



Yavapai County Fire Consortium

11975 S. State Route 69 Mayer, AZ 86333
928-632-9534

HOT WORK PERMIT

Hot work permits are required, not to prohibit work from being performed, but to ensure that all work is performed in accordance with the International Fire Code 2018 (IFC2018) and that it does not present an undue fire safety hazard.

Interpretation

Welding and other hot work are frequent sources of ignition. Due to this fact, any person performing hot work is required to obtain a hot work permit from the Yavapai County Fire Consortium (YCFC) during periods when fire restrictions have been enacted and the risk un-wanted fire is elevated. Permits must be obtained prior to starting any work. A site evaluation may be required prior to the issuance of a hot work permit.

Definitions

- 1. Hot work** is defined as; Operations include cutting, welding, Thermite welding, brazing, soldering, grinding, thermal spraying, thawing pipe, installation of torch-applied roof systems or any other similar activity.
- 2. Hot work area** is the area exposed to sparks, hot slag, or radiant or convective heat as a result of hot work.
- 3. Hot work equipment** is electric or gas welding or cutting equipment used for hot work.
- 4. Hot work safety checklist** is a site-specific inspection of the hot work area to identify flammable materials, hazardous processes, or other potential fire hazards that could be present.

(IFC2018) Chapter 1 Section 105.6.23 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. Where 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. The approved personnel shall be trained in the fire safety aspects denoted in this chapter and shall be responsible for issuing permits requiring compliance with the requirements found in Chapter 35. These permits shall be issued only to their employees or hot work operations under their supervision.

(IFC2018) Chapter 35 (*Welding and other Hot Work*) of the International Fire Code 2018 edition may be accessed at;
https://codes.iccsafe.org/content/IFC2018/chapter-35-welding-and-other-hot-work?site_type=public

Requirements

Persons conducting hot work must conform to the following:

1. All hot work operations must comply with requirements contained in 2018 IFC Ch. 35 Welding and Other Hot Work and other relevant chapters in the fire code. Where conflicts arise between this specification and the provisions of the adopted fire code, the fire code provisions must be followed.
2. A fire watch must be provided during hot work activities and continue for a **minimum of 30 minutes after** the conclusion of the hot work. The fire code official is authorized to extend the fire watch based on the hazards or work being performed. A fire watch is not required when the hot work area has no fire hazards or combustible exposures.
3. The fire watch must 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 must have additional personnel assigned to fire watches to ensure that exposed areas are monitored.
4. Individuals designated as fire watch must:
 - a. Be aware of the inherent hazards of the work site and equipment involved.
 - b. Have adequate fire extinguishing equipment readily available, and be trained in its use.
 - c. Extinguish any and all unwanted fires resulting from hot work operations.
 - d. Have the authority to stop hot work operations when found unsafe.
 - e. Communicate an alarm or order an evacuation when necessary.
 - f. **Confirm that all relevant items specified in the Hot Work Safety Checklist (located at the end of this document) are satisfactorily addressed.**

Businesses have the option of implementing a **Hot Work Program** internally within their company and issuing their own Hot Work Permits without having to seek approval of the Fire Marshal, except in certain cases. Businesses electing to implement their own hot work permit program are also not subject to paying the fee required for each permit.

Businesses wishing to implement a **Hot Work Program** must fill out the application attached to this policy and submit it to this office. Businesses implementing their own Hot Work Program shall follow all requirements of Chapter 35 of the International Fire Code 2018 edition and the additional requirements of YCFC. For businesses with a Hot Work Program, the following situations require special approval by the Fire Marshal:

- In areas where the installed sprinkler system is impaired.
- Areas where there exists the potential of an explosive atmosphere, such as locations where flammable gases, liquids or vapors are present.
- Areas with readily ignitable materials, such as storage of large quantities of bulk Sulphur, baled paper, cotton lint, dust or loose combustible materials.
- Other situations as determined by the Fire Marshal.
- **Hot work shall not be undertaken on days when a Red Flag Warning is in effect.**
Visit <https://www.weather.gov/fire/> to get the latest information.

For businesses without a hot work program, the following conditions shall apply:

- Chapter 35 of the International Fire Code sets forth the requirements for performing hot work.
- Those performing hot work shall adhere to the requirements of the fire code.
- The Fire Marshal may approve hot work permits with conditions. If the permit is issued with conditions, all conditions must be met by the person performing the hot work for the permit to be valid.

Contractors shall be responsible for insuring that all employees performing hot work comply with all fire safety requirements as required by YCFC and the fire code.

HOT WORK SAFETY CHECKLIST

A "No" answer may indicate a hazardous condition and requires careful consideration and due diligence before engaging in hot work operations.

