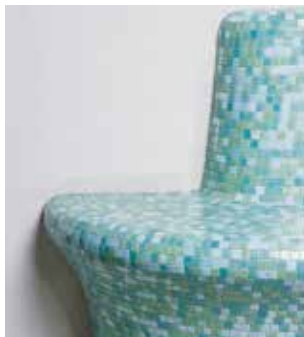
### LAYING THE MOSAIC

Begin laying at a corner: place one strip of tiles vertically and one horizontally on the first line traced. Continue laying the tiles horizontally and every now and then, if the mosaic has a paper backing, dampen it with a sponge: this will help you move individual tiles more easily and conform them to the shape of the bench.



### CURVES

When you reach the where the bottom of the backrest meets the seat, retrace the reference lines and continue laying with the same procedures as before.



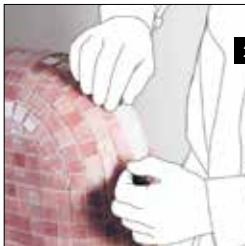


## ROUNDED EDGES



### LAYING THE MOSAIC

Once the surfaces have been skimmed and the Bisazza adhesive applied, lay the first two sheets over the rounded surface so that they act as guides for both the surfaces to be tiled. Continue laying the mosaic, one sheet under the next working downwards and following the lines traced by the first two sheets. When you have completed this step, continue laying horizontally.



### FINISHING

When you have finished laying on either side of the "shoulder", you can start on the rounded section. In this case, lay the previously prepared strips of mosaic and, when necessary, insert single suitably shaped single tiles cut with the mosaic pliers. Remember that all tiles cut with pliers should be buffed with sand paper or a diamond tipped disc to soften the cut edge. This task is not possible with Gloss and Oro mosaic. You can now go ahead with the usual grouting and cleaning procedures taking extra care on rounded sections.



## FOLDS



1

### PREPARATION

It is very important that corners are perfectly square otherwise laying becomes very complicated and time consuming. Particular expertise is called for when laying mosaic in awkward corners.

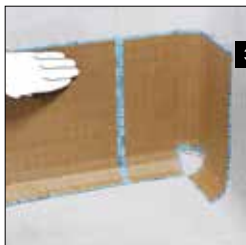
The first step involves laying a first sheet of "dry" tiles. Position the sheet against the upright section of the corner. Count the number of tiles in the curved section and mark the paper backing with a pencil as shown in the illustration. In this case, there are three tiles.



2

### REMOVING EXCESS TILES

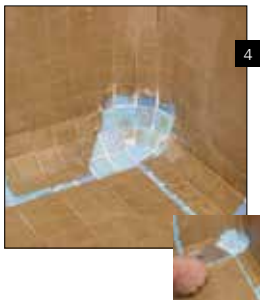
Use the smooth trowel to cut nine strips of tiles (three deep by three wide) and lay them dry against the surface letting the strips slide towards the floor until both ends touch. Use a pencil to trace a light perfectly horizontal line above the dry sheet then, shine the light from the laser on the surface to provide the lines to follow for laying the mosaic.



3

### LAYING THE MOSAIC

After applying the adhesive, lay the first sheet (the one with the upside down U shape) in the lower middle section then continue horizontally to the right and left. Proceed along the surfaces starting from the preciously laid sheets so as to keep the joints properly aligned.



4

### FINISHING

To complete the job, lay the missing mosaic in the corner. To do this, cut the tiles to shape as accurately as possible so that they blend in perfectly. Use the FLEX with the Bisazza diamond disc. On completion of this task, you can start the usual tile correcting, grouting and cleaning procedures.



## INSERTING A MOTIF ON THE BOTTOM OF A SWIMMING POOL

Before starting to lay the tiles, it is absolutely essential to establish with the customer exactly where and how the design is to go in the pool. These decorations are supplied paper mounted. Paper mounted mosaic is recommended for installation in swimming-pools, and as completion of pool bottoms. As we are dealing with swimming pools, this means that the substrate must be prepared with a waterproofing product that is compatible with Bisazza adhesive (contact a company that manufactures chemical products for the building trade). This product must be used for skimming before any other operation is performed.

### MOTIF AND MIXED TILES WITH PAPER BACKING



**1**

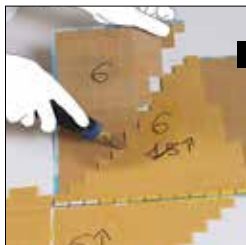
#### **DRAWING THE STARTING LINE**

Having established the position of the motif using several sheets of both the motif itself and mixed tiles and using the edge of the pool as a point of reference, draw perpendicular lines with highlighted with coloured chalk. If the pool is an irregular shape, the reference lines will be provided by the axes of the motif.



## 2 DRY LAYING

Start the dry laying (i.e. without adhesive) the various sheets of the design as shown in the laying plan. The paper backing on the sheets is numbered and has direction arrows to facilitate this task. Continue dry laying the mixed tiles which surround the modular design or motif.



## 3 CUTTING SHEETS TO ACCOMMODATE THE MOTIF

To make the motif fit in perfectly with the bottom of the swimming pool, lay the mixed sheets which surround the motif over the motif itself so as to see where any excess tiles have to be removed. Cut the paper on the sheets with a cutter and dry lay the mixed tiles which should perfectly match the shape of the design. Now all that remains is to re-number every single assembled tile so that you can reconstruct the pattern easily when the time comes for actual laying.



## 4 LAYING THE MOSAIC

Once you have laid the tiles for the background colour following the lines marked out on the grid, you can lay the motif using the new numbers.



## 5 OTHER STEPS

On completion of laying, you can start the usual procedures of removing the paper, tile correcting, grouting and cleaning.





# EPOXY INSTALLATION KIT UVR

eGlue



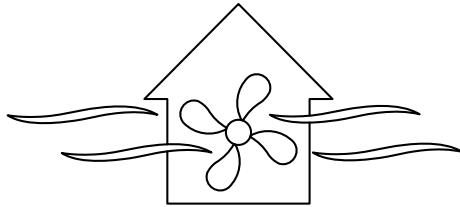
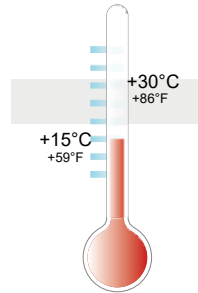
Fillgelplus  
UVR



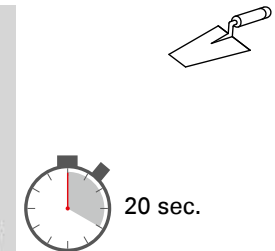
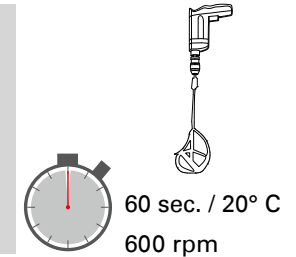
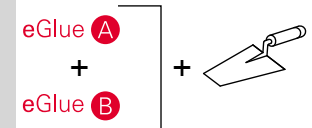
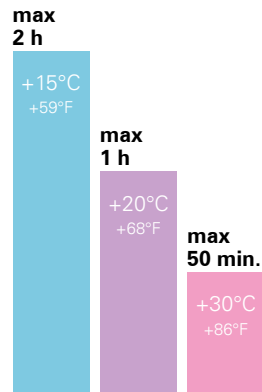
**BISAZZA**

# eGlue

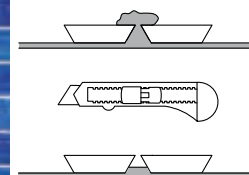
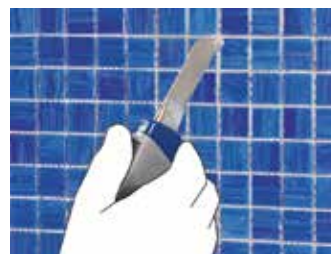
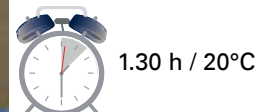
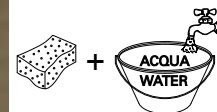
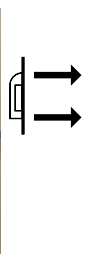
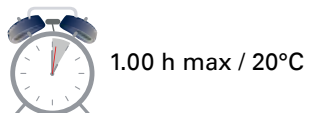
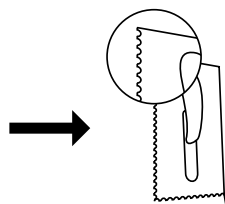
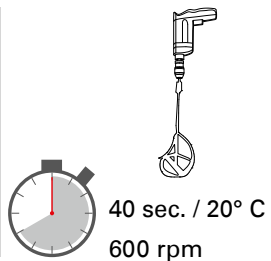
COLLANTE EPOSSIDICO - EPOXY ADHESIVE



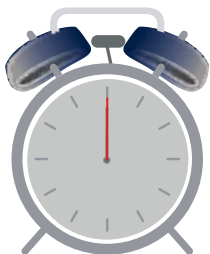
Tempo di lavorazione  
Processing time  
Durée d'utilisation  
Verarbeitungszeit  
Tiempo de utilización



APPLICAZIONE - APPLICATION  
APPLICATION - AUFTRAGEN - APLICACIÓN







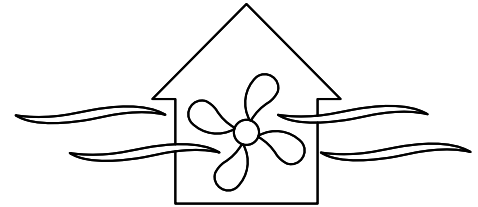
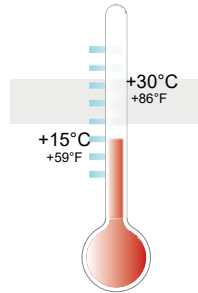
24h / 20°C



pag. 18-19

[www.bisazza.com](http://www.bisazza.com)





Tempo di lavorazione

Processing time

Durée d'utilisation

Verarbeitungszeit

Tiempo de utilización

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50 min.**

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+59°F

**max  
40 min.**

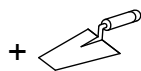
+20°C  
+68°F

**max  
25 min.**

+30°C  
+86°F



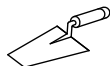
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+  
Fillgelplus <sup>B</sup><sub>UVR</sub>



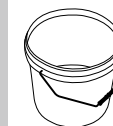
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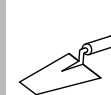
20 sec.



