

<u>INSTALLATION AND MAINTENANCE INSTRUCTIONS</u> FOR KERAMOS PRODUCTS

Revised on 6th September 2018

- Please check all tiles carefully before installation.
- Please use only Experienced Contractor/Tile Mason for Laying Keramos Tiles.
- The Tiling Must be Supervised by the Architect/ Project Manager/ Contractor/PMC.
- Follow instructions of Adhesive / Grout / Sealant / Floor Cleaner Manufacturer and use their material on small areas for testing.
- It is recommended to finish all site jobs like painting and polishing, electrical, A/c ducting, Carpentry and Civil work before installation of tiles on the floor.
- If in doubt, Contact your nearest Keramos Showroom.

I. INSTALLATION

A. FIXING

There are two basic methods for laying tiles i.e.

(i) THIN SET

Recommended for all type of KERAMOS tiles i.e Decorative, Dublin, Luna, Azul Handmade Tiles, Terracotta, Salamanca, Faenza, Lugano, Glass Mosaic tiles, and Contemporary wall finishes, Mosaic and Portuguese paving. The Thin Set method is used when the surface is rigid, sound and smooth. Also it should be used for all pre-sealed tiles.

- 1. Thoroughly dust tile surface by rubbing with clean cloth or brush. <u>Wetting of tiles is not necessary or recommended.</u>
- 2. Use only white thin set tile adhesive (i.e. LATICRETE / ARDEX / KERAKOLL or any other reputed company) for its installation. **Read manufacturer's instructions carefully.**
- 3. Prepare area on which tile is to be set by thoroughly cleaning to allow bonding of thin set adhesive to the floor.
- 4. Remove tiles from several boxes and mix them together to have a good mixture of colors for each grid.
- 5. Begin installation making sure each tile has at least 90 percent coverage of the thin set adhesive.

- 6. Thin set tile adhesive should be trowelled (using a "notched trowel") on a small area of floor at a time.
- 7. Place tile on the trowelled section with a twisting motion while pressing down with hand and spacing to desired joint (1 mm to 10 mm). Spacers should be used for uniform grouting.

The recommended grout thickness is as follows:

(a) Azul Handmade Tiles : 3mm to 6mm.
(b) Decorative/Azul/Luna Tiles : 2mm to 3mm
(c) Clay Pavers : 3mm to 10mm.
(d) AntiqueStone : 3mm to 6mm.

- 8. With the wooden handle of tool tap over the tile surface. If a hollow sound is heard pick up the tile and butter with more thin set tile adhesive to the area where coverage was not initially attained.
- 9. Do not let Adhesive set on the tile. Please clean immediately after installation.

10. After tiles are installed allow a 24-hour period before grouting.

(ii) THICK BED

Suitable for KERAMOS Terra Rossa, Antique Stone, Pescara Terrazzo, Loose Pebbles). The thick bed method is used when the surface to be tiled is uneven and also when the tiles are heavy in nature.

- 1. Thoroughly dust the tile surface by rubbing with a clean cloth or brush.
- 2. The tiles are to be soaked in water before starting fixing.
- 3. For thick bed installation of tiles cement mortar is recommended in ratio of 1 part cement 2 parts sand.
- 4. Level the area on which tile is to be fixed and start laying tiles. If any pattern has to be worked out, make drawing on the floor before starting laying of the tiles.
- 5. It is suggested to mix tiles from various boxes to get a good mixture of color variation, if any.
- 6. Cement mortar should be trawled on the back portion of tile and firmly pressed down and space to desired joint (1 mm to 10 mm), Beat on top of tiles surface with the wooden handle of the tool to assure 100% bond coverage and contact.
- 7. Do not let MORTAR set on the tiles. Please clean immediately.
- 8. Allow the tile on the floor to cure for 48 hours prior to grouting. DO NOT WALK on the tiles during curing.

After laying the tiles, grouting, sealing and cleaning is done as follows.

B. GROUT

- 1. Before grouting all the tiles must be firmly set and all spacers, string and ropes should be removed.
- 2. For porous clay pavers like Terra Rossa, Spanish Terra Cotta, Salamanca, Faenza it is recommended to seal the surface <u>before</u> grouting to avoid grout haze.
- 3. It is recommended to use readymade grouts available (Laticrete/ Ardex / Kerakoll on any reputed company) for floor as well as wall grouting. For these please follow manufacturer's instructions.
- 4. Grout in a diagonally motion with a hard sponge and let it set for about 10 to 15 minutes before washing the excess away. DO NOT LET GROUT SET ON THE TILE. DO NOT USE ACID ON TILES. Grouting level should be slightly below the tile level.
- 5. Use a damp sponge and water in a circular motion to wash excess grout away. Clean up the grout completely and immediately. Do not leave any grout on the tile over night. Otherwise, it will set on the tiles surface.
- 6. After clean up allow grout to cure for about 72 hours before use.

C. SEALING

Sealers are recommended for use on porous unglazed surfaces such as the clay pavers, terracotta, antique stones, stone mosaics and rough porcelain tiles. Please use sealer from Ager / Tenax/ Laticrete / Ardex or any reputed company **Application and maintenance should be as per the manufacturer's directions.** Under normal conditions, sealants will normally last for one year.

The tile surface should be cleaned properly with a cotton cloth. Before applying sealant make sure that the surface is also bone dry. Sealer can be applied by sponge or cotton cloth. The second or third coating can be applied after a gap of 3-4 hours of each coat. DO NOT WALK ON THE TILE UNTIL THE SEALER IS DRY.

