



## **Information You Can Use to Prevent Accidents & Injuries**

**According to OSHA, “falls from portable ladders are one of the leading causes of occupational fatalities and injuries” and falls from ladders make up nearly a third of construction deaths.**

In public works, we are often employing ladders from less stable, unlevel areas, along with other challenges, and good safety practices are essential.

### **Considerations to Mitigate Risk:**

- *Many considerations are listed in the handout and you don't have to go through every single one of them.*
  - *Encourage your crews to read through these themselves when they have time. Take a handful of them that are most relevant to the types of ladder activities your crew is likely to be involved with in the near future. In preparation for the tailgate safety talk, highlight 6-8 of the most relevant items in the list. Chances are, as employees read along, they'll ask questions – questions are always great.*
1. Read the labels on the ladder – they will tell you a great deal about the ladder, its appropriate uses, and warnings you should heed.
  2. Inspect the ladder for each use. If it is damaged, don't take the chance.
  3. If you are fatigued, dizzy, or are have balance problems, avoid ladders.
  4. Avoid ladders in high winds or storms.
  5. Choose the right ladder material.
    - a. Ladders are generally constructed of one of three materials – wood, aluminum, or fiberglass.
    - b. Aluminum is the lightest material, but if you are working near power lines of any voltage, remember that aluminum is conductive and you run the risk of electrocution.
  6. Choose the right duty rating for you, your task, and your tools and materials.
  7. Choose the right length.
    - a. A ladder can be too short, but it can also be too long.
    - b. With a step ladder, standing on the top cap or the step below the top cap is unsafe due to the likelihood of losing your balance.
    - c. With an extension ladder, the top three rungs are not for climbing.
    - d. A ladder is too long if the ceiling height does not allow it to be set-up at the proper angle.
    - e. An extension or straight ladder must extend at least 3 feet above the point of support. However, the portion above the point of contact can

act as a lever to destabilize the footing, so care must be taken with dismounting the ladder onto the elevated surface and your feet should not be placed on rungs above the point of support.

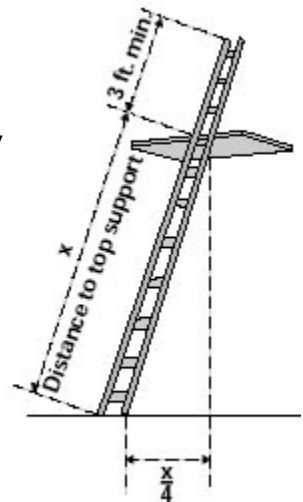
- f. Check the Duty Rating of the ladder. The weight consists of the total of your weight, the weight of your clothing and protective equipment, and the weight of tools and supplies that you carry or are on the ladder.

*The five Duty Ratings for ladders:*

Type IAA (Extra Heavy Duty)	375 pounds
Type IA (Extra Heavy Duty)	300 pounds
Type I (Heavy Duty)	250 pounds
Type II (Medium Duty)	225 pounds
Type III (Light Duty)	200 pounds

*Weights include you, your clothing, your tools, and any materials carried by you or on the ladder. Remember that if it is raining or snowing, your clothing may be quite a bit heavier than normal.*

8. Proper footing. Use a ladder only on stable and level surfaces, unless it has been secured (top or bottom). Do not place a ladder on unstable bases to obtain additional height. Do not move or shift a ladder while a person or equipment is on the ladder.
9. Ladders can be displaced by other work activities, so be mindful of the surroundings. If in doubt of what activities, equipment, or personnel may be moving about, secure the ladder to prevent displacement or erect a barricade to keep traffic away from the ladder. As a special case, be mindful not to place a ladder in front of a door that can be opened.
10. The ladder should be angled such that the base is approximately one quarter of the working length from the object it is supported on (see sketch).
11. Be sure that all locks and braces are in place.
12. Watch out for overhead power lines, particularly with metal ladders, but in general. While on a ladder, even a low voltage shock can cause you to lose your footing on the ladder and fall.
13. Always maintain a 3-point (two hands and a foot, or two feet and a hand) contact on the ladder when climbing. Keep your body near the middle of the step and always face the ladder while climbing (see sketch). Climb slowly and deliberately and avoid sudden movements.
14. Wear slip resistant boots/shoes and clean the soles to maximize traction.
15. Use towlines or a tool belt move materials up and down the ladder so that your hands are free for climbing.
16. Do not overreach or lean while working; keep your weight centered within the ladder.
17. Keep ladders free of any slippery material on the rungs or feet.
18. One person at a time on ladders.



