

Ladder Duty Ratings, Types and Selection for Use, and Accessories

The following guidelines are designed to assist with ladder selection. Understanding ladder duty ratings, ladder types, and available accessories is essential in choosing the right ladder for the specific job task.

Duty Ratings

Ladders are designed and constructed to safely hold up to a specific amount of weight. Ladders come in five different Duty Ratings identified by their “Type”. The Duty Rating is defined as the maximum safe load capacity of the ladder. A person's fully clothed weight plus the weight of any tools and materials that are carried onto the ladder must be less than the duty rating. A “Type II” ladder is recommended, at minimum, for any work activities where ladders are used for elevated work projects where the user is not handling large or heavy objects while on a ladder.

All Maintenance/Trades are recommended to use “Type I” or stronger ladders for their work activities. Departments that have maintenance/trades activities are required to purchase and use “Type I, Type IA, or Type IAA” ladders based upon the required strength for safe work by their workforce. Departments not doing these types of activities may optionally inventory and use Type I or Type II ladders. Purchase and use of “Type III” ladders should be avoided as their duty rating is too light and they are likely to fail, potentially injuring the employee.

Duty Ratings are described in terms of pounds, such as a “300 lb. Duty-Rating Type IA” ladder, which is designed for extra heavy-duty professional use where the total weight on the ladder does not exceed 300 pounds.

Ladders are also built to handle the demands of various applications. For example, a ladder used frequently on a job site by larger/heavier workers should typically be stronger and have a corresponding higher Duty Rating than a ladder used by a lighter-weight person for infrequent ‘light’ overhead work.

The American National Standards Institute (ANSI) has established the “Duty Rating” followed by OSHA. This rating identifies which portable ladder is intended for the conditions under which the ladder can be safely used. The Duty Rating system is summarized below.

Ladder Duty Rating or “Type”	Capable of Supporting	Rated Use
TYPE IAA	375 lbs.	Special Duty
TYPE IA	300 lbs.	Extra Heavy Duty Industrial
TYPE I	250 lbs.	Heavy Duty Industrial
TYPE II	225 lbs.	Medium Duty Commercial
TYPE III	200 lbs.	Light Duty Household

Ladder Types and Selection for Use

Ladder types should be chosen based on the task, work environment, appropriate height, and duty rating. Each of these ladder types are available in any duty rating.



Articulating, Combination, Multi-Position, or Sectional Ladder

An articulating ladder is a non-self-supporting or self-supporting portable ladder, adjustable or non-adjustable in length. It consists of two or more sections of ladder that may be combined to function as a single ladder. The overall length of the assembled sections designates its size.

They can be used to access areas above uneven surfaces.

Extension Ladder

An extension ladder is a non-self-supporting portable ladder, adjustable in length. It consists of two or more sections that travel in guides or brackets which are arranged to permit length adjustment. An extension ladder's size is designated by the sum of the lengths of the sections measured along the side rails.

They can be used to access varying heights.



Extension Trestle Ladder

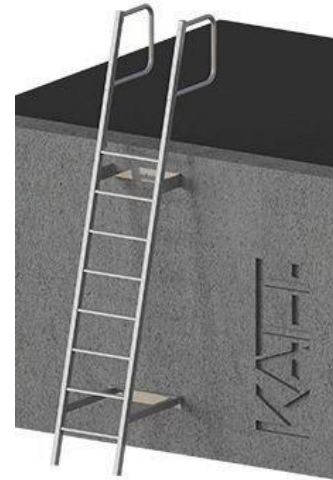
A stepladder that is a self-supporting portable ladder with an extension. They are available in "twin front" or "double front" design so they can be climbed from both sides.

They can be used to get equipment above drop ceilings.

Fixed Ladder

A fixed ladder is a ladder permanently attached to a structure, building, or equipment.

The type of ladder shown to the right is used to access the top of facilities for maintenance.



Individual Rung Fixed Ladders

A type of fixed ladder that does not have side rails. Each rung is permanently attached to the surface of a wall, machine, or piece of equipment.

