

LOADS

Load is a force or other actions that result from the weight of all building materials, occupants and their possessions, environmental effects, differential movement, and restrained dimensional changes. (NFPA 5000 Building Construction and Safety Code)

- Often Firefighters fail to recognize loads and how the effect a building, especially when the building is on fire.
- There many types of loads that apply to the building, however this drill with be about three major types that a firefighter can contribute to:

DEAD LOADS

LIVE LOADS

IMPACT LOADS

Dead Load is the weight of the building itself and any equipment permanently attached or built in.

Dead load is also known as self-weight.



Photo courtesy of www.vententersearch.com

Live load is any load other than dead loads.

Added Live Load: such as air conditioners, firefighters, hoses, and water. When using master streams keep in mind the added load.

A master stream at 600gpm will add 25 tons to a structure in 10 minutes.



Photo courtesy of www.Firefightersclosecalls.com

Impact Loads: Loads which are delivered in a short time.

- The pulsating flow from a master stream can cause collapse more readily than a steady, evenly applied load.
- **ALWAYS sound the roof before stepping on it, your IMPACT Load may be your last step!**