

Stacking and Storage

Do:

- Stack on dry and even surface to avoid damage and contact with moisture
- Keep material covered in rainy season

IMAGE: NICELY STACKED BLOCKS

Don't:

- Stacking on uneven and wet surface
- Avoid multiple handling
- Hap hazard stacking

IMAGEL VERY POORLY STACKED BLOCKS

Pre-laying wetting of blocks

Do:

- Dip only surface in water and lift immediately

IMAGE: BLOCK PARTIALLY DIPPED IN WATER

Don't:

- Keep it immersed or soak for a long time

IMAGE: BLOCK COMPLETELY DIPPED IN WATER

Cutting of blocks

Do:

- Use carbide tipped saw for efficient cutting

IMAGE: CARBIDE BLADE CUTTING A BLOCK

Don't:

Cutting blocks with

- Hammer and chisel
- Tile cutter
- Hand saw for wood

IMAGE: TILE CUTTER CUTTING BLOCKS

Mortar with masonry

Do:

- Use 1:6 cement sand mortar

IMAGE: 1 PART CEMENT AND 6 PART SAND

Don't:

- Rich mortar mix 1:4 cement sand will shrink so it leaves bond with blocks. It causes crack in wall

IMAGE: 1 PART CEMENT AND 4 PART SAND
WALL WITH VERTICLE CRACK

Mortar Thickness

Do:

- Sand Cement mortar: 10 to 12 mm thickness
- Thin bed: Strictly 3mm and with use of proper tools only. If tools are not available, use sand Cement mortar

IMAGE: WALL WITH JOINTS THICKNESS OF 10 TO 12MM

Don't:

- Sand Cement mortar: Thickness greater than 10 to 12 mm
- Thin bed: Thickness more than 3mm

Curing of Masonry Walls

Do:

- Blocks need not be wetted before laying. If required top and sides can be slightly moistened to prevent absorption from mortar.

IMAGE: SLIGHTLY MOISTENED BLOCKS

Don't:

- Flooding wall with water continuously

IMAGE: COMPLETELY WETTED BLOCKS

Pattern

Do:

- The distance between vertical joints in subsequent layers shall be minimum 100mm

IMAGE: STAGGERED JOINTS WITH MINIMUM 100MM SPACE BETWEEN TWO JOINTS

Don't:

- The distance between vertical joints in subsequent layers less than 100mm

IMAGE: STAGGERED JOINTS WITH LESS THAN 100MM SPACE BETWEEN TWO JOINTS

Coping beam

Do:

- Coping beam must be with 2nos 8 mm reinforcement after 1.44mts height

IMAGE: WALL WITH COPING BEAM AFTER 6 LAYERS

Don't:

- Wall without coping beam

IMAGE: WALL CONSTRUCTED WITHOUT COPING BEAMS

Maximum wall construction in a day

Do:

- Up to 5 layers (1.2mts)

IMAGE: WALL WITH 6 LAYERS

Don't:

- More than 5 layers in a day

IMAGE: WALLS WITH MORE THAN 6 LAYERS

Plaster Thickness

Do:

- External plaster shall be 15mm and Internal 10mm

IMAGE: Blocks with plaster thickness of 15mm

Don't:

- External thickness shall not be more than 15mm and internal 10mm

IMAGE: Blocks with plaster thickness of more than 15mm

Installation/Construction of Lintel

Do:

- Lintel shall rest on complete block

IMAGE: LINTEL SPANNING ACROSS ENTIRE BLOCK

Don't:

- Laying lintel on partial blocks

IMAGE: LINTEL SPANNING ACROSS PARTIAL BLOCKS

Electrical and Sanitary chasing

Do:

- Chasing must be done prior to plaster
- Fill with mortar and apply wire mesh before plaster

IMAGE: Wall with wire mesh on chasing

Don't:

- Chasing after plaster
- Plastering the chased surface without using wire mesh

IMAGE: Wall without wire mesh on chasing

Curing after casting:

- Once the wall is erected, curing at the joints is to be done for minimum 2 to 3 days.
- Before plastering, cement slurry may be applied on the walls and only leaner mix shall be applied. The thickness shall be 10 to 12 mm (2 layer) in the exterior wall and in internal wall it should be one layer of 10 to 12 mm.
- In case of dry walls plastering can be avoided. In such cases directly gypsum plaster/POP may be applied

Chasing of conduit:

- Use electrical router
- Do not exceed one third the depth of wall
- After installation of conduit and pipes use normal mortar (1:6 cement: sand) to fill the notch
- A power drill can be used to install electrical boxes

IMAGE: CHASED WALL WITH ELECTRICAL BOX

Installation of electrical boxes

- Electrical boxes may be fitted into wall with coarse threaded screws. As an option, glue, foam or a thin bed mortar may be used.

Wall thickness

- Minimum thickness of a non load bearing internal wall must be 10cm
- Minimum thickness of external panel wall in framed construction must be 15cm

Parapet Walls

- Parapet walls must be vertically braced after every 3 meter
- Bond beam must be installed after the topmost layer of a parapet wall

IMAGE: parapet wall with vertical bracing