

Ladder Safety Webinar Series: Safety While Climbing



NATIONAL
LADDER SAFETY
MONTH



Ladder Safety Webinar Series: Safety While Climbing



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National Jobsite Safety & Security
Retired USAF



WE ARE ONE.

**Our culture is the foundation for our success.
It's the way we work, interact, and win...together.**



We compete as a team

We believe in collaboration and working together to capitalize on the strength of our collective ideas. We are passionate about recruiting, developing, and retaining the most talented and diverse team possible. We put the most skilled, collaborative, engaged team on the field of play every day.



We act with integrity

We speak openly and honestly. We tell the whole story, not just what is convenient to our individual goals. We win with diversity and inclusion and embrace people from diverse backgrounds, cultures, and ways of thinking. We treat each other with integrity and respect. We always do the right thing, even when no one is watching.



We care for our customer, end-user and the communities we live in

The lives of our end-users depend on the quality of our products/ brands, so excellence and accountability are at the forefront of every decision we make. We are engaged and driven to exceed the expectations of our customers and to give back to the communities we live in.



We believe that innovation and continuous improvement define our future

Innovation is our ultimate competitive differentiator. We pursue out-of-the-box ideas, both big and small, to add value and continuously improve our products, processes, and services. We act with a sense of speed and urgency because we know our teammates, customers and end-users are counting on us. We are high achievers, driven to get better every day and to exceed expectations.



We keep score and play to win

We are results driven and are accountable to each other while delivering short and long term results. We understand that success enables us to continually invest back into our businesses and our people to help them realize their full potential. We earn our shareholder's investment and trust by consistently delivering on our commitments.





Ladder Safety While Climbing

Ladder Safety Month

March 2021



Top 10 Violations – 2020

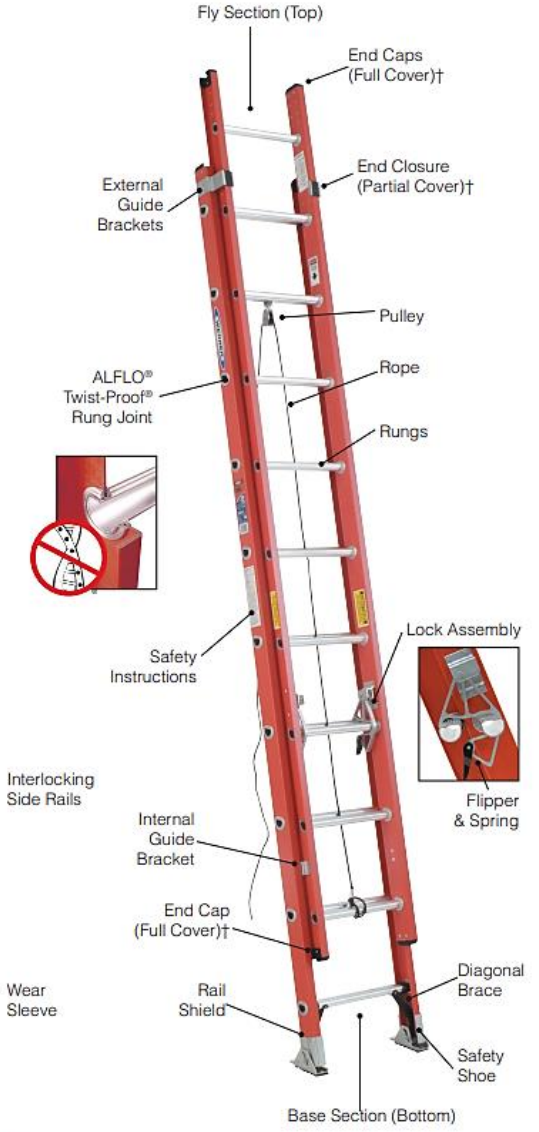
- 1. Fall Protection - General Requirements (1926.501)**
- 2. Hazard Communication (1910.1200)**
- 3. Respiratory Protection (1910.134)**
- 4. Scaffolding - General Requirements (1926.451)**
- 5. Ladders (1926.1053)**
- 6. Control of Hazardous Energy - Lockout/Tagout (1910.147)**
- 7. Powered Industrial Trucks (1910.178)**
- 8. Fall Protection – Training Requirements (1926.503)**
- 9. Personal Protective and Lifesaving Equipment – Eye and Face Protection (1926.102)**
- 10. Machine Guarding– General Requirement (1910.212)**

Where WernerCo Can Help

How to Choose a Ladder? (Mike Melton)



Ladder Inspection and Set Up (Milt DeAsis)






*Diagram shows typical ladder parts. Parts and features may differ by ladder model.

