

Brick Masonry

This bond is weak in strength but it is economical Brick masonry is made up of brick units bonded together with mortar

Components of brick masonry

- Brick
- Mortar

Types of mortar

- Cement mortar
- Lime mortar
- Cement-lime mortar
- Lime surkhi mortar
- Mud mortar

Types of bricks

- Traditional bricks
- Modular bricks

Traditional bricks

It has not been standardize in size

Dimensions varies from place to place

Thickness varies from varies from cm to 7.5cm,widthvaries from 10to13 cm and length varies from 20to25 cm

Modular brick

Any brick which is the same uniform size as laid down by bis

The nominal size of the modular brick is 20cm x10cmx10cm

Actual size is 19x9x9

Classes of brick

- First class brick
- Second class brick
- Third class brick

Bonds in brick work

- Stretcher bond
- Header bond
- English bond
- Flemish bond
- Facing bond
- English crossing bond
- Brick on edge bond
- Dutch bond
- Racking bond
- Zigzag bond
- Garden wall bond

Stretcher bond

The length of the brick is along with the face of the wall\

This pattern is used only for those wall which have thickness of half brick

Header bond

The width of the bricks are thus along the direction of the wall

This pattern is used only when the thickness of the wall is equal to one brick

English bond

It is the most commonly used method this bond is considered to be the strongest

This bond consist of alternate course of stretchers and headers

Alternative courses will show either headers or stretchers in elevation

There is no vertical joint

Every alternative header come centrally over the joint between two stretchers in course in below

Since the number of vertical joint in the header course twice the number of vertical joints in stretcher course ,the joints in the header course are made thinner than the joints in the stretcher course

Flemish bond

In this type of course is comprised of alternative headers and stretchers

Types of Flemish bond

Double Flemish bond

Single Flemish bond

Double Flemish bond

Every course consist of headers and stretchers placed alternatively

The facing and backing of the wall in each course have the same appearance

Single Flemish bond

Single Flemish bond is comprised of double Flemish bond facing an English bond backing and hearting in each course

Facing bond

This bond is used where the bricks of different thickness are to be used in the facing and backing of the wall

The nominal thickness of facing brick is 10 cm and that of backing bricks is 9 cm the header course is provided at a vertical interval of 90 cm

English cross bond

This is the modification of English bond to improve the appearance of the wall
Brick on edge bond

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