

Results Analysis of the Synergistic Effects of Copper Slag and Rice Husk Ash in Geopolymer Concrete

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Abstract: *Since unreinforced masonry (URM) constructions are susceptible to earthquakes, methods and materials for reinforcing and restoring them need to be developed. Nevertheless, several of the current URM retrofitting methods' materials and the waste they produce at the end of their useful lives are not sustainable. Environmental issues have persisted as a result of the massive global carbon footprint caused by the production of ordinary Portland cement (OPC). Geopolymers, which are more environmentally benign and sustainable than PPC, offer a viable replacement for OPC in these issues. In engineering cementitious composites (ECC), geopolymers can take the place of the OPC component, which is advised in order to reinforce and repair URM structures. The most recent advancements in our understanding of the use of geopolymers in URM constructions are covered in this publication.*

Keywords: Ordinary Portland Cement, Geopolymer, Engineering Cementitious Composites, Unrein-Forced Masonry, Strengthening; Restoration