These ladders are used to access and egress facilities like manholes and crawl spaces.

Platform Step Ladder, Single-entry work platform

A step ladder with a small horizontal platform at the top.

These can be used to work safely at elevated locations using both hands.





Single Ladder

A single ladder is a non-self-supporting portable ladder, similar to an extension ladder but non-adjustable in length. Its size is designated by the overall length of the side rail and cannot exceed 30 feet.

These can be used to access heights within the limit of their height.

Specialty Ladders

Any type of ladder that is constructed for specific use on unique devices used for research or any other purpose

Example uses of this ladder include: The ladder shown to the right is a shelf ladder that is attached to or used to access shelves. Another type of 'specialty ladder' is a rolling "Library Ladder" set on rails attached to shelving, etc.



Step Ladder

A step ladder (also known as an "A" frame ladder) is a self-supporting portable ladder, non-adjustable in length, having flat steps and a hinged back. It is measured along the front edge of the side rails. They are available in "twin front" or "double front" design, so they can be climbed from both sides.

These can be used to access heights within the limit of their height.

Step-to-Straight Ladder

The ladder can convert quickly from a stepladder to a push-up extension ladder. They are equipped with rung locks, utility-style safety feet, and a standard pole grip.

They can be used as either a self-supporting or a non-self-supporting ladder.



Tripod Industrial Ladder

Tripod Step Ladders are designed to be used in construction and maintenance activities where a 4-leg step ladder would have limited access or require the ladder user to work off to one-side of the ladder.

These should be purchased/used for maintenance and construction work where a single pole leg can be placed amongst equipment or other obstructions, and allow safe access for the ladder user to face the work area.

Tripod Orchard Ladder

Tripod orchard ladders are designed to be used on soft and uneven terrain; therefore, they lack spreaders, locking devices, steel points, and safety shoes.

These should only be purchased and/or used for outdoor work in pruning and accessing tree canopies.



Ladder Accessories and Their Uses

Ladder accessories enhance safety and productivity for different tasks, like leveling on slopes, holding tools, or platforms to stand on. Accessories should be chosen based on the specific task, working environment, and compatibility with the model and brand of your ladder.



Cable hook and V-ring assembly

Used to secure the top of a single ladder or extension ladder to a pole, pipe, or other 'rounded' vertical support structure.

Lifeline systems for fixed ladders

This ladder safety system is used to provide vertical fall protection for workers climbing fixed ladders and is required by OSHA for new and replacement fixed ladders over 24 feet. The worker attaches their harness to the sleeve, which automatically follows them as they climb.

By November 18, 2036, all existing fixed ladders that equal or exceed 24 feet above a lower level shall be equipped with a personal fall arrest system or a ladder safety system.



Caster Brackets

Weight-sensitive brackets with casters that allow a ladder to be rolled on a floor when there is no load on the ladder.

Cinch (Ladder Cinch or Ladder Tie)

Used as a quick tie-down for use on poles or similar structures.





Levelers (Ladder leveler)

Two base attachments that are used to level the ladder on a sloped support surface.

Pail Shelf

A pail shelf attaches to an existing shelf to provide relatively stable locations for tools and pails or buckets.



Paint can hangers (for extension ladders)

Hangers can be used to temporarily hang supplies or tools as long as they are within the manufacturer's load limits of the ladder and hanging bracket. They are designed to be easily attached and removed from a ladder.

Platform (Ladder Platform)

Kicks out of the way easily for climbing and is used as a platform to stand on.





Stabilizer

Attaches to the ladder rungs or rails to place the ladder away from a surface or stabilize the ladder around an obstruction such as a pipe, a gutter, or a window.

Tray – Multipurpose Use

Made for straight or stepladders. The texture is intended to provide a place to put small parts such as bolts, nuts, wire-nuts, and small tools, in addition to pails.



Tool Belt

Worn by ladder users to stow tools and project materials at their waist, so that they may ascend and descend ladders using both hands.

Tool Lasso

Secures awkward tools to a belt to allow safe ladder climbing with the needed tools.

