

According to the NFPA (National Fire Protection Association), the majority of non-home structure fires involving hot work are caused by cutting or welding or having a heat source too close to combustibles. Various construction activities commonly involve open flames or heat sources that have the potential to ignite a combustible material. All too often, even with strict safety measures, these ignition sources may cause smoldering or spark a small fire that, if unnoticed, could be catastrophic.

An important fire prevention safety precaution is to assign a **fire watch** person or personnel during and after tasks that involve potential heat or ignition sources, also known as *hot work*.



0001734



0001736



0000867



0001735

The information in this topic can help workers prevent fires that could lead to property damage, serious injuries, or worse.

A Fire Watch is a person or personnel assigned to monitor the safety of any tasks that could potentially ignite materials and start a fire.

Examples of tasks where a fire watch should be used to guard against fires include:

- Welding
- Cutting
- Brazing
- Grinding
- Soldering
- Thawing



0001738

A fire watch is especially important and useful in areas where there are combustible materials that could be ignited within a 35-foot radius of hot work.

The fire watch should be posted in the area near the work performed and equipped to find and prevent any stray sparks, slag, or heat sources from starting a fire.

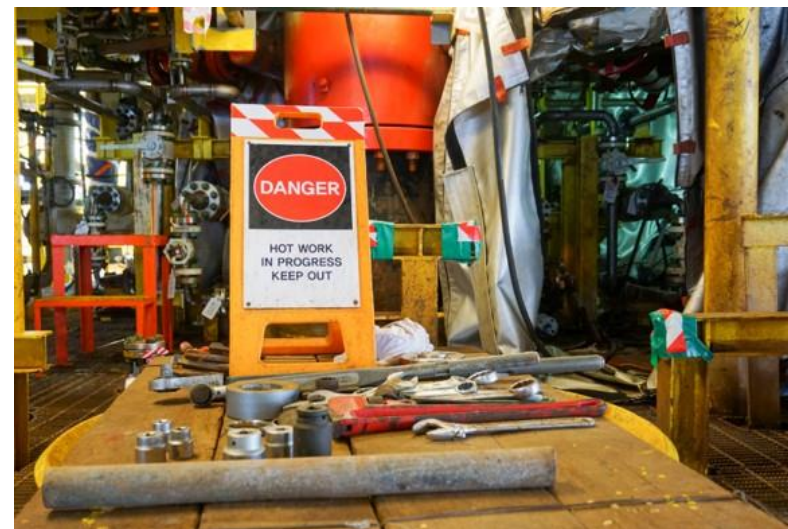
The fire watch should also be considered as a critical part of the fire warning system because they will notify workers in the immediate area of a fire and alert emergency fire personnel if a fire starts to get out of control.

OSHA Standard 1926.352(e) *When the welding, cutting, or heating operation is such that normal fire prevention precautions are not sufficient, additional personnel shall be assigned to guard against fire while the actual welding, cutting, or heating operation is being performed, and for a sufficient period of time after completion of the work to ensure that no possibility of fire exists...*

The key responsibilities of a fire watch include:

- Ensure firefighting equipment is readily available and ready for use during fire watch
- Keep the immediate area free of combustible materials within a 35-foot radius near the hot work, whenever possible
- Watch for fires and sparks, slag, or heat sources that could lead to fires
- Communicate with the workers and warn them if tasks are causing an excessive risk of fire
- Extinguish any small or incipient-stage fires immediately
- Stay in the area during the work and for at least 30 minutes after the work tasks are finished to monitor all areas where hot work was performed to make sure that there are no smoldering materials
- Call for emergency fire personnel and begin evacuation procedures immediately, if it becomes necessary

OSHA Standard 1926.352(e) *...Such personnel shall be instructed as to the specific anticipated fire hazards and how the firefighting equipment provided is to be used.*



0001733

- Workers designated to fire watch duty must be equipped with fire-extinguishing equipment readily available for the specific types of fires they may encounter.
- The class of fire extinguisher must match the type of fire especially if combustible metals, electricity, or oils or grease are present in the area of the work.
- The fire watch should be trained in the use of the fire extinguishing equipment.



0001740

- Personnel working as a fire watch should always pay close attention to the work area, exit routes, and any changes or obstacles that could prevent a safe evacuation.
- The fire watch should be diligent in looking for hidden fire dangers especially in storage locations, crawl spaces, and concealed areas where sparks or slag could have been thrown by the work performed.
- Designated fire watchers need to know the location of any manual fire alarm stations and understand the proper steps to take for fire response and sounding alarms.

OSHA Standard 1926.352(d) *Suitable fire extinguishing equipment shall be immediately available in the work area and shall be maintained in a state of readiness for instant use.*

- Fire watch personnel need to be familiar enough with the job site, structure and location, so that if there is a need to report a fire, they are able to give proper directions and information to the fire department.
- The fire watch should be aware of any emergency switches, electrical shut-off devices and main power cut-offs, as well as the shut-off locations for gas, oil, process water and any other areas that may be hazardous to personnel or add fuel to a potential fire.
- Fire watch personnel should inspect the job site prior to the hot work to make sure that combustible materials are removed, covered, or protected by fire-safe materials.
- The fire watch should only attempt to extinguish a fire if it is within the capacity of their training and the fire-fighting equipment available.
- When hot work like welding, cutting or heating is conducted on or near walls, upper-level floors, ceilings or other building dividers, a fire watch may need to be positioned on the opposite side of that partition because sparks or heat transfer may introduce a fire hazard to this adjacent area.
- Multiple fire watch personnel should be designated to provide sufficient coverage if the work site is large, if there are several hot work activities occurring simultaneously, or if there is hot work being performed that requires fire watch on opposite sides of a partition, like a wall.



0001737

COPYRIGHT AND DISCLAIMER

This material is the copyrighted property of Weeklysafety.com, LLC. Purchase of this material from Weeklysafety.com, LLC grants the owner the right to use this material for workplace safety and education purposes only. Use of this material for any other purpose, particularly commercial use, is prohibited. This material, including the photos, may not be resold. Weeklysafety.com, LLC does not warrant or assume any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed in these materials. Photos shown in this presentation may depict situations that are not in compliance with applicable Occupational Safety and Health Administration (OSHA) safety requirements. These materials are meant for informational purposes only and it is not the intent of Weeklysafety.com, LLC to provide compliance-based training. The intent is more to address hazard awareness in the construction and related industries, and to recognize the potential hazards present in many workplaces. These materials are intended to discuss Federal Regulations only, as individual State requirements may be more stringent. Many states operate their own state OSHA and may have standards that are different from information presented in this training. It is the responsibility of the employer and its employees to comply with all pertinent OSHA safety rules and regulations in the jurisdiction in which they work.

PHOTO ACKNOWLEDGMENTS

Unless specified below, all photos are the copyrighted property of Weeklysafety.com, LLC and may not be used in any other training materials or resold for any purpose.

- 0000867 Shutterstock License for Weeklysafety.com
- 0001733 – 0001738 Shutterstock License for Weeklysafety.com
- 0001740 Shutterstock License for Weeklysafety.com

For more information on this weekly safety topic, other topics that are available and the full list of FAQs please visit www.weeklysafety.com or email safety@weeklysafety.com.