

Rathmalana, Sri Lanka | 12<sup>th</sup>. December 2024

## **DETERMINATION OF APPLICABILITY CLAY FROM THE ABANDONED TILE FACTORY YATIIYANA, MATARA, SRI LANKA FOR A WALL TILE DESIGN**

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**Abstract:** Many clay tile factories face abundance and underutilization due to newer alternatives. However, sustainable wall tile alternatives are regenerating these factories by repurposing their materials and revitalizing production lines. This approach not only revitalizes the factories but also addresses environmental concerns by promoting natural materials. By utilizing abundant clay resources, these factories can meet the rising demand for eco-friendly building materials, preserving traditional craftsmanship and supporting sustainable urban development efforts. This rebirth signifies a blend of innovation and tradition, fostering a more sustainable future for construction practices. This is an attempt to search for alternative eco-friendly wall tiles for decorative purposes with clay's strength and artistic properties. Five approaches were made to change the mix design of cement and clay percentage. The cement content started at 2.5% and increased by 2.5% for each mixture, while the clay percentages were adjusted accordingly relative to the cement content. This differs from traditional clay tiles as it does not undergo any firing process; instead, the method involves compacting the materials. The standard tests were done to identify the optimum most practical mixture. The results obtained revealed that the optimum mixture of the proposed decorative wall tile can be produced by using clay 87.5% with cement 12.5% by weight together

**Keywords:** Repurposing, Alternatives, Clay, Compacting, Mix design