Y=Yes, N=No

General Safety Precautions:

1. Has the employee had sufficient training to accomplish the job safely? Y (___) N (___)
2. Has the employee been briefed on hazards unique to this particular job? Y (___) N (___)
3. Has the employee read the manufacturer's instructions, cylinder labels, & SDSs. Y (___) N (___)
4. Is heat and impact resistant clothing being used? Y (___) N (___)
5. Is the proper clothing being worn to reduce skin burns? Action Taken: Y (___) N (___)
6. Are leather aprons, leggings, and sleeves worn for hot work? Y (___) N (___)
7. Are dry welders gloves used during arc welding? Y (___) N (___)
8. Are proper respirators used when welding where toxic fumes could form? Y (___) N (___)
9. Are bottle gauges in working order? Y (___) N (___)
10. Have fire resistant shields been placed over floors, walls, or other objects that could catch fire? Y (___) N (___)
11. Have all flammable items in the hot work area been removed or covered? Y (___) N (___)
12. Is consumption (eating, drinking, smoking) prohibited while hot work is in progress? Y (___) N (___)
13. Have all ducts that could carry sparks been closed? Y (___) N (___)
14. Is adequate ventilation present in the hot work area? Y (___) N (___)
15. Where welding is conducted, is a firewatcher posted with a water hose or fire extinguisher? Y (___) N (___)

Gas Welders:

1. Are cylinders regularly checked for leaks? Y (___) N (___)
2. In storage areas, are cylinders stored upright secured in a separate, ventilated, fire protected room? Y (___) N (___)
3. Are cylinders always turned off after use? Y (___) N (___)
4. Are workers briefed to never roll or drop cylinders? Y (___) N (___)
5. Are workers briefed to never use oxygen to blow dust away? Y (___) N (___)
6. Is smoking forbidden during welding operations? Y (___) N (___)
7. Do workers regularly review the SDSs for the gases they are using? Y (___) N (___)
8. Do workers know the proper lubricants for compressed oxygen cylinder connections? Y (___) N (___)
9. Are in line spark arrestors utilized? Y (___) N (___)

Arc Welders:

1. Are welders de-energized before touching electrical parts? Y (___) N (___)
2. Are objects to be welded on, separately grounded? Y (___) N (___)
3. Do welders know the correct size cable, with intact insulation, for a given operation? Y (___) N (___)
4. Do welders know that jewelry should not be worn when welding? Y (___) N (___)
5. Are work surfaces, floors, and objects dry before starting to weld? Y (___) N (___)
6. Is it forbidden to weld in the rain? Y (___) N (___)

Hot Work in Confined Spaces:

1. Is the atmosphere tested before entering and while working? Y (___) N (___)
2. Do gas cylinders remain outside at all times? Y (___) N (___)
3. Is the space properly ventilated? Y (___) N (___)
4. Are written procedures available? Y (___) N (___)
5. Has additional Personal Protective Equipment (PPE) been considered? Y (___) N (___)
6. Are safety attendants properly equipped and is first aid equipment readily available? Y (___) N (___)

Responsible Party: _____ Signature: _____ Date: _____



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HOT WORK PERMIT APPLICATION

DATE: _____

PERMIT NO: _____

JOB ADDRESS: _____

FIRE JURISDICTION: _____

CONTRACTOR/RESPONSIBLE PARTY: _____

EMAIL: _____ PHONE: _____

HOT WORK OPERATIONS PERMIT SUBMISSION REQUIREMENTS:

COMPLETED PERMIT APPLICATION

TYPE OF HOT WORK: GRINDING WELDING CUTTING OTHER _____

HOT WORK DATE(S): START DATE _____ END DATE _____

DATE REQUESTED FOR SITE INSPECTION (IF APPLICABLE) _____

I AGREE TO THE HOLD HARMLESS AGREEMENT SET FORTH BY THE MAYER FIRE DISTRICT AS WRITTEN ON THE OPEN BURNING PERMIT APPLICATION. IF ACTIONS FROM HOT WORK GENERATE AN UNCONTROLLED FIRE, THE APPLICANT MAY BE HELD RESPONSIBLE FOR THE COST ASSOCIATED WITH EXTINGUISHMENT EFFORTS.

I WILL ENSURE ALL WORK IS PERFORMED ACCORDING TO THE INTERNATIONAL FIRE CODE 2018.

I WILL COMPLETE THE HOT WORK SAFETY CHECKLIST BEFORE ENGAGEMENT OF HOT WORK.

PERMIT SUBMITTED BY: _____ SIGNATURE: _____ DATE: _____

FIRE DISTRICT INSPECTOR: _____ SIGNATURE: _____ DATE: _____