

Comparative Analysis of Physical and Mechanical Properties of Various Masonry Bricks

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Abstract: *This project looks into and compares the physical and mechanical properties of seven types of masonry units: clay brick, fly ash brick, Porothersm brick, three-hole brick, interlock brick, solid block, and AAC (Autoclaved Aerated Concrete) brick. The study looks at three main factors: compressive strength, water absorption, and density. These are important for figuring out how long bricks will last and how well they will work in different types of construction. We used standard lab methods to test each type in the same way. According to the results, solid blocks showed high compressive strength, while AAC bricks showed low density and high water absorption. Interlocking and porotherm bricks demonstrated a good weight-to-strength ratio. The selection of suitable masonry units based on structural requirements, environmental conditions, and material efficiency is made easier by this comparative analysis.*

Keywords: masonry units

