



JOB AID

HOT
WORK AWARENESS

Hot Work Awareness

Hot work refers to any type of work that produces or uses a spark, flame or heat that can start a fire. Examples include welding, heat treating, grinding, brazing, thawing pipe and torch applied roofing. Because hot work can cause fires and injuries, you need to follow special procedures. Whenever possible, avoid hot work.

Where Hot Work Is – and Is Not – Allowed

Hot work is allowed only in areas that are or that have been made **fire safe**. Some institutions may have **designated hot work areas**.

Some areas are **not** safe for hot work, including:

- Areas not authorized by management
- Buildings where the sprinklers are not working properly
- Areas with explosive atmospheres, such as flammable gases, vapors, liquids or dusts
- Areas where there are uncleaned or improperly prepared barrels, tanks or other containers and equipment that previously contained materials that could develop explosive atmospheres
- Areas with a buildup of combustible dusts that could explode

Hot work in **permit-required areas** are those that need to be made fire safe before hot work can proceed.

Hazards and Precautions

Use alternative (non-hot work) methods, whenever possible. If hot work cannot be avoided, move hot work to a designated safe location.

If you can't move the work, make the area safe for hot work. Relocate movable combustibles to a safe place. Move combustibles within an 11-meter (35-foot) radius to a safe location.

If combustibles can't be moved, use safeguards to protect them from potential heat, sparks or flame, such as fire-resistant welding blankets, pads and curtains. When working on walls, ceilings and/or enclosed equipment: move, shield and/or watch combustibles on the other sides of the walls; make sure heat won't spread to another area; clean enclosed equipment of flammable or combustible items; and empty containers of flammable liquids/vapors.

Inspect designated areas before beginning hot work to ensure they are free of rags, cardboard, oils, grease, solvents and other combustibles. Sweep floors clean of sawdust or other debris. Make sure sprinklers, hoses and extinguishers are available, appropriate and working. Wet down and cover combustible floors with damp sand or fire-resistant sheets. Cover all wall and floor openings with fire-resistant or noncombustible material. Hang fire-resistant blankets beneath the work area where there is a chance that sparks, slag or other hot work pieces may fall to a lower level.

Use trained, equipped and authorized **fire watchers**. Fire watchers keep an eye on the hot work to make sure anything/anyone doesn't catch fire. Fire watch must be in place during and for 60 minutes after hot work, including during any breaks. The permit authorizer can reduce the fire watch to just 30 minutes or increase it to 3 or more hours, depending on their assessment of conditions. After hot work is finished, monitor the hot work area for up to 3 hours.

Hot Work Permits

When it is established that hot work is required and must take place outside a designated area, a written permit must be issued by the permit authorizer. No hot work can happen without a permit (unless done in an area specifically designated for hot work). Hot work permits are posted at the jobsite in an accessible and visible location.

Permits include a checklist of fire prevention responsibilities for the person performing the hot work, supervisor(s) who authorize permits and the fire watcher. Each person signs off to show that work area readiness steps have been completed and that fire prevention will continue for the duration of the permitted timeframe.

The permit authorizer determines the length of time the hot work permit is valid for. There may be time limits in place, such as one shift. The permit authorizer or a person they designate must inspect the area at least once per day while the permit is in effect to ensure that it remains fire-safe.

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