

HAZARD ALERT

BRICK WALL COLLAPSES DURING MANUAL DEMOLITION

A cracked brick wall that was separating from a building was scheduled for demolition. Two workers removed the top sections of the 11-foot wall with hand tools. They pried the wall's lower sections away from the building. This allowed them to lean the sections into the buildings before cleaning up debris on the ground. As they cleaned, a wall section fell on one of the workers and knocked him to the ground. He broke two vertebrae and chipped a bone in his knee.

When using hand tools such as jackhammers, sledge hammers and picks during demolition or salvaging operations, workers must use proper sequences that start from the top of the structure. Masonry and brickwork should be taken down in reasonably even courses and demolished in reverse order of construction.



Recommended Preventive Action

- Ensure workers are trained on safe demolition methods before starting.
- Ensure that any asbestos containing materials or other toxic, flammable or explosive materials are properly identified and dealt with before doing any work.
- Ensure the work is supervised by (a) competent person(s).
- Ensure a written code of practice is prepared and is appropriate for the demolition method to be used.
- Ensure that the procedure is sequential and specific for the site.
- When removing entire wall sections using manual demolition methods that incorporate hand tools, such as jackhammers, sledge hammers and picks, avoid weakening the wall by:
 - Never taking down multiple rows of brick at once or starting at the bottom of the wall.
 - Removing the top course of bricks using a hammer and chisel.
 - Finishing an entire row before starting the next.
- When removing a portion of a wall where masonry will remain above the opening (to install a door or window, for example), the upper area of masonry should be supported before demolition begins and should start at the top of the intended opening.
- Establish exclusion zones to keep unauthorized people outside of potential collapse zones and areas affected by rebounding material.
- Employers must provide and employees must wear personal protective equipment (PPE) as required by sections 39 to 50 of General Regulation 91-191.
- Employees must not work from the top of a wall that is being demolished.
- Do not allow a wall to stand unless it is effectively supported against collapse. This includes checking whether the wall to be demolished provides support for other walls.