40 sec. / 20° C  
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40 sec. / 20° C  
600 rpm

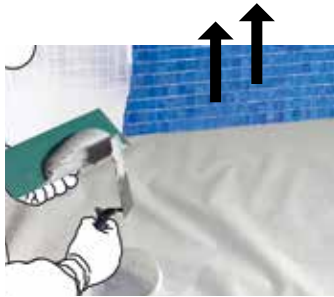


+

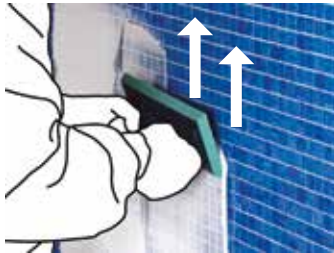




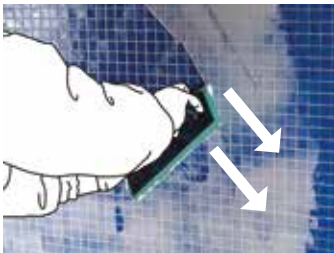
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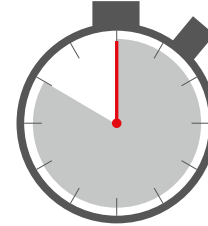


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UVR +

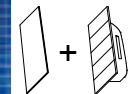
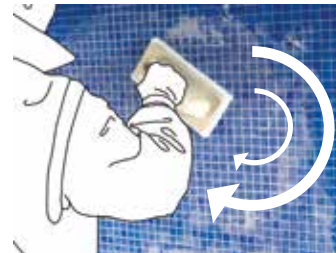
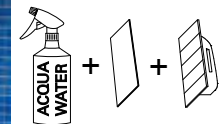


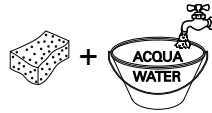
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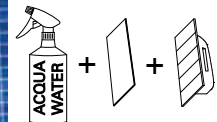
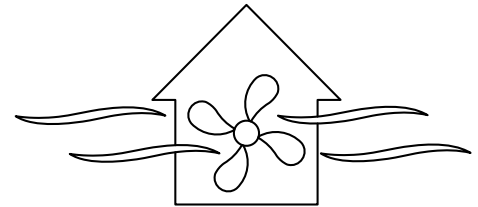


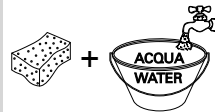
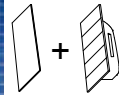
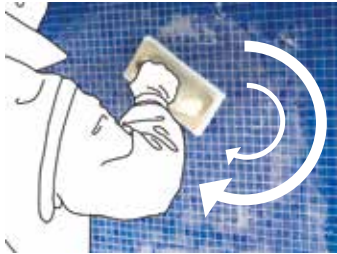
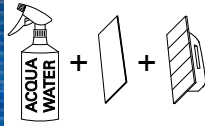
max 30 min. / 30°C  
max 50 min. / 20°C  
max 2h / 15°C





6h / 30°C  
8h / 20°C  
12h / 15°C





- Se il sottofondo non è perfettamente liscio, uniforme e bianco, utilizzare la colla Ad Hoc, per una o due mani di rasatura, già comprese nel calcolo del consumo del prodotto al mq. Per la rasatura con eGlue aggiungere 0,9 kg/mq.
- Prima della stuccatura, accertarsi che la colla sia perfettamente asciutta e che non ci siano residui d'acqua nei giunti.
- Fillgelplus UVR: temperatura di esercizio da -15°C a +70°C.
- Versare completamente il componente B nel contenitore della parte A. Mescolare bene per circa 1 minuto. Versare il composto ottenuto in un secchio pulito e miscelare ulteriormente.
- Non coprire il pavimento in mosaico stuccato prima di 4 giorni.
- Evitare di fare polvere nei primi 4 giorni dalla stuccatura.
- Piscine: riempimento vasca dopo 14 giorni.
- Per pulire gli attrezzi dai residui di eGlue e Fillgelplus UVR utilizzare alcool; per pulire i residui di Ad Hoc è sufficiente l'acqua.
- **Per maggiori informazioni, consultare l'area tecnica del sito [www.bisazza.com](http://www.bisazza.com)**
- If the intended surface is not perfectly plumb, flat, squared, consistent and white please use Ad Hoc to skim once or twice as required. The quantity of Ad Hoc to carry out the skimming process has already been calculated in the product consumption per square meter for your order. For skimming with eGlue, add 0.9 Kg of eGlue per square meter.
- Before grouting, ensure the adhesive is completely dry and there is no water in the grout joints.
- Fillgelplus UVR: operational temperature range from -15°C to +70°C.
- Pour component B in the A component container. Mix for about 1 minute. Pour the mixture in a clean bucket and mix further.
- Do not cover the surface of the mosaic with any product that may create condensation in the first 4 days after grouting.
- It is important that once installation/grouting is completed the area is protected from dust for 4 days after grouting to avoid contamination.
- Pools must not be filled until 14 days after the grouting process is completed.
- Use alcohol to clean fixing tools from residues of eGlue and Fillgelplus UVR, water from residues of Ad Hoc.
- **For additional information, refer to the technical area of the site [www.bisazza.com](http://www.bisazza.com)**
- Si le support n'est pas parfaitement lisse, blanc et uniforme, utiliser la colle Ad Hoc pour réaliser une ou deux couches de ragréage, dont la quantité correspondante est déjà incluse dans le calcul de la consommation du produit au m². Pour un ragréage à la colle eGlue, au contraire, rajouter 0,9 kg/m².
- Avant de jointoyer assurez-vous que la colle soit parfaitement sèche, et qu'aucun résidu d'eau ne soit présent dans les joints.
- Fillgelplus UVR: température de service de -15°C à +70°C.
- Verser la totalité du composant B dans le récipient du composant A. Mélanger pendant 1 minute. Verser le mélange ainsi obtenu dans un seau propre et continuer à mélanger.
- Attendre 4 jours avant de couvrir un sol en mosaïque jointée.

- Eviter de soulever de la poussière dans les 4 premiers jours suivant le jointoiement.
- Piscine : il est possible de remplir la piscine 14 jours après la fin de la pose.
- Pour nettoyer les instruments des résidus d'eGlue ou Fillgelplus UVR utiliser de l'alcool; pour nettoyer les résidus de Adhoc de l'eau est suffisante.
- **Pour de plus amples informations, consulter la session technique du site internet [www.bisazza.com](http://www.bisazza.com)**
- Bei der Verbrauchsangabe pro m² des Ad Hoc ist das Vorspachteln des Untergrundes inbegriffen, wenn der Untergrund nicht perfekt glatt, gleichmäßig und weiß ist. Für die Vorspachtelung mit eGlue sind 0,9 kg/m² hinzuzufügen.
- Vor der Verfügung sollte man sicher sein, dass der Kleber ganz getrocknet ist und dass keine Wasserreste in den Fugen verblieben sind.
- Fillgelplus UVR: Verarbeitungstemperatur -15°C bis +70°C.
- Die gesamte Komponente B in den Behälter der Komponente A leeren. Während ungefähr einer Minute gut mischen. Das Gemisch in einen sauberen Behälter leeren und nochmals mischen.
- Innerhalb der ersten 4 Tage nicht den mit Mosaik verlegten Boden verdecken.
- Innerhalb der ersten 4 Tage nach Verlegung Staub vermeiden.
- Schwimmbäder: Wasserbefüllung des Beckens nach 14 Tagen.
- Benutzen Sie Alkohol, um die Werkzeuge von den eGlue und Fillgelplus UVR Resten zu säubern; bei Resten vom Kleber Ad Hoc ist allerdings Wasser ausreichend.
- **Für weitere Informationen wenden Sie sich bitte an den technischen Bereich der Internetseite [www.bisazza.com](http://www.bisazza.com)**
- Si la superficie no está perfectamente lisa, uniforme y blanca, aplicar una o dos manos de nivelación con el cemento cola Ad Hoc, esta cantidad ya está incluida en el cálculo del consumo del producto por m². Para la nivelación con eGlue añadir 0,9 kg/m².
- Antes de rejuntar, asegúrese que el cemento cola haya fraguado completamente y que las juntas estén completamente secas.
- Fillgelplus UVR: temperatura de servicio de -15°C a +70°C.
- Vierta todo el componente B en el recipiente del componente A. Mezcle bien el contenido alrededor de un minuto. Versar el compuesto en un contenedor limpio y seguir mezclando.
- No tapar el suelo recién rejuntado durante los primeros 4 días de secado.
- No producir polvo en la zona recién rejuntada durante los primeros 4 días.
- Piscinas: esperar 14 días después del rejuntado antes de llenar.
- Para quitar los restos de eGlue y Fillgelplus UVR de las herramientas utilizar alcohol; para quitar los restos de Ad Hoc es suficiente utilizar agua.
- **Para más información consultar el área técnica en [www.bisazza.com](http://www.bisazza.com)**





# INSTALLATION KIT UVR

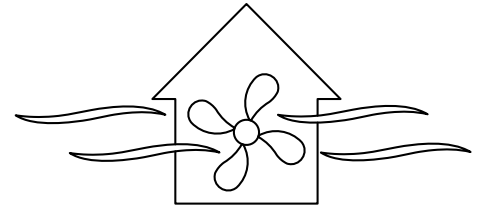
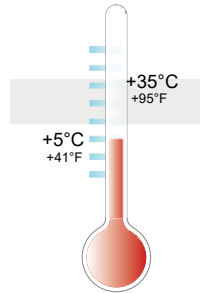
Fillgelplus  
UVR



Adhoc



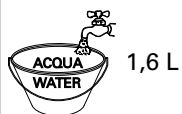
**BISAZZA**



Tempo di lavorazione  
Processing time  
Durée d'utilisation  
Verarbeitungszeit  
Tiempo de utilización

**max  
30 min.**

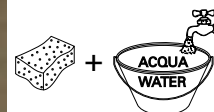
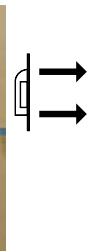
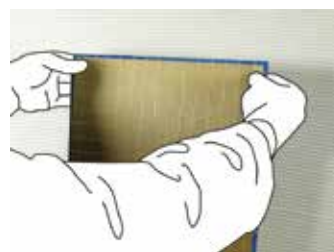
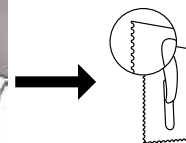
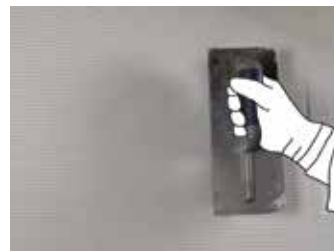
+20°C  
+68°F



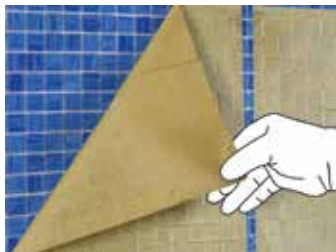
Adhoc



3 min.



