

Artedomus architectural and building products are carefully selected for their unique beauty and structural qualities. We believe they deserve the best available fixing products on the market to provide a seamless, long lasting finish with environmental responsibility in mind. We use and recommend the outstanding, eco friendly range of products from Kerakoll, Italy.

It is expected that this installation guide is read to completion prior to commencement of the installation. If you are the recipient of this installation guide and are not the contractor or subcontractor you are obliged to provide this prior to the quotation phase to ensure an accurate and complete installation quote has been provided before proceeding.

Material Inspection/Preparation

The first step in any installation is to ensure that you have enough material and that the supplied material is as expected and is suitable to be installed. Before commencing, ensure there is enough to complete the task at hand. You should also ensure the material is in line with the specification and that is to the specifiers expectations. A sample from the received material should be provided to the specifier prior to commencement of works. Once the material is installed it is deemed to be accepted. No discussions will be entered into after the material has been installed and hence it is critical that the material is inspected with this in mind. It is also imperative that the material is inspected on arrival, you have 3 days from receipt of the material to ensure there is no damage, errors or shortfall.

Substrate Preparation

Prior to installation the area should be inspected to ensure that it is free of grease, dust or any other contamination. Smooth substrates should be scrubbed or shot blasted to form a key. Substrates must be free from dust, oil and grease, free from any rising damp, with no loose, flaky material. The substrate must be stable, non-deformable, without cracks and have already completed the curing period of hygrometric shrinkage.

If waterproofing the substrate is required such as to reduce the substrate absorption rate, stop impurities from the substrate or if this area is subject to water immersion such as bathrooms then this is outlined below. If no waterproofing is required then move to the Tile Installation section.

Primer

Kerakoll Primer A Eco - Certified, eco friendly, water-based surface isolation for dry, absorbent mineral/cement/gypsum or anhydrite-based substrates, prior to the installation of waterproofing is good practice ensuring maximum adhesion and bond strength. For substrates which are deformable or non absorbent this will require Kerakoll Keragrip Primer.

Waterproofing

After the application of the suitable primer, Waterproofing membrane to be chosen from the following options:

<u>Kerakoll Aquastop Nanoflex</u> for internal & external. Any wet areas for Floors, Walls, Balconies, Terraces & Swimming Pools. Nanoflex® develops a smooth, fluid mixture that can be adjusted by varying the amount of water in order to obtain optimal workability

for the particular site conditions, guaranteeing maximum adhesion of the bonded system. Internal and External application. Ideal for swimming pools, balconies, or any other permanently submerged areas. UV Resistant. Coverage: 10m2 (2 coats).

NOTE: Waterproofing membrane must be applied in at least two coats by trowel or with a roller to give a final thickness of at least 2 mm.

<u>Kerakoll Nanodefense® Eco</u>, internal only for walls and floors. Nanodefense® Eco develops total water-resistance under positive thrust guaranteeing the protection of absorbent substrates or those subject to damp, or in constantly humid environments. Internal application only. Coverage: 10m2 (2 coats).

NOTE: Waterproofing membrane must be applied in at least two coats by trowel or with a roller to give a final thickness of at least 2 mm

Waterproofing Application Process

- Floor waterproofing membrane to be returned up wall substrates over the bond breaker/tape or flexible filler at least 150 mm in accordance with AS3740 and the TDS, and returned down into wastes.
- 2. Wall waterproofing membrane to be returned down across the floor substrate over the cured bond breaker/tape or flexible filler.
- **3.** Apply two coats of membrane over the substrate allowing sufficient time between coats and following TDS.
- 4. Conduct a flood test once the membrane has sufficiently cured before continuing.

Screed

If a screeding bed is required, a screed mixture of 1 part normal Portland cement and 3 parts clean sand should be used. This shall be mixed with clean water to the required consistency. A slurry of Kerakoll Keraplast Eco P6 liquid and neat cement should be brushed or broomed into the substrate prior to spreading the screed. The sand and cement mixture shall then be spread over the slurry and screeded to the required levels. The bed should be allowed to cure before further treatments or tile installation. Alternatively an engineered screed product like Keracem Eco can be used.

Tile Installation - Adhesive

Adhesive installation only. Do not direct fix with sand and cement. For Fiandre range use Kerakoll Bioflex S1 (Class C 2TE S1). For Inax Range use Kerakoll Biogel No Limits (Class C 2TE S1).

For Fiandre range: Kerakoll Bioflex S1 (White & Grey)
High performance, cementitious adhesive with no vertical slip and extended open time for ceramic tiles and stone material on flooring and walls. Thicknesses up to 10 mm for internal and external use, in domestic, industrial and commercial applications and for street furniture, also in areas subject to thermal shock and freezing. C2-TE S1 Classification - Coverage: 8m2 per bag.

For Inax range: <u>Kerakoll BioGel No Limits</u> (White & Grey) Geo-binder based, structural flexible multi-purpose adhesive-gel for bonding all types of material, on all substrates, and for all use, even in extreme conditions. Eco-friendly and for highly deformable

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substrates. C2TES1++ EN 12004 - SAS (Shock Absorbent System) Technology - Coverage : 8m2 per bag

Most advanced adhesive with features as follows: Thixotropic and fluid, double open time, shape memory, non-slip, water resistant, structural adhesion, distributes tensile strength, increases the performance, transfers the forces, absorbs dynamic loads.

