

#### SNS COLLEGE OF TECHNOLOGY



#### AN AUTONOMOUS INSTITUTION

Approved by AICTE New Delhi & Affiliated to Anna University Chennai Accredited by NBA & Accredited by NAAC with "A+" Grade, Recognized by UGC

#### DEPARTMENT OF CIVIL ENGINEERING

#### 16GET102 – BASIC CIVIL & MECHANICAL ENGINEERING I YEAR / I SEMESTER

Unit 2: Civil Engineering Materials and Surveying

**Topic 1 : Super Structure – Brick Masonry** 



### Super Structure



The part of the building which is above the ground level is called super structure. This provides human comfort and Structural safety

#### **Components of Super Structure**

- Masonry
- Beams & Columns
- Roofing
- Lintel
- Doors and Windows
- Plastering
- Ventilators etc.,



### Masonry



Masonry is an art of construction in which brick or stone is bonded with mortar.

#### **Types of Masonry**

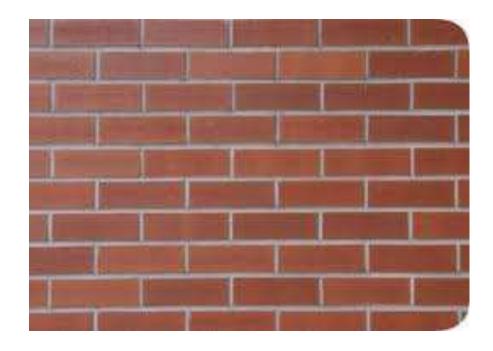
- Brick Masonry
- Stone Masonry



### **Brick Masonry**



Brick masonry is defined as the systematic arrangement of bricks, which are bonded together with mortar.





### Types of Bonds in Brick Masonry

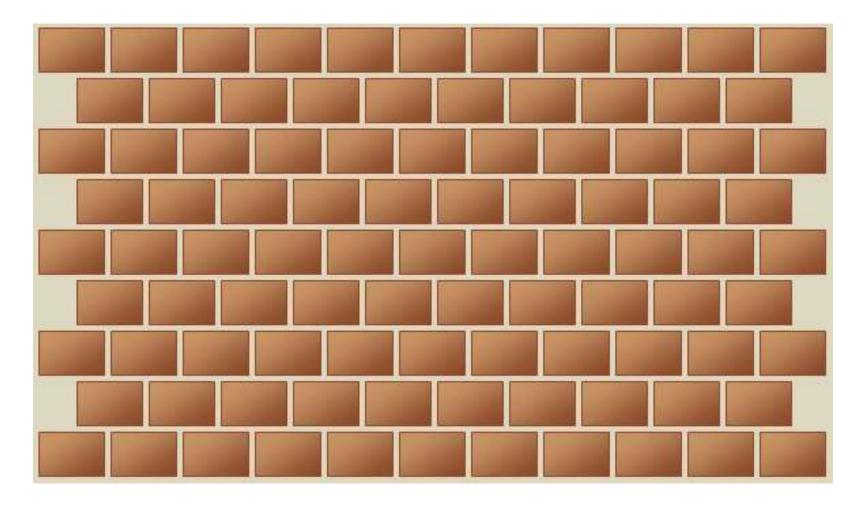


- 1. Header bond
- 2. Stretcher bond
- 3. English bond
- 4. Flemish bond
- 5. Raking bond (zig-zag & diagonal bond)



