

## Use of Fine Recycled Aggregates in Normal Concrete Production

**Authors :** Vignesh Pechiappan Ayyathurai, Mukesh Limbachiya, Hsein Kew

**Abstract :** There is a growing interest in using recycled, secondary use and industrial by product materials in high value commercial applications. Potential high volume applications include use of fine aggregate in flowable fill or as a component in manufactured aggregates. However, there is much scientific, as well as applied research needed in this area due to lack to availability of data on the mechanical and environmental properties of elements or products produced using fine recycled aggregates. The principle objectives of this research are to synthesize existing data on the beneficial reuse of fine recycled materials and to develop extensive testing programme for assessing and establishing engineering and long term durability properties of concrete and other construction products produced using such material for use in practical application widely. This paper is a research proposal for PhD admission. The proposed research aims to supply the necessary technical, as well as practical information on fine recycled aggregate concrete to the construction industry for promoting its wider use within the construction industry. Furthermore, to disseminate research outcomes to the local authorities for consideration of use of fine recycled aggregate concrete in various applications.

**Keywords :** FRA, fine aggregate, recycling, concrete

**Conference Title :** ICCEGE 2015 : International Conference on Civil, Environmental and Geological Engineering

**Conference Location :** London, United Kingdom

**Conference Dates :** July 25-26, 2015