

Research Title	The Research and development lightweight clay brick by mixing waste powder from marble industry
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The objective of this study were recycling of powder from marble industry waste to improve properties of lightweight clay bricks. The amount of powder from marble industry waste added to lightweight clay brick were varied by 10, 20, 30, 40 % by volume, and variation of firing temperature by 900, 1000, 1100 °C. The results showed that more content of powder from marble industry waste was added, the higher values of porosity and water absorption was observed, in contrast to the reduction of thermal conduction and bulk density. The increase in firing temperature affected the decrease of porosity and water absorption, for powder from marble industry added 40% and firing temperature 900 °C the best properties as 1.20 g/cm³ of bulk density, 9.2 MPa of compressive strength, 0.32 W/mK of thermal conductivity, and 23.5 % of water absorption