

MATERIAL L2 ,TOPIC 4 (MANSORY UNITS)

UNIT 1

CLAY BRICKS MANUFACTURING PROCESS

Clay is the main raw material used to manufacture clay bricks .

PROCESS OF MAKING CLAY BRICKS CAN BE DONE IN THE FOLLOWING STEPS.

STEP NUMBER1

PREPARATION OF CLAY.

- bricks are then usually made on or near the area where the clay is found.
- mixing of material , removal of large stones ,roots and crushing of large particles.
- trucks or conveyor systems are used to move the clay from the clay quarry or clay pit , to the processing plant where the bricks are made

STEP NUMBER 2

MOULDING

- ▶ IT MEANS A LUMP OF MIX IS TAKEN, ROLLED IN SAND AND SLAPPED INTO THE MOULD.
- ▶ CLAY IS PRESSED INTO THE MOULD TO COMPACT THE CLAY BY FORCING OUT ANY TRAPPED AIR.

STEP NUMBER 3

DRYING.

- ▶ Bricks are then packed onto pallets or trolleys, and are transported to a drying area . here the bricks are either sun-dried or are mildly heated to remove most of the moisture before the bricks are fired.
- ▶ Or we take the bricks in the trolley to clear space and we place them on the ground . then we cover the bricks with empty sacks to protect them from the sunlight which will crack them , and reduce their quality . then after 1 to 2 days bricks which are already dried are made into a big stack.
- ▶ Or bricks kept to the sun 3 to 4 days

STEP NUMBER 4

FIRING OR BURNING.

- ▶ The firing process usually creates bricks of varied colour , texture and strength . the reason is that bricks are fired in stacks . This means that the bricks on the outside of the stack will receive the most heat, while those in the middle of the stack will receive the least heat.
- ▶ The bricks that receive more heat will be stronger because they have been vitrified to a higher degree , but in extreme cases , they will be weaker because of warping and cracks that formed.
- ▶ Bricks that receive more heat will also be darker than the other brick