

MSJC Deep Beam Requirements

Fernando Fonseca¹, Sunup Mathew², and Richard M. Bennett³

Abstract:

The theory used for the design of slender beams has a limited applicability to deep beams, resulting in designs that are generally not conservative. Shear warping of the cross section and a combination of diagonal and flexural tension stresses in the body of a deep beam require that deep beam theory be used for the design of such members. The Masonry Standards Joint Committee (MSJC) has recently proposed a definition of deep beams as well as design provisions and requirements, which were approved by appropriate committees and by the public. The provisions have been incorporated in the 2011 Building Code Requirements and Specification for Masonry Structures. This article describes in detail the MSJC new deep beam requirements.

To purchase full article: Please use this direct link to purchase the TMS Journal Volume of this article, Volume 29, Issue 1: <https://masonrysociety.org/product/tms-ejournal-vol-29-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.138533

¹ TMS Member, Associate Professor, Brigham Young University, Department of Civil & Environmental Engineering, Provo, UT, ffonseca@et.byu.edu

² TMS Member, Director of Technical Services, Interstate Brick Company, West Jordan, UT, Sunup.Mathew@paccoast.com

³ TMS Member, Professor and Director of Engineering Fundamentals, The University of Tennessee, Department of Civil & Environmental Engineering, Knoxville, TN, rmbennett@utk.edu