

GUIDE TO AUTHORS - PAPERS

DEADLINE:

Please submit your paper in .doc Word format for peer review by Friday 11 September 2009.

SIZE:

Your paper should be presented in A4, and ideally should not be more than 5-7 pages in length. **ALL margins (top, bottom, left and right) should be 30mm.** **ALL** text, figures and tables, must fit into blocks 150mm wide by 240mm long.

PRESENTATION:

Conference secretariat staff will not be in a position to re-type manuscripts, so please proof read your paper carefully. Responsibility cannot be accepted by the Secretariat for any errors in your printed paper. Every effort should be made to avoid hand printing or sketching of figures, diagrams, equations and tables. Photographs should be unscreened black and white prints pasted into the correct location when paper is submitted. Figures, graphs and tables should be included in the text and as close as possible to the text which refers to each particular item.

TITLE PAGE:

The first page of your paper should contain:

- a. The title of your paper;
- b. Names, titles, qualifications, affiliations & email details;
- c. A summary (abstract) of the papers contents of not more than 150 words.

Please see attached for a sample Title Page.

REVIEW:

Your paper will be submitted for review by two experts from the field in which the material was written. Should any editorial changes be required you will be notified.

TEXT:

Text should preferably be Times New Roman 12 point or equivalent, justified both left and right. Words or phrases requiring emphasis may be underlined or typed in **bold** or *italics*.

SPACING:

Lines should be single spaced. A single line space should be left between paragraphs.

HEADINGS:

Headings should be typed in bold capitals with a blank space of one line left above and below. Headings should not be underlined.

FORMULAE:

Mathematical formulae should be tabulated five spaces from left border and have a reference number justified right.

NUMBERING:

- 1 **Headings and sub-headings** should be numbered for ease of reference.
- 2 **Simple headings** for paragraphs also help the reader locate information quickly.
- 3 Figures, graphs and tables should be numbered consecutively and captioned.

REFERENCES:

References should be in alphabetical order. The list should appear at the end of the paper in the following form:

Butler, B. and Hutchinson, G. (1999) Can seismologists and engineers communicate through a cracked URM interface, Engineering earthquakes Vol 1, No 1, pp 1-5.

Lam, N. and Wilson, J., (2001) If seismologists cannot predict earthquakes why not leave it to engineers? J Imag Science, Vol 99, pp 1-2.

EDITORIAL STYLE:

For consistency please note the following:

- a. Use “s” rather than “z” in “ise” words;
- b. Use metric SI units only; i.e. m and mm, kN and Mpa;
- c. Use * to indicate footnotes at the bottom of the page;
- d. Quotes from other published work should be enclosed within single ‘quotation’ marks

Estimation of Yield Curvature for Direct Displacement-based Seismic Design of RC Columns **(Times New Roman 18pt)**

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Abstract

Significant research efforts have been devoted in recent years to the development of displacement-based seismic design methodologies, recognizing the shortcomings of traditional, code-specified force-based design procedures. Recent advances in direct displacement-based seismic design of columns rely on the estimates of yield curvature for the determination of seismic design forces to satisfy the specified seismic performance levels. This paper presents simple expressions for estimating the effective yield curvature for normal- and high-strength circular reinforced concrete (RC) columns based on moment-curvature analyses of a large number of column sections. Such expressions can be programmed into the spreadsheet format and can be used for the displacement-based design of RC columns. Influence of different parameters on the effective yield curvature has also been quantified. Effective yield curvature is presented in terms of the gross diameter of the section and the yield strain of the longitudinal reinforcement together with three modification factors that take into account the effects of the compressive strength of concrete, the axial load ratio and the quantity of longitudinal reinforcement.

Keywords: seismic, design, yield, curvature, displacement, performance