

Judul Paper :

“From Micro to Macro, The Weakening Effect of The Interface Transition Zone to The Structure”

The screenshot shows the website interface for the GSTF Journal of Engineering Technology (JET). At the top, there is a navigation bar with links for HOME, ABOUT, LOGIN, SEARCH, and ARCHIVES. Below this, the breadcrumb trail reads "Home > Vol 2, No 1 (2013) > Han". The main content area displays the author's name, "Ay Lie Han, Purwanto .", followed by the section heading "Abstract". The abstract text describes research conducted at Diponegoro University, focusing on the development of an FEM program to analyze the influence of the Interfacial Transition Zone (ITZ) between aggregates and mortar in concrete. It notes that the ITZ has a substantial weakening effect on the ultimate strength and stiffness modulus of concrete, particularly in the presence of high water-cement ratio (w/c), bleeding, and a water film around the aggregates, which leads to a decrease in ITZ quality. The study was further expanded to analyze this weakening effect in a two-story building, finding that the condition of the ITZ significantly influences the overall performance of the structure.

Not secure | <https://dl6.globalstf.org/index.php/jet/article/view/765>

GSTF Journal of Engineering Technology (JET)

HOME ABOUT LOGIN SEARCH ARCHIVES

Home > Vol 2, No 1 (2013) > Han

Ay Lie Han, Purwanto .

Abstract

Research conducted at the Diponegoro University resulted in the development of an FEM program for analyzing the influence of the Interfacial Transition Zone (ITZ) between the aggregates and the mortar, in concrete. It was shown that indeed, the ITZ has a substantial weakening effect to the ultimate strength and stiffness modulus behavior of concrete. High w/c, bleeding and the presence of a water film surrounding the aggregates, resulted in a decrease of the ITZ quality. The study was further expanded to analyze this weakening effect to a twostory building. It was found that the condition of the ITZ considerably influences the overall performance of a structure.

OPEN JOURNAL SYSTEMS

[Journal Help](#)

USER

Username

Password

Remember me

NOTIFICATIONS

- [View](#)
- [Subscribe](#)

JOURNAL CONTENT

Search

Search Scope