



# Demo dangers

## Knowledge is the key to staying safe during demolition

**Accident:** An ironworker for a steel erection company was performing demolition work on a hollow block wall inside a building. An opening had been cut in the wall for a doorway, leaving 16 inches on either side, and leaving the header beam suspended without support. After noting that a nearby train track was producing building vibration, the company attempted to stabilize the header with epoxy and lumber supports. Prior to installation of the channel posts, the worker began to remove the lumber to minimize the risk of fire when welding the posts. The entire channel iron header assembly broke loose, falling on his head and shoulders. Because the assembly weighed approximately 4,000 pounds, a jack was necessary to remove the beam from the victim. He died several days later from blunt force head trauma.

**The bottom line:** An investigation determined the contractor did not consult with the engineer who designed the structural support system, and therefore was unaware the changes made were not compatible with the demolition plan. The investigation also determined the boards were of an unusual size, unmarked and securely fastened, so the victim could have concluded the lumber was an architectural detail that could safely be removed.

**Know what you're getting into** – When performing demolition on a structure, it's crucial to have access to the building's design plans before beginning work. Your employer will have a demolition plan on hand; make sure the actions you are performing are compatible with the plan.



Illustration by Don Lomax

**Note inconsistencies** – If you see something you don't expect on the site – in the decedent's case, it was wood affixed to the edge of a masonry wall – don't try to figure out the situation yourself. Although any temporary shoring system should be approved and marked, don't assume it always will be. Contact the foreman or call the office before you do something that can't be undone.

**Overcommunicate** – In this accident, employees were concerned enough about the vibration from the railroad tracks to put in the support system. However, that information never got to the victim, who viewed the lumber as a fire hazard. Ask to see the job order form the general contractor to verify the work actually to be performed and to confirm you're taking the appropriate course of action. **EW**

*Information for this Safety Watch came from an actual accident, OSHA and the Fatality Assessment and Control*

*Evaluation Form from the Center for Disease Control's NIOSH. It is for general information purposes only.*