



Table Top Training Drills

Table Top Training Exercise-March 2012

Buildings with Cellars and Basements

Response areas and districts vary, but also have many similarities. Most areas have older buildings, residential and commercial occupancies, and even lightweight construction. Some buildings have had fire department inspections and pre-plans and yet others have not. Some buildings have cellars and/or basements and yet again, others do not. When a building is involved with fire and the condition of the building deteriorates, the danger of collapse, whether localized or overall, should always be considered. In Report [09-094](#), units are operating in the cellar of a commercial/residential building and after extinguishment, it was noted that the integrity of the first floor was compromised. The report is listed below:

Event Description

We were operating at a basement fire of a small store which was on the 1st floor of a tenement building. The store was closed and shuttered with roll-down gate. Initial line entered the store after the truck company forced entry. The first due truck located the fire in the basement and the first due engine extinguished the fire. During subsequent overhaul and wash down, it was noted that several exposed joists supporting the 1st floor were severely rotted and cantilevered. In addition to a number of joists that had severe charring, the 1st floor of the store had a 4" concrete poured floor and was covered with terrazzo tile. Subsequent research revealed an anonymous complaint to the building department for the above condition. The complaint was cleared by the building department as "No Cause."

Lesson Learned

This particular building was built in 1907. This, coupled with illegal alterations, continue to make for extremely dangerous conditions for members. Whenever possible, members should make note of cellar supports and 1st floor conditions which could very well lead to collapse. Fortunately, this fire occurred at a time which allowed it to be discovered and extinguished before it had time to burn, weaken further, and lead to collapse. In a situation like this, the local unit should call the chief to the scene and pictures should be taken with the digital camera of the rotted/cantilever beams. These pictures should be shown to all responding units. If the situation is imminently perilous to life, consider a partial vacate of the premise along with a memo to all 1st due units. It should be stressed to ladder companies, that part of their examination of the building should always include a check of the cellar below the fire and the condition of the structural supports. This examination should include floors, joists, and columns.

This report highlights the dangers that are ever present in the structures in which units operate. Far too many injuries and fatalities have occurred, don't let history repeat itself. The [National Fire Academy](#) has developed a [special training bulletin](#) that deals specifically with cellar and basement fires and the importance of pre-plan inspections.