

IN SITU TERRAZZO INSTRUCTIONS

For approx. 12- 15 mm thick In situ Terrazzo Floor in Interiors (Not recommended for outdoor areas)

Preparation of the mother Floor

1. Check the mother slab and see that there are no pot holes, cracks or any other defects , if any found, proper repair work is required before proceeding further.
2. Check and ensure proper levels of the entire floor.

Preparation of the Under layer and placing of divider strips:

1. The base shall be cleaned of all dust, dirt, laitance and any loose materials. It shall be then wetted with water, and smeared with cement slurry at 2.75 Kg/sq. mt. before application of under layer screed.
2. **Under Layer-** The under layer shall be made of a Controlled Shrinkage Screed. Controlled Shrinkage Screed (Keracem or Kerakoll, TopCem of Mapei or similar) are mixed in ratio of 1:6-7 with clean aggregates of 0-8 mm size. This is added to water to obtain a mix with “damp earth” consistency, without water bleed under a float/trowel finish.
3. In case the slab is prone to movements, the under layer screed is recommended to be laid as a floating screed. It is separated by a thin layer of sprinkled sand or polyethylene isolating sheet from the slab. Then the under layer is casted in a minimum thickness of 75 mm with galvanized wire mesh.- (Detailed drawing available separately)
4. Otherwise (if the under layer is laid as a bonded screed), a minimum average thickness of around 45 mm should be maintained for the under layer, and in no place should the thickness be less than 30 mm.
5. Under layer shall be spread and leveled with a screeding board. The top surface of the under layer shall be left rough to provide a good bond to the terrazzo. The application of the Controlled shrinkage Screed must be carried out as per the instruction of the screed manufacturer.
6. **Dividing Strips:** The base shall be divided into panels with the help of dividing strips including the strips required for decorative design up to the finished surface level of the floor. This can be done in one of the two ways. a.. The divider strips are to be laid along with the under layer. The divider strips can be fixed in the under layer concrete screed while exposing approx 12mm of the strips to receive the terrazzo topping. b. On previously hardened concrete, divider strips especially in “L” or similar shapes can be glued or fastened to later receive the terrazzo topping. In case of option b. the concrete bed must be adequately cured before receiving the terrazzo topping.

Terrazzo topping

The topping shall be a factory premixed, dry Hydrophobic Terrazzo matrix of approved colour and stone chips and a minimum of 12-15 mm thickness of the Terrazzo Topping Matrix will be required.

Mixing Materials

1. With a view to avoid variation in colour, mixing shall be done in trough or tub. The available Terrazzo Matrix is to be mixed with water only. Only so much quantity of the matrix should be wetted as can be used up within 30 minutes of the wetting. Re-adding of water to the mix on drying must be avoided.

2. Water shall be added in small quantities while materials are being worked to get a mix of proper consistency. **The mixture shall be plastic but not so wet to flow. The mix shall be used within half an hour of mix of addition of water during preparation laying. Variation in water Cement ratio can lead to variation in the colour of the finished floor.**

Laying the Terrazzo Matrix

1. The terrazzo mix shall be laid to a uniform thickness on the screed bed and be finished thoroughly by tapping or rolling and trowelled smooth. The terrazzo surface shall be tamped, trowelled, and brought to required level by a straight edge and steel floats in such a manner that the maximum amount of marble chips come up and are spread uniform over the surface and no part of the surface is left without chips. If required, "seeding" of additional stone chips is possible.
2. Excessive trowelling or rolling in early stages shall be avoided as it results in working up cement to the surface which will produce a surface liable to cracking and will require more grinding to expose marble chip.

Curing

1. The surface shall be left dry for air curing for a period of 12 to 18 hours, by covering with plastic, to minimize evaporation. If early curing of fresh concrete is not done, chances of cracking of terrazzo, or of the terrazzo material not gaining adequate strength and hence shine, are greatly increased.
2. Thereafter, water shall be allowed to stand overnight in pools for a period of a minimum of four days. The floor shall be prevented from being subjected to extreme temperature or drying. Prevent contaminants on the terrazzo floor like wood, ferrous, paints or any other organic waste.

Additional Important Information

Panel Size

1. **In situ terrazzo is divided into panels not more than 1500mm square. Ideally these bays should be 1200mm x 1200mm.** so as to reduce the risk of cracking due to differential shrinkage or expansion of terrazzo and sub-floor. The joints shall be so located that the layer dimensions of any panel do not exceed 2 M. The panels shall preferably be separated by means of dividing strips.
2. **Rectangular bays are possible, however one side cannot be more than 2 times the length of the other side.**
3. Brass, Glass, SS or Aluminium are the materials used to form bays.
4. The purpose of the panels is to control movement and therefore any cracking that may occur.

Expansion Joints

1. Expansion joints are necessary to allow for movement. It is recommended that in internal applications expansion joints are located in no bays larger than 6 metres x 6 metres.
2. It is also recommended to leave joints all around columns and along the entire perimeter of the laid terrazzo floor, and filled with an elastomeric jointing material to provide for movement.

For instructions on Polishing of Terrazzo Floors, please refer to our separate instructions on Polishing of Terrazzo Tiles. The procedure remains the same.