

Electrical Safety on the Jobsite

This packet contains three stand-alone toolbox talks. Each can be delivered on its own in roughly five to ten minutes, or all three can be run across a week. Talk 1 covers extension cords, talk 2 covers general electrical safety, and Talk 3 (an optional add-on if time allows) covers electrical power tools. A sign-in sheet is attached at the end.

TOOLBOX TALK 1

Extension Cord Safety

Why this matters

Extension cords are the most common piece of electrical equipment on a jobsite and one of the most abused. They get run through doorways, over rebar, across wet ground, and left coiled and overheating. A damaged cord can energize a tool housing, start a fire, or create a shock or electrocution hazard. Most cord-related incidents are caused by damage, wrong cord for the job, or missing ground-fault protection — all of which are preventable in the field.

Key discussion points

- Inspect before every use. Check the full length for cuts, cracks, exposed conductors, melted spots, and crushed insulation. Check that the plug has all three prongs and the ground pin is intact — never remove or bend a ground pin.
- Use the right cord. Only use cords rated for hard or extra-hard service (look for markings such as S, ST, SO, STO, SJ, SJO, etc.) and rated for the amperage of the tool. Verify acceptable cord types against the current standard.
- GFCI protection. On construction sites, cord-and-plug equipment generally requires either GFCI protection or a written Assured Equipment Grounding Conductor Program. Confirm which applies on this project.
- Protect the cord from damage. Do not run cords through doorways or windows that pinch them, across walkways where they get run over, or through standing water. Elevate or cover cords where they cross traffic.
- No daisy-chaining or modifications. Do not link multiple cords beyond manufacturer guidance, use indoor cords outdoors, or repair cords with tape. Damaged cords are removed from service and tagged.
- Pull the plug, not the cord. Disconnect by gripping the plug body — yanking the cord damages the conductors and strain relief.

Field talking points / ask the crew

1. Where on this site are cords most likely to get damaged today?
2. What do we do with a cord that has a cut or a missing ground pin?
3. Do we know whether this site uses GFCIs, an AEGCP, or both?

Bottom line

Inspect every cord before use, match the cord to the load, keep ground-fault protection in place, and pull damaged cords out of service immediately. If a cord looks questionable, it does not go back in the box — it gets tagged and removed.

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TOOLBOX TALK 2

General Electrical Safety

Why this matters

Electricity is one of the “Fatal Four” hazards in construction. Contact with energized parts, overhead power lines, and damaged equipment can cause shock, burns, arc flash, falls triggered by a shock reaction, and electrocution. Many of these incidents happen during routine work, not just during electrical tasks — which is why everyone on site needs to recognize the basics.

Key discussion points

- Assume every wire is live. Treat all conductors and circuits as energized until they are verified de-energized and locked/tagged out by a qualified person.
- Maintain clearance from overhead power lines. Equipment, ladders, scaffolds, and materials must stay clear of overhead lines. Confirm the required approach distance for the line voltage and use a spotter for cranes and high equipment.
- Only qualified persons work on electrical systems. If you are not qualified for a task, you stop and get the right person. Panel work, terminations, and troubleshooting energized equipment are not general-trade tasks.
- Lockout/tagout. Energy must be controlled before work begins on or near exposed circuits. Verify zero energy before contact.
- Inspect tools, cords, and equipment. Remove cracked housings, frayed cords, and equipment with a missing ground from service.
- Keep electrical areas dry and clear. Water and electricity do not mix. Keep panels, generators, and temporary power dry, and keep a 36-inch clear working space in front of electrical panels.
- Know the response. If someone is in contact with a live source, do not touch them. De-energize the source if you can do so safely, call for help, and start emergency response.

Field talking points / ask the crew

1. Are there overhead power lines on this site? Where, and what's our clearance plan?
2. Who is the qualified person we call for electrical issues today?
3. Where are the panels, and is the working space in front of them clear?

Bottom line

Assume it's live, keep your distance from power lines, leave electrical work to qualified people, and never touch a person who is in contact with a live source. When in doubt, stop and get the qualified person.

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TOOLBOX TALK 3

Electrical Power Tool Safety (Optional Add-On)

Why this matters

Power tools combine electrical hazards with mechanical ones — moving blades, bits, and abrasive wheels. The same tool can shock you through a damaged cord and injure you through a removed guard. Most power-tool injuries trace back to a defeated guard, a damaged cord or housing, the wrong tool for the job, or loss of control.

Key discussion points

- Inspect before use. Check the cord, plug, ground pin, switch, and housing. Confirm guards are in place and functioning. Tag and remove any defective tool from service.
- Guards stay on. Never remove, wedge, or tie back a guard. Guards protect against the point of operation, rotating parts, and flying debris.
- Grounding and double insulation. Tools must be grounded (three-prong) or marked double-insulated. Use GFCI protection per the site's program.
- Right tool, right job. Don't force a tool or use it outside its rated capacity. Use the correct bit, blade, or wheel and confirm it's rated for the speed of the tool.
- Control and stance. Keep a firm grip and stable footing. Let the tool reach full speed before contact and let it stop before setting it down. Keep both hands and bystanders clear of the cut line.
- PPE. Eye protection at minimum; add hearing, face, and hand protection based on the task and a hazard assessment.
- Disconnect for service. Unplug or remove the battery before changing blades, bits, or accessories, and before clearing a jam. Never carry a tool by the cord.
- No loose clothing or jewelry near rotating parts. Secure long hair and remove items that can catch.

Field talking points / ask the crew

1. What power tools are we running today, and have they been inspected?
2. Is any guard missing or defeated on a tool in the gang box right now?
3. What PPE does today's cutting/grinding work require?

Bottom line

Inspect the tool, keep the guard on, use the right tool for the job, and disconnect power before you service it. A guarded, well-maintained tool in trained hands is safe — a defeated one is an injury waiting to happen.

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Toolbox Talk Attendance Record

Complete one sheet per talk delivered. Retain per company recordkeeping policy.

Talk delivered (circle one): 1 Extension Cords 2 General Electrical 3 Power Tools

Project / Jobsite:	Date:	Presenter:
Weather / Conditions:	Start Time:	Duration:

#	Print Name	Signature	Company / Trade
1			
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Topics / questions raised and follow-up actions:

Presenter signature: _____ Date: _____