D. <u>PROTECTION</u>: After the installation of tiles is complete, the floor must be covered till <u>ALL</u> construction work is complete. It is recommended that polythene sheet and jute bags should be used for covering. Further, after tile installation, no metal scaffolding, metal ladders etc should be used on the floor to avoid damage.

E. ADDITIONAL INFORMATION

1. CLAY PAVERS / SPANISH TERRACOTTA / TERRA ROSSA/ TUSCANY TERRACOTTA /SALAMANCA

Pre-sealing is recommended. Tile adhesive or grout should not be allowed to dry on the surface of the tile. All excess adhesive / grout should be cleaned immediately. This is VERY IMPORTANT.

For Interiors, if a wet look is required, sealing with Wet look sealer is recommended, after the Tile is completely dry.

2. CONTEMPORARY SURFACES. MOSAICS & SMALL PEBBLE MOSAIC

KERAMOS Contemporary Surfaces, Mosaics and small pebble mosaic are installed by thin set method. These are pre-assembled on fibre-mesh and supplied ready-to-lay. There is no need to remove the mesh before fixing because the tiles face right side-up. Care should be taken that no tile adhesive or grout is allowed to dry on the Surface.

Stone mosaics should be sealed by a "wet look sealer" if a color enhancement is required.

Stainless steel mosaics require extra care during installation to avoid scratches on the surface.

3. AZUL HANDMADE TILES

Handmade Tiles can be used for walls and residential, light traffic floors. These can be installed using the thin set method. These are not to be soaked in water. For Adhesive, please mix MYK-Laticrete 111 along with MYK-Laticrete 73 as per manufacturer's instructions. Kindly note that water based adhesives are not suitable, especially for the White/Ivory and Light Pastel color tiles. Adhesive should not be allowed to set on the tile.

For Grouting, please use MYK-Laticrete 600 Series Grout along with MYK-Laticrete 1776 Grout Admix plus as per manufacturer's instructions.

<u>4. GLAZED WALL / FLOOR TILES / DECORATIVE TILES / TILEDEPOT TILES</u>

Decorative / Glazed tiles can be installed using the thin set method. A minimum 1-2 mm grout is recommended. These tiles can be used both for the floor & walls. Sealing is not recommended.

5. YAMU SANDWASH AND LOFT POLISHED CEMENT WALLS

These are installed by KERAMOS only. Please contact KERAMOS for details of site and base preparation.

6. PORTUGESE PAVING / LYON POLISHED STONE MOSAIC CARPETS

For Polished Mosaic, Polished Antique Stone, Portugese Paving, detailed instructions are available from the KERAMOS showrooms. These are recommended to be installed by KERAMOS authorized installers. Please contact KERAMOS for details.

7 .CERAMIC SUNBREAKERS / JALI

(I) INSTALLATION

- (a) Before installation can start, the support grid needs to be prepared.
- (b) For large building exteriors, RCC columns / Aluminum Structure and beams are required to provide support. Approx width / height 3-4 meters is recommended.
- (c) For small internal partitions, wooden sections 75mmx75mm can also be used for grid in size of 2 metre x 2 metre.
- (d) After preparation of grid the individual pieces are fixed with epoxy resin (araldite) starting from bottom to up, horizontal row- wise. All excess resin MUST be cleaned immediately before hardening. A time period of minimum 1 hour is needed for curing of each row, before starting on the next higher row.
- (e) The end pieces are also anchored to the columns with epoxy resin.
- (f) NO LOAD is permitted on the partition wall.

(II) MAINTENANCE:

- (a) Exterior partitions can be periodically cleaned by vacuum cleaner/pressure air/water jet.
- (b) For internal partitions, manual / vacuum cleaning is recommended.

II. CARE AND MAINTENANCE

1. SWIMMING POOL TILES

For maintenance of tiles and glass mosaics installed in swimming pools, a water softening plant and filtration plant is recommended to avoid any dirt deposit and hard water deposits on the tile surface, which results in dullness of color and loss of shine.

Professional swimming pool maintenance agency must be appointed for pool maintenance.

That the maintenance Contractor should ensure the availability of fully trained, experienced persons,

A. DAILY

- 1). He will check & maintain recommended PH level/ add TCCA 90 / Acid when required.
- 2). He will check fluorine and maintain recommended level.
- 3) He will use copper sulphate for algae scale if required any time, especially when is algae very high, like rainy seasons & month of October.
- 4) Arrangement to keep the filter running for at least 8 to 10 hours every day/cleaning filter.
- 5) Checking of water softening plant/ recharging with salt.
- 6) Cleaning of pool using vacuum cleaner/ rubber scrubber/ pole net. The above should be done daily when the pool is filled with water, even when not in use.

B. MONTHLY

- 1. Service filtration plant.
- 2. Service water softening plant.
- 3. Check all pipes for blockages.

C. YEARLY

- 1. Empty pool and manually clean with surfactant cleaners ONLY.
- 2. Replace any broken / missing tiles.
- 3. Repair grout, if required.

2. DECORATIVE TILES / MOSAICS / CLAY PAVERS / SANDWASH / CONTEMPORARY SURFACES/ HANDMADE TILES / ANTIQUESTONE

All the above should be periodically cleaned daily with clean water and sponge only. Whenever required, use commercially available surfactant 'tile cleaners' 'like MOCLEAN'.

Harsh Soaps and detergents like SURF or VIM should NOT be used. NEVER USE ACIDIC TOILET CLEANERS (HARPIC) OR ACID TO CLEAN TILES.