



Post a copy at the job site.

University of Colorado at Boulder

# HOT WORK PERMIT

Make no changes in dates or other information after approved.

For Heat Guns, Grinding, Cutting, Welding, or Soldering with Portable Gas, Arc, or Other Equipment Generating Heat or Spark (References: 2009 International Fire Code Chapter 26, and National Fire Protection Association Standard NFPA 51B.)

**BEFORE INITIATING HOT WORK, CAN THIS HOT WORK ACTIVITY BE AVOIDED? IS THERE A SAFER WAY?**

Job Date \_\_\_\_\_ Start Time \_\_\_\_\_ Expiration \_\_\_\_\_ WO # \_\_\_\_\_ Project # \_\_\_\_\_

Name of Applicant \_\_\_\_\_ Company \_\_\_\_\_ Phone \_\_\_\_\_

Supervisor \_\_\_\_\_ Phone \_\_\_\_\_

Location / Description of work \_\_\_\_\_

## IN CASE OF AN EMERGENCY:

**CALL:** \_\_\_\_\_

**AT:** \_\_\_\_\_

### IS FIRE WATCH REQUIRED?

1. \_\_\_\_\_(yes or no) Are combustible materials in building construction closer than 35 feet to the point of operation?
2. \_\_\_\_\_(yes or no) Are combustibles more than 35 feet away but would be easily ignited by sparks?
3. \_\_\_\_\_(yes or no) Are wall or floor openings within a 35 foot radius exposing combustible material in adjacent areas, including concealed spaces in floors or walls?
4. \_\_\_\_\_(yes or no) Are combustible materials adjacent to the other side of metal partitions, walls, ceilings, or roofs which could be ignited by conduction or radiation?
5. \_\_\_\_\_(yes or no) Does the work necessitate disabling a fire detection, suppression, or alarm system component including concealed duct detectors? (If so, please fax a copy of this form to 303-492-0949)

YES to any of the above indicates that a qualified fire watch is required.

Fire Watcher Name(s) \_\_\_\_\_ Phone \_\_\_\_\_

**Fire watcher is required to study and complete the checklist on the second page of this form and initial it. All boxes must be checked.**

### NOTIFICATIONS

Notify the following groups at least 72 hours prior to work and 30 minutes after work is completed. Write in names of persons contacted.

- Facilities Management Fire Systems Group Supervisor (Notify in person OR by phone ONLY if question #5 above is answered "yes" or you are unsure): (303) 492-1162 or 492-0791

**For the two bullets below, notify by phone or in person: If by phone, write down name of person and send a completed copy of this permit to the project file at Facilities Management.**

- Facilities Management Fire and Life-Safety Group (303) 492-5681
- University Project Manager (name) \_\_\_\_\_ Phone \_\_\_\_\_

### SIGNATURES REQUIRED

I understand and will abide by the conditions described in this permit. I will fax or submit a signed copy of this permit to the University project manager prior to start of work and post a copy of it at the entrance to the job site/room. I will implement the necessary precautions which are outlined on both pages of this permit form. Thirty minutes after each hot work session, I will reinspect work areas and adjacent areas to which spark and heat might have spread to verify that they are fire safe, and contact Facilities Management Alarm Technicians to have any disabled fire protection systems reactivated.

Permit Applicant \_\_\_\_\_ Person Doing Hot Work \_\_\_\_\_ Name of Company or Department \_\_\_\_\_ Date \_\_\_\_\_ Phone \_\_\_\_\_  
*(Print Names Above Signatures)*

## PRECAUTIONS FOR HOT WORK

**DEFINITION:** Hot Work is any temporary operation involving open flames or equipment producing heat or spark.

**TYPICAL LIST OF HOT WORKS:** list of typical hot work includes: welding, heat treating, grinding, thawing pipe, hot riveting, soldering, brazing, powder-driven fastener operations, torch applied roofing, glass blowing, using a heat gun to heat/soften floor tiles, and similar activities involving spark, flame, or heat.

