

# Ladder Safety Webinar Series: Choosing Your Ladder



NATIONAL  
**LADDER SAFETY**  
MONTH



# Ladder Safety Webinar Series: Choosing Your Ladder



Michael Melton

Director of Product Management –  
Climbing Products





# How to Choose a Ladder

Ladder Safety Month

March 2021

# How to Choose a Ladder?

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# How to Choose a Ladder | Ladder Type

- Most common types of ladders are Steps and Extensions
- Start with your surroundings
  - Indoor / outdoor
  - Need for free-standing?
  - Surface available to lean against?
- Step Ladder
  - Free-standing ladder ✓
  - Reach height is less than 20 ft\* ✓
- Extension Ladder
  - A surface to lean against ✓
  - Need to reach a higher than 15 ft ✓
  - Need to access a higher level ✓



Step Ladder



Extension Ladder

# How to Choose a Ladder | Ladder Height

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- What height must you access to complete task at hand?
- What is the “Highest Standing Level”?
- There are rules for highest standing level
  - Step ladders = 2 steps below top (~2 ft)
  - Extensions = 4th rung from end (~4 ft)



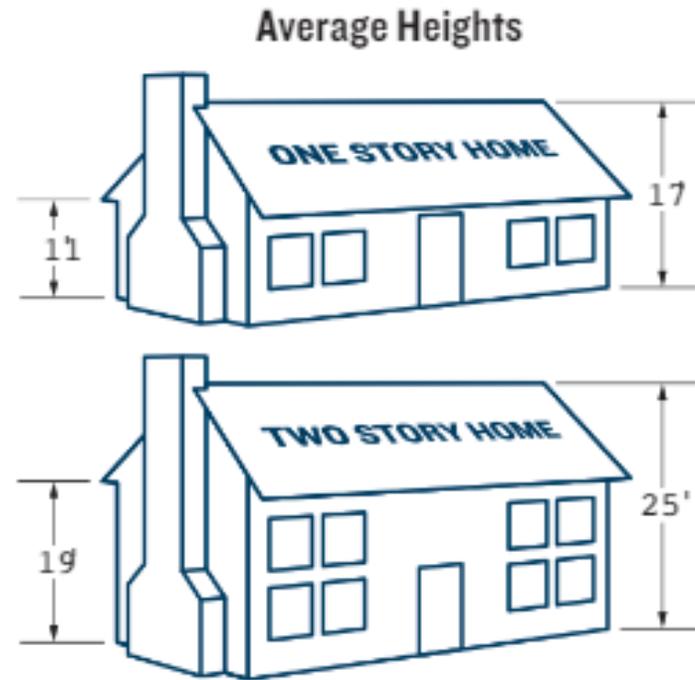
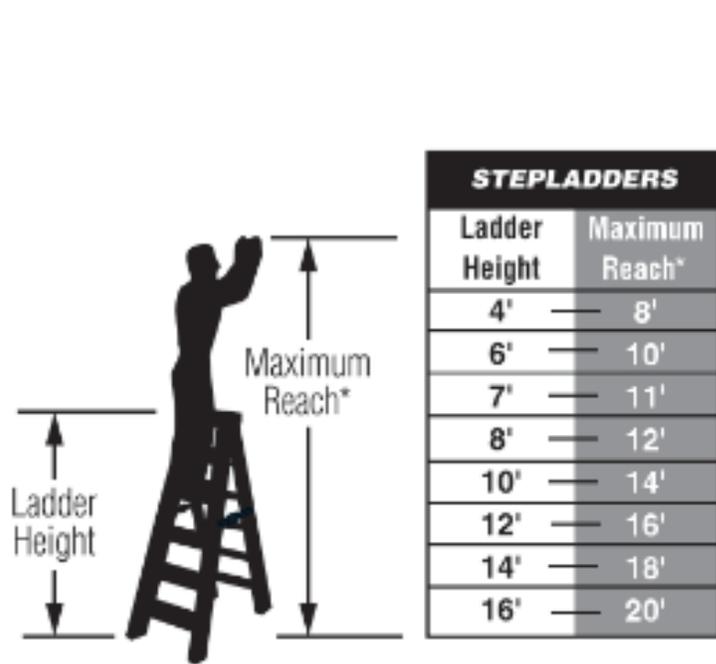
Step Ladder



Extension Ladder

# How to Choose a Ladder | Ladder Height

- Step Ladder Example:



\*Assumes a 5'6" person with a vertical 12" reach.



