

**EXPERIMENTAL INVESTIGATION OF EFFECTIVENESS OF RECRON
FIBER ENCASED IN NON WOVEN GEOTEXTILE GEODRAIN FOR THREE
DIMENSIONAL CONSOLIDATION**

Bhoomi A. Kamdar

Asst. Professor, parul university

Nitin H. Joshi

Associate professor

Applied Mechanics Department, M.S. University of Baroda

Radial consolidation by vertical geodrain is one of the most popular ground improvement technique. This extant paper discuss the technique of ground improvement with use of recron fiber encased with non woven geotextile to form circular vertical geodrain and consolidate soft clay mass using inward radial drainage. The efficacy of this geodrain is examined in accelerating rate of consolidation and to compare degree of consolidation using settlement and pore pressure computations. The consolidation parameters were obtained using hydraulically pressurized Oedometer with central geodrain of 'n' value 10. The efficacy of drain is accessed in terms of degree of consolidation based on isochrones obtained for light loading and construction loading. The results indicate that recron fiber with non woven geotextile vertical geodrain is moderately effective in accelerating the rate of pore pressure dissipation and thus compressibility and hence proved to be an efficient drain for field application.