

Angle of inclination

The preferred pitch for portable non-self-supporting ladders.

Articulated joint

A hinge which is able to be locked in one or more positions.

Articulated ladder

A portable ladder with one or more pairs of locking articulated joints which allow the ladder to be set up in several modes such as a straight or extension ladder, with or without a stand-off, as a regular or double front stepladder, scaffold or work table.

Back leg (rear rail)

The support members of a self-supporting portable ladder back section. The back legs are joined by rungs, bars, rear braces or other bracing to form the back section.

Combination ladder

A portable ladder capable of being used either as a stepladder or as a single or extension ladder. It may also be capable of being used as a trestle ladder or a stairwell ladder. Its components may be used as single ladders.

Composite

A homogeneous material created by the synthetic assembly of two or more materials (a selected filler or reinforcing elements and a compatible matrix binder) to obtain specific characteristics and properties.

Duty rating

The combination of factors, including, but not limited to, ladder type and design features, which imply service capability.

Extension ladder

A non-self-supporting portable ladder adjustable in length. It consists of two or more sections traveling in guides or brackets or the equivalent and so arranged as to permit length adjustment.

Extension trestle ladder

A self-supporting portable ladder, adjustable in length, consisting of a trestle ladder base and a vertically adjustable extension section, with a suitable means for locking the ladders together.

Fiberglass

In this standard, fiberglass refers to glass-reinforced plastic, where the most common plastic encountered would be polyester. The composite would possess directional properties, as well as specific mechanical, electrical, corrosive, and weathering characteristics.

Highest standing level

The vertical distance, expressed in feet and inches, from the uppermost rung or step the climber is advised to use to the horizontal plane of the ladder base support, with the ladder in the preferred climbing position.

Inside clear width

The distance between the inside flanges of the side rails of a ladder.

Ladder

A device incorporating or employing steps, rungs, or cleats on which a person may step to ascend or descend.

Ladder foot, shoe, or slip-resistant bearing surface

That component of ladder support that is in contact with the lower supporting surface.

Ladder Type

The designation that identifies the working load.

Marking

Any sign, label, stencil, or plate of a primary hazard or informational character, or both, affixed, painted, burned, stamped or embossed on a ladder surface. (See Appendixes A and B.)

Maximum extended length or maximum working length

The total length of the extension ladder when the middle or intermediate and top or fly sections are fully extended (maintaining the required overlay).

Permanent deformation (set)

That deformation remaining in any part of a ladder after all loads have been removed.

Pitch

The included (acute) angle between the horizontal and the ladder, which is measured on the side of the ladder opposite the climbing side. It is usually expressed as the ratio H/L, which is the horizontal distance H from the base of the ladder to the supporting surface divided by the working length L of the ladder.

Plastic top cap

Molded thermoset or thermoplastic uppermost horizontal member of a portable stepladder.

Platform

A landing surface that is used as a working or standing location.

Platform ladder

A self-supporting portable ladder of fixed size with a platform provided at the intended highest standing level.

Polyesters

Thermosetting resins produced by dissolving unsaturated, generally linear, alkyd resins in a vinyl-type active monomer such as styrene, methyl styrene, or diallyl phthalate. Cure is effected through vinyl polymerization using either peroxide catalyst and promoters or heat to accelerate the reaction.

Portable ladder

A ladder that can readily be moved or carried, usually consisting of side rails joined at intervals by steps, rungs, cleats, or rear braces.

Pultrusion

The reversed "extrusion" of resin-impregnated reinforcement in the manufacture of rods, tubes, and structural shapes of a permanent cross section. The reinforcement, after being properly wet-out by the resin application system, is drawn through a die to form a desired cross section. This is one method of manufacturing reinforced plastic shapes.

Rail

The side members joined at intervals by either rungs, steps, cleats, or rear braces.

Rear braces

Crosspieces or diagonals (in the back section of a self-supporting ladder) not intended for climbing, which may be spaced at any interval.

Reinforced plastic

A plastic with strength properties greatly superior to those of the base resin as a result of high-strength fillers embedded in the composition. The reinforcing fillers are usually fibers, fabrics, or mats made of fibers.

Reinforced plastic ladder

A device whose side rails are constructed of reinforced plastics. The crosspieces, called steps, rungs, or cleats, may be constructed of metal, reinforced plastics, or other suitable materials. This term does not denote the absence of all metallic elements, because even in ladders with side rails and crosspieces manufactured of reinforced plastics, the hardware and fasteners may be metallic.

Reinforcement

A strong inert material bonded into a plastic to improve its strength, stiffness, and impact resistance. Reinforcements are usually fibers of glass, asbestos, sisal, cotton, and the like, in woven or non-woven form. To be effective, the reinforcement material must form a strong adhesive bond with the resin.

Rungs, steps, or cleats

Ladder crosspieces that are intended for use by a person in ascending or descending.

Scaffold

A temporary elevated platform and its supporting structure used for supporting worker(s) or materials or both.

Sections:

- Bottom or base section - The lowest section of a non-self-supporting portable ladder.
- Top or fly section - The uppermost section of a non-self-supporting portable ladder.
- Middle or intermediate section - The section between the top (fly) and bottom (base) sections of a non-self supporting portable ladder.

Sectional ladder

A non-self-supporting portable ladder, nonadjustable in length, consisting of two or more sections, and so constructed that the sections may be combined to function as a single ladder.

Single ladder

A non-self-supporting portable ladder, nonadjustable in length, consisting of one section.

Size

The quantitative description of the length of the ladder. Methods of defining size are presented in the individual standards.

Special-purpose ladder

A portable ladder that is either an experimentally designed ladder or a modification or assemblage of A14 approved requirements for design, testing or construction features of one of the general-purpose ladders defined elsewhere in this section, in order to adapt the ladder for special or specific climbing uses.

Standoff

A means by which a ladder may be erected at some horizontal distance away from its upper support point.

Stepladder

A self-supporting portable ladder, nonadjustable in length, with flat steps and hinged base.

Step stool (ladder type)

A self-supporting, foldable, portable ladder, nonadjustable in length, 32 inches or less in size, with flat steps and without a pail shelf, designed so that the ladder top cap as well as all steps can be climbed on. The side rails may continue above the top cap.

Step surfaces

The clear portion of steps, rungs, or cleats on which a person may step while ascending or descending ladder.

Straight ladder

An articulated ladder where all of the sections are in line.

Test failure_

Damage or visible weakening of the ladder structure or a component, except where otherwise defined by the test protocol.

Test load

The applied load used to demonstrate compliance with performance test requirements.

Top cap

The uppermost horizontal member of a portable stepladder or step stool.

Top step

The first step below the top cap of a portable stepladder or step stool. Where a ladder is constructed without a top cap, the top step is the first step below the top of the rails.

Trestle (double front) ladder

A self-supporting portable ladder, non-adjustable in length, consisting of two sections, designed to be able to be climbed on by two (2) individuals simultaneously, one (1) per side and hinged at the top to form angles with the base.

Ultimate failure_

The collapse of the ladder structure or, where applicable, a component thereof.

Uncoated vinyl flooring

In this standard, it shall be the Classic Corlon vinyl flooring from Armstrong.

Visual damage_

Damage evident by visual inspection.

Visual inspection

Inspection by the eye without recourse to any optical device except prescription eyeglasses.

Working length_

The length of a non-self-supporting portable ladder measured along the rails from the base support point of the ladder to the point of bearing at the top.

Working load

The maximum applied load, including the weight of the user, materials, and tools, which the ladder is to support for the intended use.