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The Main Reasons for Construction Contractors' Reluctance to Use Polymeric Concrete

Seved Javad Alamdar

Lecturer Department of Civil Engineering and Architecture, Islamic Azad University, Torbate Heydarieh Branch alamdar.javad@yahoo.com

Mohsen Raei

B.S. candidate of civil engineering, Islamic Azad University, Torbat-e Heydarieh Branch raei.mohsen@yahoo.com

Abstract

Currently employing new technologies such as polymers, besides making changes in other technologies and industries have created a significant impact on the construction industry. The developed industrial countries by using this technology accomplished remarkable achievements in production of polymeric products, such as polymeric concrete. Of the main advantages of polymeric concretes over the normal ones are high strength, withstanding compressive strains, flexural and tensile strength (several times), long life, improved resistance to abrasion, hit, climate change, chemical factors, destructive environmental /industrial factors, less water absorption, and less property loss .But what has placed the construct contractors' willingness to use polymer concretes in an aura of ambiguity is the existence of setbacks, such as the contractors' ideology of traditional construction, the owners and employers' lack of sufficient awareness of the benefits of this industry, the relatively high initial cost for mass production of the concrete as well. This paper attempts to investigate the challenges and obstacles facing the widespread use of this technology in construction industry; moreover, to present scientific and practical strategies for overcoming theses problems. The research methodology is based on library studies and personal referring to active contracting companies in this field. It is hoped that, the results of the study will open up new horizons for construction practitioners to use polymeric concrete technology more efficiently.

Keywords: Polymer concrete, Construction Industry, New Technologies.

