

## Damage Assessment and Repair for Older Brick Buildings

**Authors :** Tim D. Sass

**Abstract :** The experience of engineers and architects practicing today is typically limited to current building code requirements and modern construction methods and materials. However, many cities have a mix of new and old buildings with many buildings constructed over one hundred years ago when building codes and construction methods were much different. When a brick building sustains damage, a structural engineer is often hired to determine the cause of damage as well as determine the necessary repairs. Forensic studies of dozens of brick buildings shows an appreciation of historical building methods and materials is needed to correctly identify the cause of damage and design an appropriate repair. Damage on an older, brick building can be mistakenly attributed to storms or seismic events when the real source of the damage is deficient original construction. Assessing and remediating damaged brickwork on older brick buildings requires an understanding of the original construction, an understanding of older repair methods, and, an understanding of current building code requirements.

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