Instructions For Building Wall With PRIME AAC Blocks

Thin Bed Mortar

**Thin Bed Mortar Mixing**

- Mix the thin bed mortar as per the manufacturer’s direction in a clean mixing container.
- Ensure the consistency of the mixed thin-bed mortar is such that it flows freely through the teeth of the notched trowel and it leaves the shape of the teeth on the mortar bed.
- Now set the second corner block by adding thin bed mortar to the head joint with trowel.
- Repeat the following steps for each corner using a builder’s level.

Masonry with Ordinary Mortar

- The optimum Cement : Sand ratio for mortar mix is 1:6, do not use rich mortar mix (1:4) as this will shrink and will cause cracks in the wall.
- The ideal mortar thickness should be limited to 10-12 mm while using cement mortar; thickness beyond this is not recommended.

Things to Remember

- It is very important that the blocks in each row are perfectly at “water level” after laying the row. Proper care needs to be taken while laying the leveling bed or mortar between the blocks horizontally and vertically. This is very important as improper block work with out proper leveling of mortar horizontally might lead to cracks in the wall due to mortar shrinkage.
- Proper care should be taken while placing the mortar vertically between the blocks. Generally, when the mortar is stuffed vertically, gaps are left between blocks. These air voids might result in cracks in vertical direction.
- Concrete bed of 1 to 2 inches need to be put after completing 4 rows of block work. 6 mm TMT bars should be used in the concrete bed. Concrete bed is recommended for all walls which use blocks less than 150 mm thick.
- Strength of blocks decreases with excessive curing with water. Curing has to be sparsely on blocks. However curing for joints is recommended. However, before starting constructing the wall, ensure that the blocks are dipped in water drum.
General Instructions

Wall Installation – 1st Level Coursing
- Place a full width ½" deep sand-cement mortar joint using a masonry trowel. Mortar composition can either be 1:6 or 1:5 (Portland Cement : Sand) or any approved thin bed mortar.
- Set the first corner block in the sand-cement mortar.
- Increase or decrease the height of the block by tapping on the block with a rubber mallet or by adding additional mortar under the block.

Wall Installation – Normal Course
- Clean the bed joint surface with a brush ensuring there’s no dust or any other particles so that the adhesion with mortar is optimum.
- Now apply mortar to head and bed joints using a clean, notched trowel. Ensure that the mortar covers the full width of the joints.
- Carefully ensure each block is close to the head joint.
- Finally tap the end of the blocks with a rubber mallet ensuring full surface coverage of the thin bed mortar.
- Repeat the above steps till the wall is complete.

Making Conduits in Wall
- For the purposes of making conduits for electricity and piping make a chase with chasing tools or an electric router.
- Do not drill beyond 1/3rd the depth of the wall.
- After drilling conduits use mortar (1:6 - cement: sand) to fill the notch.
- Then install the necessary cables and fasten with clips if necessary.

Plastering
- Before plastering, cement slurry may be applied on the walls and only leaner mix shall be applied.
- The thickness must be 10-12 mm of 2 layers on the exterior walls and on the internal wall it should be 1 layer of 10-12 mm.
- Before plastering the wall should be watered adequately.
- After watering, plastering should be done by applying rendering material. Chicken mesh should be used during plastering the wall. Chicken mesh is a must while plastering along the beam / column (concrete) - block joints.
- Only well-sieved sand should be used for plastering.
- Once done, the plastered wall should be watered for 7 days.