

# Job Hazard Analysis

## Campus-wide

### Using an Extension Ladder

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#### Task 1

Choosing the right extension ladder with the proper load capacity. To determine the correct ladder, consider your weight plus the weight of all tools, materials and equipment.

#### Hazards

- Falling

#### Controls

- Follow the rated load capacity on the ladder sticker. Obtain a higher load capacity ladder, as needed.
- **Never** use a single section of a double section ladder.

#### Task 2

Inspecting the ladder for obvious damage or loose mechanisms prior to use, including:

- a) Missing rungs, bolts, cleats, screws, and loose components.
- b) Grease, dirt or other contaminants that could cause slips or falls.

#### Hazards

- Falling

#### Controls

- Inspect extension ladder prior to use and remove from service if ladder does not pass inspection. It must immediately be marked as defective or tagged with “Do Not Use” or similar language.

#### Task 3

Setting up the extension ladder.

#### Hazards

- Falling
- Losing control of the ladder and inflicting injury to self or others
- Potential electrocution

#### Controls

- Set-up ladder on even, stable, non-slip surfaces. Set the base so that the bottom sits securely and so both side rails are evenly supported. Use an adjustable ladder leveling base and stabilizer, as needed for uneven surfaces and for use on stairs.

- Set ladder at the proper angle. When leaned against a wall, the bottom of the ladder should be one-quarter of the ladder's working length away from the wall.
- Secure the ladder's dogs or pawls.
- Allow sufficient room to step off ladder, keeping area around bottom and top of ladder clear of equipment, materials and tools. If access is obstructed, secure the top of the ladder to a rigid support that will not deflect, and add a grasping device to allow workers safe access.
- For access to an elevated work surface, extend the top of the ladder three feet above that surface and secure the ladder at its top. Alternate: Use a ladder rail extension system to provide safe walkthrough access to a raised surface.
- Use ladder standoff stabilizers at the top of the extension ladder, as needed.
- In a high traffic area, secure the ladder to prevent movement and set up a barrier area with cones and/or caution tape. If the ladder is placed in front of a door, always block off the door.
- For taller ladders, use two people to move and set up the ladder.
- Scan the area for overhead power lines before setting up or climbing the ladder. Keep all ladders and other tools at least 10 feet away from any power lines.
- Do not use metal ladders near power lines or electrical equipment.

#### Task 4

Using the extension ladder.

Hazards

- Falling

Controls

- Keep the ladder free of slippery material.
- Do not carry materials or tools by hand when climbing or descending the ladder, either use tool belt or use rope/bucket system to hoist tools and materials.
- Maintain three points of contact when climbing or descending a ladder and face the ladder.
- Keep body within side rails. Do not reach outside the ladder side rails.
- Use a fall protection system if the ladder is placed in an area where a fall to a lower level could occur.

#### Task 5

Taking down the ladder and returning it to its storage location.

Hazards

- Injury to self and others from losing control of the ladder.

Controls

- Scan area for any new obstacles prior to taking down ladder.
- Be aware of ladder dimensions when returning to the storage area; overhead hazards, other obstacles, or individuals.

- For taller ladders, use two people to move and put away the ladder.
- Secure ladder in storage area; do not block electrical panels or fire extinguishers.

### Required Training

- 1) Ladder Safety training
- 2) Use of fall protection system (as needed)

### Required Personal Protective Equipment

- 1) Fall protection harness assembly, as needed for potential falls to a lower level.
- 2) Hard hat, as needed for overhead hazards

### Other Information

[Reducing Falls in Construction: Safe Use of Extension Ladders OSHA Factsheet](#)

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