

Abstract

There are two things that must be considered in the manufacture of concrete for the structural strengthening, there are the criteria of acceptance of concrete and the unit price of the concrete itself. The criteria of acceptance are the criteria that must be met by the concrete in terms of strength, workability and shrinkage and the unit price is refers to materials, wages and tools. This research examines the structural strengthening cost analysis using reactive powder concrete. This study uses reactive powder concrete to compare with conventional mortar grouting as a strengthening material in concrete jacketing method. The result of the research shows that the total unit cost of structure strengthening with concrete jacketing method using reactive powder concrete is cheaper than using conventional mortar grouting, the cost for structure strengthening using reactive powder concrete is affected by the work effective time and the water cement ratio.

Keywords: *reactive powder concrete, unit price, structure strengthening.*