Fire Watch General Safety Stats and Facts

FACTS

HOT WORK WILL BE OCCURRING IN THE BUILDING

1. While ¨hot work¨ is most typically associated with welding and cutting, it can mean any type of work that produces a spark or flame, including using a torch or griding. Hot work is leading cause of industrial fires.
2. Hot work can throw sparks and molten material more than 35 feet during welding, cutting, and grinding. These sparks and hot slag typically burning above 1,000F—more than enough to easily ignite paper, wood, flammable liquids, vapors, and any other combustibles in the area.
3. There are few locations in the average facility that consistently lack combustible materials within 35 feet in all directions. Cracks in floor openings and ducts can transmit sparks to hidden locations as well. The intense heat generated by hot work can also ignite nearby combustibles, such as walls with combustible coverings or insulation.

STATS

- U.S. fire departments responded to an average of 4,630 structure fires involving hot work per year in 2013-2017. These fires caused an average of 15 civilian deaths, 198 civilian injuries and $355 million in direct property damage per year.
- Forty-three percent of the fires involving hot work in 2013-2017 occurred in or on homes, including one or two-family homes and apartments or other multi-family homes, while 57 percent occurred in or non-home properties.
- Welding torches ranked first among the type of hot work equipment involved in fires with 36 percent of the fires. The leading types of hot work equipment involved in structure fires were different in homes than in non-home properties.
- The peak areas for home fires involving hot work were wall assemblies or concealed spaces (16 percent), and bathrooms or lavatories (13 percent). Exterior roof surfaces (12 percent) and processing or manufacturing areas (11 percent) were peak for non-home fires.
- From 2001-2018, five firefighters were fatally injured in four unintentional fires started by torches.