Step Ladder

# How to Choose a Ladder | Ladder Height

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- Different Types of Step Ladders, same reach height:



Step Ladder

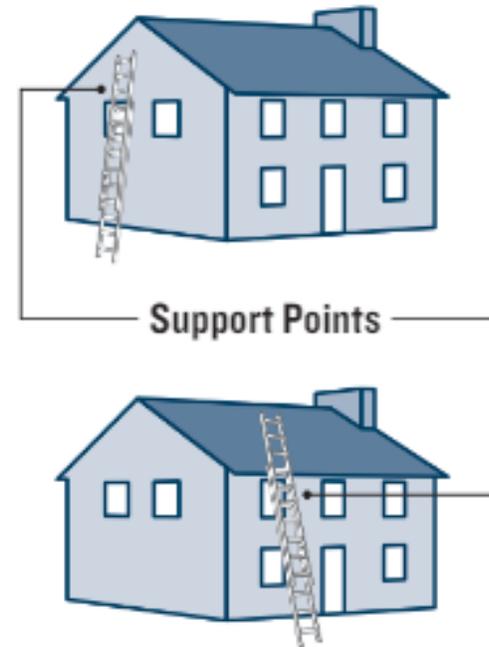
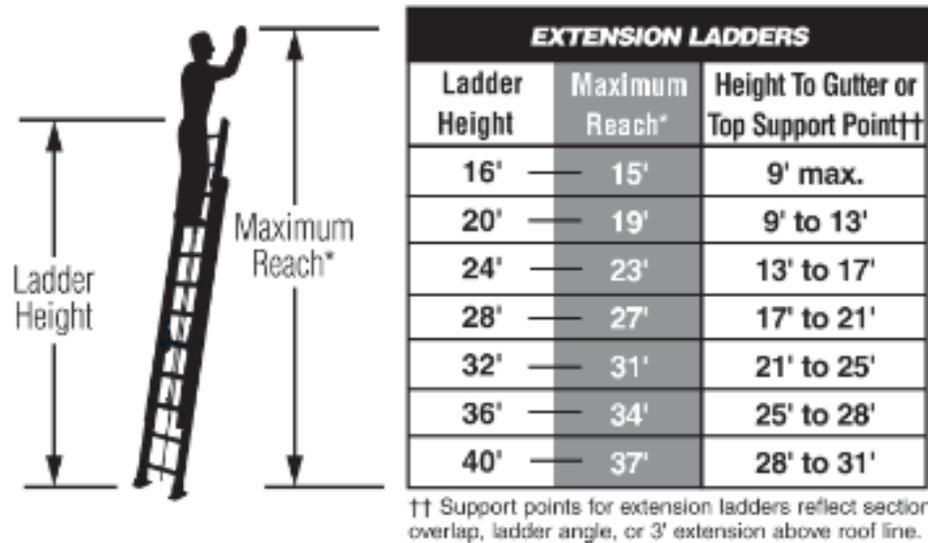


PODIUM Ladder



# How to Choose a Ladder | Ladder Height

- Extension Ladder Example:



Extension Ladder

# How to Choose a Ladder | Be Aware of New Styles

STEP LADDER REACH	
Ladder Height	Maximum Reach*
6'	10'

LEANING LADDER REACH	
Ladder Height	Maximum Reach*
6'	9'

STRAIGHT LADDER REACH	
Ladder Height	Maximum Reach*
9'	13'



# How to Choose a Ladder | Duty Rating

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Light-Duty (Type III) = 200 lbs.  
Medium-Duty (Type II) = 225 lbs.



