



## Israeli Association of Fire Protection NFPA-IL Annual Conference Building Height: Challenges and Safety Risks

Damages from fire have impacted life and property from the earliest communities and civilizations. The oldest investigation was a fire in a fishing village on the Sea of Galilee 23,000 years ago. The investigation found what tools and food the residents had and used. Occasionally significant fires in fishing villages occurred, possibly due to cooking within straw huts.

Fires continued to impact villages and settlements as their populations grew, such as a fire in Rome in 64 AD. Later a fire began in a bakery in London in 1666, leading to the destruction of 13,000 homes; 100,000 city residents became homeless as a result of this fire. The Great Fire of Chicago in 1871 was started by an oil lamp in a barn and destroyed much of the city. Fires like these made it necessary to find ways to prevent future fires.

The NFPA was established by insurance representatives to minimize damages from fire in 1896. 120 years later, the association has 65,000 members from 90 countries throughout the world and writes hundreds of codes and standards in all aspects of construction. Many countries adopt NFPA codes and standards, including here in Israel.

The fire safety organization's effect in the world is significant. In the US alone the number of fires in buildings has decreased to half between 1977 and 2011. Accounting for population growth in these years, the property damage has decreased by over 60%.

The Israeli Association for Fire Protection, the NFPA-IL, was established to enhance existing efforts to reduce fire's damage to life and property in Israel. We hope to bring together all parties within the field because we believe a joint organization will enrich the level of knowledge and help us achieve the organization's purpose.

Expensive real estate in city centers leads to the construction of huge buildings to even higher heights. At this leading construction conference we chose to present very diverse aspects of fire safety challenges in tall buildings. The potential harm to person and property in these skyscrapers is very high. The challenge of proper protection for those in the building has necessitated more complex engineering and architectural aspects. We have chosen the best professors to present on this subject.

We will start with a lecture by architect **Professor Moshe Tzur, CEO and owner Moshe Tzur Architect Planners**. This presentation discusses the change in the Tel Aviv skyline as an example of the accelerated process of building up in Israel and around the world.

We will examine the impact of a plane hitting a building built to the Israeli standards and see if the building damage is similar to what happened in the collapse of the Twin Towers in September 2001. An interesting response will be provided for all who attend the conference.

Engineer **Israel David, CEO and owner of David Israeli Engineers**, will examine the impact of a plane that hit a building built according to Israeli standard and see whether the damage to the building so similar to what happened in the collapse of the Twin September 2001 in New York. His answer is interesting and will be provided to all who join the conference.

Smoke management in a multi-story building is complex and requires knowledge and experience from the planning, construction, maintenance and other systems. **Shmuel Netanel's** lecture will review the complexity of smoke management systems in a building. In addition to building heights, building depth below grade must be considered: In many high-rise apartments today there may be basements of 7 or 8 floors below ground. This too makes fire safety complex.

**Senior chief Ayal Caspi, commander of the Central District Israel Fire and Rescue Services**, discusses methods for fire and emergency response of a fire in a high-rise building and the potential such an event will result in human casualties and property damage.

**Senior chief Chaim Tamam, head of Fire Safety and Investigation** will present the upcoming changes in the implementation of revisions to planning and building regulations.

Without a doubt, this series of lectures is important for all fire safety professionals. Mr. Don Bliss - Vice President of International Operations at the NFPA has come specifically for the conference and will honor us with his presence.

I invite you to be active members of this planned function of the fire protection association.

On this occasion I would like to thank the founding team who worked diligently to establish this great project. May the association's goals be achieved!

See you at the conference!