#### Header Bond

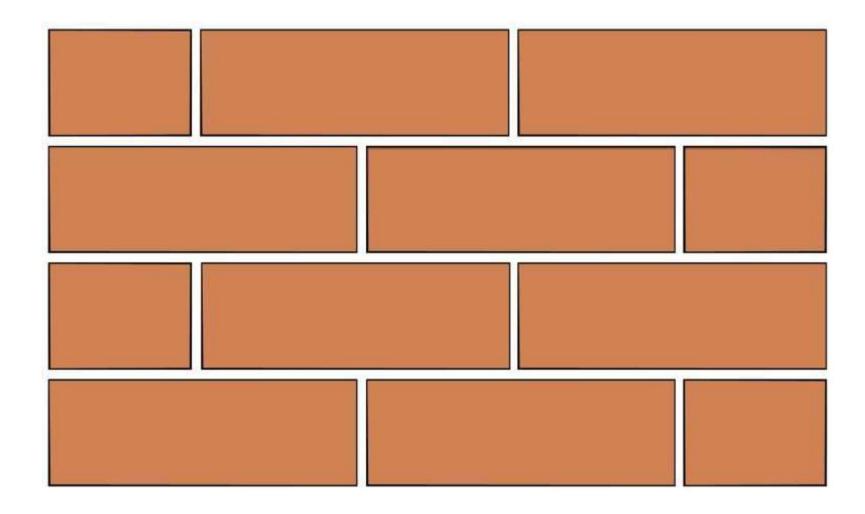






#### Stretcher Bond

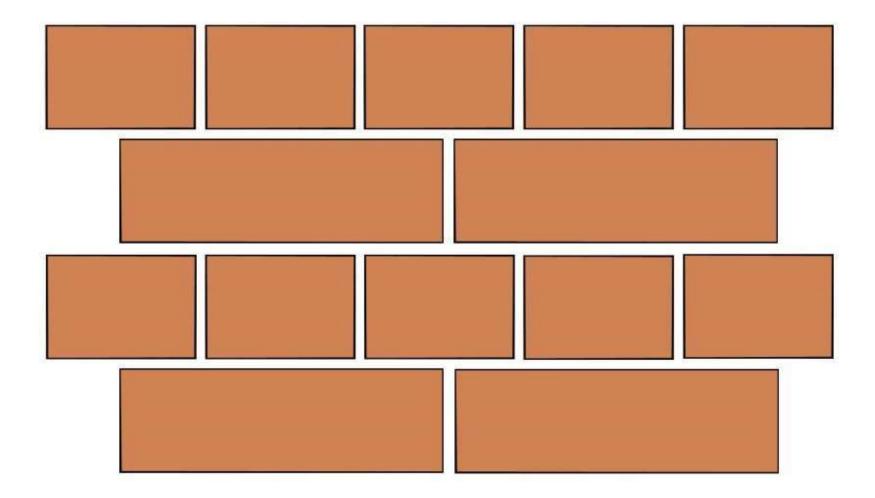






# **English Bond**

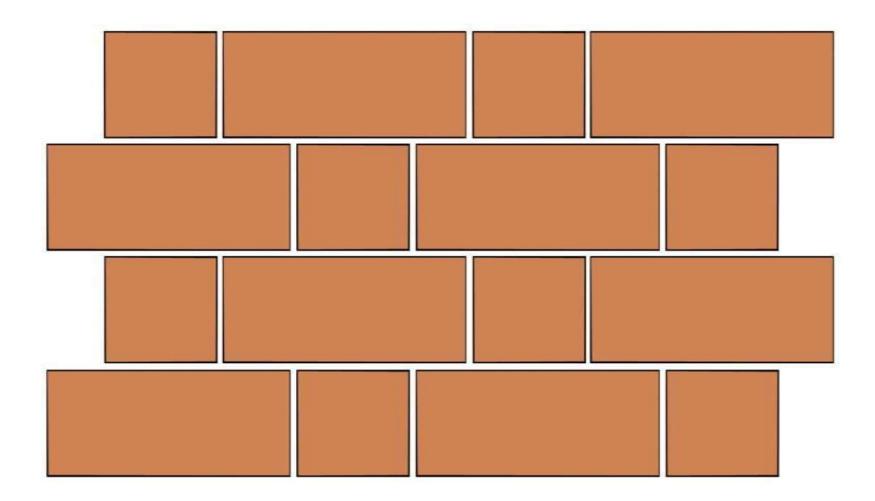






#### Flemish Bond

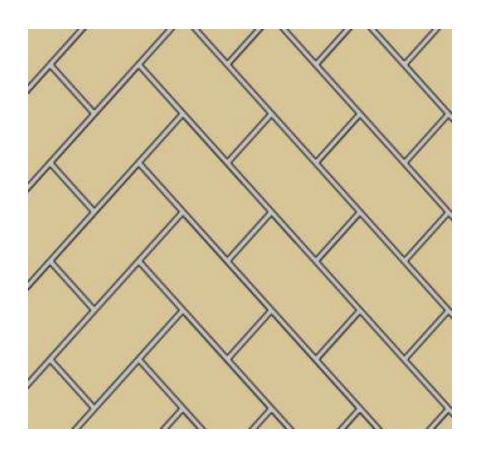


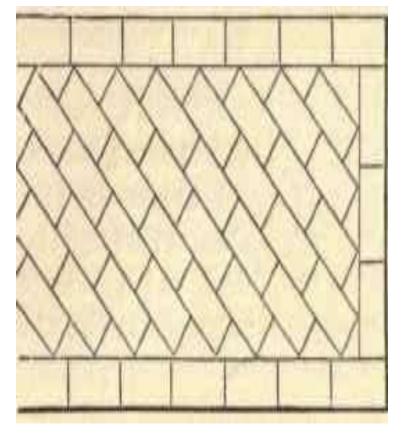




## Zig- Zag Bond











# Thank You!!