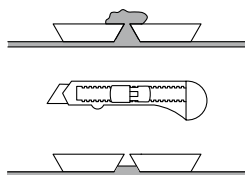
max 30 min. / 20°C



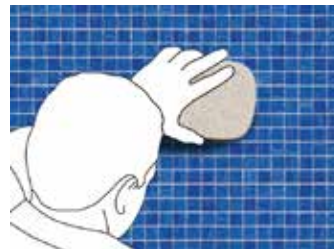
max 30 min. / 20°C



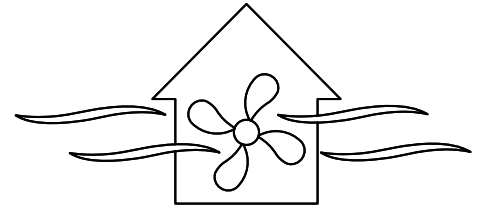
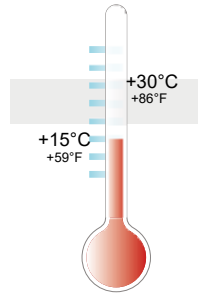
max 30 min. / 20°C



8h / 20°C



pag. 18-19



Tempo di lavorazione

Processing time

Durée d'utilisation

Verarbeitungszeit

Tiempo de utilización

**max  
50 min.**

**+15°C  
+59°F**

**max  
40 min.**

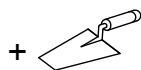
**+20°C  
+68°F**

**max  
25 min.**

**+30°C  
+86°F**



Fillgelplus <sup>A</sup><sub>UVR</sub>  
+  
Fillgelplus <sup>B</sup><sub>UVR</sub>



60 sec. / 20° C  
600 rpm



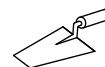
20 sec.



40 sec. / 20° C  
600 rpm



Fillgelplus <sup>UVR</sup> +



+



40 sec. / 20° C  
600 rpm



+

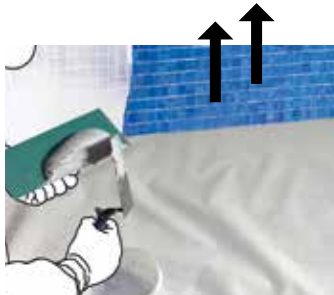




Fillgelplus  
UVR + +



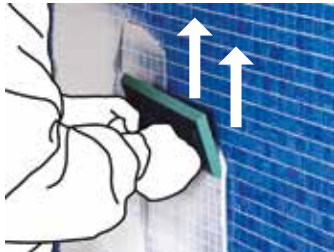
max 30 min. / 30°C  
max 50 min. / 20°C  
max 2h / 15°C



Fillgelplus  
UVR +



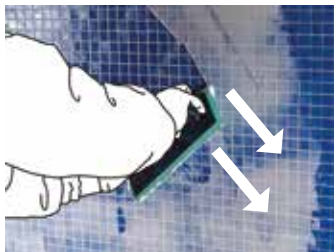
ACQUA  
WATER



Fillgelplus  
UVR +



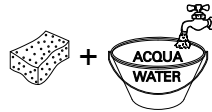
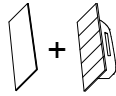
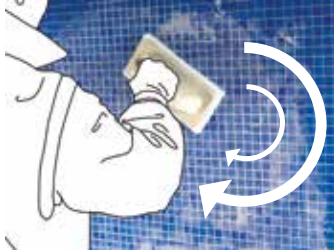
ACQUA  
WATER + +



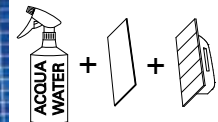
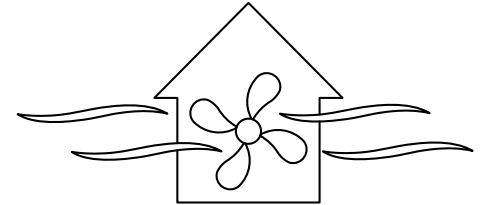
Fillgelplus  
UVR +

NO

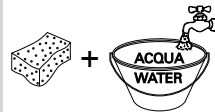
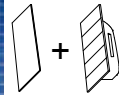
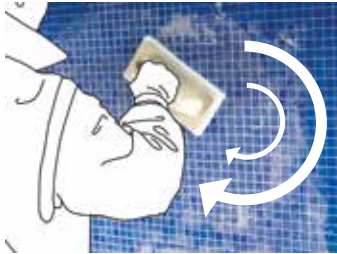
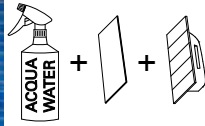
OK



6h / 30°C  
8h / 20°C  
12h / 15°C







- Se il sottofondo non è perfettamente liscio, uniforme e bianco, utilizzare la colla Ad Hoc, per una o due mani di rasatura, già comprese nel calcolo del consumo del prodotto al mq. Per la rasatura con eGlue aggiungere 0,9 kg/mq.
- Prima della stuccatura, accertarsi che la colla sia perfettamente asciutta e che non ci siano residui d'acqua nei giunti.
- Fillgelplus UVR: temperatura di esercizio da -15°C a +70°C.
- Versare completamente il componente B nel contenitore della parte A. Mescolare bene per circa 1 minuto. Versare il composto ottenuto in un secchio pulito e miscelare ulteriormente.
- Non coprire il pavimento in mosaico stuccato prima di 4 giorni.
- Evitare di fare polvere nei primi 4 giorni dalla stuccatura.
- Piscine: riempimento vasca dopo 14 giorni.
- Per pulire gli attrezzi dai residui di eGlue e Fillgelplus UVR utilizzare alcool; per pulire i residui di Ad Hoc è sufficiente l'acqua.
- **Per maggiori informazioni, consultare l'area tecnica del sito [www.bisazza.com](http://www.bisazza.com)**
- If the intended surface is not perfectly plumb, flat, squared, consistent and white please use Ad Hoc to skim once or twice as required. The quantity of Ad Hoc to carry out the skimming process has already been calculated in the product consumption per square meter for your order. For skimming with eGlue, add 0.9 Kg of eGlue per square meter.
- Before grouting, ensure the adhesive is completely dry and there is no water in the grout joints.
- Fillgelplus UVR: operational temperature range from -15°C to +70°C.
- Pour component B in the A component container. Mix for about 1 minute. Pour the mixture in a clean bucket and mix further.
- Do not cover the surface of the mosaic with any product that may create condensation in the first 4 days after grouting.
- It is important that once installation/grouting is completed the area is protected from dust for 4 days after grouting to avoid contamination.
- Pools must not be filled until 14 days after the grouting process is completed.
- Use alcohol to clean fixing tools from residues of eGlue and Fillgelplus UVR, water from residues of Ad Hoc.
- **For additional information, refer to the technical area of the site [www.bisazza.com](http://www.bisazza.com)**
- Si le support n'est pas parfaitement lisse, blanc et uniforme, utiliser la colle Ad Hoc pour réaliser une ou deux couches de ragréage, dont la quantité correspondante est déjà incluse dans le calcul de la consommation du produit au m². Pour un ragréage à la colle eGlue, au contraire, rajouter 0,9 kg/m².
- Avant de jointoyer assurez-vous que la colle soit parfaitement sèche, et qu'aucun résidu d'eau ne soit présent dans les joints.
- Fillgelplus UVR: température de service de -15°C à +70°C.
- Verser la totalité du composant B dans le récipient du composant A. Mélanger pendant 1 minute. Verser le mélange ainsi obtenu dans un seau propre et continuer à mélanger.
- Attendre 4 jours avant de couvrir un sol en mosaïque jointée.

- Eviter de soulever de la poussière dans les 4 premiers jours suivant le jointoiement.
- Piscine : il est possible de remplir la piscine 14 jours après la fin de la pose.
- Pour nettoyer les instruments des résidus d'eGlue ou Fillgelplus UVR utiliser de l'alcool; pour nettoyer les résidus de Adhoc de l'eau est suffisante.
- **Pour de plus amples informations, consulter la session technique du site internet [www.bisazza.com](http://www.bisazza.com)**
- Bei der Verbrauchsangabe pro m² des Ad Hoc ist das Vorspachteln des Untergrundes inbegriffen, wenn der Untergrund nicht perfekt glatt, gleichmäßig und weiß ist. Für die Vorspachtelung mit eGlue sind 0,9 kg/m² hinzuzufügen.
- Vor der Verfügung sollte man sicher sein, dass der Kleber ganz getrocknet ist und dass keine Wasserreste in den Fugen verblieben sind.
- Fillgelplus UVR: Verarbeitungstemperatur -15°C bis +70°C.
- Die gesamte Komponente B in den Behälter der Komponente A leeren. Während ungefähr einer Minute gut mischen. Das Gemisch in einen sauberen Behälter leeren und nochmals mischen.
- Innerhalb der ersten 4 Tage nicht den mit Mosaik verlegten Boden verdecken.
- Innerhalb der ersten 4 Tage nach Verlegung Staub vermeiden.
- Schwimmbäder: Wasserbefüllung des Beckens nach 14 Tagen.
- Benutzen Sie Alkohol, um die Werkzeuge von den eGlue und Fillgelplus UVR Resten zu säubern; bei Resten vom Kleber Ad Hoc ist allerdings Wasser ausreichend.
- **Für weitere Informationen wenden Sie sich bitte an den technischen Bereich der Internetseite [www.bisazza.com](http://www.bisazza.com)**
- Si la superficie no está perfectamente lisa, uniforme y blanca, aplicar una o dos manos de nivelación con el cemento cola Ad Hoc, esta cantidad ya está incluida en el cálculo del consumo del producto por m². Para la nivelación con eGlue añadir 0,9 kg/m².
- Antes de rejuntar, asegúrese que el cemento cola haya fraguado completamente y que las juntas estén completamente secas.
- Fillgelplus UVR: temperatura de servicio de -15°C a +70°C.
- Vierta todo el componente B en el recipiente del componente A. Mezcle bien el contenido alrededor de un minuto. Versar el compuesto en un contenedor limpio y seguir mezclando.
- No tapar el suelo recién rejuntado durante los primeros 4 días de secado.
- No producir polvo en la zona recién rejuntada durante los primeros 4 días.
- Piscinas: esperar 14 días después del rejuntado antes de llenar.
- Para quitar los restos de eGlue y Fillgelplus UVR de las herramientas utilizar alcohol; para quitar los restos de Ad Hoc es suficiente utilizar agua.
- **Para más información consultar el área técnica en [www.bisazza.com](http://www.bisazza.com)**