† End Cap's and End Closure's positions differ by ladder models.
 End Caps - completely cover the rail.
 End Closures - partially cover the rail, leaving clearance for the mating ladder section.

Ladder Inspection Form

Download Ladder Inspection Forms from the Werner website:
<https://www.wernerco.com/climbing-pro>

<input type="checkbox"/> STEPLADDER Size: _____ ft.	<input type="checkbox"/> PODIUM Size: _____ ft.	<input type="checkbox"/> LEANSAFE Size: _____ ft.
 <div style="float: right;"> <input type="checkbox"/> Fiberglass <input type="checkbox"/> Aluminum <input type="checkbox"/> Wood </div> <p>Circle Areas of Damage 6206</p>	 <div style="float: right;"> <input type="checkbox"/> Fiberglass <input type="checkbox"/> Aluminum </div> <p>Circle Areas of Damage PD6204</p>	 <div style="float: right;"> <input type="checkbox"/> Fiberglass <input type="checkbox"/> Aluminum </div> <p>Circle Areas of Damage L6206</p>
<p>Steps: Loose, cracked, bent, or missing <input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>Rails: Cracked, bent, split or frayed rail shields <input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>Labels: Missing or not readable <input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>Pail Shelf: Loose, bent, missing, or broken <input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>Top: Cracked, loose, or missing <input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>Spreader: Loose, bent, or broken <input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>General: Rust, corrosion, or loose <input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>Other: Bracing, shoes, or rivets <input type="checkbox"/> YES <input type="checkbox"/> NO</p>	<p>Steps: Loose, cracked, bent, or missing <input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>Rails: Cracked, bent, split or frayed rail shields <input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>Labels: Missing or not readable <input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>Top: Cracked, loose, or missing <input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>Spreader: Loose, bent, or broken <input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>Platform: Cracked or bent <input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>General: Rust, corrosion, or loose <input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>Other: Bracing, shoes, or rivets <input type="checkbox"/> YES <input type="checkbox"/> NO</p>	<p>Steps: Loose, cracked, bent, or missing <input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>Rails: Cracked, bent, split or frayed rail shields <input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>Labels: Missing or not readable <input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>Hinge Mechanism: Loose, bent, missing, or broken <input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>Top: Cracked, loose, or missing <input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>Spreader: Loose, bent, or broken <input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>General: Rust, corrosion, or loose <input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>Other: Bracing, shoes, or rivets <input type="checkbox"/> YES <input type="checkbox"/> NO</p>
<p>ACTIONS:</p> <p><input type="checkbox"/> Ladder tagged as damaged and removed from use</p> <p><input type="checkbox"/> Ladder is in good condition</p>	<p>ACTIONS:</p> <p><input type="checkbox"/> Ladder tagged as damaged and removed from use</p> <p><input type="checkbox"/> Ladder is in good condition</p>	<p>ACTIONS:</p> <p><input type="checkbox"/> Ladder tagged as damaged and removed from use</p> <p><input type="checkbox"/> Ladder is in good condition</p>

Ladder Safety – Proper Use While Climbing

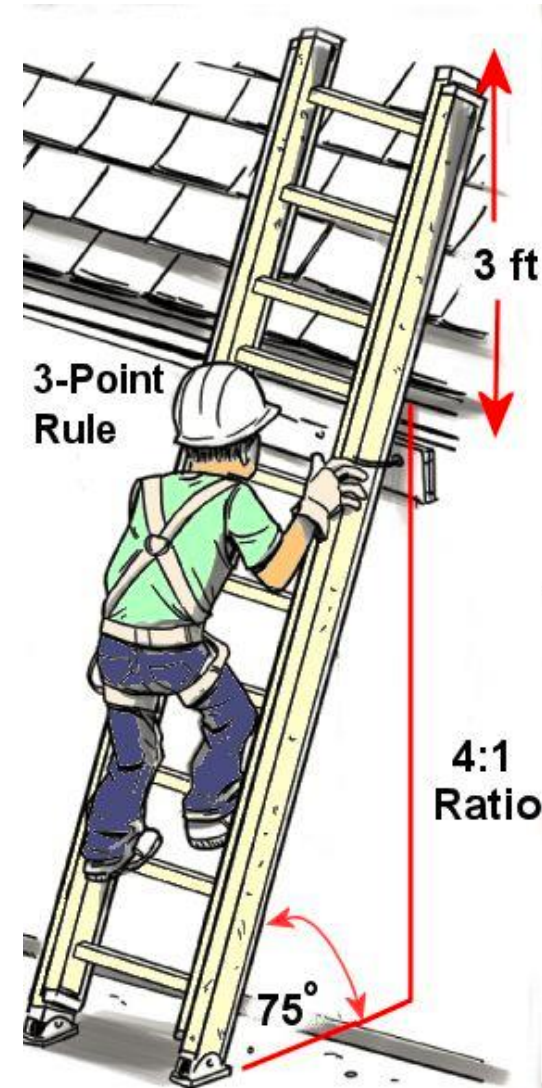
- How many points of contact?
- Always face the ladder when climbing and descending
- Walking a ladder
- Don't Reach! – Keep belt buckle between rails
- Top 2 steps on Stepladder
- Sitting or standing on top cap
- Avoid setting up a ladder in a doorway or pedestrian path



