



HOT WORK & WELDING OPERATION SUBMITTAL REQUIREMENTS

These guidelines are to be followed when a business, facility or organization proposes to preform Hot Work and Welding Operations within the Lake Cities Fire Department Jurisdiction. This document shall assist in the preparation of a submittal for permit. These guidelines are not to be interpreted as containing all data required for proper design, installation, or approval.

All Hot Work and Welding Operation for the purposes of this guideline and the requirements of the Fire Department shall conform to the current adopted International Fire Code, and amendments by Hickory Creek, Shady Shores, Lake Dallas, and Corinth.

This guide does not replace, nor supersede any codes and/or ordinances adopted by Hickory Creek, Shady Shores, Lake Dallas, Corinth.

INCOMPLETE PERMIT APPLICATIONS WILL NOT BE REVIEWED.

This guideline covers hot work operations such as welding, cutting, open torches, brazing, soldering, grinding, thermal spraying, thawing pipe, installation of torch-applied roof systems, and any other similar activity. Any other associated activity, such as compressed gases, hazardous materials, flammable/combustible liquids, open flames, and candles, etc. shall have separate permits prior to commencing those other activities.

Hot Work Operations includes:

Welding, cutting, Thermite welding, brazing, soldering, grinding, thermal spraying, thawing pipe, installation or torch-applied roof systems or any other similar activity.

SPECIFICATIONS AND SUBMITTAL REQUIREMENTS:

An application must be completed for each submittal. A minimum of two sets of plans and three sets of specifications shall be submitted with the permit application. The plans shall be drawn to an indicated **scale 1/8" = 1' scale (1/16" = 1' Acceptable for Large Buildings)**. Plans shall show compliance in accordance with the current adopted International Fire Code. All submittals must be legible and readable, or the plan shall be issued a correction letter for cause.

A permit is required and shall be obtained from the Lake Cities Fire Department for hot work operations including, but not limited to:

1. Public exhibitions and demonstrations where hot work is conducted.
2. Use of portable hot work equipment inside, upon, or within 10 feet of a structure.
3. Fixed-site hot work equipment such as welding booths.
4. Hot work conducted within a hazardous fire area.
5. Application of roof coverings with the use of an open-flame device.
6. When approved, Lake Cities Fire Department will issue a permit to carry out a Hot Work Program. This program allows approved personnel to regulate their facilities' hot work operations. The approved personnel shall be trained in the fire safety aspects denoted in the current adopted **International Fire Code (IFC)** under **Chapters Welding and Other Hot Work, Aerosols, and Compressed Gasses**. The permits shall be issued only to their employees or hot work operations under their supervision.

Two (2) submittal plan packages are required to be submitted to Lake Cities Fire Department and shall include the items listed within the following information below.

FIXED

1. Provide a floor plan of the building indicating the following information:
 - a. Location and type of hot work operations and equipment in relation to combustible materials, elevators, stairs, gangways, means of egress, building openings, or ventilation openings. A minimum of 35-foot separation shall be provided or approved shielding shown.
 - b. Location, type, and volume (in cubic feet) of compressed gas cylinders if used.
 - c. Location of ventilation equipment if provided.
 - d. Location of minimum rated 2A 20-B:C fire extinguishers or charged water hose equipped with a nozzle. Must be within 30-feet of hot work operations and accessible without climbing stairs or ladders.
2. Provide a detailed narrative describing the type of hot work operations performed in the field.
3. Provide a fire watch in accordance with the current adopted International Fire Code.
4. Maintain a completed (signed) **HOT WORK OPERATIONS/FIRE WATCH PROCEDURES AND SAFETY SIGN-OFF SHEET** at the job site.

MOBILE

1. Provide a detailed narrative describing the type of hot-work operations performed in the field.
2. Provide a fire watch in accordance with the adopted International Fire Code.
3. Include the type of hot work equipment to be used.
4. Location, type and volume (in cubic feet) of compressed gas cylinders if used.
5. Maintain a completed (signed) **HOT-WORK OPERATIONS/FIRE WATCH PROCEDURES AND SAFETY SIGN-OFF SHEET** at the job site.

COMBINATION FIXED & MOBILE

1. Provide a floor plan of the building indicating the following information:
 - a. Location and type of hot work operations and equipment in relation to combustible materials, elevators, stairs, gangways, means of egress, building

openings or ventilation openings. A minimum of 35-foot separation shall be provided or approved shielding shown.

- b. Location, type and volume (in cubic feet) of compressed gas cylinders if used.
- c. Location of ventilation equipment if provided.
- d. Location of minimum rated 2A 20-B:C fire extinguishers or charged water hose equipped with a nozzle. Must be within 30-feet of hot work operations and accessible without climbing stairs or ladders.