[www.bisazza.com](http://www.bisazza.com)



# INSTALLATION KIT UVR

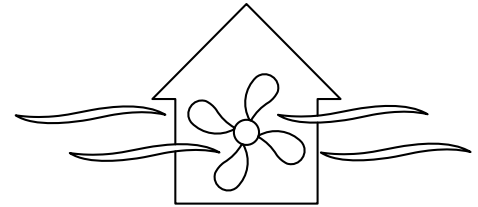
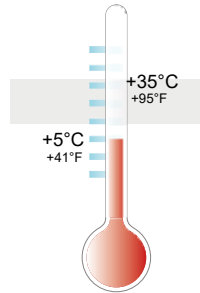
Fillgelplus  
UVR



Adhoc



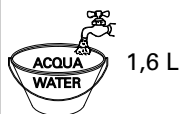
**BISAZZA**



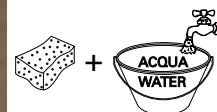
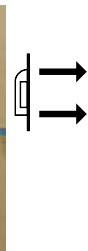
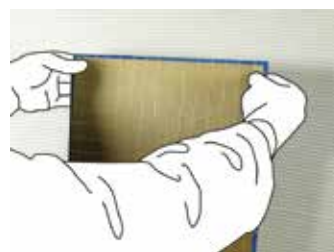
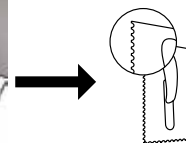
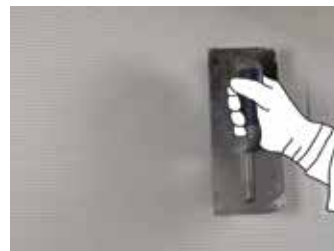
Tempo di lavorazione  
Processing time  
Durée d'utilisation  
Verarbeitungszeit  
Tiempo de utilización

**max  
30 min.**

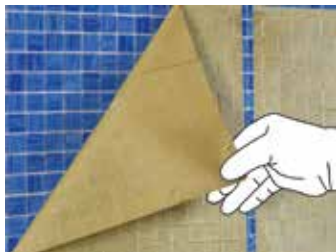
+20°C  
+68°F



Adhoc



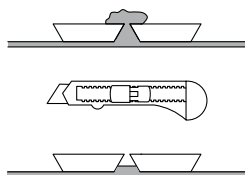
max 30 min. / 20°C



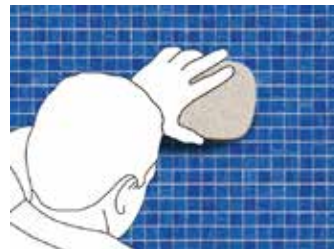
max 30 min. / 20°C



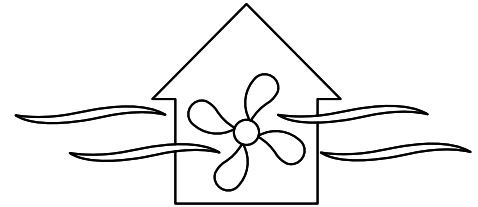
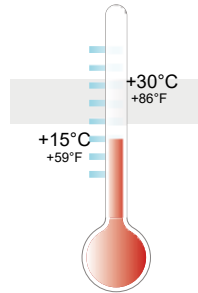
max 30 min. / 20°C



8h / 20°C



pag. 18-19



Tempo di lavorazione

Processing time

Durée d'utilisation

Verarbeitungszeit

Tiempo de utilización

**max  
50 min.**

**+15°C  
+59°F**

**max  
40 min.**


**+20°C  
+68°F**


**max  
25 min.**

**+30°C  
+86°F**











60 sec. / 20° C  
600 rpm





20 sec.



40 sec. / 20° C  
600 rpm



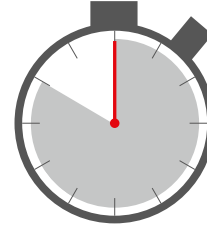
**Fillgelplus** UVR +



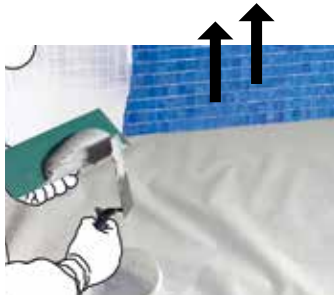
40 sec. / 20° C  
600 rpm



Fillgelplus  
UVR + +



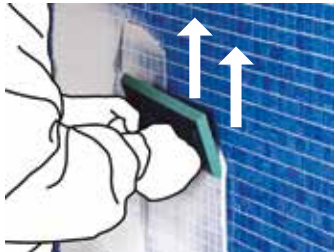
max 30 min. / 30°C  
max 50 min. / 20°C  
max 2h / 15°C



Fillgelplus  
UVR +



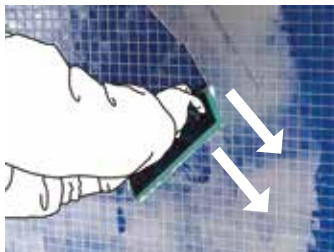
ACQUA  
WATER



Fillgelplus  
UVR +



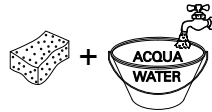
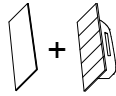
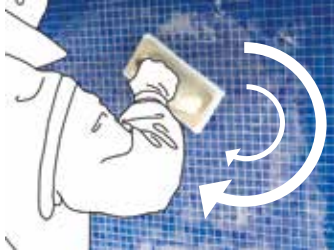
ACQUA  
WATER + +



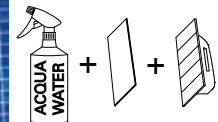
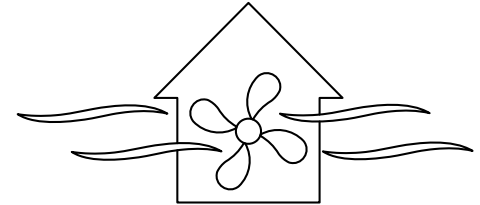
Fillgelplus  
UVR +

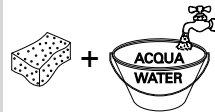
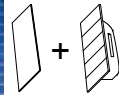
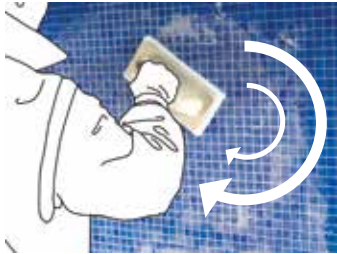
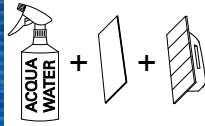
NO

OK



6h / 30°C  
8h / 20°C  
12h / 15°C





- Se il sottofondo non è perfettamente liscio, uniforme e bianco, utilizzare la colla Ad Hoc, per una o due mani di rasatura, già comprese nel calcolo del consumo del prodotto al mq. Per la rasatura con eGlue aggiungere 0,9 kg/mq.
- Prima della stuccatura, accertarsi che la colla sia perfettamente asciutta e che non ci siano residui d'acqua nei giunti.
- Fillgelplus UVR: temperatura di esercizio da -15°C a +70°C.
- Versare completamente il componente B nel contenitore della parte A. Mescolare bene per circa 1 minuto. Versare il composto ottenuto in un secchio pulito e miscelare ulteriormente.
- Non coprire il pavimento in mosaico stuccato prima di 4 giorni.
- Evitare di fare polvere nei primi 4 giorni dalla stuccatura.
- Piscine: riempimento vasca dopo 14 giorni.
- Per pulire gli attrezzi dai residui di eGlue e Fillgelplus UVR utilizzare alcool; per pulire i residui di Ad Hoc è sufficiente l'acqua.
- **Per maggiori informazioni, consultare l'area tecnica del sito [www.bisazza.com](http://www.bisazza.com)**
- If the intended surface is not perfectly plumb, flat, squared, consistent and white please use Ad Hoc to skim once or twice as required. The quantity of Ad Hoc to carry out the skimming process has already been calculated in the product consumption per square meter for your order. For skimming with eGlue, add 0.9 Kg of eGlue per square meter.
- Before grouting, ensure the adhesive is completely dry and there is no water in the grout joints.
- Fillgelplus UVR: operational temperature range from -15°C to +70°C.
- Pour component B in the A component container. Mix for about 1 minute. Pour the mixture in a clean bucket and mix further.
- Do not cover the surface of the mosaic with any product that may create condensation in the first 4 days after grouting.
- It is important that once installation/grouting is completed the area is protected from dust for 4 days after grouting to avoid contamination.
- Pools must not be filled until 14 days after the grouting process is completed.
- Use alcohol to clean fixing tools from residues of eGlue and Fillgelplus UVR, water from residues of Ad Hoc.
- **For additional information, refer to the technical area of the site [www.bisazza.com](http://www.bisazza.com)**
- Si le support n'est pas parfaitement lisse, blanc et uniforme, utiliser la colle Ad Hoc pour réaliser une ou deux couches de ragréage, dont la quantité correspondante est déjà incluse dans le calcul de la consommation du produit au m². Pour un ragréage à la colle eGlue, au contraire, rajouter 0,9 kg/m².
- Avant de jointoyer assurez-vous que la colle soit parfaitement sèche, et qu'aucun résidu d'eau ne soit présent dans les joints.
- Fillgelplus UVR: température de service de -15°C à +70°C.
- Verser la totalité du composant B dans le récipient du composant A. Mélanger pendant 1 minute. Verser le mélange ainsi obtenu dans un seau propre et continuer à mélanger.
- Attendre 4 jours avant de couvrir un sol en mosaïque jointée.

