

# Ladders

## Occupational Health and Safety Act

### SECTION 5

Sections and Schedules 122 - 129







### Ladder Markings

An employer must ensure that a portable ladder manufactured on or after July 1, 2009 meets the requirements of:

- CSA Standard CAN3-Z11-M81 (R2005), Portable Ladders, **Sec. 124(1)**

Other Recognized Ladder Standards:

- ANSI Standard A14.1-2007, American National Standard for Ladders - Wood - Safety Requirements,
- ANSI Standard A14.2-2007, American National Standard for Ladders - Portable Metal - Safety Requirements, or
- ANSI Standard A14.5-2007, American National Standard for Ladders - Portable Reinforced Plastic - Safety Requirements.

### Portable Ladders Sec. 122(1)

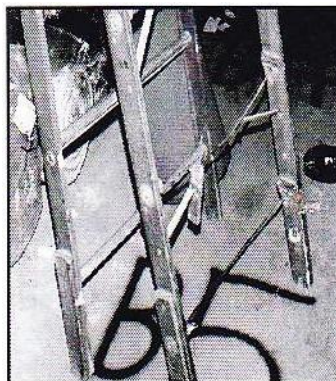
An employer shall ensure that a portable ladder used at a place of employment is of adequate strength and length, clean and free of grease, and maintained in a safe condition.

A ladder shall be designed, constructed and maintained so as not to endanger a worker and shall be capable of withstanding all loads to which it may be subjected.

### Ladder Maintenance Sec. 123(d)(iii)

A ladder:

- Shall be free from defective or loose rungs,
- Shall have rungs spaced at 300 millimetres on centres,
- Shall have side rails at least 300 millimetres apart, and
- Shall be placed on a firm footing.

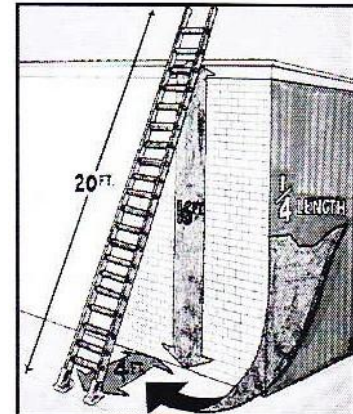


### Ladder Stability and Pitch (1/4 Length) Sec. 125

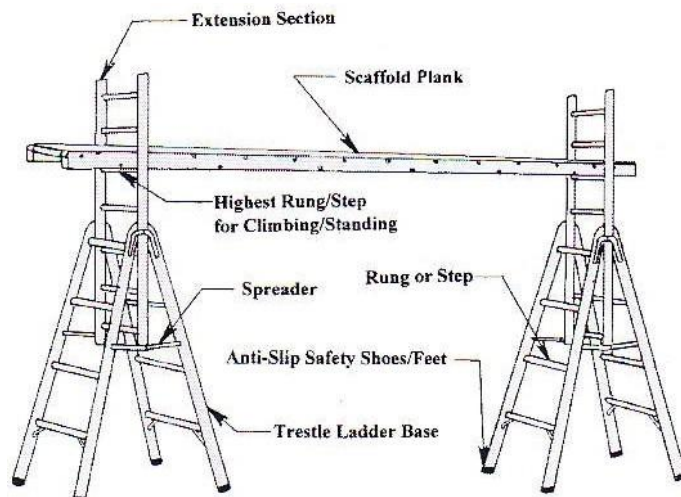
(Legislative Interpretations Date Issued: October 8, 1997)

A ladder:

- Must be secured against movement and placed on a base that is stable.
- The base of an inclined portable ladder is no further from the base of the wall or structure than  $\frac{1}{4}$  of the height to where the ladder contacts the wall or structure.



### Trestle Ladder



The maximum length of a ladder measured along its side rail shall not be more than 5 metres for a trestle ladder or for each of the base and extension sections of an extension trestle ladder.

