

AmTrust Property Zone

Fire Safety During Hot Work

Hot work involves welding, burning, cutting, grinding, or other operations that could create sparks, fire or explosions outside of predesignated and approved locations. According to the National Fire Protection Association (NFPA), approximately 4,440 structure fires involving hot work occur each year. These fires result in direct property damage losses of \$287 million, 208 civilian injuries and 12 civilian deaths.

Know the Risks

It is crucial to know the risks of hot work at your business, such as those listed below:

- Combustible or flammable materials in the area may catch fire. These may include fuel, gases, vapors, dust or other debris.
- High winds may spread embers and make resulting fires harder to control.
- Fires may smolder slowly. As a result, a fire might not be evident right away.
- When hot work is performed in confined spaces, workers may be overcome or have difficulty evacuating quickly if an emergency occurs. Special precautions must be made for confined spaces.

Control the Hazards

Before beginning hot work, remove the hazards. Control hot work dangers to your business by doing the following:

- Consider alternatives to hot work when possible
- Ensure that fire sprinkler systems, hoses and fire extinguishers are in place and in proper working condition
- Have a way to call the fire department immediately
- Remove all combustible materials and oily residues within a 35-foot radius of where the hot work will be performed
- Consider the need for wetting the area, approved fire-resistant traps, and protecting openings or conveyors that may migrate sparks
- Avoid performing hot work in open buildings or doing outdoor hot work on windy days
- Use fire watch attendant(s) to monitor the area for fire
- Continue monitoring the worksite for at least two hours after hot work is completed
- Have a working fire extinguisher on hand
- Hire qualified and competent contractors to evaluate hot work in confined spaces
- Use a written Hot Work Permit for work outside of designated hot work areas

For additional information and resources on this topic and other safety and risk management subjects be sure to visit the Loss Control section on our website:

www.amtrustfinancial.com/loss-control

Comply with Safety Regulations

Various safety regulations exist to reduce the risk of fires caused by hot work. Make sure to understand and utilize industry best practices and safety regulations when performing hot work.

- **NFPA 51B: Standard for Fire Prevention During Welding, Cutting, and Other Hot Work:** This standard covers safety measures that should be taken to prevent bodily injury, death and property damage arising from a fire or explosion caused by hot work.
- **OSHA 29 CFR 1910.252:** This Occupational Safety and Health Administration (OSHA) standard covers safety during welding, cutting and brazing operations. The standard includes requirements for removing fire hazards and the use of fire extinguishers, fire guards and fire watchers. Also, see OSHA 1915.14, 1915.503 and 1917.152.
- **Industry Best Practices:** Companies in different industries may face particular hot work risks due to the work location, common hazards in the area and the type of hot work being performed. Follow industry best practices and OSHA safety guidelines.
- **Local Regulations:** Review all local regulations for hot work safety requirements.

Hot Work Permits Benefits

Hot Work Permits help ensure that all regulations and safety guidelines are being met.

A Hot Work Permit system provides the following key benefits:

- The workers performing hot work have a checklist of safety requirements
- A second level of management authorization is provided
- All hot work activities are recorded and people are notified as needed

Sources

https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_id=9853&p_table=STANDARDS

<https://www.nfpa.org/Training-and-Events/By-topic/Hot-Work>

<https://www.nfpa.org/codes-and-standards/all-codes-and-standards/list-of-codes-and-standards/detail?code=51B>

<https://www.nfpa.org/-/media/Files/Code-or-topic-fact-sheets/HotWorkFactSheet.pdf>



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