

Finite element modelling of high-strength fibre reinforced concrete columns under eccentric loading

Zaid Al-Azzawi*

College of Engineering, University of Anbar, Iraq Email: zaid.kani@uoanbar.edu.iq

*Corresponding author

Salah Talib Nimnim

College of Engineering, University of Kufa, Iraq Email: salah.alkhazaali@uokufa.edu.iq

Shamil K. Ahmed

College of Engineering, University of Anbar, Iraq Email: shamil.kamil83@gmail.co

Abstract

This paper presents a numerical finite element model simulating the behaviour of high-strength fibre reinforced concrete columns under monotonic eccentric loading. The results of the numerical model in this study show very good agreement with the experimental part of the investigation which was presented previously in a separate paper. In addition to the ultimate capacity, lateral deflection and axial shortening are taken into consideration in the finite element model.