

## **Abstract**

The lack of utilization of building debris as *Recycled* material for building construction in Bandung makes it challenging for demolition crews to find proper disposal *sites* for the rubble. Consequently, a considerable amount of building debris is discarded in the Kabupaten Bandung area, leading to additional *Costs* for transporting the building debris. Despite numerous researchers discussing the potential of rubble as a *Recycled* material for building construction, the resulting bricks are often unable to withstand high loads. This research aims to explore the potential of rubble as a raw material for making rosters. In theory, this may be feasible due to the similar concrete mix characteristics. The research methodology employed is qualitative, as described by Ramdhan in 2021, characterized by descriptive nature and tendency to use analysis. The study utilizes the design thinking method to discover a suitable design for rubble utilization. The resulting design is tested using the *Velux daylight visualizer software* to assess its impact on lighting and *Autodesk CFD* to examine airflow around the product. The product's strength is evaluated using the Universal *Testing Machine (UTM)*. The objective is for this product to serve as an alternative building material, contribute to *green design* principles, and enhance the value of rubble.

Keywords: Building debris, Recycling, Roster, Concrete