Adhesive Application Process

- 1. If needed, add an oxide tint to achieve the preferred installation colour, with particular reference to the colour of the mesh if a match is intended.
- 2. Checking Mosaic Sheet Arrangement:
 - a. Mesh-backed: sheets include a netting to connect the tiles and form the sheet. Before getting started, one should inspect all the mosaic sheets for alignment. Any mosaics that are out of alignment should be cut, using a sharp box cutter or equivalent, from the sheet and placed to one side and used to fill the sheets with pieces removed.
 - b. Paper faced mosaics: Some mosaics include a paper sheet to the finished face instead of netting on the back. Paper faced mosaics can be checked via the rear of the sheet.
- **3.** Apply a layer of adhesive at the correct thickness on the substrate using a suitable notched trowel. Working in sections of approximately 1mx1m.
- **4.** Place the mosaics firmly into position with a slight twisting motion/tapping, to ensure good contact coverage is achieved.
- **5.** It is recommended that once the sheet is laid, it should then be removed to assess the coverage. If it is acceptable, then continue, if it is not acceptable, reassess the trowel used and the application technique.
- **6.** The positioning of each sheet should be checked whilst the adhesive is still workable and before the adhesive cures to ensure suitable alignment with adjacent sheets. The individual mosaics that may have been misaligned should be installed individually before the adhesive skins
 - a. Paper faced mosaics: the mounting paper on the face of the sheets needs to be removed from the tiles while the adhesive is still tacky. The best way to remove is via saturation with clean water. Once saturated the paper sheets should be removed at a 45 degree angle across the tiles pulling the paper close to the face carefully so as to not remove the mosaics in the process. Other solutions can be added to the water to make paper removal easier, for example Rust-Oleum DIF Concentrate Wallpaper Stripper which is available from Bunnings. Scraping tools which may damage the tile face beneath the paper should not be allowed to contact the tiles. It is important that the paper is not wet and then allowed to dry, this makes the removal of the paper very difficult. Once the paper is removed one can adjust the individual mosaics as required.

Tile Joints

The optimum amount of adhesive must be applied to fix the tile fully in position without allowing excess adhesive to seep forward through the tile joints. Seeping adhesive which is not removed is

unsightly and undesirable and difficult to remove once dried. Inax wall claddings are designed to be installed without grout. Trowel marks should not be visible on the finished installation.

Grouting

Kerakoll Fugabella Color (0-20mm) is to be used where joints of up to 20mm between the tiles.

Fugabella Color is a decorative resin-cement for grouting of ceramic and porcelain tiles, mosaic and natural stone in a 50-colour design range. The groundbreaking hybrid grout Fugabella® Color is ideal when decorating any surface in porcelain, ceramic tiles, mosaic and natural stone. Fugabella® Color achieves performance characteristics such as water repellency, very low water absorption, high surface hardness, high resistance to the most common acidic substances and total colour uniformity.

Grout Application Process

- 1. The surfaces to be grouted must be dry and clear of debris. A test area should be completed to ensure excess grout can be suitably removed from the tile surface. Moisture levels associated with Thin Bed Method tiling should be allowed to reduce prior to commencing to grout. For mortar substrates, wait at least 7-14 days depending on screed thickness, site conditions and on the level of absorption of the tile and the substrate.
- 2. Any water or moisture rising can cause salt to build up on the surface of the grout or cause shade variations due to the uneven evaporation of the remaining water through the grout. Joints must be of even depth equal to at least 2/3 of the thickness of the tile covering, to avoid variations in colour.
- **3.** Fill the joints completely (or to the level that is desirable by the client/specifier) with the grout using the appropriate trowel or rubber float, ensuring the joints are completely compacted with no unevenness.
- **4.** Remove excess grout while still fresh from the surface of the tile/ stone by moving the float diagonally across the joints.
- 5. It is recommended to carry out a 1 m2 sample area for approval by the architect.

Protection

Protect the dry installation with 2mm polystyrene foam covered with 3mm sheets of MDF or similar. Do not use any tape directly on the tile. Additional cover may be necessary, and this can be put on the top of the MDF.

Silicone

Where silicone is required to be applied it should be selected from the Kerakoll Fugabella Color range. <u>Fugabella Eco Color Silicone</u> includes anti-mould properties with a high level of elasticity of expansion and deformation joints. Another alternative is Maxisil.

Cleaning & Maintenance

For everyday cleaning, we recommend neutral detergents. Do not use wax, oils, hydrofluoric acid, phosphoric acid or products which contain it. For any cleaning product that you are not confident using, test on a sample or a discreet part of the installation before

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proceeding. For special cleaning to treat calcium deposits, we suggest 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. There are professional tile and stone cleaners which should be contacted if a more intense clean is required.

Final Note

Other materials may be used, it is best to communicate with your preferred adhesives manufacturer to obtain a specification, these may include:

Laticrete - https://au.laticrete.com/ or 1800 331 012 Mapei - https://www.mapei.com/au Just to name a couple.

Kerakoll products (www.kerakoll.com.au) are distributed through a range of shops please contact Kerakoll. Technical guidance on suitable product selection is available from Kerakoll and covered in Kerakoll Technical Data Sheets (TDS). The above process is a brief outline however TDS must be adhered to and can be found on Kerakoll's website. Maxisil products are supplied by other local distributors. These notes are provided by Artedomus for guidance only. Site conditions may require additional installation procedures. All enquiries should be resolved prior to commencing works. Completion of a test area can assist to ensure suitability of tiling procedures.