# EERI Policy Statement

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## Mitigation of Nonstructural Hazards in Schools

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Students should be kept safe from injury from falling nonstructural items in school buildings in regions with high and moderate earthquake hazard.

**Background**

Nonstructural hazards pose a great risk to students, staff and visitors in schools during earthquakes. Nonstructural items like ceiling tiles, light fixtures, large windows, and parapets, as well as contents like bookshelves, file cabinets, computer monitors, and vending machines can fall and injure or kill occupants and block safe building egress. In the 1994 earthquake in Northridge, California, light fixtures weighing up to 80 pounds each fell on students' desks in approximately 100 classrooms. Had the earthquake occurred during school hours, many students would have been injured. In addition to the safety risk, the performance of nonstructural components has a disproportional effect on the recovery time of any school building.

In many cases, reducing the falling hazard of contents, and even some nonstructural items, is inexpensive and can be completed by facility staff or volunteers. This is an important and relatively easy first step for schools to take when working to identify, prioritize, and mitigate their earthquake risks.

**Needed Action**

Legislatures, school districts, and school boards in regions with high and moderate seismic hazard should:

1. Establish programs to identify, prioritize, and mitigate nonstructural and contents hazards in schools.
2. Establish funding mechanisms, financial assistance, and incentives to finance mitigation of nonstructural and contents hazards.
3. Require nonstructural anchoring and bracing of potential falling hazards to ensure safe egress from schools after earthquakes.
4. Prioritize anchoring and bracing of recovery-critical nonstructural components to ensure acceptable recovery of normal school functions.

Further considerations for safe schools should include a screening to assess the structural integrity of the school building, retrofit or replacement of school buildings found to be vulnerable to earthquake shaking, and creating community resilience plans that align and prioritize mitigation efforts. Because schools support a range of community functions, and because a return to normalcy requires the return of schoolchildren to safe and functional schools, an emphasis on nonstructural components and contents is consistent with EERI's related Policy Position on Creating Earthquake-Resilient Communities.

More information on this policy statement can be found on the full policy white paper:
https://www.eeri.org/wp-content/uploads/eeri-policy-nonstructural.pdf

Information on EERI's Public Policy and Advocacy efforts, including other policy statements at:
https://www.eeri.org/advocacy-and-public-policy/