

INSTALLATION INSTRUCTIONS

SPECIFICATION FOR INSTALLATION OF CONCRETE TILES ONTO VARIOUS SUBSTRATES

QUALITY REQUIREMENTS

- Qualified contractors should be employed with experience of similar projects fixing natural stone or concrete products. The application of concrete Tiles needs a great deal of skill and attention to detail.
- Specified materials only should be used all in accordance with manufacturers recommendations
- Existing or new walls must be as rigid as possible; any flexing should be less than L/360 over the span.

SUITABILITY OF SUBSTRATES

- Before starting work ensure that the background has been allowed to dry out with exposure to air for not less than the following:
 - Concrete walls - 6 weeks
 - Brickwork or block work walls - 6 weeks
 - Rendering Sand & Cement - 2 weeks
- It is also important to ensure that the backgrounds are sufficiently flat to permit specified flatness of finished surface bearing in mind the permissible minimum and maximum thickness' of bedding materials.
- Substrate NOTE: it is important to check the load bearing capabilities of any boards, in relation to the weight of the Tiles before installation.

TOLERANCES

- The requirement for the flatness of the substrate is that no sudden irregularities should be permitted. Substrates shall have a maximum permissible variation of 6mm in 3m from the required plane, and no more than 2mm variation in 305mm when measured from the high points in the surface. In order for this to be attainable within the finished surface it is also important that the backgrounds achieve the same tolerances and this should be checked prior to the application of any finished.

PREPARATION OF VARIOUS SUBSTRATES

1. Existing Concrete/Stucco Substrates

Cut out all loose or hollow portions and repair with pre-mixed leveling mortar. Dampen the area first and remove any dust or debris. Modified Mortar Bed is ready for finishes within 4-5 hours.

2. New Block or Brickwork Substrates

The block/brickwork joints should be raked out to form a key for a nominal 20mm render the raking out should be carried out to a depth of not less than 22mm and the loose friable materials should be brushed away before applying the mortar bed. The mortar bed can comprise of a 3.5:1 sand and cement mix, applied onto a slurry bond coat. Ensure surface is free of dust, oil, grease, paint or glue residues.

Carefully, apply up to a thickness of 6mm. Suggest to follow the directions of Mapei Modified Mortar

Bed container.

3. Plywood Substrate

Interior dry areas only. Ensure that the sheets are dry, minimum thickness of 20mm securely fastened, rigid and that approved fasteners do not protrude. Approved fasteners should be provided. We recommend the use of Cement Backer Unit as the most suitable backer board.

PROTECTION AND CLEANING

To ensure quality of the completed installation is maintained, finished surfaces must be protected at all stages and we would suggest a light cleaning is provided to the walls to remove any dust or dirt, this should be done using Cleaner and sprayed onto a micro fiber cloth and wiped over the surfaces to remove any dirt or marks.

CUTTING

Wherever possible, cutting should be avoided and the tile layout should be in full pieces. However, if cutting is required at perimeters and corners this should be carried out with a diamond saw blade, and a MK Diamond 101 Wet Saw. Ensure that the correct safety equipment and procedures are implemented during the cutting process. Finally, finish with diamond hand sanding blocks if required.

GROUTING

A 4mm grout joint is recommended in order to accommodate for the tiles dimensional tolerance. It is important to apply a small amount of grout in a small area to check that it does not stain the tiles.

Grout joints to be filled with Mapei Ultra Color Plus polymer modified rapid setting cement based grouting compound, mixed at a ratio of approximately 5:1 powder to liquid mixed mechanically in a clean container to a smooth paste and allowed to slake for 2-3 minutes then re-mix prior to application.

Pack well into the joints ensuring there are no voids. Joint width should be a minimum of 3mm wide. Clean off excess grout mortar as work proceeds and the correct time to start cleaning is when the grout becomes opaque. Do not allow grout mortar to harden on the surface. Use a minimum of water in cleaning and finally polish with a dry cloth to remove all traces of grout.

PROTECTION

To ensure the quality of the completed tiling installation is maintained the tile's surface finish must be protected at all stages, the tile contractor must allow for this protection as part of his package. Intermediate and final cleaning should be carried out in accordance with the standard cleaning instructions, as indicated above.

FINAL CLEAN AND PROTECTION

Finally, the tile installation should have one final cleaning using a pH balanced neutral cleaner to remove any residues left from the installation process and once the tiles are dry you should then polish them with a clean dry cloth.

SEALING

We recommend sealing of the tiles with a good quality sealer such as FILA MP90. This procedure should be executed after completion of the installation.