

## ***Interactive comment on “Earthquake safety analysis of masonry historical building case study: Historical Konya Gazi High School” by M. Sami Donduren and Seyit Uguz***

### **Anonymous Referee #3**

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The paper in consideration is intituled “Earthquake safety analysis of masonry historical building case study: Historical Konya Gazi High School”. The main purpose was to proceed to a numerical analysis of a historical masonry building, Konya Gazi High School, in Turkey, in order to evaluate the structural seismic performance. In term of scientific contents, the importance and relevance of studies addressing structural assessment of existing building subject to seismic events are evident. In general, the text needs significant editing by a native speaker. Even, in some parts of the text, namely, in tables and figures, the text is not in English. In terms of technical contents, the different modelling approaches in masonry buildings (micro/macro modelling), the differentiation between static/dynamic analyses types, the assumption of a linear and

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non-linear behaviour, are addressed in the paper scope. However, the text does not completely clarify what type of analysis was adopted. The explanation of the options taken is essential to fully understand the work presented. From a perspective of the practical application, as mentioned by the authors, the reference to recommendation and standards concerning assessment of existing buildings in seismic risk zones is crucial. The authors point out some criteria defined in the FEMA 356 - Prestandard and Commentary for the Seismic Rehabilitation of Buildings. However, in the opinion of this reviewer, the analysis of the results could be further explored and analysed, namely, in terms of standard limits. A solution to improve the observed structural behaviour should be also proposed and analyse. Furthermore, the comparison with the European standard - Eurocode 8: Design of structures for earthquake resistance - Part 3: Assessment and retrofitting of buildings - could enrich the work presented.

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