

Muram or Mud Floors:

The ground floor having its topping consisting of muram or mud is called Muram or Mud Floors

These floors are easily and cheaply repairable

Method of Construction:

- The surface of earth filling is properly consolidated
- 20cm thick layer of rubble or broken bats is laid, hand packed, wet and rammed
- 15cm thick layer of muram or good earth is laid
- 2.5cm thick layer of powdery variety of muram earth is uniformly spread
- The whole surface is well watered and rammed until the cream of muram earth rises to the earth surface
- After 12 hours the surface is again rammed for three days.
- The surface is smeared with a thick paste of cow-dung and rammed for two days
- Thin coat of mixture of 4 parts of cow-dung and 1 part of Portland cement is evenly applied
- The surface is wiped clean by hand.
- For maintaining this type of floor properly, gobri leaping is done once a week

Suitability:

These floors are generally used for unimportant building in rural areas

Cement Concrete Floor:

The floor having its topping consisting of cement concrete is called Cement Concrete Floor or Conglomerate Floor

Types of Cement Concrete Floor:

According to the method of finishing the topping, Cement Concrete Floor can be classified into the following two types

- 1- Non-monolithic or bonded floor finish concrete floor
- 2- Monolithic floor finish concrete floor

1- Non-monolithic or bonded floor finish concrete floor:

The type of Cement Concrete Floor in which the topping is not laid monolithically with the base concrete is known as Non-monolithic or bonded floor finish concrete floor

Method of Construction:

- The earth is consolidated.
- 10cm thick layer of clean sand is spread.
- 10cm thick Lime Concrete (1:4:8) or Lean Cement Concrete (1:8:16) is laid thus forming base concrete
- The topping {4cm thick Cement Concrete (1:2:4)} is laid on the third day of laying base cement concrete, thus forming Non-monolithic construction.

This type of construction is mostly adopted in the field

The topping is laid by two methods:

I- Topping laid in single layer:

The topping consists of single layer of Cement Concrete (1:2:4), having its thickness 4cm

II- Topping laid two layers:

The topping consists of 1.5cm thick Cement Concrete (1:2:3), which is laid monolithically over 2.5cm thick Cement Concrete (1:3:6)

2- Monolithic Floor Finish Concrete Floor:

The Cement Concrete Floor in which the topping consisting of 2cm thick Cement Concrete (1:2:4) is laid monolithically with the Base Concrete is know as Monolithic Floor Finish Concrete Floor

Method of Construction:

- The surface of muram or earth filling is leveled, well watered and rammed
- 10cm layer of clean and dry sand is spread over
- When the sub soil conditions are not favorable and monolithic construction is desired, then, 5cm to 10cm thick hard core of dry brick or rubble filling is laid.
- 10cm thick layer of Base Concrete consisting of Cement Concrete (1:4:8) or Lean Cement Concrete (1:8:16) is laid.
- The topping {2cm thick layer of Cement Concrete(1:2:4)} is laid after 45 minutes to 4 hours of laying Base Concrete

Brick Floors:

The floors having its topping consisting of bricks are known as brick floor

Features:

- These floors can easily be constructed and repaired.
- But this type of floor provides a rough surface.
- These can easily absorb moisture from the surrounding areas and may cause dampness in the building.

Method of Construction:

- The muram or earth filling is properly consolidated.
- 10cm thick layer of dry clean sand is evenly laid
- 10cm thick layer of Lime Concrete (1:4:8) or Lean Cement Concrete (1:8:16) is laid, compacted and cured to form a base concrete.
- Well soaked bricks are laid in Cement Mortar (1:4) in any desired bond pattern e.g. Herring Bond, Diagonal Bond or any other suitable bond
- In case the pointing is not to be done, the thickness of joints should not exceed 2mm and the mortar in joints is struck off flush with a trowel
- In case the pointing is to be done, the minimum thickness of joints is kept 6mm and the pointing may be done as specified.

Suitability:

This type of floor is suitable for stores, god owns etc.

Tile Floor:

The floor having its topping consisting of tiles is called tile floor.

Method of Construction:

- The muram or earth filling is properly consolidated.
- 10cm thick layer of dry clean sand is evenly laid
- 10cm thick layer of Lime Concrete (1:4:8) or Lean Cement Concrete (1:8:16) is laid, compacted and cured to form a base concrete.
- A thin layer of lime or cement mortar is spread with the help of screed battens.
- Then the screed battens are properly leveled and fixed at the correct height.
- When the surface mortar is harden sufficiently, 6mm thick bed of wet cement (1:5) is laid and then over this the specified tiles are laid.
- The surplus mortar which comes out of the joints is cleaned off.
- After 3 days, the joints are well rubbed with a corborundum stone to chip off all the projecting edges.
- Rubbing should not be done in case of glazed tiles

- The surface is polished by rubbing with a softer variety of a corborundum or a pumice stone.
- The surface is finally washed with soap.

Suitability:

This type of floor is suitable for courtyard of buildings.

Glazed tiles are used in modern buildings where a high class finish is desired.

Mosaic Floors:

The floors having its topping consisting of mosaic tiles or small regular cubes, square or hexagons, embedded into a cementing mixture is known as Mosaic Floors

Method of Construction:

- The earth is consolidated.
- 10cm thick layer of clean sand is spread.
- 10cm thick Lime Concrete (1:4:8) or Lean Cement Concrete (1:8:16) is laid thus forming base concrete
- Over this base course 5cm thick Lime Mortar or Cement Mortar or Lime and Surkhi mortar (1:2) is laid.
- The mortar is laid in small area so that the mortar may not get dried before finishing the wearing course.
- 3mm thick cementing mixture is spread.
- The cementing mixture consists of one part of pozzolana, one part of marble chips and two parts of slacked lime.
- After nearing 4 hours, patterns are formed on the top of the cementing material.
- Now the tiles of regular shaped marble cubes are hammered in the mortar along the outline of the pattern.
- The inner spaces are then filled with colored pieces of marble.
- A roller 30cm in diameter and 50cm in length is passed gently over the surface.
- Water is sprinkled to work up the mortar between the marble pieces.
- The surface is then rubbed with pumice stone fixed to a wooden handle about 1.5m long.
- The surface is then allowed to dry up for 2 weeks