International Journal of Civil, Structural, Environmental and Infrastructure Engineering Research and Development (IJCSEIERD)
ISSN(P): 2249-6866; ISSN(E): 2249-7978
Vol. 4, Issue 2, Apr 2014, 97-102

EXPERIMENTAL PERFORMANCE OF FLEXURAL BEHAVIOR OF FERROCEMENT SLAB UNDER GRADUAL LOADING

SIDRAMAPPA DHARANE & ARCHITAMALGE

Department of Civil Engineering, SVERI'S College of Engineering Pandharpur, Mumbai, Maharashtra, India

ABSTRACT

Experimental flexural behavior of ferrocement slab and RCC slab was studied. Fourteen slab panels were casted and tested for gradual loading. The first cracking load and collapse load along with the deflections were measured during the test for every increment of gradual load. It was found that the first cracking load depends upon the specific surface of the reinforcement. Also the behavior of ferrocement slab found to be more ductile as compared to RCC slab designed for same moment of resistance. The theoretical moment of resistance by using IS method and Hongestad's method were found and the results were compared with RCC slab. The efficiency ratios at cracking and collapse were found. The flexural behavior of ferrocement slabs were found superior to RCC slab.

KEYWORDS: Ferrocement, RCC, Slab, Gradual Loading, Flexural Behavior