

Engineered Aseismic Masonry Veneers

(Aseismic-Resisting the Destructive Forces of Earthquakes)

David Allen¹

Abstract*:

With a total population less than that of Philadelphia and about that of San Francisco, New Zealand is a country of acknowledged seismicity, a reality well reflected in the building regulations. Unreinforced veneers are restricted in height and are domestic in scale. About a quarter of the existing housing stock displays brick, either in whole or in part. The provisions of NZS 3604:1984[1] allow rule-of-thumb veneers to be laid up to within an arbitrary height limit of 4 metres, effectively a single storey. There is a latent demand for two-storey continuous cavity brick veneers, to be fixed to timber framing. To date, the degree of aseismic design expertise required, hampered by the lack of suitable wall ties and coupled with the additional effort necessary to access building permit approvals, have precluded such uses except for isolated instances. With the issuance of NZS 4210:1989[2] and the introduction of the La Palte flexible tie connector, this situation has been transformed. Utilizing the rules for materials and the guidelines for workmanship contained in this Code of Practice, two-storey designed timber structures supporting full height continuous cavity aseismic veneers can now be built to rational engineering standards. One such project is the topic of this article.

**Note that older issues of The Masonry Society Journal did not require abstracts. The excerpt above has been extracted from the introduction of the article by the Editors.*

To purchase full article: Please use this direct link to purchase the TMS Journal Volume of this article, Volume 8, Issue 2: <https://masonrysociety.org/product/tms-ejournal-vol-8-no-2/>

Otherwise, consider becoming a TMS member for full access to all TMS Journal articles: <https://masonrysociety.org/membership/#join>

DOI: 10.70803/001c.142894

¹Technical Consultant, Auckland, New Zealand