



# **SNS COLLEGE OF TECHNOLOGY**

Coimbatore – 641 029

**An Autonomous Institution**



## **DEPARTMENT OF CIVIL ENGINEERING**

**19CE0302 – BYE LAWS IN BUILDING AND CONSTRUCTION**

**IV YEAR / VII SEMESTER**

**UNIT 1 :CLASSIFICATION OF BUILDING - BASED ON NATURE OF  
OCCUPANCY**



# UNIT 1 :FUNDAMENTALS OF BUILDINGS



1. Introduction – Classification of Buildings
2. Based on nature of occupancy
3. Based on fire resistance
4. Based on built in environment and naturality
5. Classification of residential buildings



# Building



*The building* is a kind of structure which is built with materials and including with foundation, plinth, walls, floors, roofs, chimneys, plumbing, and building services, fixed platforms, veranda, balcony, cornice or projection, part of a building or anything affixed thereto or any wall enclosing or intended to enclose any land or space and signs and outdoor display structures.

For example, houses, factories, shopping malls, hospitals, etc.



# Building Components



- A building has three basic requirements and components.
- They are
  1. Foundation
  2. Superstructure
  3. Roof

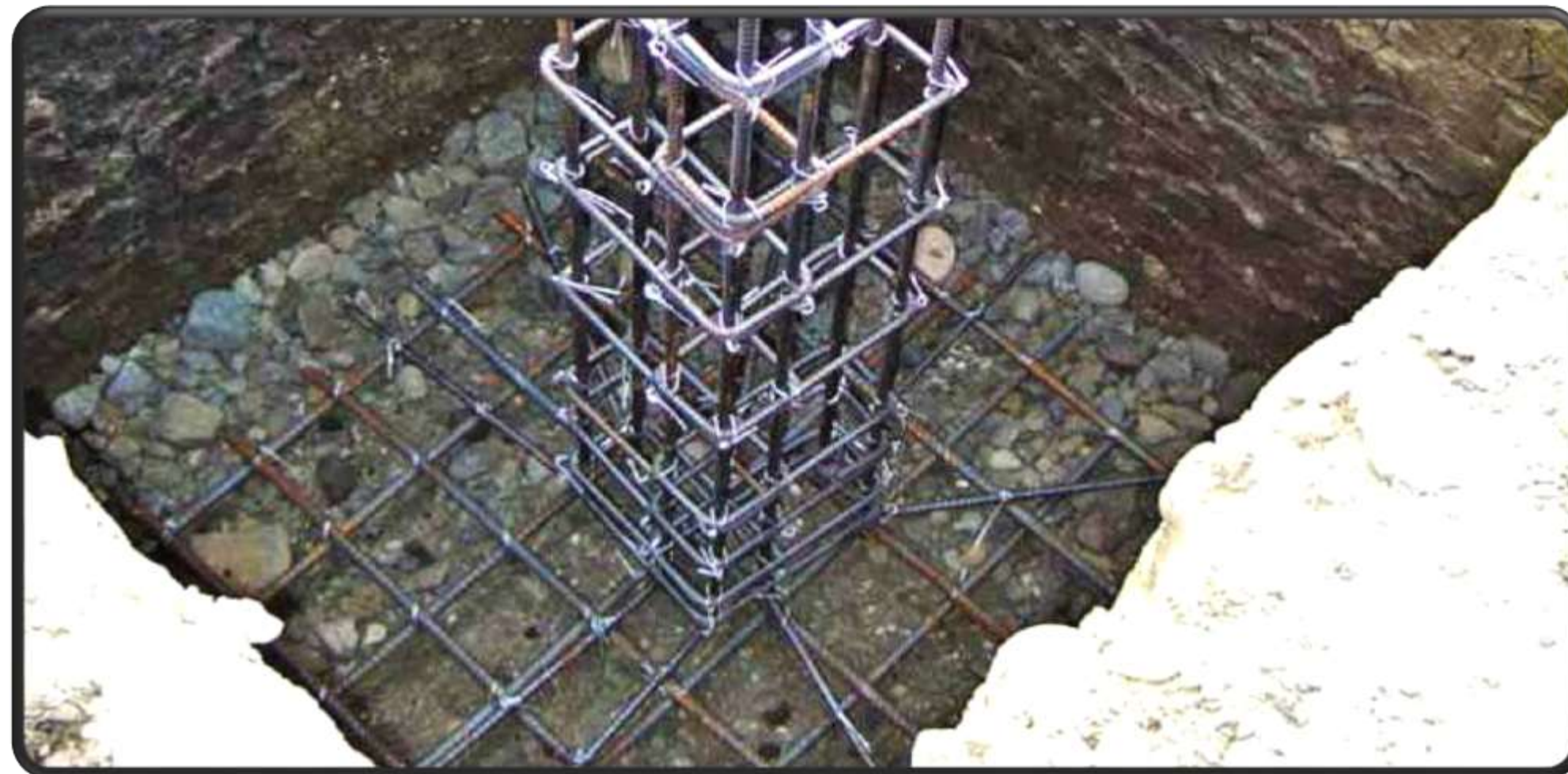


## Foundations

It is the bottom most part of a structure taken into the ground to get good anchorage and to form stable base for the structural elements to rest on.

