

Ladder Jack Scaffolds

Supported Scaffolds

A ladder jack scaffold is a system designed to perform activities, such as: installing building exteriors, trim, and finishes. Contractors widely use ladder jack scaffolds because of their cost effectiveness, portability, and quick erection and dismantling procedures, as well as their adaptability for use in narrow spaces at construction worksites.

What is a Ladder Jack Scaffold?

Triangle-shaped brackets called “ladder jacks” are attached to portable ladders, which are used on each side of a ladder jack scaffold to form a means of support for a platform.



Photo courtesy of National Association of Home Builders.

Ladder Jack Scaffold

Types of Ladder Jack Bracket Devices

There are different types of Ladder Jack bracket devices. These include:

1. Side Rail Ladder Jack – (Over the rail and rung)

This style of jack is installed onto the railing and rungs of a pair of extension, or single, ladders. The planking is then slid into position along the side of the bracket to create a work platform.



Photo courtesy of ACRO Building Systems, Inc.

Side Rail Ladder Jack

2. Two or Three Rung Bracket Ladder Jacks – (Over the rung only)

This style of jack hooks directly onto two or three ladder rungs. With these types of ladder jacks, planking may be placed on top of the bracket jacks to create a working platform.



2-Rung Bracket Jack



3-Rung Bracket Jack

Photos courtesy of Werner Co Services, Inc.

Setting-Up Ladder Jack Scaffolds

Before each use:

- Inspect all scaffold components for damage.
- Verify that all parts are working and ensure that all nuts are tightened.
- Do not use bent, cracked, damaged or substitute parts.
- If using a two- or three-rung bracket jack, ensure that the rectangular brackets are fitted securely onto the ladder rungs in accordance with manufacturer's specifications.
- If using the side rail ladder jack, secure the upper round hooks and the lower brackets of the device onto the ladder's side rails, then rest the brackets onto the rungs, and secure the platform gusset plate onto the adjustable notches at center. **(See Figure #1).**
- The ladder jack must be designed and constructed so that it will bear on the side rails and ladder rungs or on the ladder rungs alone. If bearing on rungs only, the bearing area must include a length of at least 10 inches (25.4 cm) on each rung [29 CFR 1926.452(k)(3)].

- Ensure that the bracket jack is adjusted so that it is parallel to the ground to create a level platform.
- Securely tighten the ladder jack's wing nuts to prevent slippage during use.
- If the scaffold system is defective, tag and promptly remove it from service.

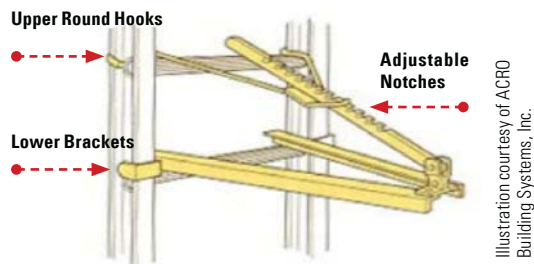


Figure #1

Using Ladder Jack Scaffolds

- Extension ladders must not be separated to create two ladders.
- Keep the areas around the base of all ladders clear to prevent trip-and-fall hazards.
- Avoid setting ladders up in high traffic areas or barricade areas near the base of the ladder.
- Keep ladders on stable and level surfaces, unless secured, to prevent accidental displacement.
- Ladders must be secured or provided with slip-resistant feet when used on slippery surfaces.
- Workers should avoid electrical hazards and look for overhead power lines before handling ladders.
- Workers should not use metal ladders near power lines or exposed energized electrical equipment.
- Keep platforms clear for working activities.

Platform Requirements

- Two workers are recommended when installing planking onto jack bracket supports for scaffolding.
- Do not paint or plaster scaffold planks, and if paint or plaster is observed, promptly remove the plank from service.
- Do not use ladder jack scaffolding to support a platform higher than 20 feet (6.1m) [§1926.452(k)(1)].
- Do not bridge scaffold platforms together [§1926.452(k)(5)]. (This practice often causes the center of the platform to overload.)
- Each ladder jack scaffold platform must be at least 12 inches (30 cm) wide [§1926.451(b)(2)(i)].



When choosing a straight or extension ladder, make sure that its length allows you to set it up at the required angle, using the 4-to-1 Rule.

