

## glass mosaic

### Processing instructions

Installation work must be carried out by a qualified and experienced tile installer. In addition to these processing instructions, the applicable legal DIN standards and EU directives as well as the processing instructions of the manufacturers of all required products (adhesive, mortar and so on) must be observed. For processing the product in facade systems (suspended ventilated facade, external thermal insulation composite system), observing the processing instructions of the facade system manufacturer is mandatory.

The product has to be stored implicit dry, in the shade, dust- and frost-proof and has to be processed within 6 months after production date (notice batch identification). The product has to be stored in the shade on site for at least one day so they can adapt to the ambient temperature. The position and technical necessity of building expansion joints and field definition joints must be coordinated with the architect and system and/or product manufacturers and have to use according to the DIN standard 18515-1. Compliance with the processing tolerances according to DIN 18202 is required. The cartons should not be tilted at no time in order to avoid deformations of the sheets.

#### Substrate & preparation

The substrate being tiled must be absolutely smooth, plumb, warp resistant, dry and free of dust. Plaster and reinforced rendering of the mortar group P II, P III or anhydrite floors are suitable substrates. Supporting plates made of drywall, fibrated concrete or wood-based materials may have to be prepared with a reinforced levelling course.

Please notice that the substrates have to have an evenness of +/- 2mm/sqm in combination with an external thermal insulation composite system (WDVS) or +/- 1mm/sqm in combination with suspended ventilated facades. Filling, smoothing and possibly sanding the surface or rendering to create a smooth and plumb surface is recommended. Small irregularities up to 5 mm can be equalized with the adhesive mortar. Highly absorbent substrates and plaster have to be primed prior to installation.

The optimum processing temperature is between 5°C and 30°C, which needs to be maintained consistently during the setting phase. Direct sunlight on the surfaces being worked has to be avoided. Do not process the product below 5°C !

The mosaic fields have to be measured on the wall before gluing. Horizontal and vertical alignment lines also have to be drawn to ultimately align the mosaic sheets. We advise to lay a pattern area before you start off with the main work in the field. You should always be supported by a qualified application engineer before you start your working.

#### Glueing

White flexible adhesive cement suitable for the respective field of application must be used. The adhesive is applied with a 6x6mm notched trowel and then the adhesive strips are drawn off smooth. Full-surface adhesion of the product so that air pockets are excluded is essential (floating-method; glue on one side according to DIN EN 12004). This is made possible by pressing the mosaic sheets with a trowel. This can be achieved by carefully pressing and aligning by means of a rubberized rub board.

The adhesive foil is elastic, so small substrate variances can be compensated by carefully moving and/or cutting open the mosaic sheets.

After a setting time of 1-2 days, the adhesive foil has to be carefully pulled off diagonally from the top to the bottom. Recommended for this the adhesive foil has to be watered and catted vertically into 10 cm stripes along the joint lines. Adhesive residues on the mosaic do not constitute a product defect and must be removed before grouting with commercially available denatured alcohol. Escaping mortar residue must be completely scraped out of the joints.

### Grouting

After 7 days drying time the installation is grouted using the slurry method. In order to do this, the grout is applied diagonally into the joints with a grouting rubber. Once partly set (approx. 0.5 - 1 hour), the joint is shaped with a sponge board and then the installation is washed off.

Remaining grout haze can be removed with a damp cloth after a setting time of 2 days. Glass or window cleaner can be used if the surface is very dirty. Careful polishing with a clean, dry microfiber cloth gives the surfaces the desired brilliance.

### Cutting & drilling

The product is easy to cut with a glass cutter. A tile curve cutter with diamond cutting band and water reservoir is suitable for dimensionally accurate complex processing. Individual chips can usually be cut with glass pincers.

For damage-free drilling, the product is placed on a smooth, solid surface. A strip of adhesive tape should be applied to the drilling location so the tip of the drill bit does not slip when starting the hole. A suitable diamond-tipped drill bit has to be used.

### Cleaning & graffiti

The product can be cleaned with a neutral cleaning agent. Waxes, acids and oils must not be used. In case of heavy soiling, we recommend a slightly alkaline cleaning agent used according to the directions of the manufacturer. This must be rinsed several times with plenty of water. For heavy soiling, we recommend the product "Zementschleier- und Rostentferner" from Lithofin. Graffiti has to be treated quickly and can usually be removed with, for example the products "Kükü" and "Graffiti-Entferner" from Lithofin.

### Standards & directives

DIN 18157-1	Execution of ceramic claddings using the thin-bed method
DIN EN 12004	Mortar and adhesive for ceramic tiles and slabs
DIN 18352	Tile and slab work
DIN 18515-1	Exterior wall claddings - Tiles or slabs fixed with mortar
DIN 18540	Sealing of exterior wall joints in building construction with joint sealant
DIN 18202	Dimensional tolerances in building construction
DIN EN 14411	Tolerances for ceramic tiles and slabs
ZDB data sheet	Movement joints in claddings and coverings made of tiles and slabs

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This technical data sheet replaces the previous version. It provides information about the product properties and fields of application. Delta Elements has compiled all recommendations with due diligence according to the state of the art. Numeric information may deviate within the general tolerances for production technology reasons. The list of standards and directives merely serves as an overview with no claim of completeness. This technical datasheet does not constitute any guarantee in regards to the recommendations provided. Delta Elements assumes no liability and refers to its general business terms and conditions. No rights can be derived from the contents of the technical datasheet. The respective current version and the general business terms and conditions are available at [www.deltaelements.eu](http://www.deltaelements.eu); printing errors reserved.

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