## When is a Ladder a Poor Choice?

*This is a question that merits a conscious choice. Encourage your crews to think about elevated tasks and recognize when something other than a ladder is called for.*

While a ladder or stepladder is commonly used to reach higher work areas, it may not always be the best option. Ask yourself:

- Will I have to hold heavy items while on the ladder?
- Is the elevated area high enough that it would require a long ladder that can be unstable?
- Will I be working from this height for a long time?
- Do I have to stand on the ladder sideways in order to do this work?

If any of these are yes, maybe a ladder isn't the best tool. If possible, bring in other equipment like a scissor lift or a boom/bucket lift.

## Safety Videos:

The American Ladder Institute has very helpful, free videos (see link below) for stepladder safety, single and extension ladder safety, mobile ladder safety, and articulated ladder safety. These are 13-25 minutes long, so they may be better suited for a lunch and learn environment or as part of another training program. However, you might choose one of the videos and play it in lieu of going over the handout – just give them the handout and ask them to review it when they have time later.

## Safety Training:

The American Ladder Institute has free online training (see link below) for individuals or groups. These two are organized for stepladders, single and extension ladders, mobile ladders, and articulated ladders. You can use these as part of your training certification program if you like.

## Resources for Further Reading:

OSHA Publications:

<https://www.osha.gov/pls/publications/publication.AthruZ?pType=AthruZ#L>

American Ladder Institute (videos):

<http://www.americanladderinstitute.org/page/LSTVideos>

American Ladder Institute (training): <https://www.laddersafetytraining.org/>

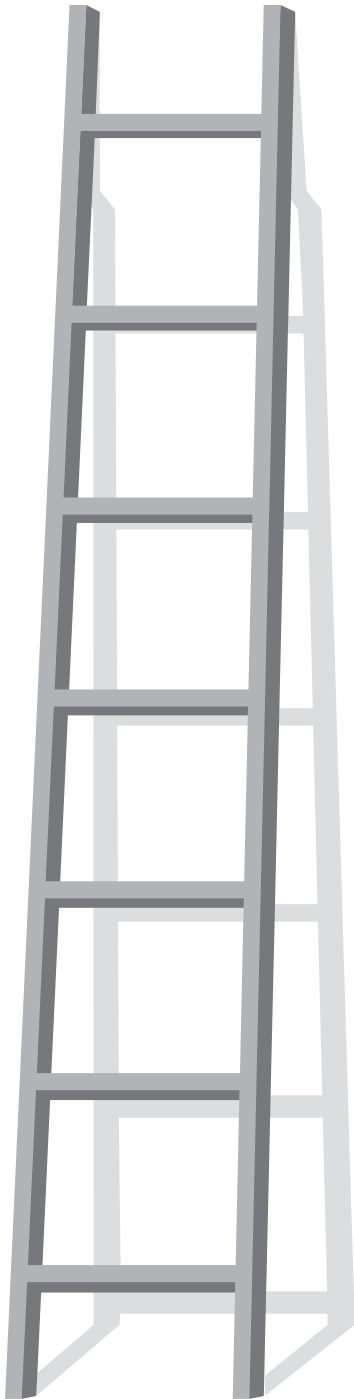
*Users of this tailgate talk are advised to determine the suitability of the information as it applies to local situations and work practices and its conformance with applicable laws and regulations.*





# Take Your Safety Into Your Own Hands.

## Do You Know What to Check For?



### Reminders about your ladder

- Determine what type of ladder is appropriate for your current work environment
- Confirm that the ladder is the appropriate length for the task
- Check that your ladder has the proper Duty Rating
- Thoroughly inspect the ladder to ensure it is in good working condition
- Clean the climbing and gripping surfaces
- Read the safety information label(s) on the ladder



### Reminders about your surroundings

- Confirm that the ground where the ladder is set-up is firm and level
- Confirm that any surrounding doors are blocked open, locked or properly guarded
- Ensure that the weather is sufficiently safe for using a ladder



### Reminders for YOU

- Clean the soles of your shoes to maximize traction and avoid slipping
- Ensure that you are not tired, dizzy or prone to losing your balance before using the ladder
- Use towlines, a tool belt or an assistant to convey materials so that your hands are free when climbing
- Maintain three points of contact with the ladder while climbing

Visit [www.laddersafetytraining.org](http://www.laddersafetytraining.org) to learn more and earn your ladder safety certificate.