



## WHAT IS HOT WORK?

Operations including welding, cutting, brazing, soldering, grinding, torch-applied roof systems or any other similar activity are referred to as hot work.

## PERMIT REQUIRED

**Hot work operations.** An operational permit is required for hot work including, but not limited to:

1. Public exhibitions and demonstrations where hot work is conducted.
2. Use of portable hot work equipment inside a structure.  
**Exception:** Work that is conducted under a construction permit.
3. Fixed-site hot work equipment such as welding booths.
4. Hot work conducted within a wildfire risk area.
5. Application of roof coverings with the use of an open-flame device.
6. When approved, the fire code official shall issue a permit to carry out a Hot Work Program. This program allows approved personnel to regulate their facility's hot work operations.

To apply for a Hot work operational permit, contact the Mercer Island Community Planning Department: 206-275-7728 or retrieve an application at the following web address: <http://www.mercergov.org/files/PermitAppFire2018.pdf>

## GENERAL INFORMATION

Due to the potential health, safety, and property hazards resulting from fumes, gases, sparks, hot

metal and radiant energy produced during hot work, special awareness and training on the part of the worker needs to be a priority for safety.

Areas where hot work is done should be properly designated and prepared. Combustible materials within the work area should be protected against fire hazards and the operation should not pose a hazard to others in nearby areas. To achieve this, please follow the fire safety requirements.

## FIRE SAFETY REQUIREMENTS

**Combustibles.** Hot work areas shall not contain combustibles or shall be provided with appropriate shielding to prevent sparks, slag or heat from igniting exposed combustibles.

**Openings.** Openings or cracks in walls, floors, ducts or shafts within the hot work area shall be tightly covered to prevent the passage of sparks to adjacent combustible areas, or shielded by metal fire-resistant guards, or curtains shall be provided to prevent passage of sparks or slag.

**Housekeeping.** Floors shall be kept clean within the hot work area.

**Conveyor systems.** Conveyor systems that are capable of carrying sparks to distant combustibles shall be shielded or shut down.

**Partitions.** Partitions segregating hot work areas from other areas of the building shall be non-combustible. In fixed hot work areas, the partitions shall be securely connected to the

floor such that no gap exists between the floor and the partition. Partitions shall prevent the passage of sparks, slag, and heat from the hot work area.

**Floors.** Fixed hotwork areas shall have floors with noncombustible surfaces.

**Precautions in hot work.** Hot work shall not be performed on containers or equipment that contains or has contained flammable liquids, gases or solids until the containers and equipment have been thoroughly cleaned, inerted or purged; except that "hot tapping" shall be allowed on tanks and pipe lines when such work is to be conducted by approved personnel.

**Sprinkler protection.** Automatic sprinkler protection shall not be shut off while hot work is performed. Where hot work is performed close to automatic sprinklers, noncombustible barriers or damp cloth guards shall shield the individual sprinkler heads and shall be removed when the work is completed. If the work extends over several days, the shields shall be removed at the end of each workday. The fire code official shall approve hot work where sprinkler protection is impaired.

**Fire detection systems.** Approved special precautions shall be taken to avoid accidental operation of automatic fire detection systems.

**Fire watch.** A fire watch shall be provided during hotwork activities and shall continue for a minimum of 30 minutes after the conclusion of the work. The fire code official, or the responsible manager under a hot work program, is authorized to extend the fire watch based on the hazards or work being performed.

**Exception:** Where the hot work area has no fire hazards or combustible exposures.

**Location.** The fire watch shall include the entire hot work area. Hot work conducted in areas with vertical or horizontal fire exposures that are not observable by a single individual shall have additional personnel assigned to fire watches to ensure that exposed areas are monitored.

**Duties.** Individuals designated to fire watch duty shall have fire-extinguishing equipment readily

available and shall be trained in the use of such equipment. Individuals assigned to firewatch duty shall be responsible for extinguishing spot fires and communicating an alarm.

**Fire training.** The individuals responsible for performing the hot work and individuals responsible for providing the fire watch shall be trained in the use of portable fire extinguishers.

**Fire hoses.** Where hoselines are required, they shall be connected, charged and ready for operation.

**Fire extinguisher.** A minimum of one portable fire extinguisher with a minimum 2-A:20-B:C rating shall be readily accessible within 30 feet of the location where hot work is performed.

**Area reviews.** Before hotwork is permitted and at least once per day while the permit is in effect, the area shall be inspected by the individual responsible for hot work operations to ensure that it is a fire safe area. Information shown on the permit shall be verified prior to signing the permit.

**Pre-hot-work check.** A pre-hot-work check shall be conducted prior to work to ensure that all equipment is safe and hazards are recognized and protected. A report of the check shall be kept at the work site during the work and available upon request. The pre-hot-work check shall determine all of the following:

1. Hot work equipment to be used shall be in satisfactory operating condition and in good repair.
2. Hot work site is clear of combustibles or combustibles are protected.
3. Exposed construction is of noncombustible materials or, if combustible, then protected.
4. Openings are protected.
5. Floors are kept clean.
6. No exposed combustibles are located on the opposite side of partitions, walls, ceilings or floors.
7. Fire watches, where required, are assigned.
8. Approved actions have been taken to prevent accidental activation of suppression and detection equipment, and
9. Fire extinguishers and fire hoses (where provided) are operable and available.