

# WELDING & CUTTING FIRE SAFETY

## MANAGEMENT AUTHORITY AND RESPONSIBILITY

1. Management must recognize its responsibility to have cutting and welding operations performed safely and convey this intent to all appropriate employees.
2. A responsible individual should be designated to authorize all cutting and welding operations in areas not specifically designed or approved for such processes.
3. Ensure that all appropriate employees and their supervisors are trained in the safe operation of the equipment, are aware of the presence of any fire hazards in the work area, and understand necessary emergency procedures.
4. Cutting and welding operations should not be performed near the end of the work day. Also, operations should be postponed when high winds or extremely dry conditions present substantial hazards. If operations are absolutely necessary at the end of the day or under unfavorable conditions, then a fire watch must be established for at least two hours after completion of the work.

## WORK AREA PRECAUTIONS

1. Employee must gain approval from the designated supervisor / manager prior to cutting or welding. When frequent cutting / welding operations are performed, a written permit should be employed which includes the specific work to be done, location, time, and a checklist of precautions. This permit should be signed by the supervisor / manager.
2. All combustible materials, including stock, wood refuse, trash, etc., within 35 feet must be removed, or protected by fire-resistant barriers or covers.
3. Openings in floors, walls, or ducts within 35 feet must be covered to prevent sparks from reaching adjacent areas.
4. Combustible floors and supports within 35 feet must be wet down, or covered with fire-resistant shields.
5. A fire extinguisher or a hose line must be available at the work area.
6. A fire watch must be provided by an employee that is trained in the use of extinguishing equipment and emergency procedures such as sounding an alarm or notifying appropriate personnel.
7. Fire watch must be maintained for at least two hours after completion of the work to detect and extinguish any smoldering fires.

## EQUIPMENT

1. Only equipment in good condition and appropriate for use should be allowed.
2. Oxy-fuel gas cutting and welding equipment should be tested periodically for leaks with special emphasis on hoses, hose connections, and valves.

3. Arc welding cables should be of adequate size for current and workload. Cables should be inspected frequently for wear and damage.
4. All oxygen and fuel gas cylinders should be kept at least 20 feet from heat sources and combustible materials.
5. All cylinders should be secured to prevent them from being knocked over. Valve protection caps should be in place when not in use.
6. Stored oxygen and fuel gas cylinders should be separated from one another by at least 20 feet, or by a noncombustible barrier at least five (5) feet in height.
7. Cylinder valves must be closed and hoses bled down when work is finished.