



STONE MASONARY

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The art of building a structure in stone with any suitable masonry is called stone masonry.



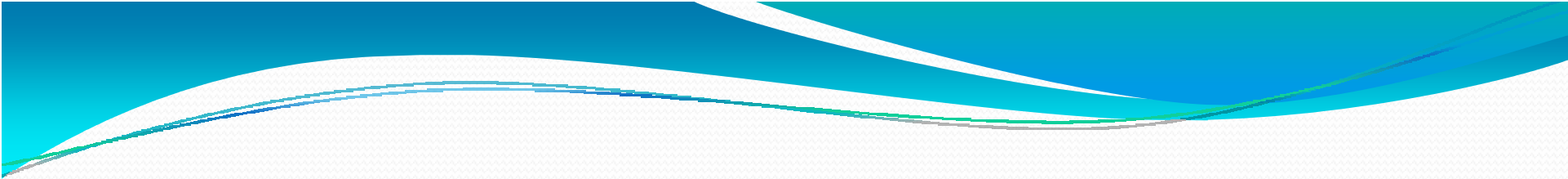
Types of Stone Masonry

- Stone masonry may be broadly classified into the following two types:
 - **Rubble Masonry**
 - **Ashlar Masonry**

Rubble Masonry

- The stone masonry in which either undressed or roughly dressed stone are laid in a suitable mortar is called rubble masonry.
- joints are not of uniform thickness.





Rubble masonry is further subdivided into the following three types:

- **Random rubble masonry**
- **Squared rubble masonry**
- **Dry rubble masonry**



Random rubble masonry

- The rubble masonry in which either undressed or hammer dressed stones are used is called random rubble masonry.

Further random rubble masonry is also divided into the following two types:

- 1) **Un coursed random rubble masonry**
- 2) **Coursed random rubble masonry**



Squared rubble masonry

- The rubble masonry in which the face stones are squared on all joints and beds by hammer dressing or chisel dressing before their actual laying, is called squared rubble masonry.

There are two types of squared rubble masonry.

- **Coursed Square rubble masonry**
- **Un coursed square rubble masonry**



Dry rubble masonry:

- The rubble masonry in which stones are laid without using any mortar is called dry rubble masonry or sometimes shortly as "dry stones". It is an ordinary masonry and is recommended for constructing walls of height not more than 6m. In case the height is more, three adjacent courses are laid in squared rubble masonry mortar at 3m intervals



Ashlar masonry

- The stone masonry in which finely dressed stones are laid in cement or lime mortar is known as ashlar masonry. In this masonry the courses are of uniform height, all the joints are regular, thin and have uniform thickness. This type of masonry is much costlier as it requires dressing of stones.

Ashlars masonry is further sub divided into the following types:

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 - Ashlars fine or coarse ashlar masonry
 - Random coarse ashlars masonry
 - Rough tooled ashlar masonry
 - Rock or quarry faced ashlars masonry
 - Chamfered ashlars masonry
 - Block in coarse masonry
 - Ashlar facing



Ashlar fine or coursed ashlar masonry:

- In this type of stone masonry stone blocks of same height in each course are used. Every stone is fine tooled on all sides. Thickness of mortar is uniform through out. It is an expensive type of stone masonry as it requires heavy labor and wastage of material while dressing. Satisfactory bond can be obtained in this type of stone masonry.



Random coursed ashlar masonry

This type of ashlar masonry consists of fine or coursed ashlar but the courses are of varying thicknesses, depending upon the character of the building.



Rough tooled ashlar masonry

- This type of ashlar masonry the sides of the stones are rough tooled and dressed with chisels. Thickness of joints is uniform, which does not exceed 6mm.



Rock or quarry faced ashlar masonry

- This type of ashlar masonry is similar to rough tooled type except that there is chisel-drafted margin left rough on the face which is known as quarry faced



Chamfered ashlar masonry

- It is similar to quarry faced except that the edges are beveled or chamfered to 45° for depth of 2.5 cm or more.



Block-in course masonry

- It is the name given to a class of ashlar masonry which occupies an intermediate place between rubble and ashlar. The stones are all squared and properly dressed. It resembles to coursed rubble masonry or rough tooled ashlar masonry.



Ashlar facing

- Ashlar facing is the best type of ashlar masonry. Since this type of masonry is very expensive, it is not commonly used throughout the whole thickness of the wall, except in works of great importance and strength. For economy the facing are built in ashlar and the rest in rubble.