- Eviter de soulever de la poussière dans les 4 premiers jours suivant le jointoiement.
- Piscine : il est possible de remplir la piscine 14 jours après la fin de la pose.
- Pour nettoyer les instruments des résidus d'eGlue ou Fillgelplus UVR utiliser de l'alcool; pour nettoyer les résidus de Adhoc de l'eau est suffisante.
- **Pour de plus amples informations, consulter la session technique du site internet [www.bisazza.com](http://www.bisazza.com)**
- Bei der Verbrauchsangabe pro m² des Ad Hoc ist das Vorspachteln des Untergrundes inbegriffen, wenn der Untergrund nicht perfekt glatt, gleichmäßig und weiß ist. Für die Vorspachtelung mit eGlue sind 0,9 kg/m² hinzuzufügen.
- Vor der Verfügung sollte man sicher sein, dass der Kleber ganz getrocknet ist und dass keine Wasserreste in den Fugen verblieben sind.
- Fillgelplus UVR: Verarbeitungstemperatur -15°C bis +70°C.
- Die gesamte Komponente B in den Behälter der Komponente A leeren. Während ungefähr einer Minute gut mischen. Das Gemisch in einen sauberen Behälter leeren und nochmals mischen.
- Innerhalb der ersten 4 Tage nicht den mit Mosaik verlegten Boden verdecken.
- Innerhalb der ersten 4 Tage nach Verlegung Staub vermeiden.
- Schwimmbäder: Wasserbefüllung des Beckens nach 14 Tagen.
- Benutzen Sie Alkohol, um die Werkzeuge von den eGlue und Fillgelplus UVR Resten zu säubern; bei Resten vom Kleber Ad Hoc ist allerdings Wasser ausreichend.
- **Für weitere Informationen wenden Sie sich bitte an den technischen Bereich der Internetseite [www.bisazza.com](http://www.bisazza.com)**
- Si la superficie no está perfectamente lisa, uniforme y blanca, aplicar una o dos manos de nivelación con el cemento cola Ad Hoc, esta cantidad ya está incluida en el cálculo del consumo del producto por m². Para la nivelación con eGlue añadir 0,9 kg/m².
- Antes de rejuntar, asegúrese que el cemento cola haya fraguado completamente y que las juntas estén completamente secas.
- Fillgelplus UVR: temperatura de servicio de -15°C a +70°C.
- Vierta todo el componente B en el recipiente del componente A. Mezcle bien el contenido alrededor de un minuto. Versar el compuesto en un contenedor limpio y seguir mezclando.
- No tapar el suelo recién rejuntado durante los primeros 4 días de secado.
- No producir polvo en la zona recién rejuntada durante los primeros 4 días.
- Piscinas: esperar 14 días después del rejuntado antes de llenar.
- Para quitar los restos de eGlue y Fillgelplus UVR de las herramientas utilizar alcohol; para quitar los restos de Ad Hoc es suficiente utilizar agua.
- **Para más información consultar el área técnica en [www.bisazza.com](http://www.bisazza.com)**



[www.bisazza.com](http://www.bisazza.com)



# FILLGELPLUS UVR

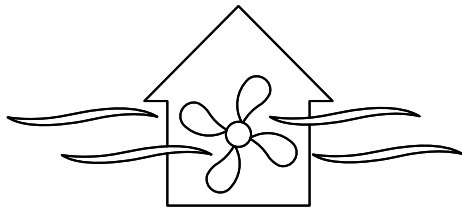
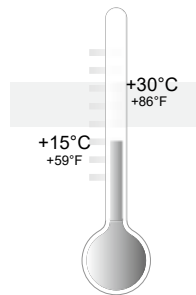
Fillgelplus  
UVR



**BISAZZA**

# Fillgelplus<sub>UVR</sub>

STUCCO EPOSSIDICO - EPOXY GROUT



Tempo di lavorazione  
Processing time  
Durée d'utilisation  
Verarbeitungszeit  
Tiempo de utilización

**max  
50 min.**

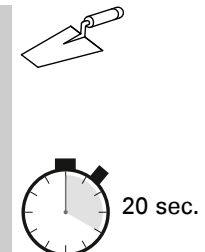
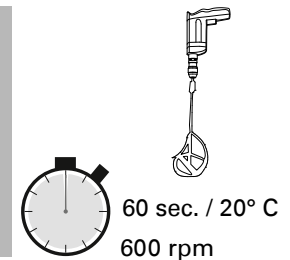
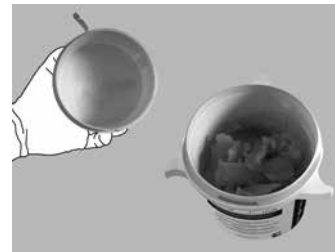
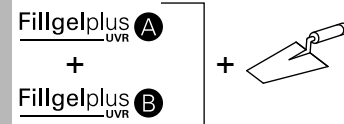
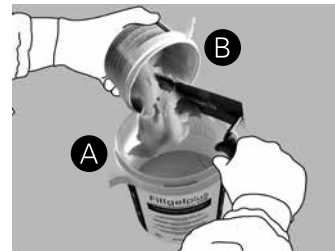
+15°C  
+59°F

**max  
40 min.**

+20°C  
+68°F

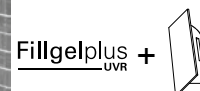
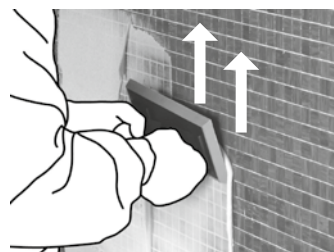
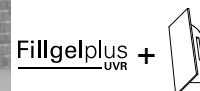
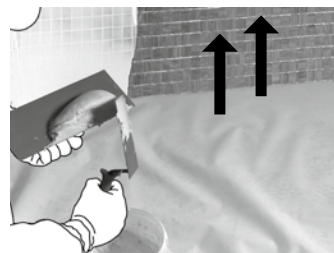
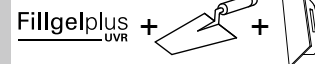
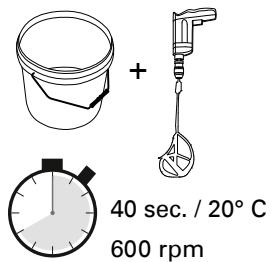
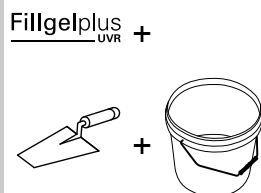
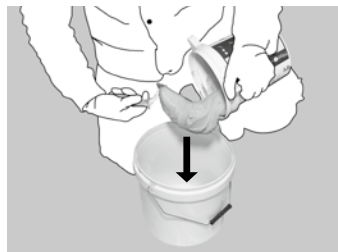
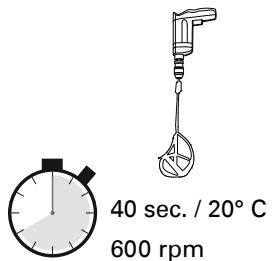
**max  
25 min.**

+30°C  
+86°F

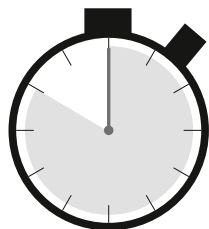
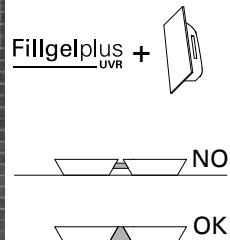
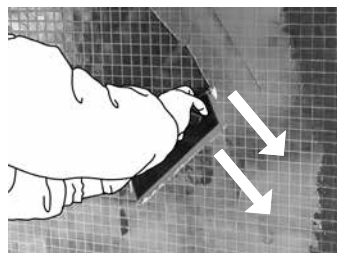




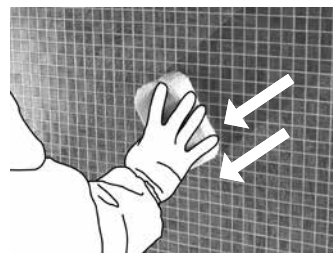
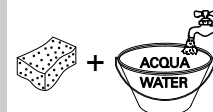
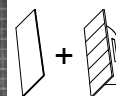
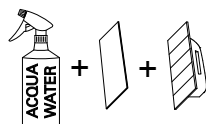
APPLICAZIONE - APPLICATION  
APPLICATION - AUFTRAGEN - APLICACIÓN



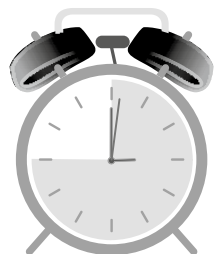
PULIZIA INIZIALE - INITIAL CLEANING  
NETTOYAGE INITIAL - ERSTE REINIGUNG  
LIMPIEZA INICIAL



