



STRUCTURAL PERFORMANCE OF CONCRETE SLABS REINFORCED BY SPECIALLY SHAPED HIGH-STRENGTH BARS

Author(s): **Danda Li¹, Xing Ma²**

Volume: **XII**

No: **1**

Pages: **1-11**

Date: **January 2015**

Abstract:

This paper addresses structural performance of concrete slabs reinforced with a new type of specially shaped high-strength steel rebar. Because of its high strength and good bonding property with concrete, concrete members reinforced by the new rebar type are supposed to be of superior mechanical properties. To investigate the flexural behaviour of the specially reinforced concrete members, four one-way and one two-way slabs with a span length of 3 m (10 ft) each were tested in the structural laboratory at Tongji University, China. Experimental results verified that the slabs reinforced with special rebar type indicated higher load capacity, thinner cracks and better ductility as compared to the slabs reinforced with normal steel rebars.

For full paper, contact:

Prof Muhammad Masood Rafi

Editor-in-Chief, NED University Journal of Research

Ph: +92 (21) 99261261-8 Ext: 2413; Fax: +92 (21) 99261255

Email: NED-Journal@neduet.edu.pk

Website: <http://www.neduet.edu.pk/NED-Journal>

¹ PhD Student, School of Natural and Built Environments, University of South Australia, Adelaide 5095, Australia, Ph. 61 8 8302 3761, Fax: + 61 8302 5082, Email: danda.li@unisa.edu.au.

² Senior Lecturer, School of Natural and Built Environments, University of South Australia, Adelaide 5095, Australia, Ph. + 61 8 8302 3109, Fax: + 61 8302 5082, Email: Xing.Ma@unisa.edu.au.