### Functions of Foundations:

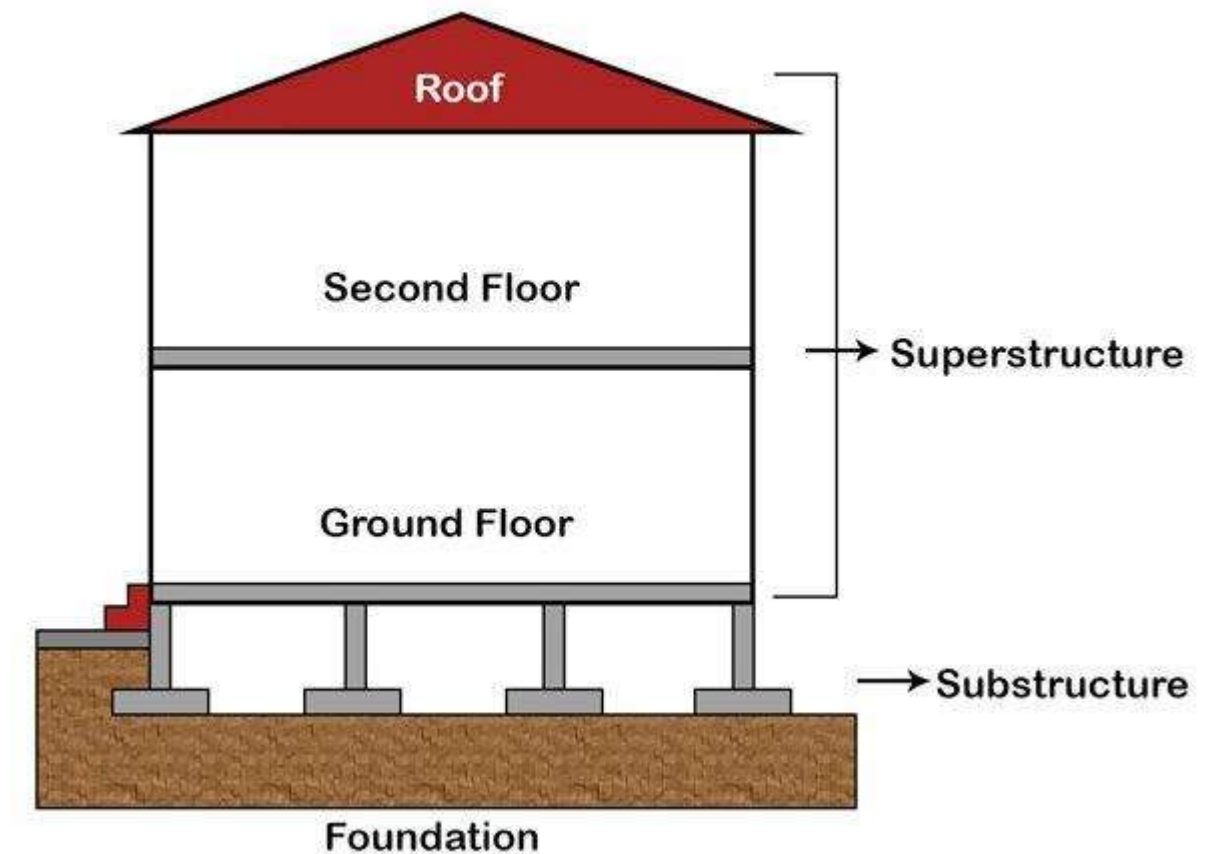
- Load distribution
- Provide firm and level surface
- Protection against soil movement
- Reduction of load intensity
- Reduction of differential settlement
- Safety against sliding and overturning
- Safety against undermining





## Superstructure

The Superstructure is constructed above the underground level. The location between the underground level and the ground level is known as the plinth. In this structure, walls and rooms are constructed and transfer loads from the upper part to the substructure.





## Roof

Roof is the uppermost part of the structure shielding it from the weathering elements like sun, snow and rain.





## Classification of building

- \*Based on nature of occupancy
- \*Based on fire resistance
- \*Based on built in environment and naturality





# Based on nature of occupancy



- Residential Building
- Educational Building
- Office Building
- Historical Building
- Industrial Building
- Recreational Building
- Institutional Building
- Commercial Building
- Hazardous Building
- Storage Building
- Assembly Building
- Public Building





## Residential Building

- The **buildings in which an individual or a family or a group of families** reside temporarily or permanently are referred as residential buildings such as flat, cottage, house, bungalow, etc.

## Educational Building

- The buildings in which education is imparted to the children are referred as Educational Buildings such as school, college, library, coaching center, etc.



## **Office Building**

- The buildings which are used for official purposes by any department such as Income Tax, Telegraph, Telephone, Public health referred as Office Buildings.

## **Historical Building**

- The buildings which indicate the historic importance are referred as Historical Buildings such as Lal Quila, Taj Mahal, Jama Masjid, Qutub Minar, etc.

## **Industrial Building**

- The Buildings used for producing industrial goods or products are referred as Industrial Buildings such as factories, workshops, etc.



## **Recreational Building**

- The buildings used for recreation purposes are referred as Recreational Buildings such as cinemas, clubs, swimming, pools, etc.

## **Institutional Building**

- The buildings constructed for the care of persons suffering from various diseases mental as well as physical are referred as Institutional Buildings such as hospitals, sanitararia, etc.

## **Commercial Building**

- The buildings used for business purposes referred as Commercial Buildings such as shops, stores, banks etc.



## **Storage Building**

- The buildings used for the storage of various products are referred as storage buildings such as cold storages, godowns etc.

## **Hazardous Building**

- The buildings used for the purposes of storage and handling of highly combustible materials are referred as Hazardous Buildings such as Building used for the storage of sulfur dioxide ammonia carbon dioxide etc,

## **Assembly Building**

- The buildings used for get together purposes are referred as Assembly Buildings such as Temples, townhalls mosque, etc.

## **Public Building**

- The buildings constructed in the interest of the public are referred as Public Buildings such as railway station, bus stands, airport etc.