Flooring

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Flooring

- Permanent covering of a rammed earth
- Floor covering is a term to generically describe any finish material applied over a floor structure to provide a walking surface

Types of Flooring

1.Mud Flooring
2.Brick Flooring
3.Stone flooring
4.Concrete Flooring
5.Granolithic Flooring
6.Terrazzo Flooring
7.Mosaic Flooring
8.Marble Flooring
9.Wood or timber Flooring
10.Asphalt Flooring

MUD FLOORING

- Easiest form of material available
- economical, mud is readily available and the flooring is easy to construct and maintain
- village housing

BRICK FLOORING

- Bricks → successfully used for foundations, walls, roof, floors etc.
- Brick flooring is advantageous in areas where bricks are available locally.
- Easy to construct with the help of local mason and are also economical.

▪provides a rough surface.
▪absorb moisture from the surrounding areas and may cause dampness in the building.

STONE FLOORING

- Stones suited for flooring→
  - strong
  - resist abrasion and impact
  - pleasing appearance.
- Granite
- Marble
- Other locally available stones

STONE FLOORING : Granite

- Molten rock formed by fluid magma from inside the earth constraining itself between existing layers of rock and in the long run it chills off to a strong state
- Heat Resistance, Scratch Free surface, Hardness, Low retention of water

STONE FLOORING : Granite


Absolute Black


Amber Yellow


Autumn Harmony


Bain Brook Brown


Baltic Brown


Bianco Catalina


Bianco Romano


Black Galaxy


Black Pearl


Blanco Taupe


Blue Bahia


Blue Pearl


Bordeaux


Brown Antique


Caledonia


Carioca Gold


Coffee Brown


Colombo Juparana

STONE FLOORING : Marble

- Metamorphic rock made by adjustment of limestone or dolomite → most exquisite stone
- Durable but lesser than granite. Does not get older very easily. Inherent design patterns

STONE FLOORING : Marble


Arabescato Carrara


Arabescato Statuary


Arabescato Venato


Athens Grey


Bianco Dolomite


Bianco Venatino


Black Oak

Botticino Fiorito


Botticino Semiclassico


Breccia Oniciata


Cafe Forest


Calacatta Crestola


Calacatta Gold


Calacatta Vagli


Carrara White


Carrara White C/D


Cherry Blossom


China Black w/Vein

CEMENT CONCRETE FLOORING

- Durable, easy to construct and maintain besides being economical as compared to tile, marble and other such type of floorings.
- Non-monolithic or bonded floor finish concrete floor : the topping is laid after the base has set.
- Monolithic floor finish concrete floor : base layer is laid and then immediately a concrete topping is provided.

1) 4 cm concrete topping
2) 10 cm lime or lean cement concrete
3) Sand cushion

Concrete Flooring

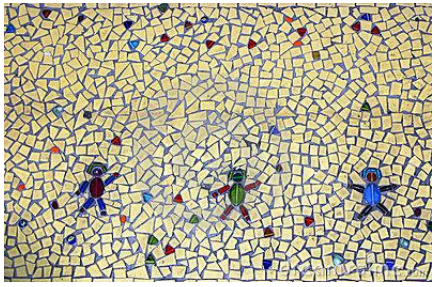
Pros and Cons

- Durability
- Economical
- Easy to maintain
- Versatile
- Long Lasting

- Hardness
- Cold
- Moisture
- Environment Friendly

MOSAIC FLOORING

- The floors having its topping consisting of mosaic tiles or small regular cubes, square or hexagons, embedded into a cementing mixture
- **Mosaic** is the art of creating images with an assemblage of small pieces of colored glass, stone, or other materials. It is a technique of decorative art or interior decoration.



MOSAIC FLOORING

- Mortar is spread over the concrete base and levelled. Thickness of the mortar will be 5 to 8 cm.
- Before drying the mortar, a layer of cementing material of about 3mm thick will be placed over it. This layer is consisting 2:1:1 ratio of lime, marble and pozzolana material.
- After some time, about 4 hours later, marble pieces or tiles laying is started.
- A stone roller is passed over the surface gently and water being sprinkled over now and then to work up the cement between the marble pieces.
- The surface is then allowed to set for 24 hours and is rubbed with a pumice stone to polish the surface and to make it smooth and level.

TILE FLOORING

- Tiles are available in different patterns, designs and utility options.
- Ceramic tile
  - These are made from fired clay and finished with a glaze. They are hard-wearing, waterproof and fireproof.
- Vitrified tile : Vitrified tiles are made of a mixture of clay with elements like silica, quart and feldspar. Very strong, durable and resistant to water.
- Tiles from different types of stones like marble, granite etc.

Laying the tiles over concrete in new building using sand and cement mortar.

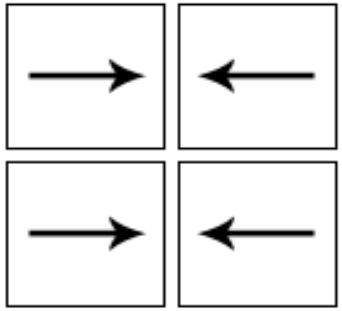
The bed surface should be perfectly clean and free from dust, paint, scraps, grease, oil etc.

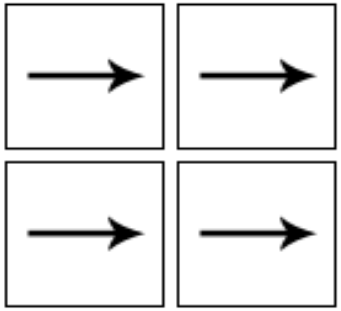
If the bed surface has been left dry for a long time it should be washed and made sufficiently cured.

Make suitable bedding using cement and sand mortar with the ratio of 1:4 along with water to make a consistence paste.

Once mixing is completed use this to make a bedding of 20 to 30 mm thickness after checking the levels through 4 corners of the area

Kindly look for the arrow on the back of the tile and follow the laying pattern as shown here.





If the arrows are not followed the proper design may not be achieved and also it may affect the alignment.

Apply fine cement slurry to the back of the tile to ensure proper and full bonding on the surface.

Press gently with a wooden mallet to make proper adherence. (Do not use iron hammer or any heavy material to press the tile).

After fixing the tiles, extra mortar etc. should be cleaned with wet cloth or sponge and allow setting for two days.

After proper setting, the tile should be suitably cleaned and there after grouting should be done with matching grout.

Since most of the carpentry, electrical or interior works are done after the installation of tiles, it is important to provide a protective cover on surface of the tiles.

It is recommended to use POP of 12 to 15 mm thickness and this should be opened only when the area is ready for occupation.

Use of newspaper below the POP should be avoided since the printing ink and other black spots of the newspaper are likely to leave permanent stains on the tiles.