Job hazard analysis (JHA): Scaffold erection

Task: Scaffold erection	**Site or job:**
Crew:	**Date:**
Supervisor:	

No.	Job step	Hazard	Controls (most effective first)
1	Plan the scaffold and name the competent person	Scaffold is built wrong or loaded beyond its design	**Eliminate:** Where the work can be done from a scissor lift or the ground, skip the scaffold. **Engineering control:** Have a qualified person design the scaffold, and build and load it to that design. (29 CFR 1926.451(a)(6)) **Administrative control:** Put a competent person in charge of every erecting, moving, altering and dismantling task. (29 CFR 1926.451(f)(7)) **Administrative control:** Train the crew before they start, including erectors and anyone who works from the scaffold. (29 CFR 1926.454(b))
2	Plan the scaffold and name the competent person	Scaffold will be near energized lines	**Eliminate:** Ask the utility to de-energize or move the lines before any scaffold work starts. **Administrative control:** Keep the scaffold and anything conductive handled on it outside the clearance distances in the standard. (29 CFR 1926.451(f)(6))
3	Prepare the foundation	Posts sink or kick out on soft or uneven ground	**Engineering control:** Set legs, posts and frames on base plates and mud sills or another firm foundation. (29 CFR 1926.451(c)(2)) **Engineering control:** Level the ground first and use screw jacks to correct small differences. **Administrative control:** Walk the footprint for trenches, backfill, voids and slick spots before delivering materials.
4	Erect frames, bracing and ties	Scaffold tips or sways	**Engineering control:** Keep uprights plumb and braced to prevent swaying and displacement. (29 CFR 1926.451(c)(3)) **Engineering control:** Guy, tie or brace any scaffold taller than four times its base width, and add ties for cantilevered loads. (29 CFR 1926.451(c)(1)) **Administrative control:** Do not intermix parts from different manufacturers unless they fit together without force. (29 CFR 1926.451(b)(10))

No.	Job step	Hazard	Controls (most effective first)
5	Erect frames, bracing and ties	Erector falls while building up	**Engineering control:** Have the competent person decide whether fall protection is feasible for erecting and dismantling, and use it where it is. (29 CFR 1926.451(g)(2)) **Engineering control:** Install hook-on or attachable ladders as soon as the erection has reached a point where they can be used safely. (29 CFR 1926.451(e)(9)(ii)) **PPE:** Wear a full-body harness tied to a point approved for it when the competent person calls for it.
6	Install safe access	Climbing the end frames or cross braces	**Engineering control:** Provide a ladder, stair tower, ramp or other safe access when a platform is more than 2 feet above or below the access point. (29 CFR 1926.451(e)(1)) **Administrative control:** Do not use cross braces on frame scaffolds as a way up or down. (29 CFR 1926.451(e)(9)(iv)) **Administrative control:** Keep the access path clear of tools, hoses and stored material.
7	Deck the platform	Gaps and loose planks let a worker or tool fall through	**Engineering control:** Fully plank or deck each platform between the front uprights and the guardrail supports. (29 CFR 1926.451(b)(1)) **Engineering control:** Where planks overlap to make a long platform, overlap them only over supports, by at least 12 inches unless they are nailed together or otherwise restrained. (29 CFR 1926.451(b)(7)) **Administrative control:** Replace any plank that is cracked, warped or split before it is set.
8	Deck the platform	Platform too narrow for the crew and material	**Engineering control:** Use platforms at least 18 inches wide, with narrow exceptions the standard spells out. (29 CFR 1926.451(b)(2)) **Administrative control:** Limit materials on the deck to what the day needs.
9	Add guardrails and overhead protection	Fall from the working level	**Engineering control:** Protect each employee more than 10 feet above a lower level with a guardrail system or personal fall arrest system as the scaffold type requires. (29 CFR 1926.451(g)(1)) **PPE:** Use a personal fall arrest system where the standard calls for one, such as on suspension and ladder jack scaffolds. (29 CFR 1926.451(g)(1)(i))
10	Add guardrails and overhead protection	Tools or debris fall on people below	**Engineering control:** Add toeboards, screens, debris nets or catch platforms, or barricade the area below. (29 CFR 1926.451(h)(1)) **PPE:** Wear a hard hat in addition to the overhead protection. (29 CFR 1926.451(h)(1))

No.	Job step	Hazard	Controls (most effective first)
11	Inspect, use and dismantle	A defect is missed	**Administrative control:** Have a competent person inspect the scaffold before each work shift and after any event that could affect its integrity. (29 CFR 1926.451(f)(3)) **Administrative control:** Immediately repair, replace or brace any damaged or weakened part, or remove the scaffold from service until it is repaired. (29 CFR 1926.451(f)(4))
12	Inspect, use and dismantle	Overload, weather and housekeeping hazards	**Administrative control:** Do not load beyond the maximum intended load or rated capacity. (29 CFR 1926.451(f)(1)) **Administrative control:** Keep workers off scaffolds covered with snow, ice or other slippery material, except to remove it. (29 CFR 1926.451(f)(8)) **Administrative control:** Stop work in storms or high winds unless a competent person has decided it is safe and the workers are protected by a personal fall arrest system or wind screens. (29 CFR 1926.451(f)(12)) **Administrative control:** Do not let debris build up on platforms. (29 CFR 1926.451(f)(13)) **Administrative control:** Never move a scaffold horizontally while people are on it, unless it was designed by a registered professional engineer for that movement or it is a mobile scaffold used under 1926.452(w). (29 CFR 1926.451(f)(5))

Required PPE

- Hard hat (29 CFR 1926.451(h)(1))
- Full-body harness and lanyard where fall arrest is used (29 CFR 1926.451(g)(3))
- Safety glasses
- Cut-resistant gloves for handling frames and planks
- Steel-toe or composite-toe boots

OSHA sections

29 CFR 1926.451 General requirements; 29 CFR 1926.454 Training requirements

Reviewed with the crew. Names and signatures

Free JHA template from ToolboxKits, toolboxkits.com. Check it against your site and your employer's program before use. This is not legal advice.