



TECHNICAL UPDATE

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THE RISK OF CANDLES IN OFFICE BUILDINGS

In the context of office buildings, the comfort and charm of an open flame transforms into a significant hazard. The risks associated with candles in such settings are too substantial to ignore, making their prohibition a necessary measure to protect property and lives.

THE DANGERS OF OPEN FLAMES

Candles, despite their benign appearance, are open flames. They pose inherent risks, particularly in environments filled with combustible materials such as paper, electronics, and various office supplies. A small flame can quickly escalate into a full-blown fire, leading to catastrophic consequences. The primary danger is the potential for a candle to accidentally ignite nearby materials, which can happen through direct contact or radiant heat.

FIRE STATISTICS AND SAFETY CONSIDERATIONS

Fire statistics underscore the severity of the risk. According to the National Fire Protection Association (NFPA), from 2014 to 2018, U.S. fire departments responded to an estimated 7,610 home structure fires that were started by candles each year. These fires resulted in an annual average of 81 deaths, 677 injuries, and \$278 million in direct property damage. While these figures pertain to homes, the principles apply equally to office environments, where the density of combustible materials and the presence of multiple ignition sources compound the risk.

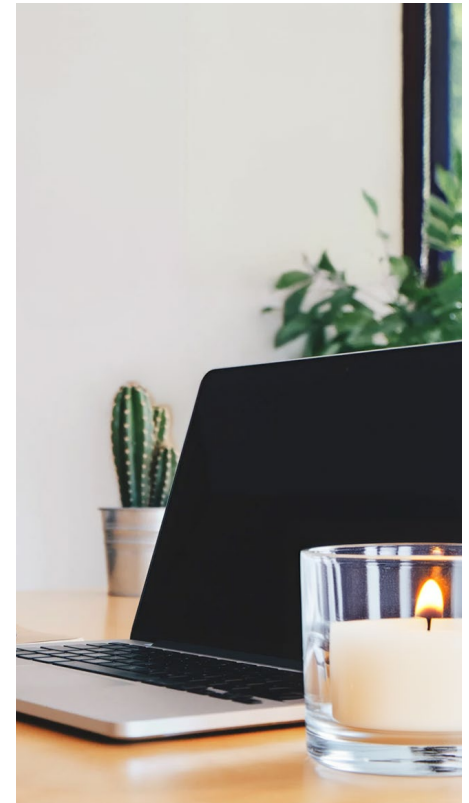
Office buildings, typically bustling with activity, can become chaotic in emergencies. In the event of a fire, the priority is the swift and safe evacuation of all occupants. However, the presence of candles can complicate this process. A small flame can easily be knocked over or forgotten, leading to rapid fire spread. The ensuing panic can hinder evacuation efforts, endangering lives and complicating the efforts of emergency responders.

Insurance companies also recognize the heightened risk associated with open flames. The financial implications of a fire incident can be staggering, encompassing not only property damage but also business interruption costs, legal liabilities, and potential loss of life.

PREVENTATIVE MEASURES AND ALTERNATIVES

To mitigate the risk of fire in office buildings, a proactive approach is essential. Eliminating the use of candles is a straightforward and effective measure. In cases where ambiance or scent is desired, CTSI requests safer alternatives such as LED candles, electric warmers, and battery-operated diffusers. These devices mimic the aesthetic and sensory effects of candles without the associated fire hazards.

Employee education is another critical component of fire prevention. Regular training on fire safety protocols, including the proper use and storage of potential ignition sources, can significantly reduce the likelihood of fire incidents. Additionally, ensuring that fire extinguishers, smoke detectors, and sprinkler systems are well-maintained and easily accessible is paramount.



WHAT THIS MEANS FOR COUNTIES

CTSI recommends the use of candles, electric air fresheners, or any open flame be prohibited in the workplace as they pose a high risk of property damage, injury, and even loss of life. Counties should consider updating fire safety measures in older buildings to protect occupants. This could involve retrofitting sprinkler systems where feasible and ensuring compliance with modern fire safety codes. For more information about fire safety, contact CTSI Loss Control at (303) 861-0507.