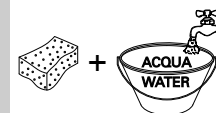
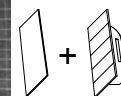
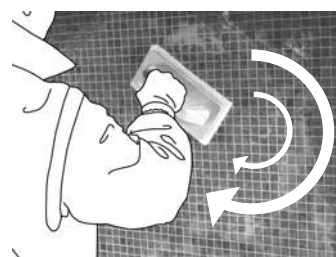
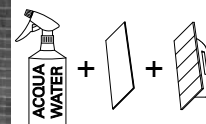
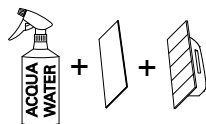
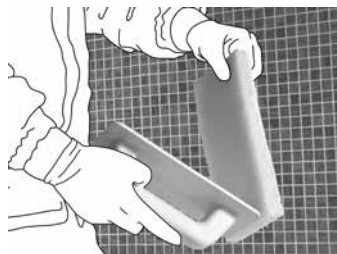
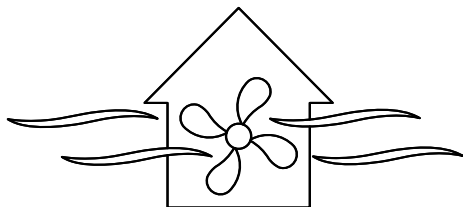
max 30 min. / 30°C  
max 50 min. / 20°C  
max 2h / 15°C



PULIZIA FINALE - FINAL CLEANING  
NETTOYAGE FINAL - ENDREINIGUNG - LIMPIEZA



6h / 30°C  
8h / 20°C  
12h / 15°C



AVVERTENZE - WARNINGS  
AVERTISSEMENTS - ZUR BEACHTUNG  
ADVERTENCIAS

- Se il sottofondo non è perfettamente liscio, uniforme e bianco, utilizzare la colla Ad Hoc, per una o due mani di rasatura, già comprese nel calcolo del consumo del prodotto al mq. Per la rasatura con eGlue aggiungere 0,9 kg/mq.
- Prima della stuccatura, accertarsi che la colla sia perfettamente asciutta e che non ci siano residui d'acqua nei giunti.
- Fillgelplus UVR: temperatura di esercizio da -15°C a +70°C.
- Versare completamente il componente B nel contenitore della parte A. Mescolare bene per circa 1 minuto. Versare il composto ottenuto in un secchio pulito e miscelare ulteriormente.
- Non coprire il pavimento in mosaico stuccato prima di 4 giorni.
- Evitare di fare polvere nei primi 4 giorni dalla stuccatura.
- Piscine: riempimento vasca dopo 14 giorni.
- Per pulire gli attrezzi dai residui di eGlue e Fillgelplus UVR utilizzare alcool; per pulire i residui di Ad Hoc è sufficiente l'acqua.
- Per maggiori informazioni, consultare l'area tecnica del sito [www.bisazza.com](http://www.bisazza.com)
- If the intended surface is not perfectly plumb, flat, squared, consistent and white please use Ad Hoc to skim once or twice as required. The quantity of Ad Hoc to carry out the skimming process has already been calculated in the product consumption per square meter for your order. For skimming with eGlue, add 0.9 Kg of eGlue per square meter.
- Before grouting, ensure the adhesive is completely dry and there is no water in the grout joints.
- Fillgelplus UVR: operational temperature range from -15°C to +70°C.
- Pour component B in the A component container. Mix for about 1 minute. Pour the mixture in a clean bucket and mix further.
- Do not cover the surface of the mosaic with any product that may create condensation in the first 4 days after grouting.
- It is important that once installation/grouting is completed the area is protected from dust for 4 days after grouting to avoid contamination.
- Pools must not be filled until 14 days after the grouting process is completed.
- Use alcohol to clean fixing tools from residues of eGlue and Fillgelplus UVR, water from residues of Ad Hoc.
- For additional information, refer to the technical area of the site [www.bisazza.com](http://www.bisazza.com)
- Si le support n'est pas parfaitement lisse, blanc et uniforme, utiliser la colle Ad Hoc pour réaliser une ou deux couches de ragréage, dont la quantité correspondante est déjà incluse dans le calcul de la consommation du produit au m². Pour un ragréage à la colle eGlue, au contraire, rajouter 0,9 kg/m².
- Avant de jointoyer assurez-vous que la colle soit parfaitement sèche, et qu'aucun résidu d'eau ne soit présent dans les joints.
- Fillgelplus UVR: température de service de -15°C à +70°C.
- Verser la totalité du composant B dans le récipient du composant A. Mélanger pendant 1 minute. Verser le mélange ainsi obtenu dans un seau propre et continuer à mélanger.
- Attendre 4 jours avant de couvrir un sol en mosaïque jointée.

AVVERTENZE - WARNINGS  
AVERTISSEMENTS - ZUR BEACHTUNG  
ADVERTENCIAS

- Eviter de soulever de la poussière dans les 4 premiers jours suivant le jointoiement.
- Piscine : il est possible de remplir la piscine 14 jours après la fin de la pose.
- Pour nettoyer les instruments des résidus d'eGlue ou Fillgelplus UVR utiliser de l'alcool; pour nettoyer les résidus de Adhoc de l'eau est suffisante.
- Pour de plus amples informations, consulter la session technique du site internet [www.bisazza.com](http://www.bisazza.com)
- Bei der Verbrauchsangabe pro m² des Ad Hoc ist das Vorspachteln des Untergrundes inbegriffen, wenn der Untergrund nicht perfekt glatt, gleichmäßig und weiß ist. Für die Vorspachtelung mit eGlue sind 0,9 kg/m² hinzuzufügen.
- Vor der Verfügung sollte man sicher sein, dass der Kleber ganz getrocknet ist und dass keine Wasserreste in den Fugen verblieben sind.
- Fillgelplus UVR: Verarbeitungstemperatur -15°C bis +70°C.
- Die gesamte Komponente B in den Behälter der Komponente A leeren. Während ungefähr einer Minute gut mischen. Das Gemisch in einen sauberen Behälter leeren und nochmals mischen.
- Innerhalb der ersten 4 Tage nicht den mit Mosaik verlegten Boden verdecken.
- Innerhalb der ersten 4 Tage nach Verlegung Staub vermeiden.
- Schwimmbäder: Wasserbefüllung des Beckens nach 14 Tagen.
- Benutzen Sie Alkohol, um die Werkzeuge von den eGlue und Fillgelplus UVR Resten zu säubern; bei Resten vom Kleber Ad Hoc ist allerdings Wasser ausreichend.
- Für weitere Informationen wenden Sie sich bitte an den technischen Bereich der Internetseite [www.bisazza.com](http://www.bisazza.com)
- Si la superficie no está perfectamente lisa, uniforme y blanca, aplicar una o dos manos de nivelación con el cemento cola Ad Hoc, esta cantidad ya está incluida en el cálculo del consumo del producto por m². Para la nivelación con eGlue añadir 0,9 kg/m².
- Antes de rejuntar, asegúrese que el cemento cola haya fraguado completamente y que las juntas estén completamente secas.
- Fillgelplus UVR: temperatura de servicio de -15°C a +70°C.
- Vierta todo el componente B en el recipiente del componente A. Mezcle bien el contenido alrededor de un minuto. Versar el compuesto en un contenedor limpio y seguir mezclando.
- No tapar el suelo recién rejuntado durante los primeros 4 días de secado.
- No producir polvo en la zona recién rejuntada durante los primeros 4 días.
- Piscinas: esperar 14 días después del rejuntado antes de llenar.
- Para quitar los restos de eGlue y Fillgelplus UVR de las herramientas utilizar alcohol; para quitar los restos de Ad Hoc es suficiente utilizar agua.
- Para más información consultar el área técnica en [www.bisazza.com](http://www.bisazza.com)





## THE POOL RECOMMENDATIONS AND SUGGESTIONS

Laying mosaic in the pool requires professional expertise on the part of the layer, who must be familiar with the most appropriate techniques for the products used and the specific conditions in effect at the site, of key importance for the success of the project.

This brochure is intended to provide a practical guide for designers, in which Bisazza offers suggestions based on many years of experience in the field of swimming pools and wellness areas.

In addition to the range of Bisazza technical products, we will mention other products available on the market tested by installers the company has been working with for many years.

For more information on the products mentioned, go to the Technical Area of our web site [www.bisazza.com](http://www.bisazza.com).

### APPLICATIONS

Bisazza mosaic gives pools all the style and prestige of a handmade artefact. Mosaic may be applied to conventional concrete pools or prefabricated pools made of cementitious materials (perforated brick, blocks cast in formworks, panels installed side-by-side, cement panels), fibreglass or metal. To obtain optimal results and ensure optimal performance of the products used in the project, it is essential to follow the substrate preparation procedures appropriate for the specific material the swimming pool is made of.

### CONCRETE POOL (CONVENTIONAL OR PREFABRICATED)

#### THE SUBSTRATE

The substrate forming the pool must be capable of withstanding a pressure of 250 kg/cm<sup>2</sup> and be:

- ◇ compact
- ◇ dried
- ◇ free of dust and grease (oil, etc.)

The substrate must be properly prepared and be:

- ◇ cured (28 days for ordinary cement)
- ◇ coated with primer and consistent
- ◇ free of crumbling parts
- ◇ flat and
- ◇ plumb

Furthermore:

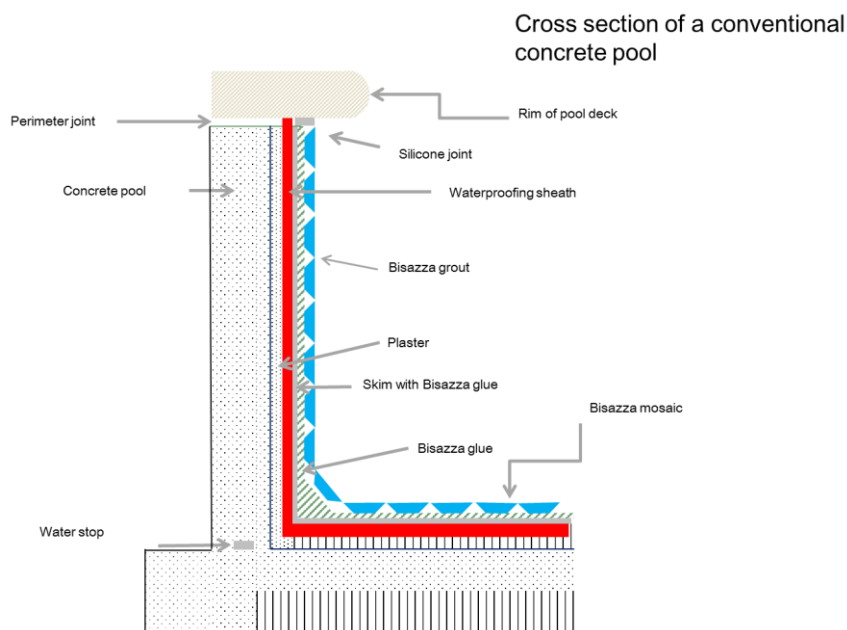
- ◇ rebars emerging from the pool bottom must be ground and coated with rust proofing products
- ◇ wood on the walls must be removed
- ◇ concrete burr or crests must be removed with the grinder
- ◇ residues of release agents or similar products present in the substrate must be eliminated with a grinder and/or degreasing products
- ◇ to make the concrete receptive, mechanically eliminate cement scale with widia cups

Substrate humidity must be no more than **4%** (after curing).

