

QUALITY CLASIFICATION OF RED BRICKS in DUMAI CITY

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ABSTRACT

Red clay brick is one of the building materials that is still widely used in construction work, especially as a wall masonry material. The quality of bricks greatly affects the strength, stability, and durability of a building. Therefore, testing is necessary to determine the quality of the bricks used so that they comply with applicable construction standards. Differences in raw materials, molding processes, and firing processes can affect the quality of the bricks produced. The tests carried out include visual appearance, size and dimensions, bulk density, water absorption, suction rate, and compressive strength of the bricks. The test results are then compared with the applicable standard, namely SNI 15-2094-2000 concerning solid red bricks for wall masonry. This research is expected to provide information regarding the quality of red bricks in Dumai City and serve as a consideration in selecting construction materials that meet quality standards. In addition, the results of this study are also expected to become a reference for further research related to red brick materials.

Keywords: red brick, physical properties, mechanical properties, compressive strength, water absorption, SNI 15-2094-2000.