

AN ABSTRACT OF A THESIS

THERMO-MECHANICAL ASSISTED MOISTURE DIFFUSION

Avinash B Veerasha

Master of Science in Civil Engineering

Moisture transport kinetics of internal curing water is being investigated. An analysis of equation that governs thermo mechanical assisted moisture diffusion has been studied using finite element method. Finite element equation was formulated in general co-ordinates and later on specialized to cylindrical coordinates. A working FORTRAN developed was capable of analyzing temperature diffusion, moisture diffusion, and stresses in the material. Computed results are presented in form of contour and line plots.