Factors affecting moisture content:

- ◇ excess water in mix
- ◇ use of porous inert materials
- ◇ use of cellular concrete
- ◇ excess moisture in structures
- ◇ water due to the weather
- ◇ thick substrates containing more water

The result of a greater moisture content would be formation of cracks in the cement; if this should occur, the cracks must be sealed with an epoxy resin product.



## FORM PREPARATION

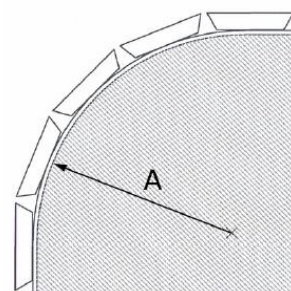
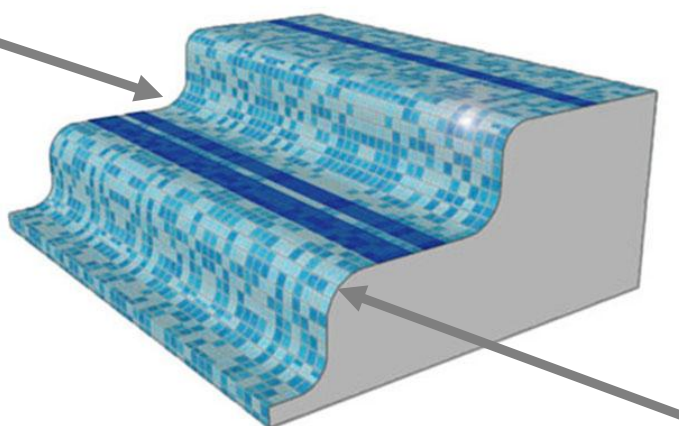
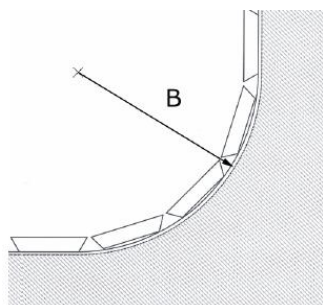
In the presence of structures of particular shapes, construction must take into account the size of the angles required for covering with mosaic.

This allows us to avoid unsightly cuts in the sheets and obtain a better finish.

Depending on the size and type of backing on the mosaic sheets used, the curve radius required to create rounding (folds) varies as shown below:

### Concave angle

10x10: 20 mm  
20x20 PAPER: 40 mm  
OPUS 12: 20 mm  
OPERA 25: 50 mm  
OPERA 15: 30 mm



### Convex angle

10x10: 20 mm  
20x20 PAPER: 30 mm  
OPUS 12x12: 30 mm  
OPERA 25: 30 mm  
OPERA 15: 20 mm

## LOAD TEST

Before proceeding with plastering, we must perform a load test by filling the pool.

- ◇ Fill the pool and leave it full for a few days, checking that the water level does not drop.
- ◇ Then empty the pool and wait until the concrete dries completely before proceeding with plastering.



## PLASTER

After preparing the surfaces as described, we may apply plaster.

Every company that makes glue produces a range of plasters appropriate for different circumstances.

Recommended product: **PCI - NANOCRET R3\*** (also perfect for making folds).

Shelter the work site from rain and sunshine.

## WATERPROOFING

Waterproofing is performed using appropriate products.

The following operations must be performed before proceeding:

- ◇ Smoothing over the substrate with a diamond-tipped tool and washing it under pressure to remove dust and release agents.
- ◇ Opening gravel nests, removing the wood included in the cast and preparing all rims (rounding them off if necessary) with demolition.
- ◇ Opening the protruding rebars and cutting formworks spacers to a depth of at least 15 mm.
- ◇ Passivation of rebars and spacers.
- ◇ Sealing over all openings with restoration mortar with structural adhesion.
- ◇ Plastering and skimming of surfaces.
- ◇ When possible, round off all vertical and horizontal corners in order to:
  - ◇ prevent sharp corners (preventing breakage during maintenance and discouraging mosaic sheet detachment)
  - ◇ ensure safety, especially on high parts of the walls and where the runner and the riser of steps meet
  - ◇ facilitate cleaning in corners
  - ◇ facilitate sheath application, avoiding the difficulty of covering sharp corners
  - ◇ make it look good
- ◇ Shelter the work site from rain and sunshine

Recommended waterproof coating: **PCI - SECCORAL 2K RAPID\***.

In swimming-pools with salty water or thermal water, use **PCI APOFLEX W\*** (wall) and/or **F (floor)**.

## SKIMMING

Before skimming, make sure the temperature at the site is between:

- ◇ Minimum: 5°C
- ◇ Maximum: 30°C



Skimming is necessary to ensure that the substrate is regular and perfectly smooth.

- ◇ For best results, the substrate on which the glue for mosaic sheets is applied must be evenly white; this is necessary due to the nature of mosaic sheets, which are made of translucent glass so that the colour of the material behind the sheet is visible.
- ◇ To even over the substrate and make it white, use Bisazza AdHoc+Ultra glue (or e-Glue if the substrate used requires this product, as in the case of fibreglass or steel pools).
- ◇ Bisazza glues can even over cementitious substrates up to 2 mm thick. (if it is necessary to even over a thicker surface, use a suitable skimming plaster).

Important: the skim is not a waterproof product!

After skimming, the substrate must be covered and/or sheltered to keep it at a temperature between

- ◇ + 5°C and + 30°C if skimming and laying are performed using Bisazza Ad Hoc + Ultra glues
- ◇ + 15°C and + 30°C if skimming and laying are performed using Bisazza eGlue

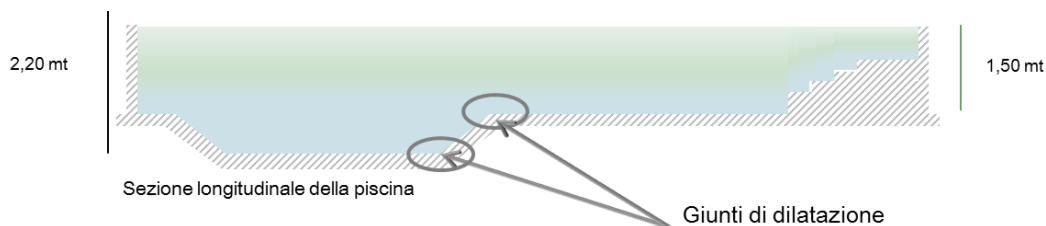
This temperature must be kept constant at all times until completion of the work.

\* Refer to the manufacturer's technical data sheets.



## IMPORTANT

- ◇ Skims are not waterproof
- ◇ If there are expansion joints on the floor, they must be left and sealed with an elastic product such as **PCI SILICOFUG E\***



Joints are normally located where there is a change in level, and should be present around the perimeter of the pool bottom; they should be 3/4 of the thickness of the slab and 0.5 to 0.8 cm wide.

## The pool deck and other wet areas

The pool deck and other special areas require use of non-slip coverings. These areas include:

- ◇ pool deck
- ◇ service areas (shower and dressing room floors)
- ◇ inclined overflow rims
- ◇ underwater steps
- ◇ areas connecting different pools

International standards classify the degree of slipping in wet areas where people walk barefoot on the basis of the inclination of surfaces:




<b>A</b>	$\geq 12^\circ$	
<b>B</b>	$\geq 18^\circ$	
<b>C</b>	$\geq 24^\circ$	

TABLE OF BISAZZA MATT MOSAICS FOR THE POOL DECK	
Vetricolor 20 and 10 MATT	All colours in the collection, on request.
Smalto 20 and 10 MATT	All colours in the collection, on request. Note that MATT mosaic tiles will not have the same sparkly appearance as standard tiles.
Velours	The 20 standard colours.
Le Gemme 20 and 10 MATT	All colours in the collection, on request. Note that MATT mosaic tiles will not have the same sparkly appearance as standard tiles.
Flow MATT	All colours in the collection, on request.
Opus Romano MATT	The 24 standard matt colours only.
Opera MATT 15 and 25	All colours in the Opera 15 and 25 collections, on request.

For applications, refer to the PRODUCT APPLICATION TABLE.

\*fare riferimento alle schede tecniche del produttore

## **BISAZZA LAYING PRODUCTS**

For laying mosaic on a cement substrate:

- ◇ **Ad Hoc** A high performing white cement tile adhesive
- ◇ **Ultra** Latex to be mixed with Ad Hoc adhesive

To lay mosaic over any other kind of substrate:

- ◇ **eGlue** Bi-component epoxy adhesive (in case of waterproof coating **PCI APOFLEX\*** W e/o F, only this glue must be used).

The use of EGlue is highly recommended for:

- ◇ Installation of glass mosaic in swimming-pools with salty or thermal water;
- ◇ installation of transparent or semi-transparent glass mosaic in swimming-pools or humid areas (showers, Turkish bath, bio-sauna, etc...), with special reference to all colours belonging to ranges CANVAS and OPERA , and to some colours belonging to ranges VETRICOLOR and FLOW.

For any further information on specific colours reference, please contact our sales office.

### ***Laying mosaic***

- ◇ Inspect the mosaic received at the site before laying. The boxes and sheets of mosaic must be in perfect condition, and the quantity and colour must correspond to the customer's order.
- ◇ 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.
- ◇ When using a shading blend, check that all the blends required to make up the shading blend are present (the packing list is attached to the order) and consult the laying plan.
- ◇ When using a decoration, check the laying plan enclosed with the order; if it is a modular decoration, lay a module dry, to check the direction of the sheets and the combination of modules in it; if it is a decoration in a single solution, lay the entire decoration dry, to make sure that all the sheets are there.
- ◇ The epoxy adhesive is strongly suggested in case of very light and transparent mosaics in solid colour version.