2. Provide a detailed narrative describing the type of hot work operations performed in the field.

3. Include the type of hot work equipment to be used in the field.

4. Provide a fire watch in accordance the current adopted International Fire Code.

5. Maintain a completed (signed) **HOT WORK OPERATIONS/FIRE WATCH PROCEDURES AND SAFETY SIGN-OFF SHEET** at the job site.

GENERAL REQUIREMENTS:

Conducting Hot Work Operations - The use of welding, cutting and other hot work equipment shall be in accordance with the current adopted International Fire Code.

1. Fire watch - Shall be provided during hot work activities and shall continue for a minimum of 30 minutes after the conclusion of the work. The fire watch shall include the entire hot work area. Hot work conducted in areas that include horizontal or vertical fire exposures that are not observable by a single individual shall have additional personnel assigned to fire watch to ensure that exposed areas are monitored.

2. 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 fire watch duty shall be responsible for extinguishing spot type fires and communicating an alarm. No other duties shall be assigned to personnel performing fire watch duty.

3. Fire watch is not required when the hot work area has no fire hazards or combustible exposures. However, a final check is required 30 minutes after completion of operation to detect and extinguish smoldering fires.

Restricted areas – Hot work shall not be conducted in the following areas unless approval has been obtained from the Lake Cities Fire Department:

- 1. Areas where the sprinkler system is impaired.

2. Areas where there exists the potential of an explosive atmosphere, such as locations where flammable gases, liquids or vapors are present.
3. Areas with readily ignitable materials, such as storage of large quantities of bulk sulfur, baled paper, cotton, lint, dust, or loose combustible materials.

The Hot work Site - Shall be inspected by the individual responsible for the hot work for compliance.

Pre-hot work check - A pre-hot work check shall be conducted prior to the hot work operations and shall determine all the following:

1. Notify facility personnel (owner/owner representative) providing location, type of work to be performed, duration of hot-work operations on a daily basis **AND FOLLOW ALL THE IN-HOUSE INTERNAL HOT WORK PROCEDURES.**
2. Hot work equipment to be used shall be inspected by the operator prior to use and equipment shall be in satisfactory operating condition and in good repair.
3. Hot work site is clear of combustibles or combustibles are protected.
4. Exposed construction is of noncombustible materials or that combustible materials within 35-feet are protected.
5. Openings within 35-feet are protected.
6. Floors within 35-feet are kept clean.
7. No exposed combustibles are located on the opposite side of partitions, walls, ceilings, or floors.
8. If hot work area is accessible to anyone other than operator of hot work equipment, warning sign(s) stating "**CAUTION – HOT WORK IN PROCESS – STAY CLEAR**" must be displayed.
9. Fire watches, where required, are assigned.
10. Fire extinguishers and fire hoses (where provided) are operable and available.
11. Approved actions have been taken to prevent accidental activation of suppression and detection equipment in accordance with the current adopted International Fire Code. The automatic sprinkler protection shall not be shut off while hot work is being performed unless otherwise approved by the fire code official.
12. If any of these conditions cannot be met, then the hot work operation shall not be performed.

Fire Watch Personnel Qualifications:

1. Be physically capable and willing to walk the building during the duration of the shift. The floor should be walked in a time period not to exceed 5 minutes, with the entire building being toured every 15 minutes.
2. Walk the designated hot work areas and other fire exposures continuously during the entire hot work operations (except for breaks) and continue fire watch 30 minutes after the conclusion of the work. Replacement fire watch personnel must be provided to continue fire watch during personnel breaks.
3. Be equipped with, and able to use a bullhorn (or other loud sounding device), flashlight, remote radio, and cellular phone.
4. Be capable of and willing to assist employees vacating the building in an emergency situation while utilizing a flashlight to illuminate the path of egress for evacuating employees.
5. Be trained in the use of a portable fire extinguisher and capable of extinguishing a small incipient fire utilizing a portable fire extinguisher.
6. Be instructed in and be familiar with emergency notification and evacuation procedures and capable of notifying employees of an emergency and then assisting employees to evacuate the building. All fire watch personnel on the property are responsible for responding immediately to any building where a fire condition is discovered. Upon discovery of a fire, fire watch personnel shall immediately Dial 9-1-1, then advise all other fire watch personnel of the emergency in order to obtain their assistance in notifying and evacuating employees.

NOTE:

1. If submittals are approved, a field inspection may be required and scheduled with the Lake Cities Fire Department for evaluation and verification.
2. Failure to obtain a permit, comply with safety criteria, or required conditions may result in stop work order, permit revoked, and/or a citation issued for each violation.

The issuance of a Fire Department Construction Permit from the Lake Cities Fire Department does not relieve the applicant of any permits required by the Cities of Hickory Creek, Shady Shores, Lake Dallas, or Corinth Building Department.

Submit Plans To

Lake Cities Fire Department

3501 FM 2181 Suite B Corinth, TX 76210

Phone: 940-279-4590 Fax: 940-497-3455