

RENDERCON® ‘Super’ Tile Bedding Mortar

PROBLEM TO ADDRESS

Tile laying has become challenging as hollowness is observed under most of the tiles off tile laying in a large size project in Bengaluru. Mix proportion is 1:4 with crushed sand. No admixture is being used.

MOCK DONE

The following is the procedure adopted using RenderCon ‘Super’ admixture.

- 1. Cleaning the Floor:** Unwanted litter like waste papers etc are removed by hand. The hall area was completely cleaned and water sprinkled all over. Dry cement sprinkled over this water. (Alternately, cement+ water slurry may also be used here).
- 2. Mixing Dry Mortar:** Many batches were prepared where each batch comprised of 2 bags of cement and proportionate sand for 1:4 mix ratio. 2 Powder pouches of RenderCon ‘Super’ sachets is emptied and mixed thoroughly in each batch.
- 3. Mixing Wet Mortar:** Along with the mix water, 2 liquid pouches of RenderCon ‘Super’ sachets is emptied is mixed in each batch. The mix water is then mixed thoroughly with the dry mix.
- 4. Achieving Right consistency:** More water is obtained, poured over each batch to reach required consistency and see that all the mortar is wet. We repeatedly bothered the mason to use the spade to move the mortar upside-down continuously to ensure that no mortar is left dry without being wet. Just in case any dry mortar is found, we used more water to make it wet.



Dry Mixed (Cement + Sand)



Wet Mixing (With Admixture)



Mixing More Water, Ensuring no cement / Sand particle is dry.

5. **Levelling and Water Sheen:** After ensuring that all the mortar is sufficiently wet, the levelling process started on the bed mortar. We get to see slight sparkling water-sheen if the mix has just enough water and such water-sheen ensures that no cement / sand particles are dry. The whole area is completely levelled.



Water-sheen appearing on the surface

6. **Cement Slurry:** Cement Water Slurry to connect the tile bed and tile is prepared. No admixture is mixed in this. Care has been taken to keep it slightly thick despite being flowing like water.

Note: If masons are used to keeping the bed mortar dry, pouring cement slurry and striking lines over it may have to repeated 2/3 times to achieve required wetness in the bed and pasty slurry on the top required to stick the tile.

Case Study

7. **Tile Fixing:** Cement slurry is poured over the tile-bed mortar and many random lines were stricken over the slurry to ensure more slurry gets into the bed to form a stronger bond between tile and tile-bed mortar. Each tile is held in position and rammed gently use wooden mallet etc., onto the slurry. Process repeated until all tiles are fixed.

8. **No curing:** No curing was done on the tiles. There was good wind all over the room in the 12th floor – which can increase evaporation and shrinkage of the mortar bed promoting hollowness.

9. **Checking Hollowness:** After 7 days, 3months and 6 months, each tile in the mock was rammed to check for hollowness. All tiles were intact with no signs of hollowness. Joint inspection with client / contractor confirmed the above results.

