

DC Arc Hazard Awareness

TRADE: SOLAR & RENEWABLE INSTALLATION

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

Take a few minutes before the task to cover DC Arc Hazard Awareness. The main concern is DC arcing and energized components, so make sure everyone sees the exposure and knows the plan before work begins. Electrical incidents often happen when a circuit is assumed to be dead, temporary wiring is damaged or overloaded, or the work moves closer to energized parts than planned. Treat verification, protection and working clearance as part of the task, not paperwork that happens somewhere else.

A SCENARIO TO DISCUSS

During DC Arc Hazard Awareness, a worker is told that the equipment is off, but the person who isolated it is not present and the status has not been verified at the work point. What evidence is required before the crew treats it as de-energized?

BEFORE WORK STARTS

- Identify the circuit/equipment and the isolation or protective device that applies to today's task.
- Inspect cords, plugs, enclosures and temporary wiring in the work area before energizing tools/equipment.
- Establish required working clearances and keep conductive materials/water out of the exposure zone.
- Identify every possible electrical source and keep unqualified workers outside the electrical hazard area.
- Inspect cords, connectors, tools and temporary power components before use; remove damaged equipment from service.

SAFE WORK SEQUENCE / CONTROLS

- Identify every possible electrical source and keep unqualified workers outside the electrical hazard area.
- Inspect cords, connectors, tools and temporary power components before use; remove damaged equipment from service.
- De-energize and verify whenever the task requires it instead of relying on a switch position or assumption.
- Keep electrical equipment dry, maintain required clearances and use GFCI/grounding protection where applicable.

QUESTIONS THAT SHOULD CHANGE THE JOB

1. What is energized, what is de-energized, and how was that status verified instead of assumed?
2. What GFCI, grounding, isolation, guarding, or other protective device is controlling the electrical exposure today, and how was it checked?
3. Where could water, conductive material, damaged cords, or another trade change the electrical risk while we are working?

COMMON FAILURE POINTS

- Treating "off" as the same thing as verified de-energized.
- Using damaged or improvised temporary wiring because it still powers the tool.
- Letting water, metal access equipment or another trade move into the electrical clearance.

STOP AND RESET IF...

- The circuit, conductor or equipment cannot be positively identified or its status is uncertain.
- Cords, plugs, enclosures, GFCI protection or grounding/bonding are damaged or do not match the planned setup.
- Water, metal access equipment, nearby energized work or another condition changes the electrical exposure.

MAKE IT REAL ON THE JOB

Show the disconnect/protective device or test method being relied on and identify the energized boundary.

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

DC Arc Hazard Awareness

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.