

Manufacturing Commercial Bricks with Construction and Demolition Wastes

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Abstract : This paper reports utilization of different kind of construction and demolition wastes (C&D) in the production of bricks at industrial scale. Plastered brick waste and tile wastes were collected from İSTAÇ Co. Compost and Recovery Plant, Istanbul, Turkey. Plastered brick waste and tile waste are mixed with brick clay in the proportion of 0-30% and fired at 900°C. The physical and mechanical properties of the produced bricks were determined and evaluated according to İKİZLER Brick Company Production values, Brick Industry Association (BIA) and Turkish Standards (TS). The resulted showed that plastered brick waste and tile waste can be used to produce good quality brick for various engineering applications in construction and building. The replacement of brick clay by plastered brick waste and tile waste at the levels of 30% has good effects on the compressive strength of the bricks.

Keywords : commercial brick, construction and demolition waste, manufacturing, recycling

Conference Title : ICWMEEE 2016 : International Conference on Waste Management, Ecological and Environmental Engineering

Conference Location : Prague, Czechia

Conference Dates : March 30-31, 2016