

Structural Testing of Single-Storey Post-tensioned Concrete Masonry Walls

Peter T. Laursen¹ and Jason M. Ingham²

Abstract:

In-plane response of post-tensioned concrete masonry walls with unbonded tendons is examined by means of structural testing. A brief description of the University of Auckland wall testing programme is followed by a presentation of the results from structural testing of six fully grouted walls, one partially grouted wall and one ungrouted wall. Discussion of the results is concerned with wall structural response in terms of flexural strength, shear strength, displacement capacity, tendon stress and masonry vertical strain.

To purchase full article: Please use this direct link to purchase the TMS Journal Volume of this article, Volume 19, Issue 1: <https://masonrysociety.org/product/tms-ejournal-vol-19-no-1/>

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

DOI: 10.70803/001c.142720

¹ PhD. Student, Department of Civil and Resource Engineering, University of Auckland, Private Bag 92019, Auckland, New Zealand.

² Cement and Concrete Association Lecturer, Department of Civil and Resource Engineering, University of Auckland, Private Bag 92019, Auckland, New Zealand.