Heavy-Duty (Type I) = 250 lbs.



Extra Heavy-Duty (Type IA) = 300 lbs.



Special-Duty (Type IAA) = 375 lbs.

# How to Choose a Ladder | Duty Rating

- Weight of person + weight of tools and equipment
- Example:  
If you weigh 200 lbs. and you are carrying a tool box filled with tools ~ 35 lbs. your total weight is 235 lbs.

You would select a 250 lbs. (Type I) duty ladder



Heavy-Duty (Type I) = 250 lbs.

## APPROXIMATE MATERIAL WEIGHTS

Bundle of Shingles	70lbs
5 gallons roof coating	70lbs
5 gallons paint	60lbs
Tool box with tools	35lbs
Portable sprayer	20lbs
Ceiling fan	30lbs
3x4 window	80lbs
Garage door opener	40lbs
Basketball hoop	60lbs
Sheet of plywood	80lbs
(3) 4x4's	80lbs

# How to Choose a Ladder | Material Choice

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Aluminum or Fiberglass?

- How do you choose?



# How to Choose a Ladder | Material Choice



NOT FOR USE  
NEAR ELECTRICITY



DESIGNED AND TESTED FOR  
EXTREME TEMPERATURES



WON'T DENT, SHATTER, RUST  
OR CORRODE



# How to Choose a Ladder | Material Choice



NON CONDUCTIVE FOR WORKING  
NEAR ELECTRICITY



DESIGNED AND TESTED FOR  
EXTREME TEMPERATURES



WON'T DENT, SHATTER, RUST  
OR CORRODE



HIGH VISIBILITY COLOR



# How to Choose a Ladder | ID Labels

## LADDER IDENTIFICATION LABELS

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

**Step Ladder  
I.D. Label**

**Extension Ladder  
I.D. Label**

**PERFORMANCE**

**LOAD CAPACITY**

**DUTY RATING**

**LADDER SIZE**

**MAXIMUM REACH**

**HIGHEST STANDING LEVEL**  
is the maximum safe working height

- Step ladders: 2<sup>nd</sup> step down from the top
- Extension ladders: 4<sup>th</sup> rung down from the top

**MODEL (ID) NUMBER**

**UPC CODE**

Orange Label  
For Type IA  
Extra Heavy Duty

Gold Label  
For Type IAA  
Special Duty



Step Ladder

Extension Ladder

# How to Choose a Ladder | Summary

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1. Choose the *type of ladder* based on your environment / surroundings.
2. Choose the *ladder height* based on where you need to reach and remember the rules for how high you can safely climb.
3. Choose the strength or *duty rating* of the ladder based on your weight plus the tools / equipment you need to carry.
4. Choose the *material* based on the hazards that are present or rules for your jobsite.
5. Reference the *ID Label* on the side rail for all of the above information.
6. Lastly, always be **SAFE**. Read all safety related labels before use.

A construction site at dusk or dawn. A worker is on a tall ladder on the left. In the center, two workers are looking at a blueprint on a ladder. To the right, a worker is near a white pickup truck. In the background, there are large pieces of equipment with the 'KNAUF' logo. The scene is dimly lit, with a dark sky.

**Any Questions?**

# Ladder Safety Webinar Series

## Choosing Your Ladder

Safety Before the First Step (Inspection and Set Up)

Tuesday, March 9 | 1:00 PM CT

Safety While Climbing

Tuesday, March 16 | 1:00 PM CT

Safety at the Top

Tuesday, March 23 | 1:00 PM CT

# American Ladder Institute

[americanladderinstitute.org](http://americanladderinstitute.org) • (312) 321-6806 • [info@americanladderinstitute.org](mailto:info@americanladderinstitute.org)

[laddersafetymonth.com](http://laddersafetymonth.com)

[laddersafetytraining.org](http://laddersafetytraining.org)

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