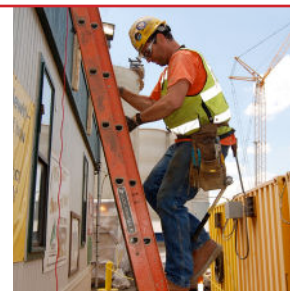


# HAZARD ALERT

CPWR [O]  
THE CENTER FOR CONSTRUCTION  
RESEARCH AND TRAINING

# LADDERS



## Am I in danger?

If you use a ladder on a construction site, then the answer is **YES**.

Falls are the leading cause of deaths and injuries in the construction industry.

- Each year, more than 4,000\* construction workers are injured so seriously by ladder falls that they miss work.
- Each year, more than 70\* construction workers die in falls from ladders.



PHOTO COURTESY OF ROBERT CARR, PH.D., P.E.

## Electrocution Hazard

Falls aren't the only way to get hurt on a ladder!

Contact with overhead power lines can be fatal. Make sure your ladder is positioned **at least 10 feet away from power lines**.

Aluminum conducts electricity. A fiberglass ladder is a better choice when working near electricity.



A painter was electrocuted when a metal ladder came in contact with a powerline.



\*Source: Dong SX, Wang X, Katz R, West G, Bunting J. 2017. *Fall Injuries and Prevention in the Construction Industry* <http://www.cpwr.com/sites/default/files/publications/Quarter1-QDR-2017.pdf>

## To learn more visit:

- ▶ [www.StopConstructionFalls.org](http://www.StopConstructionFalls.org)
- ▶ OSHA's eTool: Falls - Ladder Safety <http://bit.ly/eToolsFallsAndLadders>
- ▶ NIOSH Resources & Ladder Safety App <http://bit.ly/ResourcesAndLadderApp>

To get more of these Hazard Alert cards and cards on other topics, Call **301-578-8500** or visit **www.cpwr.com**

## To avoid a fall ...

### 1 Inspect the ladder before every use

- Inspect the rails, rungs, feet, and spreaders or rung locks for defects or damage **every time** you use a ladder.
- If you see any damage, **tag it** "do not use" and request another ladder in proper working order.
- Always check your ladder's duty rating to make sure it will support you and your toolbelt!



Not every defect is this obvious

### 2 Position your ladder properly

**For all ladders:**

- Make sure you have a level, solid footing for your ladder.
- Position the ladder near your work to avoid overreaching.

**For extension ladders:**

- Set the base one foot away from the building for every four feet of height.
- Tie off the ladder at the top – and bottom where possible!

**The minute you take to tie off could save your life.**

### 3 Use the ladder safely

- Maintain three-point contact with the ladder at all times: two hands and a foot or two feet and a hand.\*
- Do not use the top step/rung of a ladder unless it was designed for that purpose, or stand on the top three rungs of a straight, single, or extension ladder.\*
- Have a co-worker hold the ladder to steady it as you climb up and down.
- Always face the ladder when moving up or down.
- **Do not carry tools and materials while climbing. Use a rope to haul or hoist materials to the upper level.**

\*Source: OSHA Quick Card, [https://www.osha.gov/Publications/portable\\_ladder\\_qc.html](https://www.osha.gov/Publications/portable_ladder_qc.html)



PHOTO COURTESY GREATER PA REGIONAL COUNCIL OF CARPENTERS

## Is a ladder the right equipment for the job?

For **work at heights**, consider using a **scaffold** or **aerial lift**. The wider work platform and guard rails can reduce your risk of falls.

**If you think you are in danger:**

Contact your supervisor.  
Contact your union.

Call OSHA  
**1-800-321-OSHA**