

LADDER SAFETY

Portable ladders are one of the handiest, simplest tools we use. Because of their effectiveness, ladders are used by many different people to perform many different tasks. Although ladders are very uncomplicated, planning and care are still required to use them safely. Each year in the U.S., accidents involving ladders cause an estimated 300 deaths and 130,000 injuries requiring emergency medical attention.

LADDER HAZARDS

Ladder accidents usually are caused by improper selection, care or use, not by manufacturing defects. Some of the more common hazards involving ladders, such as instability, electrical shock, and falls, can be predicted and prevented. Prevention requires proper planning, correct ladder selection, good work procedures and adequate ladder maintenance.

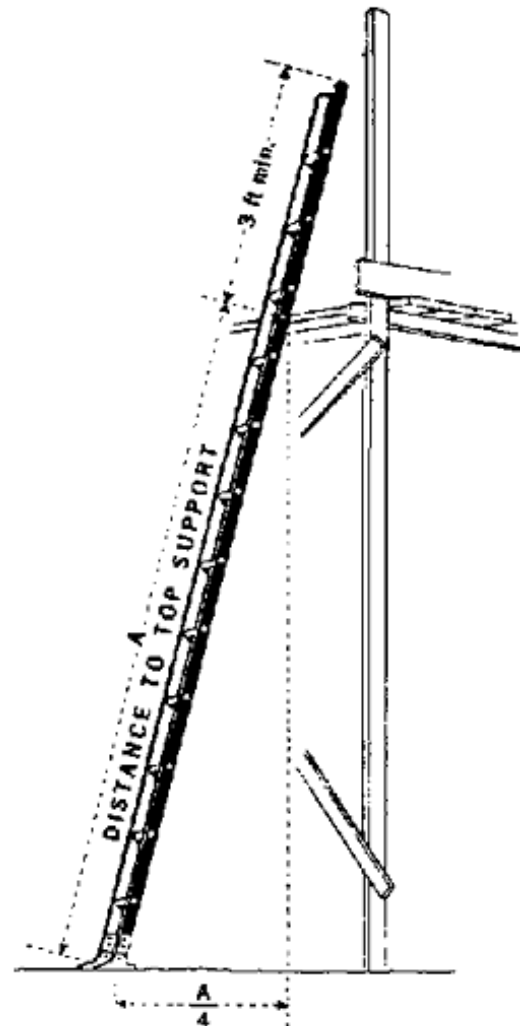
Accident Prevention Tips:

- Do not hand-carry loads on a ladder.
- Do not try reaching so far that you lose your balance --- move the ladder.
- Non-skid feet or spurs may prevent a ladder from slipping on a hard, smooth surface.
- Do not stand on the ladder's top three rungs.
- A damaged side rail may cause one side of a ladder to give way.
- The base should be spaced 1 foot away for every 4 feet it reaches up.
- Ladders used to reach a walking surface or roof must extend at least 3 feet beyond.
- Extension ladders need both locks holding to prevent overloading a rail.
- Step ladders should be securely spread open. Never use a folding step ladder in an unfolded position.
- Electrical shock can occur with metal or wet wooden ladders. Not only is the shock itself dangerous, but it can cause falls resulting in injury.

LADDER SELECTION

Portable ladders are designed as "one-man" equipment with the proper strength to support the worker as well as his tools and materials. Ladders are constructed under three general classes:

- Type I **Industrial** - Heavy-duty with a load capacity not more than 250 pounds.
- Type II **Commercial** - Medium-duty with a load capacity not more than 225 pounds (suited for painting and similar tasks).
- Type III **Household** - Light-duty with a load capacity of 200 pounds.



LADDER MAINTENANCE

Wood ladders should be protected with a clear sealer varnish, shellac, linseed oil or wood preservative. Wood ladders should not be painted, because the paint could hide defects. Check carefully for cracks, rot, splinters, broken rungs, loose joints and bolts and hardware in poor condition.

Aluminum or steel ladders should be inspected for rough burrs and sharp edges before use. Inspect closely for loose joints and bolts, faulty welds and cracks. Make sure the hooks and locks on extension ladders are in good condition. Replace worn or frayed ropes on extension ladders at once.

Fiberglass ladders should have a surface coat of lacquer maintained. If it is scratched beyond normal wear, it should be lightly sanded before applying a coat of lacquer.

HELPFUL HINTS

- When working on cylindrical objects like poles and columns, the top rung of portable ladders can be replaced with chain or rope to reduce rocking.
- Aluminum ladders are very corrosion-resistant, but exposing them to fertilizer can cause damage.
- Use the ladder inspection checklist to remind yourself of what you should look out for in order to prevent accidents.

Ladder Safety Quiz

NAME (Please Print) _____

1. _____ Household ladders are OK to use at work.
2. _____ All ladders shall be inspected for damage prior to use.
3. _____ Ladders shall not be placed against movable objects.
4. _____ Employees shall insure their shoes are free of mud, grease, or other substances that could cause a slip or fall.
5. _____ Ladders can be placed on unstable bases such as boxes or barrels.
6. _____ Employees can stand on the top two steps of a stepladder.
7. _____ No ladder shall be used to gain access to a roof unless the top of the ladder extends at least one foot above the point of support, at eave, gutter, or roofline.
8. _____ Always move the ladder to avoid overreaching.
9. _____ Extension ladders up to 36 feet must have a 3-foot overlap between sections.
10. _____ Ladders can be used horizontally as scaffolds, runways, or platforms if approved.
11. _____ The base of straight or extension ladders shall be set back a safe distance from the vertical or approximately 1/8 of the working length of the ladder.
12. _____ Barricades or guards shall protect ladders that project into passageways or doorways where they could be struck by personnel, moving equipment, or materials being handled.
13. _____ Employees must use both hands when going up or down a ladder. Materials or equipment shall be raised or lowered by way of lines.
14. _____ Inspections shall be conducted before each use and defective, broken, or damaged ladders shall be pulled from service tagged and marked "**Dangerous. Do Not Use.**" Broken or damaged ladders will not be used.
15. _____ Rungs shall be kept free of grease and oil.
16. _____ Portable stepladders shall be no longer than 20 feet.
17. _____ The step spacing shall be no more than 18 inches apart.
18. _____ Wood ladders shall not be painted except for identification marking.
19. _____ Metal ladders shall not be used for electrical work or in areas where they could contact energized wiring.
20. _____ It is optional to treat or paint fixed ladders to prevent rusting.

Name _____

School District _____

School Site _____

Date _____

Work Order Submitted Yes _____
Work Order Number

No

Ladder Inspection Checklist

General	Needs repair	O.K.	Date repaired
Loose steps or rungs (considered loose if they can be moved at all with the hand)?	_____	_____	_____
Loose nails, screws, bolts, or other metal parts?	_____	_____	_____
Cracked, spilt, or broken uprights, braces, or rungs?	_____	_____	_____
Slivers on uprights, rungs, or steps?	_____	_____	_____
Damaged or worn non-slip bases?	_____	_____	_____

Step ladders

Wobbly (from side strain)?	_____	_____	_____
Loose or bent hinge spreaders?	_____	_____	_____
Stop on hinge spreaders broken?	_____	_____	_____
Loose hinges?	_____	_____	_____
Broken, split, or worn steps?	_____	_____	_____

Extension ladders

Loose, broken, or missing extension locks?	_____	_____	_____
Defective locks that do not seat properly while extended?	_____	_____	_____
Worn or rotted rope?	_____	_____	_____

Signature