### Portable Ladders Lengths Sec. 124(2)

- 6 metres for a step-ladder
  - 9 metres for a single ladder or an individual section of a ladder
  - A ladder is 11 m or less, overlap shall be 1 m
  - A ladder exceeds 11 m and is 15 m or less, the overlap shall be 1.25
  - A ladder exceeds 15 m and is 22 m or less, the overlap shall be 1.5 m
- No ladder shall be lashed to another ladder to increase its length.



**Portable Ladders Access Sec. 125(2)(b)**

A ladder used as a regular means of access between levels of a structure:

- Shall extend at the upper level at least 1 metre above the landing or floor,  
Recommended to have a clear space of at least 15 cm behind every rung and,
- Be located so that an adequate landing surface that is clear of obstructions is available at the top and bottom of the ladder.

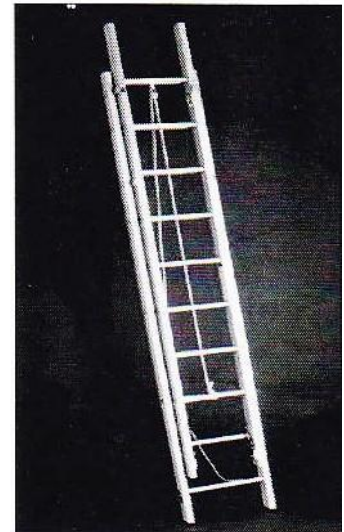
**Constructed Wood Ladders**

A wooden ladder:

- Shall be made of wood that is straight-grained and free of loose knots, sharp edges, splinters and shakes; and
- Shall not be painted or coated with an opaque material

The side rails of a wooden ladder of the cleat type:

- That has a length of 5 metres or less
  - Has side rails constructed of lumber measuring not less than 38 millimetres by 89 millimetres,
- More than 5 metres long
  - Has side rails constructed of lumber measuring not less than 38 millimetres by 140 millimetres,
  - Has side rails that are not notched, dapped, tapered or spliced,
  - Has side rails at least 500 millimetres apart at the bottom.



Rungs must be:

- Constructed of lumber measuring not less than 21 millimetres by 89 millimetres,
- Held by filler blocks or secured by a single continuous wire, and
- Uniformly spaced at a centre to centre distance of 250 millimetres to 300 millimetres.

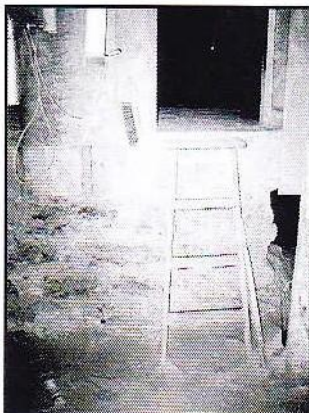


**Self-Supporting Ladders Sec. 125(3)(d) [NEW]**

When a step-ladder is being used as a self-supporting unit, its legs shall be fully-spread and its spreader shall be locked. Never stand on the material shelf, the top or the top step of a portable step ladder, or work from the top three rungs of a portable single or extension ladder.

**Frequent Ladder Errors**

- Wooden ladders cannot be painted
- No worker shall stand on the top of or the pail shelf of a step-ladder
- Do not place ladders in front of doors opening toward the ladder; unless the door is blocked upon, locked, or guarded.
- Ladders cannot be placed on boxes, barrels, or other unstable bases to obtain additional height.

