

# Seismic vulnerability assessment methodology for historical buildings with cultural value

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## ABSTRACT

Banat seismic region represents the second most important seismic area of Romania. The area is characterised by shallow earthquakes, with a peak ground acceleration  $a_g=0.20g$  [1]. The city was influenced by several architectural styles, keeping until nowadays many valuable masonry historical buildings.

Most of the historical buildings present severe decay due to the lack of proper maintenance over time. Timisoara was selected to be European Capital of Culture 2021, so the buildings in the historical districts are expected to be visited by a large amount of tourists.

This paper presents the seismic vulnerability assessment of two of the most important historical urban districts of Timisoara. The evaluation is based on existing Italian vulnerability assessment methodology [2], following on-site investigation. Moreover, there is considered also the influence of the cultural value of the historical buildings. Following a set of new proposed architectural-artistic, urbanistic and social-economic factors, there was developed a new investigation form, presented and explained in the paper [1].

In the end, the authors present a detailed empirical seismic vulnerability assessment influenced by the cultural value for historical masonry buildings in Timisoara city, Romania.

This study could help the local authorities to realise prioritization lists for rehabilitation work, considering first the historical buildings that are the most important for the local community identity. The cultural value and the history of a city must be well known and promoted.

## REFERENCES

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