

Climate Engineers Inc. follows the OSHA Standard 29 CFR 1926.350-354; CFR 1910.252, ANSI specification A49.1-1967, Article 630 of the National Electric Code, and NFPA 70-1971, and ANSI specification C1-1968 (R-1971) guidelines regarding welding, cutting and brazing. All of the following shall be complied with concerning these subjects and dependent upon scope and location of the work activity as is necessary.

1. All personnel accomplishing the aforementioned tasks shall insure that they are wearing the appropriate personal protective equipment as called for in 29 CFR 1926.100-106, and as a minimum this shall include safety glasses with side shields, appropriate welders/cutters gloves (leather), sleeves, aprons, or leggings as may be necessary, an appropriate welding hood, cutting goggles, or face shield with the appropriate level of shading for the given type of work, hard hat, sturdy leather boots or shoes, appropriate clothing in good repair, and respiratory protection if performing work in poorly ventilated atmospheres, or while performing these types of operations on coated surfaces as described in 29 CFR 1926.354.
2. Appropriate shielding shall be established prior to commencing work activity as stipulated in this subject.
 - 2.1. When practical, objects to be welded, cut, or heated must be moved to a designated safe location or, if the objects to be welded, cut, or heated cannot be readily moved, all movable fire hazards in the vicinity must be taken to a safe place, or otherwise protected.
 - 2.2. If the object to be welded, cut, or heated cannot be moved and if all the fire hazards cannot be removed, combustibles must be shielded using flameproof covers, shielded with metal, guards, curtains, or wet down to help prevent ignition of material. All shielding shall be of a noncombustible or flame resistant variety.
 - 2.3. No welding, cutting, or heating is permitted where the application of flammable paint, or the presence of other flammable compounds, or heavy dust concentrations as it creates a hazard.
 - 2.4. Fire extinguishing equipment must be immediately available in the work area and must be maintained in a state of readiness for instant use.
3. Appropriate fire protection equipment, and if necessary, a trained fire watch, shall be immediately available while operations are in progress.
4. If utilizing a man lift to access the work area, a fire extinguisher shall be placed in the man basket and one at ground level with a fire watch to ensure that potential fire hazards are controlled.
5. If appropriate permits are required by the owner/customer, the person in charge of the activity shall ensure that all permits necessary have been obtained and that conditions stipulated by such permits are adhered to during the entire duration of work activity. These permits shall be returned to the appropriate customer representative upon completion of the work activity.
6. The jobsite foreman shall determine if mechanical ventilation shall be necessary in order to eliminate or control potential or existing hazards. They shall also determine if respiratory protection is necessary for the given work activity, and shall ensure that the wearer of such protection has met all prerequisite requirements and that all appropriate documentation is available at the site.

- 6.1. No welding, cutting, or other hot work may be performed on drums, barrels, tanks or other containers until they have been cleaned so thoroughly as to make absolutely certain that there are no flammable materials present or any substances such as greases, tars, acids, or other materials that when subjected to heat, might produce flammable or toxic vapors. Any pipelines or connections to the drum or vessel must be disconnected or blanked.
7. If we do not accomplish air quality monitoring, the foreman shall ensure that all test results achieved by the customer's representative are made a part of the daily job log and posted for employee examination when required by law or regulation.
8. All hoses, connections, gauges, valves, torches and other equipment that carry compressed gases or oxygen shall be inspected before each shift and as often as necessary dependent upon conditions and use.
9. Torches shall be lighted by friction lighters only and not by any other source of open flame or other type of hot work.
10. Directional fittings shall be used on all hoses to prevent back flow.
11. All arc welding cables shall be completely insulated and capable of handling the maximum current requirements of the particular work activity. There shall be no exposed wiring in the cables and all equipment shall receive a daily visual inspection prior to being put into use.
12. Defective equipment shall not be used and shall be tagged as to the defect. It shall be removed from service until it is either repaired by a competent and qualified person or destroyed.
13. When a welding operation is to cease for any lengthy period of time where the unit will be unattended the power source should be opened or gas supply shut off. And the tools should be placed so that no unauthorized person may put them into use or come into contact with a live tool.
14. All arc welding cables and machine grounds shall comply with 29 CFR 1926.351 (c).
15. Fire watchers must be trained in appropriate fire protection and prevention techniques and in the applicable aspects of the site emergency action plan. Fire watches shall be required wherever a significant potential for fire exists or where access to firefighting equipment would be impaired for the person accomplishing the work.
16. All arc welding machines shall be appropriately ground.
17. Appropriate grounding shall be achieved prior to commencing any arc welding activity.
18. The foreman shall ensure that appropriate ventilation and pressure venting are in place prior to commencing any activity which would require such to minimize or eliminate potential hazards.
19. All vessels or pipes which are scheduled for hot work applications shall be sniff tested prior to commencing work if there is a potential for the presence of flammable or combustible liquids, gases, or vapors. This determination shall be made by any superintendent and customer representative, if any.