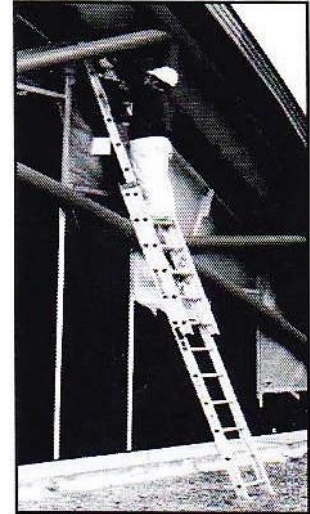


### Ladder Overlap in Feet and Inches

Based on the nominal length of the ladder, each section of a multi-section ladder shall overlap the adjacent section by at least the number of feet stated, as recommended by the manufacturer in feet:

| Ladder Length                        | Required Overlap |
|--------------------------------------|------------------|
| Up to and including 36 feet          | 3.3 feet         |
| Over 36, up to and including 49 feet | 4.1 feet         |
| Over 49, up to 72 feet               | 5 feet           |

4.1



### Portable Ladder Fall Protection Sec. 124 (3)

An employee working 3 m or more above the ground or floor level on a portable ladder may work without a fall-protection system if:

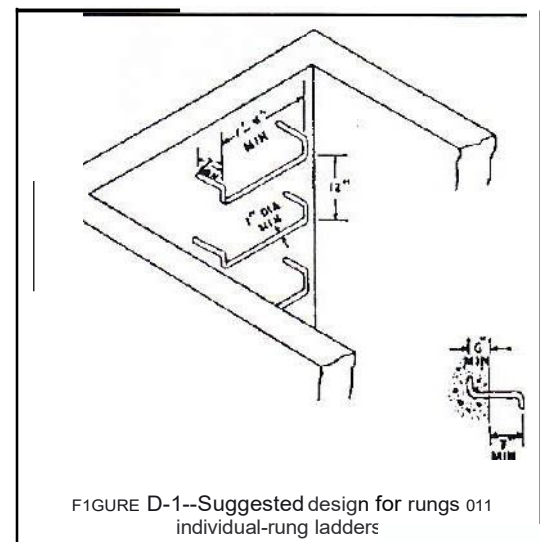
- The work is a light duty task of short duration at each location,
- The employee's centre of gravity is maintained between the two ladder side rails,
- The employee will generally have one hand available to hold on to the ladder or another support, and
- The ladder is not positioned near an edge or floor opening that would significantly increase the potential fall distance.

*Note: This section does not apply while the worker is moving up or down the portable ladder.*

### Access Ladder Fixed in Position

An access ladder fixed in position:

- Shall be vertical,
- Shall have rest platforms at no more than 9 metre intervals, and
- Shall be offset at each rest platform.

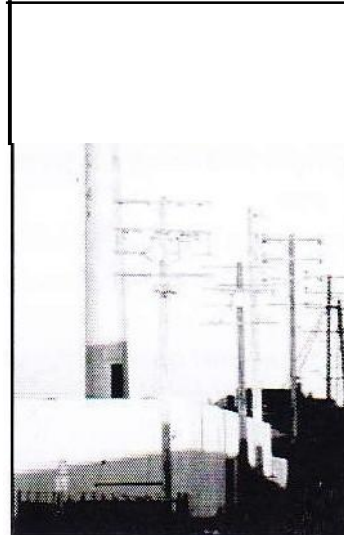


**Cages or Wells Sec. 121(1)**

Where a ladder cage is used on a fixed ladder, an employer shall ensure that:

- A fixed ladder that is more than 6 min height is equipped with ladder cages.
- The cage is provided with metal hoops spaced to prevent an employee from falling away from the ladder and to contain an employee who may lean or fall against the cage,
- The cage extends not less than 685 mm and not more than 725 mm from the centre line of the rungs of the ladder,
- The cage is not less than 685 mm wide where it attaches to the ladder,
- The cage extends from a point 2.5 m from the base of the ladder to the top of the ladder, the inside of the cage is free of projections, and
- If the fixed ladder is more than 9 min height, it is equipped with a rest platform at intervals of no more than 9 m.

**\*\*Note:** Does not apply where an employee on the ladder uses a fall-arresting system\*\*

**Reminders:**

- Any ladders operated near electrical systems must be non conductive
- All ladders must be CSA approved
- All ladders must be secured against movement
- You must ensure a minimum of three (3) rungs above a level you wish to work from
- You may never use the top two (2) rungs for work.