



Department of Civil Engineering

Event Title	Subject lecture on Building materials - II yr		
Objective of Event	The clay is made loose and any ingredient to be added to it , is spread out at its top. The blending indicates intimate or harmonious mixing. It is carried out by taking a small		
Chief Guest /Speaker Details	Dr.T. FELIX KALA, JR & Professor, Department of Civil Engineering, Dr.M.G.R. Educational and Research Institute		
Date	08/11/2024	Time	10.00 AM to 12.00 PM
Venue	Civil Smart Room	No. of Participants	50

REPORT

TITLE

BUILDING MATERIALS

CONTENT

The clay is made loose and any ingredient to be added to it , is spread out at its top.

The blending indicates intimate or harmonious mixing. It is carried out by taking a small

amount of clay every time and turning it up and down in vertical direction. The blending

makes clay fit for the next stage of tempering.

Tempering: In the process of tempering, the clay is brought to a proper degree of hardness

and it is made fit for the next operation of moulding .Kneaded or pressed under the feet of

man or cattle .The tempering should be done exhaustively to obtain homogeneous mass of

clay of uniform character.For manufacturing good bricks on a large scale, tempering is done

in pug mill.A typical pug mill capable of tempering sufficient earth for a daily output of

about 15000 to20000 bricks.

A pug mill consists of a conical iron tub with cover at its top .It is fixed on a timber



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base
which is made by fixing two wooden planks at right angle to each other. The bottom of tub is covered except for the hole to take out pugged earth. The diameter of pug mill at bottom is about 800mm and that at top is about 1 m. The provision is made in top cover to place clay inside pug mill. A vertical shaft with horizontal arms is provided at center of iron tub. The small wedge-shaped knives of steel are fixed at arms. The long arms are fixed at vertical shaft to attach a pair of bullocks. The ramp is provided to collect the pugged clay. The height of pug mill is about 2m. Its depth below ground is 600mm to 800mm less than the rise of the barrow run and to throw out the tempered clay conveniently. In the beginning, the hole for pugged clay is closed and clay with water is placed in pug mill from the top. When vertical shaft is rotated by a pair of bullock, the clay is thoroughly



EVENT OUTCOME

Students quips professionals to design and construct sustainable, energy-efficient buildings using advanced materials and technologies. It emphasizes environmental impact, safety, and innovative solutions to urban and habitat challenges.



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PHOTOS



Mr. D.Ramakrishnan