

Tailgate Safety Talk

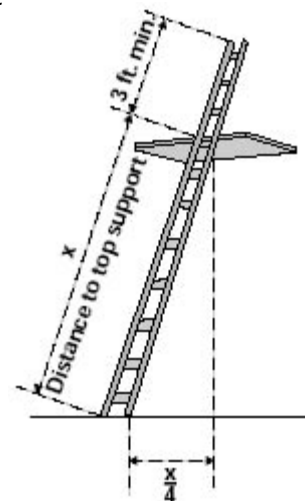
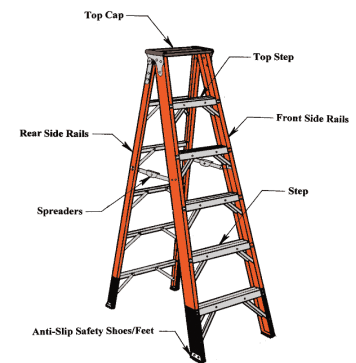
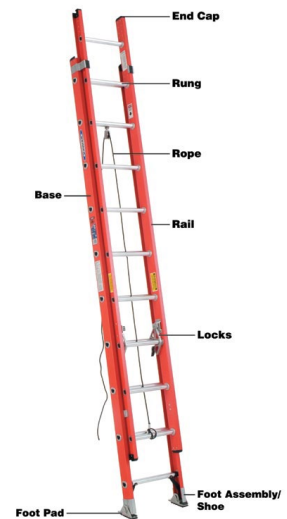
Ladder Safety

Dangers/Risks/Problems:

According to the Occupational Safety and Health Administration, OSHA, “falls from portable ladders (step, straight, combination and extension) are one of the leading causes of occupational fatalities and injuries.” Falls from ladders make up nearly a third of construction deaths. These deaths and injuries are preventable and falls can be prevented by following safe work practices. 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:

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 dismantling 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.
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.

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.

When is a Ladder a Poor Choice?

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.

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.

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/>