For submerged environments (pools, fountains) we strongly suggest to use of paper-faced mosaic or hot-melt system, where provided. The paper backing covers the front of the sheets and is removed when laying the sheets;

### ***Grouting***

Grouting with cement grout after laying may create an uneven, patchy effect; use of Bisazza FILLGEL PLUS UVR epoxy grout is recommended.

When applied properly, FILLGEL PLUS UVR provides grouting with the following characteristics:

- ◇ smooth, compact final surface
- ◇ uniform colour, resistant to the weather
- ◇ waterproofness
- ◇ hardness
- ◇ excellent bonding to sheets

Fillgel Plus UVR is immune to shrinkage and therefore to cracks and crazing.

All the Fillgel Plus UVR colours have the same chemical characteristics; the lighter colours (1101 bianco alabastro, 1102 bianco panna, 1103 bianco neve), need special attention during application and more maintenance than the others.

Fillgel 1104 neutro base cannot be used outdoors and in outdoor swimming-pools.

\* Refer to the manufacturer's technical data sheets.

## Recommendations and warnings for use of Fillgel Plus UVR

- ◇ Take care not to cover expansion joints, which should be sealed with appropriate products.
- ◇ Fillgel Plus UVR is not a waterproof product.
- ◇ Do not add water or solvent to Fillgel Plus UVR to improve its workability: this would inevitably compromise the product's performance.
- ◇ Do not mix the two components approximately, or you may alter the product's performance.
- ◇ After the first mixing process, pour the mixture in a clean bucket and mix further.
- ◇ Slight variations in colour can occur from one batch of material to another.
- ◇ Workability times vary considerably in relation to environmental and substrate conditions.
- ◇ Do not clean grout with alcohol but with water only.

Before beginning grouting, clean the sheets thoroughly to eliminate all glue residues left behind by the paper (in the case of mosaic with paper backing), using a sponge dipped in water and squeezed. Clean large surfaces (about 300 m<sup>2</sup>) with water and bleach. This will sterilise the mosaic substrate and prevent proliferation of microscopic algae. Let it dry perfectly and then proceed with grouting. This is not necessary when laying mosaic on mesh backing.

- ◇ Only after the surfaces are dry should you apply the layer of grout with a rubber spatula, working diagonally.
- ◇ Let the grout dry for about 10-20 minutes in the gaps (time may vary depending on environmental conditions).
- ◇ After grouting, use a felt cloth and water to remove excess grout from the mosaic emerging from the gaps (within 50 minutes of beginning grouting at a temperature of 20°C).
- ◇ Use a sponge dipped in clean water and then squeezed to remove excess grout, again working diagonally, without pressing too hard.
- ◇ When the grout begins to solidify, after about 8 hours at 20°C, wipe the surface off again with felt and water and then with water and a sponge.

After grouting, remove grout residues from all surfaces, following the instructions provided in the "Installation Kit" or "Epoxy Installation Kit" folder.

The pool may be filled with water about 14 days after grouting. Remember that grout takes longer to dry at low temperatures.

Evaluation of resistance of Fillgel to chemical solutions. Tests performed according to the norm UNI EN 12808-1.

solutions / conditions	continuous immersion for 28 days	sporadic contact
Hydrochloric acid 1%	++	no change
Sodium hydroxide 2%	+	no change
5 mg/l di Cl <sub>2</sub>	no change	no change
10 mg/l di Cl <sub>2</sub>	+	no change
sodium hypochlorite 15%	+++	++
Hydrogen peroxide 65 mg/l	no change	no change
Hydrogen peroxide 10%	+++	++

Legend:

- + slight change
- ++ visible change
- +++ strong change

## GENERAL WARNINGS AND RECOMMENDATIONS

- ◇ Given the nature of mosaic, be careful to avoid damaging the tiles surface with aggressive products or abrasive tools that could cause their breakage.
- ◇ While applying the waterproofing sheath, and until you have grouted the tiles, the work site must be sheltered from the elements (sun, rain, etc.).
- ◇ If work in areas around the mosaic has not yet been completed, protect the mosaic with appropriate materials.
- ◇ Protect the site throughout the work.

## CLEANING THE TILED SURFACE WHILE THE POOL IS IN USE

- ◇ Grouted mosaic should be cleaned with a slightly acidic cleaning product containing a small amount of phosphoric acid to detach lime scale. This type of cleaning product should be used for general cleaning, may be used every day, and may be used on mould. The final rinse may be done with ammonia diluted from 1:10 to 1:50 (depending on the initial concentration).
- ◇ Do not use organic acids (such as sulphamic acid) or hydrochloric acid in any form, even diluted.
- ◇ In the presence of persistent organic stains, use a chlorine-based whitener (sodium hypochlorite) or an oxygen-based whitener (hydrogen peroxide, contained in some whitening products). If using a chlorine-based whitener, it is particularly important to ensure that the chlorine is diluted to a very low concentration.
- ◇ In no case may these compounds be used on hot surfaces; they must not be allowed to act for more than 10 minutes (also because they are quickly deactivated).
- ◇ Rinse surfaces well after using these products.

## IMPORTANT

- ◇ SCRUPULOUSLY FOLLOW THE SAFETY INSTRUCTIONS PROVIDED BY MANUFACTURERS OF CLEANING PRODUCTS AND CHEMICAL COMPOUNDS. USERS ARE IN ALL CASES RESPONSIBLE FOR THEIR USE, AND MUST BE EXPERTS WITH PROFESSIONAL EXPERIENCE.
- ◇ THE PRODUCTS MENTIONED ARE SUBJECT TO DIFFERENT STANDARDS, ARE SOLD AT DIFFERENT CONCENTRATIONS AND MUST BE DISPOSED OF IN DIFFERENT WAYS IN DIFFERENT MARKETS.

## MAINTENANCE

**Refer to the pool manufacturer's instructions and experience.**

- ◇ The pool may be cleaned with a diluted acidic cleaning product, rinsing it repeatedly right away with plenty of water.
- ◇ DO NOT EMPTY the pool in winter (during cold weather).
- ◇ Work the water pumps in the event of particularly cold weather.
- ◇ It is even more important to work the pumps when the season is changing; this prevents large differences in temperature in overflow pools, which could result in detachment of the mosaic. This is also advisable in the case of pools in tropical climates (such as the Caribbean or Australia) where temperatures climb steeply when the season changes.
- ◇ Cover the pool with tarpaulins in winter, placing foam floats around its edges.
- ◇ Do not use concentrated products (which increase the temperature of surfaces).
- ◇ Do not leave the pool empty in the hot sun.
- ◇ Perform pool maintenance regularly. Always use diluted products, so that they will not be too aggressive, and rinse them off right away. You may use an ordinary lime scale remover, which is less aggressive, or a product with a basic action intended for hard surfaces. Rinse thoroughly with water.
- ◇ In the presence of a non-epoxy (cement tile) grout, use of bleach or similar products would lighten the joints; this will not occur if you use Bisazza epoxy grout, which is resistant to chemical attack.

## FIBREGLASS POOL (PREFABRICATED)

If the pool surface is smooth and finished, the surface will not require preparation or waterproofing. You may therefore proceed with skimming with eGlue epoxy adhesive right away, and then lay the mosaic.

If the surface is irregular and requires adjustment, use resins specifically intended for preparation.

PRODUCT APPLICATION TABLE		
PRODUCT	SWIMMING POOL	TURKISH BATH
Vetricolor 20 and 10	ok	ok
Smalto 20 and 10 Velours	ok	ok
Le Gemme 20 and 10	ok	ok
Gloss Opera 15 Gloss Opera 25 Gloss Glow	GLOSS has a good resistance to hydrolytic and alkali attacks, therefore it is suitable for swimming pool tiling. It is nevertheless recommended to evaluate - case by case - the type of swimming pool, its environmental location, the water temperature, etc. Not suitable for tiling spa pools in general, especially those with sulphur waters.	
Canvas	ok	ok
Flow	ok	ok
5X5	<b>NO</b>	<b>NO</b>
Opera 25	suitable only for submersed areas; not suitable for shore areas and lateral beaches. not suitable for external showers (both tray and walls) <u>Opera 25 Gloss is not suitable for tiling spa pools in general, especially those with sulphur waters.</u>	ok
Opera 15	ok <u>Opera 15 Gloss is not suitable for tiling spa pools in general, especially those with sulphur waters.</u>	ok
Oro Bis	Yellow gold tiles suitable for use in indoor and outdoor swimming pools. In the case of using white Oro Bis, replace White Oro Bis (Oro Bis bianco) with Platino mosaic. For use in fibreglass or steel swimming pools, please consult the Bisazza technical department: <a href="mailto:installation.department@bisazza.com">installation.department@bisazza.com</a>	
Opus Romano*	ok	ok
Vintage	<b>NO</b>	<b>suitable</b> for wall and ceiling covering; <b>not suitable</b> for floor and seat covering.
N.B. Kneipp cure and hot tubs: same application warnings as for swimming pools		

\* For the pool deck and other special areas where use of non-slip coverings is required, the MATT version is recommended.

NON-SLIP TEST CERTIFICATION TABLE						
	Vetricolor MATT	Flow MATT	Le Gemme Smalto	Velours	Opus Romano MATT	Opera MATT
Slip resistance DIN 51097 Limit values set A (12°-18°) - B (18° - 24°) - C (+24°)	A+B+C (31°)	A+B+C	A+B	A+B	A+B+C	A+B+C
Slip resistance DIN 51130 Limit permitted R9 – R13	R11	R11	R9	R10	R10	R11
Slip resistance BS 7676 Limit permitted >36 (low)	41-40 37-38	-	-	-	-	-
B.C.R Rep. CEC. 6/81 Limit permitted $0.40 \leq \mu < 0.74$	0.59	-	-	-	0.86	-
Slip resistance ENV 12633:2006 Limit values set: Class 0- 3 (Rd $\geq 45$ )	Class 3 (46)	Class 3 (52)	-	-	Class 3 (55)	-