**VERIFY THE PRECAUTIONS LISTED BELOW ARE IMPLEMENTED. OTHERWISE DO NOT PROCEED WITH HOT WORK:**

**BUILDING SYSTEMS:** With regard to building systems, ensure that:

- Fire sprinklers are existing and are kept operational.
- If the hot work is to be conducted outdoors measures must be taken to prevent the re-entry of air contaminants into buildings. Therefore, the requester needs to be aware of building opening locations such as air intakes, operable windows, doors, etc.
- If the hot work is to be conducted inside an occupied building, the worker must provide fume/odor control or removal by using a smoke eater, exhaust ventilation or another method.
- All duct openings within 5 ft. covered with a fire resistant barrier for soldering and similar activities. For welding or activities that may emit sparks, any ducts that may be exposed to sparks are to be covered, e.g., within 30 feet of the work area.
- Fire alarm system kept operational; detectors disabled only if necessary, i.e., if they would likely be activated by the work; Facilities Management Fire Systems Group (FSG) requires at least 72 hours notice (303-492-1162 or 492-0791) to identify the need and disable detectors. Only FSG is authorized to disable fire alarm devices.
- Cutting and welding equipment in good operating condition and UL listed when applicable.

**PERSONNEL / OCCUPANT PROTECTION:** With regard to building occupants, ensure that:

- Workers and occupants protected from smoke, fumes, odors or other potentially toxic materials by use of exhaust ventilation, smoke eaters or other approved safety measures.
- If hot work is to be conducted in an area where people (contractors, building occupants, etc.) are passing by or could possibly be able to view the flash, a vision screen or barrier must be utilized.
- Confined space entry permit/procedures in place when applicable.
- Energized equipment locked/tagged out of service when applicable.
- Workers properly trained in use of equipment.

**WITHIN 35 FEET OF WORK:** Read and implement the requirements of NFPA-51 B including the 35 foot rule.

Within 35 feet of the area, ensure that:

- Floors swept clean of combustibles.
- Combustible debris vacuumed away from inside ventilation or other service and duct openings.
- Combustible floors swept down & covered with damp sand, metal or other spark/heat shields.
- Combustible and flammable materials removed.
- Flammable liquids, dust, lint, and oily deposits removed.
- Explosive atmosphere in area eliminated.
- Fixed combustibles and flammables covered with fire-resistive covers, guards, and/or shields.
- Wall and floor openings covered with non-combustible covers.
- Fire-resistive covers suspended beneath work to collect sparks and protect areas beneath hot work.

**WORK ON OR NEAR WALLS FLOORS OR CEILINGS:** Prior to the start of work ensure that:

- All holes, cracks and penetrations are sealed with non-combustible material.
- Construction is non-combustible and without combustible covering or insulation. Otherwise, combustibles are to be shielded/protected.
- Combustibles moved away from opposite side of wall and second fire watch provided where required by NFPA-51B or the UFC.

**WORK ON ENCLOSED EQUIPMENT (tanks, ducts, plenums, etc.)**

- Confined space entry permit/procedures in place.
- Compressed gases out of confined space.
- Equipment empty, cleaned of residues, pressure released, purged of vapors, and gas valves shut off.

**FIRE WATCH (at work site)**

- Fire watcher is to be present 30 minutes before for combustible clean-up, during and for 30 minutes after operation to ensure that no smoldering fires exist. Fire watcher is to search for any smoldering or flaming ignition and extinguish any such sources. Fire watcher is to inspect the ducts in the vicinity of the hot work activities for smoke or flames.
- Fire watcher is to be supplied with hose and/or fire extinguishers of proper size and type and be properly trained in use of same.
- Fire watcher is to be trained in emergency procedures and activating fire alarm.
- The permit applicant or their representative is to protect all combustibles from hot work ignition sources. This includes sealing of floor and wall penetrations.
- Fire watcher is to stop hot work if any of the safety precautions cannot be met.
- Fire watcher is to locate the nearest fire alarm pull station before hot work begins and pull the alarm immediately if an emergency occurs.
- Fire watcher is to have access to a telephone to dial 9-1-1 to report emergencies.

**OTHER PRECAUTIONS TAKEN**

\_\_\_\_\_

FIRE WATCHER'S NAME: \_\_\_\_\_

INITIALS PRIOR TO HOT WORK: \_\_\_\_\_ INITIALS 30 MINUTES AFTER COMPLETION OF HOT WORK: \_\_\_\_\_