عنوان مقاله:

PARAMETRIC STUDY OF DUCTILITY IN REINFORCED CONCRETE CROSS-SECTIONS

محل انتشار:

دومین کنفرانس بین المللی بتن و توسعه (سال: 1384)

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خلاصه مقاله:

The paper presents the analytical study of different parameters influencing ductility of RCC cross-sections. The study also includes the experimental work on determination of the mechanical properties of reinforcing bars produced in Pakistan. Parametric study is limited to the cross-sectional analysis of rectangular RCC sections subjected to flexural stresses only, for which software has also been developed. Ductility, so far has not been quantified precisely, but some factors may lead to prediction of ductile nature of a cross-section, subsequently leading to its suitability for use in RCC. Proposed Ductility Index (DI) may give a fair idea about the ductility of RCC section predominantly subjected to flexural deformations. The parametric study of ductility has been carried out and their influence on the Ductility Index has been discussed. Effect on DI because of mechanical properties of locally manufactured reinforcing bars was also studied.

کلمات کلیدی:

ductility, parametric analysis, ductility index