Suggested Guidelines

[29 CFR 1926 Subpart L, Appendix A(2)(k)]

- The maximum intended load for a ladder jack scaffold is 25 lb/ft².
- No more than two workers may occupy a platform at any one time.
- The maximum span between supports is 8 feet.

Training

- The training requirements of 29 CFR 1926 Subparts L – Scaffolds (§1926.454) and X – Stairways and Ladders (§1926.1060) apply to ladder jack scaffolding.
- Employers must provide training for workers in hazard recognition, and procedures for controlling or minimizing hazards, when working on ladders and scaffolding.
- Employers must ensure that workers use ladders are trained by a person competent in fall hazards, fall protection systems, the maximum intended load-carrying capacity of ladders, and the proper construction, use, placement and care required when handling ladders.
- Employers must ensure that workers involved in erecting, disassembling, moving, operating,

repairing, maintaining, or inspecting scaffolding are trained by a person competent in hazard recognition.

Which OSHA standards apply to Ladder Jack Scaffolds?

Several OSHA standards apply to construction operations involving the use of ladder jack scaffolding, including:

- *Ladder Jack Scaffold*: A platform resting on brackets attached to ladders [§1926.450(b)];
- *Supported Scaffold*: One or more platforms supported by outrigger beams, brackets, poles, legs, uprights, posts, frames, or similar rigid support [§1926.450(b)];
- *Ladder Jack Scaffolds*: requirements applicable to specific types of scaffolds (29 CFR 1926 Subpart L – Scaffolds), including requirement that all ladders used to support ladder jack scaffolds meet the requirements of Subpart X – Stairways and Ladders [§1926.452(k)];
- *Non-Mandatory Guidelines*: 29 CFR 1926 Subpart L, Appendix A – Scaffold Specifications.

Ladder Requirements

- All ladders used to support ladder jack scaffolds must comply with 29 CFR 1926 Subpart X – Stairways and Ladders [§1926.452(k)(2)].
- **Exception**: Job-made ladders must not be used to support ladder jack scaffolds.

Fall Protection Requirements

- Employees working above 10 feet (3.1 m) on a ladder jack scaffold must be protected from fall hazards by a personal fall arrest system (PFAS) [§§1926.451(g)(1) & (g)(1)(i)].
- Personal fall arrest systems for scaffolds must meet the requirements of §1926.502(d) & §1926.451(g)(3).
- The maximum distance from the face for plastering and lathing operations must be 18 inches (46 cm) [§1926.451(b)(3)(ii)].
- The front edge of all platforms must not be more than 14 inches (36 cm) from the face of

the work, unless guardrail systems are erected along the front edge and/or personal fall arrest systems are used [§1926.451(b)(3)].

OSHA's Scaffolding e-Tool

- OSHA's Scaffolding e-Tool provides information on the requirements that apply to specific types of scaffolding and ways to recognize potential hazards and identify controls, at: www.osha.gov/SLTC/etools/scaffolding/supported.

Workers' Rights

Workers have the right to:

- Working conditions that do not pose a risk of serious harm.
- Receive information and training (in a language and vocabulary the worker understands) about workplace hazards, methods to prevent them, and the OSHA standards that apply to their workplace.
- Review records of work-related injuries and illnesses.
- File a complaint asking OSHA to inspect their workplace if they believe there is a serious hazard or that their employer is not following OSHA's rules. OSHA will keep all identities confidential.
- Exercise their rights under the law without retaliation, including reporting an injury or raising health and safety concerns with their employer or OSHA. If a worker has been retaliated against for using their rights, they must file a complaint with OSHA as soon as possible, but no later than 30 days.

For more information, see [OSHA's Workers page](#).

How to Contact OSHA

For questions or to get information or advice, to report an emergency, fatality, inpatient hospitalization, amputation, or loss of an eye, or to file a confidential complaint, contact your nearest OSHA office, visit www.osha.gov or call OSHA at 1-800-321-OSHA (6742), TTY 1-877-889-5627.

This is one in a series of informational fact sheets highlighting OSHA programs, policies or standards. It does not impose any new compliance requirements. For a comprehensive list of compliance requirements of OSHA standards or regulations, refer to Title 29 of the Code of Federal Regulations. This information will be made available to sensory-impaired individuals upon request. The voice phone is (202) 693-1999; teletypewriter (TTY) number: (877) 889-5627.

For assistance, contact us. We can help. It's confidential.



www.osha.gov (800) 321-OSHA (6742)



U.S. Department of Labor