Not sure? Look at Labels

Ladder Safety – Proper Use While Climbing

- How to properly angle Extension Ladders (4:1 Ratio)
- How many rungs above the roof line?
- Feet are flat/level
- Careful loading and unloading
- Check flippers, rope, pulley, feet
- Secure the ladder to your work surface
- Keep ladder clean of any slippery materials
- Only one person at a time on ladder unless specifically designed for more than one climber



Ladder Safety – Duty Ratings

- Ladders are available in different duty ratings, based on their load capacity
- There are 5 duty ratings recognized by ANSI (used by all manufacturers)
- End user needs to consider not only their weight, but the weight of any materials when considering duty rating Werner uses a color system to simplify proper weight capacity selection
- Never exceed the duty rating of a ladder



200 lbs.*	Economical design for lightweight use	Type III
225 lbs.*	Basic design for simple projects	Type II
250 lbs.*	Designed to handle most projects and jobs	Type I
300 lbs.*	Rugged performance designed with the pro in mind	Type IA
375 lbs.*	Maximum performance and durability for the toughest jobs	Type IAA

Ladder Safety – Duty Ratings

LADDER IDENTIFICATION LABELS

I.D. labels provide important information regarding each ladder's Model Number, Type, Duty Rating, Size, and Highest Standing Level.

**Stepladder
I.D. Label**

**Orange Label
For Type IA
Extra Heavy Duty**

**Extension Ladder
I.D. Label**

**Gold Label
For Type IAA
Special Duty**

PERFORMANCE

LOAD CAPACITY

DUTY RATING

LADDER SIZE

MAXIMUM REACH

HIGHEST STANDING LEVEL
is the maximum safe working height

- Stepladders: 2nd step down from the top
- Extension ladders: 4th rung down from the top

MODEL (ID) NUMBER

UPC CODE

PERFORMANCE SYSTEM

225lb LOAD CAPACITY	250lb LOAD CAPACITY	300lb LOAD CAPACITY	375lb LOAD CAPACITY
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Combined weight of user and material should not exceed duty rating

APPROXIMATE MATERIAL WEIGHTS

Bundle of shingles	70 lbs.
5 gallon roof coating	70 lbs.
5 gallons paint	60 lbs.
Tool box with tools	35 lbs.
Portable sprayer	20 lbs.
Ceiling fan	30 lbs.
3 x 4 window	80 lbs.
Garage door opener	40 lbs.
Basketball hoop	60 lbs.
Sheet of plywood	80 lbs.
(3) 4 x 4's	80 lbs.

Ladder Safety – 5 Most Common Causes of Ladder Incidents

1. Missing the last step of the ladder when climbing down.

Exercise caution when climbing down a ladder. Always face the ladder when climbing up or down, and don't skip steps!

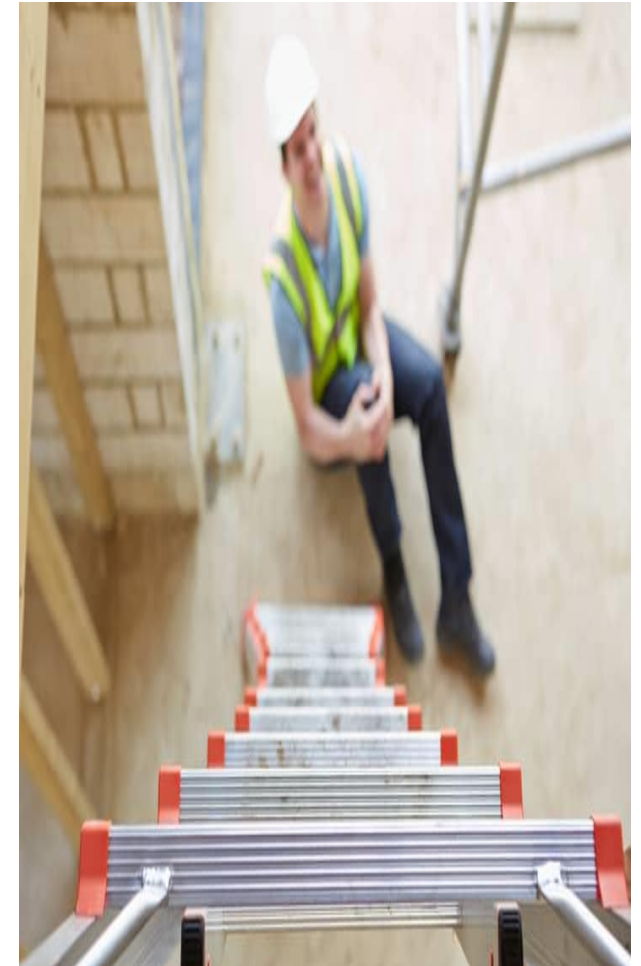
2. Overreaching while on the ladder.

