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(57) Abstract :

The present invention is a unique eco-friendly construction material Manufacture of Red Mud and Waste Foundry Sand Based Sustainable Brickswhich symbolizes the unceasing reality of innovations in the construction industry. The invention relates to using of Red mud and Waste foundry sand for producing bricks suitable for structural walls. The objective of the present invention is to provide a sustainable brick which is a value addition building material to the construction industry. The present invention presents a method of preparing bricks using Red mud (RM) and waste foundry sand (WFS) without the use of clay or cement and the firing process. The bricks produced are of comparable strength to the standard brick and are also more economical as a walling material.The method involves a way of preparing these sustainable bricks in ambient temperatures, eliminating the need for Kiln firing them. The invention therefore is designed to circumvent the conventional use of depleting natural resources such as clay. The brick produced achieves the dual purpose of the reduction of carbon foot prints and the effective usage of hazardous waste materials. The novel feature of the invention is the blending of different types of industrial byproducts in brick production at ambient temperature improving the structural properties of the bricks. Such bricks enhance structural durability and reduce energy bills.

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