

WELDING AREAS IN FACILITIES



Hot work is defined as any work that involves burning, welding, or similar operation that is capable of producing a spark, flame or heat

References:

AFMAN 91-203, Air Force Occupational Safety, Fire and Health Standards

OSHA 1910.252(a), Welding, Cutting, Brazing

NFPA 51B, Welding, cutting, and other Hot Work

International Fire Code, Chapter 35 Welding and other Hot Work



Fire Prevention Office
724 Quartermaster Rd
(NE Corner, 2nd Floor)

Phone: 907-384-5555
Fax: 907-384-3212

673ces.cef.fireprevention@us.af.mil



The purpose of this fire safety handout is to summarize existing requirements, standards, and guidelines that are applicable to hot work in approved welding areas. All welding areas shall be designated and approved in writing by the JBER Fire Prevention Office, Occupational Safety Office and Bioenvironmental Office.

GETTING STARTED

In order to obtain a welding area approval letter, there are a few steps you need to take and this handout will help guide you along the way. The first step you need to take is to contact the JBER Fire Prevention Office. We will get the process started and provide all the necessary paperwork. Your second step is to contact Bioenvironmental to inspect your facility ventilation system to confirm it meets requirements. The third step is to contact the Wing Safety Office to perform a safety assessment. Once your welding area has been evaluated and inspected by both Bioenvironmental and Wing Safety you can contact the Fire Prevention Office to schedule your fire inspection appointment. All requirements on back of this handout must be met prior to scheduling your inspection. After you pass your inspection we will provide you with an authorization letter. Any changes to the approved welding area will require reevaluation by all three agencies. The approval letter needs to be added to the facility fire prevention binder and shall be available upon request. The number of approved welding areas will be based upon mission requirements and not out of convenience.

HOT WORK TRAINING

Between April and August training is provided every Thursday at 0800 in bldg. 724, and every first Thursday of the month between September and March. All personnel that perform hot work on JBER are required to be trained and certified by the JBER Fire Prevention Office, including individuals who work in approved welding areas. After successfully completing the training, individuals are issued a competency card, AF Form 483, and are required to recertify annually.

JBER FIRE & EMERGENCY SERVICES

Welding Areas

Fire Prevention Office
724 Quartermaster Rd
(NE Corner, 2nd Floor)

Phone: 907-384-5555
Fax: 907-384-3212

CHECKLIST FOR WELDING AREA

- ◆ Area must be of noncombustible or fire resistive construction and segregated from adjacent areas.
- ◆ Warning signs are required to be posted at all personnel entry ways of the area.
- ◆ Welding booth walls, screens, and non-rigid heat and spark barriers, shall be used to isolate the welding activity, reflectivity, and contain sparks. Booths, screens, etc., shall be arranged to ensure adequate ventilation.
- ◆ An adequate ventilation system must be provided by mechanical or natural means, and approved by an Industrial Hygienist (Bioenvironmental). The ventilation system shall not be blocked with any means.
- ◆ Combustible floors shall be protected with fire resistive shields. Welding areas shall be free of combustible materials for a minimum of 35ft.
- ◆ Welding area shall be free of flammable liquids for a minimum of 50ft. (i.e. flashpoint below 100° F).
- ◆ Where a fire protection system exists, the system shall be fully operational while welding or cutting work is being performed and the proper fire extinguishing equipment shall be readily available. No system or device shall be taken out of service without approval from the JBER Fire Prevention Office.



- ◆ A fully charged and operable fire extinguisher rated for the task (a minimum rating 2A:20B:C [typically 5 lb.]) shall be located in the immediate work area unless otherwise specified by the JBER Fire Prevention Office. Additional extinguishing requirements apply to specialized metals (magnesium, titanium, etc.). See Fire Prevention Office for additional guidance.
- ◆ No welding shall be conducted outside a designated welding area unless a valid hot-work permit is issued by a Permit Authorizing Individual (PAI). Hot-work certification is provided by the JBER Fire Prevention Office. Contact 384-5555 to schedule your training. Recertification is required annually.
- ◆ Ensure welding equipment is in working order.
- ◆ Welding area supervisors shall safely manage and accept full responsibility for all welding, cutting, or brazing operations under their supervision. Facility managers must be informed of any hot work within their facilities.
- ◆ All certified individuals shall comply with AFMAN 91-203, OSHA 1910.252(a), and NFPA 51B.
- ◆ **Contact Information**
 - Bioenvironmental
Phone: 384-8192
Alt Phone: 384-3985
Alt Email: usaf.jber.673-mbx.673-amds-sgpb@mail.mil
 - Wing Safety
Phone: 552-6850
Email: 673abw.seg@us.af.mil
 - Fire Prevention
Phone: 384-5555
Email: 673ces.ccf.fireprevention@us.af.mil

This document was established as a quick reference guide and is not all inclusive. Please contact the Fire Prevention Office for assistance in determining your fire extinguisher requirements.