

APPENDIX II ORDER OF BUILDING CONSTRUCTION

1. Clearing the site

- It is the process of removing all vegetation such as bushes and scrub. The roots of trees and bushes must be dug and cleared away.

2. Setting out the building

- After the site is cleared of obstructions the outline of the building can be set out on the ground with fixed lines and profiles.

3. Excavations: It can be done by hand or with mechanical diggers.

Removing the topsoil

Topsoil should be removed because:

- It contains vegetation, which can damage foundations,
- It is not firm enough to support a building

You should remove at least 300 mm of topsoil. If you have to remove the roots of bushes and trees that are growing within the boundary of the building, then you may have to excavate more than 300 mm.

Do not use soil to backfill holes that are created by excavating roots in the topsoil. The soil may settle to a different level in the holes and create cracks in the over site concrete.

Then it should be cleared away.

Excavation for the actual foundation

When you remove the topsoil, then you should have a firm subsoil that is strong enough to support the over site structure.

It includes:

- Digging a trench for strip foundations
- Digging pits for shallow foundations
- Digging holes for piles

4. Foundation

The foundation is part of the construction below the natural ground level.

5. Construction of the frame

It is the construction of the beams, the columns, the slabs, and the stairs

6. Wall construction

It is the structural element that separates the spaces inside and outside a building.

The most common materials for wall construction are:

- Natural stone
- Bricks
- Concrete blocks
- Mud blocks

Masonry walls also need mortar. Mortar is the mixture of cement, lime and sand that is used to joint the individual units of the building material into a uniform mass.

7. Roofs

The two main types of roof are:

- a. Pitched roofs
- b. Flat roofs

Parts of pitched roofs

- **Covering:** The external material that is laid over the roof structure to protect the inside of the building and it can be any one of the following materials: corrugated fiber sheets, corrugated metal sheets, thatch, and tiles.
- **Fascia**

A thin board that is fixed to the end of rafters or roof joists to support the gutters

- **Purlin**

A member spanning between roof trusses that supports roof sheets

- **Rafter/Truss**

A member that spans from the eaves to the ridge in a pitched roof

- **Ridge cover**

A tile that caps two inclined roof surfaces

Parts of flat roofs

A flat roof requires:

- A deck or slab
- A cement and sand screed that has the correct slope
- A water tight covering

8. Doors and Windows

There are different types of doors and windows, and are usually made of timber and steel, but other materials such as plastic or aluminium are also popular.

9. Sanitation Installations

- Pipe work
- Equipments
- Appliances
- Disposal – Above ground level and below ground level

10. Electrical Installations

- Cabling
- Switches, Socket outlets and Light points
- Appliances

11. Finishing

It is about the treatments that put on ceilings, walls and floors, and it includes:

- Plastering: the process of applying mortar on a wall to make it even surface
- Rendering: the process of applying mortar on a wall to give it different texture
- Painting: the process of applying pigmented liquid
- Floor finishes
- Wall tiling