The Fire Equipment Manufacturers’ Association is a group of leading fire protection manufacturers working together to educate the public about fire prevention to save lives and reduce property damage. Member companies manufacture top quality fire protection products, such as portable fire extinguishers, fire/smoke alarms, fire hose systems, fire suppression systems, and interior equipment – all necessary components of a complete and balanced fire protection plan.

To receive more information on any of the above products or on designing your own balanced fire protection plan, contact FEMA at 216-241-7333 or visit our web site at www.yourfirstdefense.com.
Statistics show that most fatalities and property damage caused by structure fires occur after the first critical minutes. These incidents can be avoided if the fire is fought immediately. How is this possible? Only through a complete and balanced approach to fire protection that targets the fire from the inside out during the first few minutes. These initial minutes determine the path a fire will take – from a single flame to a fatal tragedy. To avoid the worst, industry and building professionals need to focus on designing a balanced fire protection plan – the first line of defense against fire before the fire department arrives.

The number of structure fires over the years remains consistent. That is why it is more important than ever to ensure that once a fire begins, all systems are in place to contain the initial flames while occupants exit safely.

The National Fire Protection Association (NFPA) requires that every building or structure be designed, constructed, and maintained to protect occupants who are not intimate with the initial fire development for the time needed to evacuate, relocate, or defend in place. This can only be achieved with a balanced fire protection plan. Here are the basic components:

- Design and construction of building, to include: exit ways, standpipe fire protection stations, fire hose racks, fire walls, etc.
- Emergency lighting and EXIT signs
- Portable fire extinguishers
- Fire/smoke alarms
- Fire suppression systems
- Fire sprinkler systems
- Education and training

When fires are Extinguished in the early stages:

Loss of life is minimal. 93 percent of all fire-related deaths occur once the fire has progressed beyond the early stages.

Direct property damage is minimal. 95 percent of all direct property damage occur once the fire has progressed beyond the early stages.

Source: 1991-1995 NFIRS study

According to the NFPA, a successful balanced fire protection plan should be designed so that reliance for safety to life does not depend solely on any single safeguard. Multiple safeguards shall be provided for life safety in case any single safeguard is ineffective due to inappropriate human actions or system failure.
The Chain of Survival

The illustrated chain of survival demonstrates how safety to life does not depend on any single safeguard – they must all work together within a balanced fire protection plan to save lives and protect property.

1. Fire department is notified; everyone is safe via evacuation plan
2. Defend in place with on-site fire equipment
3. Fire/smoke alarms sound
4. Suppression system activates
5. Sprinkler system activates
6. Fire department responds
Designing Your Own Balanced Fire Protection Plan

**Step 1:** Whether you are working with a new or existing structure, first assess the fire protection safeguards that currently exist. Once inventory has been taken, consult with local code officials to determine the codes and standards for which you are responsible.

**Step 2:** When establishing a balanced fire protection plan, begin as early as when the occupancy is constructed. The architect involved should design fire protection into the original floor plan.

**Step 3:** Once the balanced fire protection plan has been designed, the next step is to obtain the fire equipment and consult with local fire officials and equipment manufacturers to ensure proper placement and installation.

**Step 4:** Following installation, all fire protection equipment will require ongoing maintenance by competent fire equipment service personnel.

**Step 5:** Training is an integral step in any balanced fire protection plan. Occupants must understand where emergency exits are located, as well as proper use of on-site, defend-in-place fire equipment.