The Effect of Slenderness and End Restraint on the Behavior of Masonry Prisms – A Literature Review

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Abstract:

This literature review provides a summary and discussion of results from a number of past projects investigating the effects of prism slenderness and platen end restraint on the compressive behavior of masonry test prisms. The importance of accurately describing compressive strength and behavior for use in a limit states design methodology is emphasized. Results from literature are in general agreement, showing a distinct relationship between masonry prism slenderness and compressive strength. A low slenderness ratio leads to an artificial shear failure, with a higher apparent strength than the characteristic tensile splitting mode. A minimum of 4 courses of masonry is recommended for masonry test prisms to obtain an accurate representation of masonry compressive behavior.

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