



# Weekly Safety Meeting

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## Hot Work and Fire Watchers

In the construction industry, there are many work areas where welding, cutting, and brazing might be in operation. Welding operations are of three types: electric arc, gas, and thermit. Electric arc welding is probably the most common or widely used type, where an electric arc melts the materials to form the weld. Gas or oxy-fuel welding uses a flame from gas, like acetylene. This melts metal at joints to be welded, involving materials like iron, steel, cast iron, even copper. Thermit welding uses a chemical reaction to generate intense heat. There even other methods such as pressure welding.

Oxy-fuel and plasma cutting, along with brazing, are all related to welding. They all create or are involved in the melting of metal or molten metal, sparks, weld spatter, slag, and hot work surfaces. Fires can easily result from all these operations. These operations are referred to as “Hot Work.”

### Fire Watchers in Construction

According to 1926.352, in the construction industry the employer must assign employees to be on watch or guard against the potential of a fire occurring during any welding, cutting, or heating operation, including an additional time frame after the completion of the work. These employees are referred to as “Fire Watchers.”

### “Fire Watchers” Are Additional Site Personnel, Trained to:

- Maintain a “fire watch” for the duration of the hot work operation and for at least 30 minutes following the completion of work;
- Provide additional safeguards against fire potential, specific to the job task and unique location, during and after welding, cutting, or heating operations;
- Ensure fire prevention equipment is near the job task;
- Provide correct application of fire prevention equipment to the fire hazard when necessary;
- Evaluate the necessity for providing a fire watcher;
- Understand the responsibilities of a fire watcher;
- Understand the employer’s welding best practices;
- Inspect an area for fire hazards prior to all welding or cutting operations;
- Provide protections for fire hazards by adequately covering fire hazards that cannot be removed from area of operations;
- Obtain a site-specific hot work permit; and
- Immediately report all fires.

In general, OSHA is concerned with, or more focused on, construction site fire hazards in the following conditions:

- Where any combustible material (example, paper, wood, solvents, paint) may be positioned or located within 35 feet from the operation;
- Where any combustible material may be located more than 35 feet away but could easily ignite by a spark;
- Where a wall opening or floor opening within 35 feet can potentially expose combustible materials; or
- In which there are concealed wall or floor surfaces, areas adjacent, or even the opposite or opposing sides of the materials being welded.

For additional information, review the employer's "Fire Prevention Plan," specific OSHA regulations including 29 CFR 1926 Subpart J – Welding and Cutting, and American National Standards Institute (ANSI) – Safety in Welding and Cutting.

***WHEN IT IS HOT, IT'S REALLY HOT!***