When working from a ladder, keep your center of gravity and body between the side rails. If you can't easily reach the project area once you have ascended the ladder, climb down the ladder and move the ladder closer to your project area.

3. The ladder was not the right size for the job.

One of the factors in determining the right ladder for the job is length. A good rule of thumb when selecting a ladder is to calculate a person's maximum reach height, which is approximately four feet higher than the height of the ladder.

<https://blog.ansi.org/ali/common-causes-ladder-incidents/#gref>



Ladder Safety – 5 Most Common Causes of Ladder Incidents

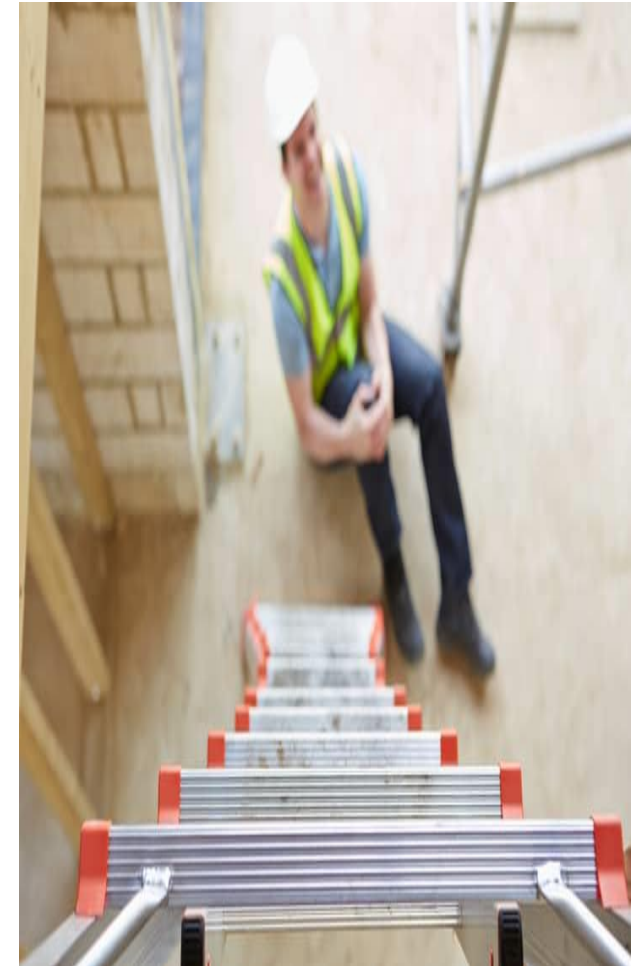
4. The ladder was not on firm, level ground.

Clear trash, construction materials and other obstructions away from the base and top of the ladder. The base of the ladder should be safely secured to prevent accidental movement. You can also use a ladder with non-slip feet or add levelers to the bottom of an extension ladder to increase the footprint.

5. Three points of contact were not used when climbing the ladder.

Always maintain three points of contact – two hands and a foot, or two feet and a hand – when climbing up or down a ladder. This allows you to maintain your balance.

<https://blog.ansi.org/ali/common-causes-ladder-incidents/#gref>



A construction site at dusk or dawn. A worker is on a tall ladder on the left. In the center, two workers are near a KNAUF A-frame ladder. On the right, a worker is by the back of a white pickup truck. A KNAUF storage cabinet is visible in the middle ground. The background shows the steel frame of a building under construction.

Any Questions?

Ladder Safety Webinar Series

Choosing Your Ladder
On-Demand

Safety Before the First Step (Inspection and Set Up)
On-Demand

Safety While Climbing

Tuesday, March 16 | 1:00 PM CT

Safety at the Top

Tuesday, March 23 | 1:00 PM CT

American Ladder Institute

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