

Welding & Cutting During Steel Erection

TRADE: STEEL ERECTION & IRONWORK

LEADER GUIDE: 8-12 MINUTES

USE WHAT FITS TODAY

LEADER NOTE

Do not read this sheet word-for-word. Pick the sections that match today's task, point to the actual equipment/work area, and get the crew to answer the questions out loud.

WHY THIS MATTERS

Welding & Cutting During Steel Erection can go wrong fast when sparks, fall exposures and hot metal. Use the job in front of you to show the crew where the exposure is and how it will be controlled. Hot work creates more than a burn hazard. Sparks and heat can travel through openings, ignite hidden combustibles and start fires after the crew has moved on. Gas cylinders, hoses, ventilation and fire-watch coverage all matter.

A SCENARIO TO DISCUSS

During Welding & Cutting During Steel Erection, sparks or heat begin reaching farther than expected through an opening, joint, penetration, or onto material outside the original fire-watch area. What needs to be stopped, moved, shielded, or re-permitted before work resumes?

BEFORE WORK STARTS

- Remove or protect combustibles and inspect the area on both sides of walls/floors where sparks or heat can travel.
- Verify permits, ventilation, fire extinguishers and fire-watch responsibilities before ignition.
- Inspect cylinders, regulators, hoses/leads, torches and connections before use.
- Confirm the required hot-work authorization, location controls and fire-prevention steps before sparks or flame begin.
- Secure cylinders, inspect hoses/leads and keep hot-work equipment in serviceable condition.

SAFE WORK SEQUENCE / CONTROLS

- Confirm the required hot-work authorization, location controls and fire-prevention steps before sparks or flame begin.
- Remove or protect combustibles and check both sides of walls, floors and penetrations for hidden ignition hazards.
- Secure cylinders, inspect hoses/leads and keep hot-work equipment in serviceable condition.
- Provide the required fire watch and suitable extinguisher, and continue post-work monitoring as required by the site procedure.
- If the setup changes or the control for sparks, fall exposures and hot metal is not working, stop the job and fix it before continuing.

QUESTIONS THAT SHOULD CHANGE THE JOB

1. What combustibles, coatings, penetrations, or hidden spaces can sparks/heat reach from this exact work position?
2. What fire protection/fire-watch coverage is required, and who is responsible for the post-work check?
3. What metal, coating, ventilation, or enclosure condition could change the fume-control/PPE plan?

COMMON FAILURE POINTS

- Missing combustibles hidden on the other side of a wall, floor or penetration.
- Allowing sparks/heat to travel beyond the fire-watch area.
- Working with damaged hoses/leads or inadequate ventilation because the weld/cut is short.

STOP AND RESET IF...

- Combustibles cannot be removed or protected, or required fire-watch coverage is not available.
- Ventilation is inadequate or fumes/coatings create an exposure not covered by the plan.
- Torches, leads, hoses, regulators, cylinders or hot-work equipment are damaged or improperly set up.

MAKE IT REAL ON THE JOB

Trace where sparks/heat can travel and physically inspect the fire-watch area and extinguisher location.

BEFORE YOU RELEASE THE CREW

Before the crew starts, everyone should be able to explain the hazard, point to the control being used today, and name the condition that would make the work stop.

ATTENDANCE & SIGN-OFF

Welding & Cutting During Steel Erection

Project / Job:		Date:	
Talk leader:		Location:	

CREW ACKNOWLEDGMENT

By signing, attendees confirm they participated in this toolbox talk and had the opportunity to raise job-specific questions. Signatures do not replace required training, qualifications, permits or certifications.

#	Name	Company / Trade	Signature
1			
2			
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QUESTIONS / CONDITIONS / CORRECTIVE ACTIONS

END-OF-TALK CHECK

☐ Crew can point to the main hazard.	☐ Critical control is in place and usable.
☐ The responsible person/check is clear.	☐ Stop/re-brief conditions were discussed.