

Welding and Cutting

Gas Welding:

- * Appropriate clothing and protective equipment, including eye protection.
- * Cylinders, hoses, couplings, torches and other apparatus inspected before each use.
- * Cylinders properly secured, including during transportation, and separated.
- * Regulators removed and valve protection cap reinstalled when cylinders hoisted.
- * Equipment free of oil and grease.
- * Cylinders placed out of welding/cutting area.
- * Safety zone established around welding area.
- * Proper screening provided against arc flash.
- * Fire suppression equipment immediately available in the welding area.
- * Welding/cutting area properly ventilated.
- * Precautions taken to protect personnel against toxic fumes.
- * Area examined after project completed.
- * Cylinder valves closed when not in use, when empty or when being moved.

Arc Welding:

- * Appropriate clothing and protective equipment, including eye protection.
- * Apparatus inspected before each use.
- * Rod holder properly insulated.
- * Welder properly grounded.
- * Safety zone established around welding area.
- * Proper screening provided against arc flash.
- * Fire suppression equipment immediately available in the welding area.
- * Area properly ventilated.
- * Precautions against toxic fumes.
- * Rod removed from holder, when not in use.
- * Area examined after project completed.

Welding and Cutting

Filter Lens Shade Numbers for Protection against Radiant Energy

<u>Welding Operation:</u>	<u>Shade Number:</u>
Shielded metal arc welding (1/16, 3/32, 1/8, 5/32 inch diameter electrodes)	10
Gas shielded arc welding (non-ferrous) (1/16, 3/32, 1/8, 5/32 inch diameter electrodes)	11
Gas shielded arc welding (ferrous) (1/16, 3/32, 1/8, 5/32 inch diameter electrodes)	12
Shielded metal arc welding (3/16, 7/32, 1/4 inch diameter electrodes)	12
Shielded metal arc welding (5/16, 3/8 inch diameter electrodes)	14
Atomic hydrogen welding	10 to 14
Carbon arc welding	14
Torch blazing	03 or 04
Light cutting, up to one (1) inch	03 or 04
Medium cutting, one (1) to six (6) inches	04 or 05
Heavy cutting, over six (6) inches	05 or 06
Gas welding (light), up to 1/8 inch	04 or 05
Gas welding (medium), 1/8 to 1/2 inch	05 or 06
Gas welding (heavy), over 1/2 inch	06 or 08

Electric City, Inc.

Heat Generation Work Zone Procedures

*** General Requirements:**

- * If feasible, combustible material(s) should be relocated into an area that is thirty-five (35) or more feet removed from the heat generation work zone.
- * If Indicated, shield(s) should be used in order to protect combustible material(s).
- * Personnel fire suppression equipment utilization procedures training will be provided.
- * At the conclusion of relevant work activities, supervisory personnel will inspect and evaluate the relevant work zone.

*** Hot Work Permit Requirements:**

- * During the performance of the following work activities:
 - * Welding * Cutting * Brazing * Abrasive Grinder Operation * Soldering
 - * Spark Producing Chop Saw Operation
- * A Hot Work Permit document will be prepared by the job site superintendent and discussed and reviewed with pertinent personnel. (A Hot Work Permit document is provided on a subsequent page).
- * Finalized Hot Work Permit document(s) will be retained in a job site file and maintained until project completion.

*** Fire Watch Requirements:**

- * When other than a minor fire may potentially develop.
- * When a considerable amount of combustible material is contained within (construction or content) or located within thirty-five (35) feet of a building or structure.
- * When wall or floor opening(s), located within a thirty-five (35) feet radius of a heat generation work zone, expose combustible material(s), which are located in an adjacent area, to a potential ignition hazard.
- * When a wall, partition or floor, which is located within a thirty-five (35) feet radius of a heating generation work zone, could potentially conceal an emission from heat generation work activities.

Electric City, Inc.
Hot Work Permit

Work Location: _____

Date Issued: _____

Time Issued: _____

Time Canceled: _____

Final Closure:

_____ _____
Time Initials

Work activities: Welding: Cutting: Brazing: Grinding: Soldering: Chop Saw:

Personnel assigned to perform work activities:

(1) _____ (2) _____

(3) _____ (4) _____

Procedures:

- | | | | |
|--|------------------------------|-----------------------------|------------------------------|
| Fire extinguisher availability: | Yes <input type="checkbox"/> | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| Flammable and combustible material removed: | Yes <input type="checkbox"/> | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| Adjacent area inspected and protected: | Yes <input type="checkbox"/> | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| Floor swept: | Yes <input type="checkbox"/> | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| Lint, dust and debris removed: | Yes <input type="checkbox"/> | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| Flame resistant cover(s) or shield(s) installed: | Yes <input type="checkbox"/> | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| Floor/wall opening(s) shielded: | Yes <input type="checkbox"/> | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| Adequate ventilation provided: | Yes <input type="checkbox"/> | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| Fire watch personnel assigned: | Yes <input type="checkbox"/> | No <input type="checkbox"/> | N/R <input type="checkbox"/> |

Name: _____

Name: _____

Post work activities inspection completed: Yes

Work activities terminated 30 minutes prior to personnel departure: Yes

Approval: Electric City representative: _____

Subcontractor company name: _____

Subcontractor representative: _____