

How to handle AAC Blocks ? The Do's and Don't on AAC Blocks.

STORAGE OF MATERIAL

The blocks shall be stored on the site on a level ground and to be protected against rain fall and snow fall. .



Mix Proportions of Mortar:

Use of strong mortar with light weight concrete blocks is not advisable, use of compatible mortar is advisable. Lean mortars distribute and accommodate more readily the strains arising from thermal, moisture and chemical changes. According to IS 6041:1985 blocks shall be embedded with a mortar, the strength of which is relatively lower than that of mix used in making of blocks. Cement sand mortar 1:6 or 1:1 : 5 (1 cement : 1 flyash : 5 sand) shall be used.

SOAKING AND WETTING OF BLOCKS:

These blocks should never be soaked prior to laying in the wall. Only slight wetting is required.

Laying of Mortar:

The mortar shall not be spread so much ahead of the actual laying of the units that it tends to stiffen and lose its plasticity there by resulting in poor bond. Consistency as per requirement of site must be maintained at the point of laying over bed.

Mortar joint shall be struck off flush with wall surface and when the mortar starts stiffening, it shall be compressed tightly to have a key for plastering.

Laying block masonry :



Laying of AAC Block masonry shall be in accordance with the recommendations of IS 6041 of 1985 and IS 1905 OF 1987 .The joint thickness shall be 10 mm.

The laying of block may be started either at the corners first or it may be started from one end and proceed to the other direction. The first course of the cellular block masonry shall be laid with greater care, making sure that it is properly aligned, leveled and plumbed, as this may assist the mason in laying succeeding courses to obtain a straight and truly vertical wall.

The design of wall should be such that cutting of blocks is minimized when leaving space for door and windows.

SLENDERNESS RATIO:

Design of AAC block masonry is based on the same parameters as that of brick masonry, as Indian Standard BIS:1905 (masonry code) applicable to brick masonry is also applicable with the same provisions to AAC block masonry. Therefore slenderness ratio of AAC masonry walls shall be as per guide lines of Indian Standard for masonry walls.

CHASES

Guide lines for chases in masonry walls as per Indian Standard BIS:1905 need to be followed. The cutting of chases, recesses etc. should be done without damage to the surrounding masonry. It is desirable to use such tools for cutting which depend upon rotary motion not on heavy impact for cutting action.

FIXTURES IN AAC:

Doors and windows

Doors and Windows can be fixed to AAC Block Masonry as is being done in brick Masonry. Hold fast can be planned by using U-blocks or by cutting the block on both the faces.

DO'S & DON'T'S WITH AAC MASONRY:

S.NO	DO'S	S.NO.	DON'T'S
1	Surface of AAC blocks to be joined with mortar is to be wetted with brush / cotton waste or with the help of a tray filled with 25 mm water	1	Do not soak AAC blocks in water
2	Use only compatible mortar 1:6 or 1:1:6 mortar (1 cement : 1 fly ash : 6 sand)	2	Do not use rich mortars
3	AAC masonry should be as per IS code 6041 (1985) and IS code 1905 (1987)	3	The mortar should not be spread much ahead of the actual laying of blocks.
4	Chases for services in AAC masonry should be as per IS code 1905 (1987)	4	Do not deviate from the norms of chase cutting specified in the code IS 1905 (1987)
5	Use electro mechanical rotary tool for chase cutting	5	Do not use chisel and hammer for chase cutting
6	Chases should be filled along with plastering and a layer of chicken mesh is to be embedded in the plaster over the width of the chase with proper over lap	6	Do not fill the chase up to the top surface of the masonry to have a key while plastering.
7	While storing AAC blocks, care should be taken to avoid of excess moisture	7	Do not expose the AAC blocks during rains or snow fall

AAC Masonry. (some useful tips)

- The mortar shall not be spread so much ahead of the actual laying of the units that it tends to stiffen and lose its plasticity thereby resulting in poor bond.
- Consistency as per requirement of site must be maintained at the point of laying over bed.
- Laying of AAC block masonry shall be in accordance with the recommendations of IS 6041 of 1985 and IS 1905 of 1987. The joint thickness shall be 10 mm .
- The laying of block may be started either at the corners first or it may be started from one end and proceed to the other direction .
- Lay 10 mm thick cement mortar uniformly over bed. Wet the blocks on all sides by using a tray filled with 20/25 mm water and place them one by one and press it firmly to have proper bond. Fill the joints between the blocks.
- The first course of the cellular block masonry shall be laid with great care ,making sure that it is properly aligned , leveled and plumbed, as this may assist the mason in laying succeeding courses to obtain a straight and truly vertical wall.

- The mortar joint shall be struck off flush with wall surface and when the mortar stiffening , it shall be compressed tightly.
- Before laying the mortar, two 10 mm square rods can be placed on both the sides of the block to obtain uniform joint.
- Ensure all the surfaces of the block which come in contact with cement mortar are wet to have proper bonding.

