

SAFE WORK

S SPOT THE HAZARD
A ASSESS THE RISK
F FIND A SAFER WAY
E EVERYDAY

No. 177
December 2008

Portable Ladder Safety

Potential hazard:

Unsafe use of portable ladders can lead to falls, often resulting in severe injury or even death. Portable ladders including step, extension, and trestle ladders are the most commonly used types of ladders in industry today.

How to control the hazard:

Falls from portable ladders can be prevented by:

- Checking the ladders for defects before each and every use
- Following **safe work procedures**

Checking the ladder

Before using a ladder, you should always inspect it carefully.

- ✓ Check rails for cracks, checks, bends, or defects.
- ✓ Check for broken or missing rungs.
- ✓ Check the braces.
- ✓ Step Ladder – make sure the ladder is fully open and the spreaders are locked.
- ✓ Are the feet worn or broken?
- ✓ Is the base of the ladder placed on a solid surface?
- ✓ Look for anchor points at the top and bottom of the ladder.
- ✓ Look at where the top of the ladder is resting.
- ✓ What is above where you are working? Are there any hazards (ex. overhead electrical wires)
- ✓ Check for other work being performed near you.
- ✓ If repaired, make sure it has been repaired and restored to its original design specifications.
- ✓ Before moving a ladder, check for material or tools left on the ladder.

Safe Work Procedures

You must develop safe work procedures for using portable ladders. The following lists contain some dos and don'ts that your safe work procedures should include:

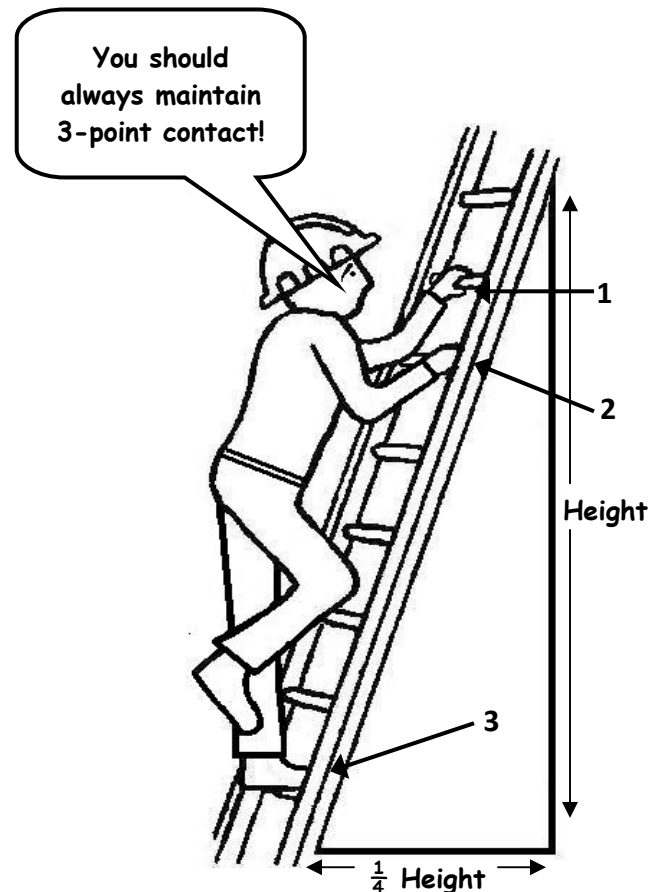
Do

- Ensure workers are trained in safe work procedures
- Inspect the ladder before every use
- Place the ladder on a firm surface
- Make sure the ladder is level and secure to prevent side-slip or kick out from base

Don't

- Use a worn or damaged ladder
- Paint a wooden ladder (this covers up imperfections)
- Carry tools and materials up ladders
- Use an extension ladder as a platform. A ladder is design with vertical strength, not horizontal

(see over)



For every 1m (3.28 ft) high,
the ladder base should be out
0.25m (0.82 ft)

Workplace Safety and Health Division Contact Information:

Winnipeg: (204) 945-3446

Toll-Free: 1-866-888-8186 (Manitoba only)

24-Hour Emergency Line: (204) 945-0581

Publications/resources available at: www.safemanitoba.com



Do (con't)

- Store ladders in a clean, dry area
- Face the ladder when climbing up or down
- Use only grade #1 ladders for construction
- Keep three points of contact when on a ladder (see illustration on page 1)
- Maintain ladders according to manufacture's guideline
- Select a ladder that is appropriate for your task
- Keep your body within the rails of the ladder while working on it
- Watch out for overhead power lines when using a ladder
- Have a second person hold the bottom of a long ladder, especially when tying or untying an extension ladder
- Extend an extension ladder 1 meter (3 ft) beyond the top surface the ladder is resting upon.
- Space the bottom of an extension ladder ¼ of its height at the base (see picture on page 1)
- Dispose of a ladder if broken, worn, or damaged beyond repair

Don't (con't)

- Use a step ladder as an extension ladder
- Over-extend an extension ladder
- Have more than one person on a ladder at the same time
- Use a ladder in high winds
- Use a ladder on a scaffold
- Stand on the top step of a step ladder
- Use a metal or aluminum ladder near electrical power
- Use ladders as scaffold uprights
- Use the rungs of a ladder for a winch point
- Place the top of a ladder a flexible or unstable surface (ex. against a window, or placing the rung against a beam)
- Leave a ladder unattended for extended periods or overnight

Additional Information and Requirements

- A portable ladder means a ladder that can be readily moved or carried (usually consists of side rails jointed at internals by steps, rungs, cleats or rear braces).
- Portable ladders are designed for one person use to meet the requirements of the person, the task, and the environment.
- For short duration work the worker must ensure a portable ladder exceeding 6 meters (20 feet in length) that is not secured at the top, or where the ladder could move, is held in place by another worker while the ladder is being used.
- An employer must ensure that a commercially manufactured portable ladder used at a workplace complies with the applicable requirements of the standards referenced in the box below. Employers must also ensure that ladders are used and maintained in accordance with the manufacturer's specifications and safe operating instructions.

Reference to legal requirements under workplace safety and health legislation:

- Entrances, Exits, Stairways and Ladders: Manitoba Regulation 217/2006 Part 13

Additional workplace safety and health information available at: www.safemanitoba.com

- CSA Standard CAN3-Z11-M81 (R2005), *Portable Ladders*
- ANSI Standard A14.1-2000, *American National Standard for Ladders - Wood - Safety Requirements*
- ANSI Standard A14.2-2000, *American National Standard for Ladders - Portable Metal - Safety Requirements*
- ANSI Standard A14.5-2000, *American National Standard for Ladders - Portable Reinforced Plastic - Safety Requirements*