

Preventing Injuries and Deaths of Fire Fighters due to Truss System Failures

WARNING!

Fire fighters may be injured and killed when fire-damaged roof and floor truss systems collapse, sometimes without warning.

Fire fighters should take the following steps to minimize the risk of injury and death during structural fire-fighting operations involving roof and floor truss systems:

- Know how to identify roof and floor truss construction.
- Immediately report the presence of truss construction and fire involvement to the incident commander.
- Use extreme caution and follow standard operating procedures when operating on or under truss systems.
- Immediately open ceilings and other concealed spaces whenever a fire is suspected of being in a truss system:
 - Use extreme caution, as opening concealed spaces can result in a backdraft.
 - Always have a charged hose line available.
 - Be positioned between the nearest exit and the concealed space to be opened.
 - Be aware of the location of other fire fighters in the area.

- Understand that fire ratings may not be truly representative of real-time fire conditions and that truss systems' performance may be affected by fire severity.



Figure 1. Typical lightweight truss construction. (Photo courtesy of Vincent Dunn.)

