

RESPONSE TO THE EDITOR'S COMMENTS

The author is very grateful to the Editors and Associate Editors for the kind consideration and possible publication of our article in the European Journal of Environmental and Civil Engineering. The authors would like to thank all the reviewer(s) for suggesting improvements for the manuscript. Point-wise reply/answer to each comment is provided below (comments are shown in BOLD, answers are shown in REGULAR and modifications/added lines are shown in RED COLOR). All suggestions have been addressed, but still if reviewer(s) have any other point/reservation, the authors are happy to incorporate. Furthermore, the authors are very thankful and appreciate the associate editors and reviewers for the timely handling of review process. The revised paper is provided in both formats (with Track Changes and Final version).

REVIEWER 1

| Sr. No. | Questions with answers | Clarification made or Changes Incorporated |
|---------|--|--|
| 1 | <p>1. The abstract should be totally written, such that to be shorter and present a summary of all the parts of the paper including the results and achievements.</p> <p><i>The reviewer is thanked for the suggested improvement, which has been made in the revised paper.</i></p> | YES |
| 2 | <p>2. The English need to be improved. For instance, see the last sentence in Page 1.</p> <p><i>The reviewer is thanked for the indicated corrections, which have been made in the revised version of the paper. Furthermore, the manuscript is re-visited for English writing improvement.</i></p> | YES |

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| 3 | <p>3. The sentences are lengthy in many parts of the paper.. Understanding of such sentences is hard.</p> <p><i>The reviewer is thanked for the suggested improvement, which has been made in the revised version of the paper.</i></p> | YES |
| 4 | <p>4. In Page 3, a two story frame is considered representative of hospitals, shopping malls, and schools. With attention to different geometry and loadings of these three types of buildings, more explanation regarding the representative frame is essential.</p> <p><i>The reviewer is thanked for the suggestion improvement, which has been made in the revised paper. For the kind information, the RC frames studied in the present research are representative of commercial and public buildings. Because construction of hospital, plazas, schools etc., is carried out using RC frames.</i></p> | YES |
| 5 | <p>5. The caption of Fig. 3 should include the explanations under the several figures in Fig. 3. (Similar problem also exist in Figs . 5 and 6)</p> <p><i>The reviewer is thanked for the suggested improvement, which has been made in the revised paper.</i></p> | YES |
| 6 | <p>6. An additional lines seems existing at the end of the caption of Fig. 4.</p> <p><i>The reviewer is thanked for pointing to this, the second line describe the fitting shown in the plot.</i></p> | Comments are provided herein to clarify the author's intention. |
| 7 | <p>7. The numbers in Figs. 5-7 are too small to be read.</p> <p><i>The reviewer is thanked for the suggested improvement, which has been made in the revised paper.</i></p> | YES |
| 8 | <p>8. Some legend should express the meaning of blue and red colors in Figs. 5-7</p> <p><i>The reviewer is thanked for the suggested improvement, which has been made in the revised paper.</i></p> | YES |

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| 9 | <p>9. It is not clear which seismic code is under consideration, neither from the text nor from the references.</p> <p><i>The reviewer is thanked for the suggested improvement, which has been made in the revised paper.</i></p> | YES |
| 10 | <p>10. I could not find any thing new in the paper even after reviewing the "Conclusions" section.</p> <p><i>The reviewer is thanked for pointing to this. The authors have investigated deficient RC frames having weaker beam-column joints. The authors have derived force reduction factor and displacement amplification factor for RC frames with weaker joints. These parameters are not available for the considered structures in the available literature. Further, the authors have developed and applied a simplified static force-base procedure for seismic analysis and vulnerability assessment of similar like structures. The proposed procedure and the derived seismic response parameters will enable engineers for the preliminary vulnerability assessment of RC frame structures having weaker beam-column joints. This clarified also in the revised manuscript.</i></p> | Comments are provided herein to clarify the author's intention. |