

CARE, USE, AND QUALITY CONTROL OF REINFORCED PLASTIC LADDERS

USE OF LADDERS

General. Restrict ladder usage to the purpose for which the ladder is designed.

Self-supporting ladders, such as stepladders and platform ladders, are not to be used as single ladders, that is, in the closed position.

A non-self-supporting ladder, such as an extension or single ladder, needs to be erected a minimum of one to three feet above the top support point when using for access to a roof or other work level. Do not step on any rung above the upper support point since this could cause the ladder to slip. Secure the ladder or have someone hold it while using it.

Pitch. Portable non-self-supporting ladders are to be erected at an angle of 75-1/2 degrees from horizontal. Combination ladders are to be erected so that the top surface of the steps are parallel to the surface supporting the base or bottom section. A simple rule for setting up a non-self-supporting ladder at the proper angle is to place the base a distance from the vertical support equal to one-fourth the effective working length of the ladder. The effective working length is the distance along the side rails from the bottom to the top support points. A simple procedure for setting a ladder up properly is as follows:

1. Place toes against bottom of ladder side rails.
2. Stand erect.
3. Extend arms straight out.
4. Palms of hands should touch top of rung at shoulder level.

TABLE A1 — DUTY CLASSIFICATIONS

Capable of Supporting

Ladder Duty Rating (pounds) Ladder Duty Rating (pounds)

Special Duty (Type IAA) 375 Medium Duty (Type II) 225

Extra Heavy Duty (Type IA) 300 Light Duty (Type III) 200

Heavy Duty (Type I) 250

Generally accepted usage/duty relationships are:

- Special duty: for users requiring a 375-pound load capacity or for service requirements such as industry, utilities, contractors, etc.
- Extra heavy duty: for users requiring a 300-pound load capacity or for service requirements such as industry, utilities, contractors, etc.
- Heavy duty: for users requiring a 250-pound load capacity or for service requirements such as industry, utilities, contractors, etc.
- Medium duty: for users requiring a 225-pound load capacity or for service requirements such as painters, offices, light maintenance use, etc.
- Light duty: for users requiring no more than a 200-pound load capacity or for a service requirement such as general household use.

Werner Co. recommends only extra heavy duty ladders for use with ladder jacks and scaffold planks.

Ladder Selection. Portable ladders are designed as one-man working ladders including any material supported by the ladders. An exception is double front self-supporting ladders which are designed to be used by two workers, one per side. The five duty ratings are shown in Table A1.

Werner Co. FRP ladders are available in Type IAA, Type IA, Type I and Type II duty ratings. Users should give consideration to the length required, the type of loading, and service to which the ladder will be subjected. Never overload a ladder.

Footing Support. The bottom ends of the ladder must be placed with a secure footing on a firm level base. On firm but uneven ground, ladder levelers may be used. Safety shoes, spurs, spikes, or similar devices of good substantial design are installed on all Werner Co. ladders. Ladders without safety shoes, spikes, spurs, slip resistant pads or similar devices shall not be used. Do not use ladders on ice, snow, or slippery surfaces, unless suitable means to prevent slipping are employed. Do not place ladders on boxes, barrels, or other unstable bases to obtain additional height.

Top Support. The top of the straight or extension ladder shall be placed with the two rails supported. A V-rung, pole lash, pole strap, or other device designed to support the ladder under load, shall be used when using a non-self-supporting ladder against a pole. To support the top of a ladder at a window

opening, attach an

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extension ladder stabilizer to the ladder, extending across the window opening to provide firm support against the building walls or window frames.

Climbing Ladders. When ascending or descending, always face the ladder. Maintain a firm hold on the ladder when climbing up or down. Never climb onto a ladder from the side, or from one ladder to another ladder. Only climb from a ladder to a stage platform when both the ladder and stage platform are secured against sideways motion. Never climb a damaged ladder.

Fastening Together. Never tie or fasten additional ladders or ladder sections together to make a longer ladder.

Improper Use. Ladders shall not be used as a brace, skid, lever, guy or gin pole, gangway, platform, scaffold plank, material hoist, or for other uses for which they were not intended, unless specifically recommended by the manufacturer.

Ladders on Scaffolds. Ladders shall never be used on scaffolds to gain additional height since the forces imposed when climbing the ladder may cause the scaffold to tip.

Electrical Hazards. Users are cautioned to take proper safety measures when FRP

ladders are used in areas with power lines and electric circuits to prevent short circuits, electrical shock or electrocution. Have the power turned off before starting work whenever possible. Never use metal ladders near power lines or other electrical circuits.

Doorways. Ladders should not be placed in front of doors opening toward the ladder unless the door is blocked open, locked, or guarded.

Access to Roof. No ladder shall be used to gain access to a roof unless the top of the ladder extends at least one to three feet above the upper support point at the eave, gutter, or roofline. Secure the ladder to prevent slipping before ascending onto roof.

Adjustment of Extension Ladders. Adjustment of extension ladders should only be made by the user when standing at the base of the ladder, so that the user may observe when the locks are properly engaged. Adjustment of extension ladders from the top of the ladder (or any level over the locking device) is a dangerous practice and should not be attempted. Adjustment shall not be made while the user is standing on the ladder.

Use of Sections Of Sectional Ladders. Middle and top sections of sectional ladders shall not be used for bottom sections unless the user equips them with safety shoes.

Erection of Extension Ladders. Werner Co. extension ladders are always to be erected so that the upper (fly) section is above and resting on the climber's side of the bottom (base) section. Werner Co. ladders shall never be used in the reverse position where the upper end of the fly section becomes the lower end of the ladder, and the lower end of the base section becomes the upper end of the ladder. Where an extension ladder has been separated and the sections used separately, exercise extreme care to ensure that reassembly of these sections is done properly. Make sure that the interlocking guides or brackets are properly engaged before further use, and that only sections manufactured by the same manufacturer and from the same model ladder are used together in the same ladder.

Bracing. The bracing on the back sections of stepladders is not designed for climbing. Twin or double front stepladders and combination ladders are designed for using both the front and rear sections.

Cable (strand) Hooks. When use conditions warrant, cable (strand) hooks may be attached at or near the top of non-self-supporting portable ladders to give added security. A cable (strand) hook shall not be used as a stand off and shall not be used as a means of total support or suspension of a ladder.

Side Loading. Keep the ladder close to the work. Do not overreach, but descend the ladder and relocate the ladder instead. When using a ladder, use caution pushing or pulling anything, you may tip the ladder. Secure the ladder to prevent tipping whenever possible.

Climbing and Working Locations. Never stand on the ladder top cap, the first step below the top cap, the bucket shelf, or the rear section of a step or platform ladder (unless the rear section has been specifically designated and stated for this purpose by the manufacturer). The highest standing level on a stepladder is two steps down from the top. Never stand higher than the fourth highest rung from the top of a single or extension ladder.

Ladder Jacks. Werner Co. recommends only extra heavy duty (Type IA) and special duty (Type

IAA) single and extension ladders shall be used in conjunction with ladder jacks and stages or planks. Medium duty (Type II) and Light duty (Type III) ladders shall never be used with ladder jacks. ANSI A10.8 allows the use of heavy duty (Type I) ladders with ladder jacks.

Relocating Ladders. Never relocate a ladder while the user is on the ladder.

Accessories. Use only those accessories supplied or approved by Werner Co. with Werner Co. ladders