



## **Methodology of Industrial Tiling –**

### **Substrate Preparation –**

A firm and structurally sound concrete floor is required (Not our scope) for any kind of floor covering including tiling. All the foreign materials should be removed to expose the surface of the main concrete floor.

The final finished floor levels should be marked on all sides of the wall according to the required slopes, if any. Although the major slopes required should be taken in to consideration while casting the main floors.

Priming of the main concrete floor is most necessary before preparing the levelling course or bed mortar. A ready primer can also be used otherwise a slurry coat of engineered cement is absolutely suitable as primer.

### **Levelling Coarse or Bed Mortar –**

This is the most important part of the total system and must be handled very carefully as the performance and life of the floor totally depends on this.

A bed mortar of engineered cement & sand performs much better instead of the normal OPC/PPC cement & sand mortar.

The standard thickness of the bed mortar is in range of 20 mm to 40 mm. If more thickness is required than the bed mortar should be prepared in steps but not beyond 40 mm per layer else PCC is a better and cheaper option leaving a scope of 25 mm thick bed mortar for tiling along with the thickness of the tiles.



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### **Important -**

Bed mortar made with engineered cement is the most suitable for all kind of floor coverings as it meets the requirement of the levelling coarse for tiling which need the following properties –

- No water curing required.
- Adhesion not less than 1 MPA to the main floor.
- Compressive strength not less than the main concrete floor, higher is preferred.

### **Comparison with normal cement & sand mortar –**

The normal cement & sand mortar requires water curing to achieve its strength which is never possible in the case of tiling work and even if it is made possible a cement & sand mortar cannot achieve a compressive strength more than 4 to 5 MPA which is much less than the requirement and to compensate the weakness of the bed mortar the thickness of the tiles becomes necessary to be increased.

Therefore the use of a suitable engineered cement becomes the most necessary for tiling work specially industrial tiling as the use of the engineered cement safely allows not only in the reduction of the thickness of tiles required with a normal OPC/PPC cement and sand bed mortar but also makes the flooring system much sturdier, longer lasting, easy to maintain, faster and cost effective.

### **Grouting –**

A suitable grouting material preferably an epoxy grout is most suitable for most of the industrial floors because of not only the higher physical abuse are to be taken care off but also the possible chemical abuse whereas a normal cementitious grout is not capable to with stand these kind of stresses.