

Use of Fine Marble in Concrete Based On Sand Dune

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Abstract : In the development that our country has in all areas and especially in the field of Building and Construction, the development of new building materials is a current problem where researchers are trying to find the right materials for each region and returning cheapest countries. Enhancement of crushed sand and sand dunes and reuse of waste as additions in concrete can help to overcome the deficit in aggregates. This work focuses on the development of concrete made from sand, knowing that our country has huge potential in sand dune. This study is complemented by a review of the possibility of using certain recycled wastes in concrete sand, including the effect of fines (marble powders) on the rheological and mechanical properties of concrete and sand to the outcome optimal formulation. After the characterization phase of basic materials, we proceeded to carry out the experimental program was to search the optimum characteristics by adding different percentages of fines. The aim is to show that the possibility of using local materials (sand dune) for the manufacture of concrete and reuse of waste (marble powders) in the implementation of concrete.

Keywords : sand dune, mechanical properties, rheological properties, fine marble

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