

## Annex C - Safe Work Practice - Step, Platform and Extension Ladders

### General:

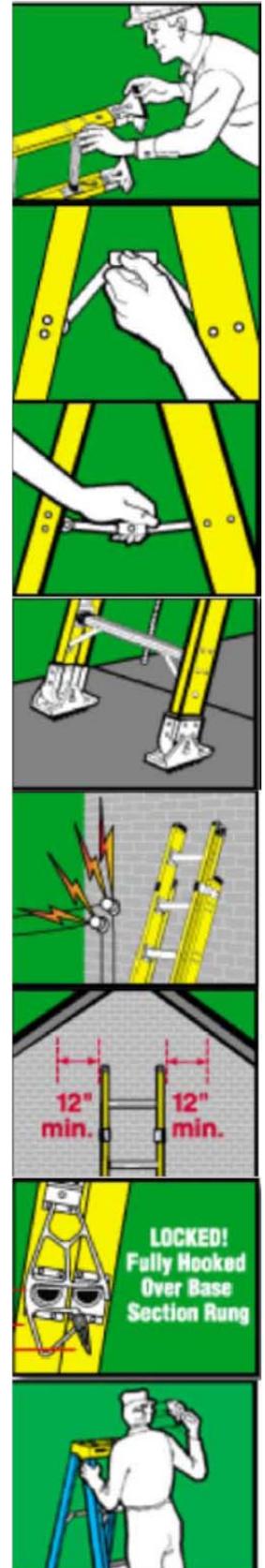
1. Select & use the appropriate ladder for the work to be done. If the work is expected to take longer than 30 minutes, then a platform or lift is to be used.
2. Only use step ladders or other approved devices when necessary to place or remove objects from elevated locations. **DO NOT STAND ON CHAIRS OR TABLES.**
3. The right type of ladder is important for your safety. See Annex A for an extract from CSA CAN3-Z11 for definitions and information on ladders. Ladder selection is based on the following considerations:
  - Height - The height of the user, and the height which is needed to be obtained to do the work. Generally to work safely, the ladder length will be 4' less than the height of the work. This means that if the work is at 8' above the ground, assuming a 5'6" user, a 4-6' ladder would be selected.
  - Class Weight - Ladders are rated for weight bearing capacity according to CSA & ANSI. The user must consider their weight and the weight of any materials on their person as they mount the ladder.
  - Special Materials - Only non-conductive material ladders are to be used for electrical work.
4. FALL ARREST is required if your feet are at a height over 3 metres (10 feet). See FMOP 2-16 for more information.
5. Do not overload the ladder. Step and platform ladders are meant for only one person.

### Set-up and Placement of the Ladder:

1. Before setting up the ladder, **INSPECT** it for missing or loose parts. Repair or replace as is necessary. Ensure that the ladder is free of paint, debris and oil. Clean as required. Also clean muddy or slippery soles before mounting the ladder. Ensure footwear is in good condition (this means good grip and heel).
2. Ensure the area below the ladder is clear of debris and rough materials.
3. Set-up the ladder so that the feet are well supported and even. Fully extend the spreaders.
4. Look up and see where the top of the ladder is to be placed. Ensure that you are not near overhead electrical wires. Make sure there is at least 12" of support on either side of the ladder.
5. Before you climb, make sure the locks are fully engaged.

### Climbing:

1. While ascending or descending the ladder, face the ladder and use three point contact at all times (one hand and two feet or two hands and one foot).
2. When working from the ladder, continue to maintain adequate contact, although the contact points may include parts of your body such as a knee, hip or stomach.
3. Keep your center of gravity between the side rails. Your belt buckle should



- never be outside the side rail.
4. If using a ladder in a doorway or passage way, set up barricades and warning signs.
  5. When climbing, carry tools, parts, etc., in an apron or belt, or raise and lower them by a hand line, and hook equipment on a rung while you work.
  6. Where it would not be practical to perform work other than from a ladder and it is not practical for the worker to maintain three points of contact while performing the work, fall protection is required;
  7. Do not use a ladder when it is too windy.



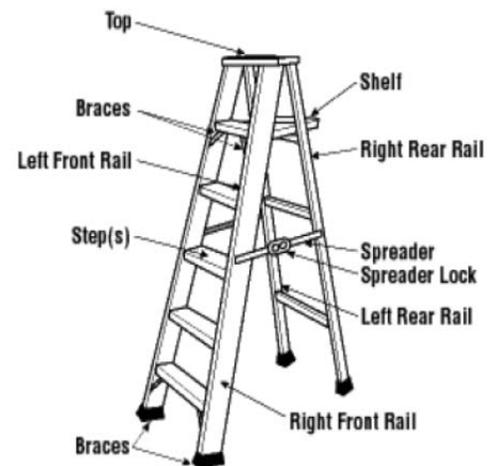
## Step & Platform Ladders

### Step Ladder Inspections:

The following is a check list for careful inspection of a step ladder including an orchard ladder (wood, aluminum or fiberglass):

Look over your ladder carefully before each use. Observe the following:

1. SIDERAILS-splits, cracks, separated laminations, splinters, decay, protruding nails.
2. RUNGS-cracks, decay, splinters, excessive wear or looseness.
3. HARDWARE - loose or missing rivets
  - broken, loose or missing step or rung braces.
  - broken, loose or missing spreaders
  - loose hinges
  - broken or missing spreader locking device
- the bottom of the legs should be equipped with shoes of slip resistant material.



### Step Ladder Safety:

1. Keep the ladder away from all electrical sources.
2. Ensure all four feet are positioned on a firm, level surface.
3. Do not set the ladder up on mobile equipment.
4. Ensure that the ladder is fully open and the bars are locked.
5. Place the step or platform ladder at right angles to the work.
6. For step ladders, do not work from the material shelf, the top or the top step of the ladder.
7. For folding platform ladders with a hand hold or guard rail above the platform, work may be done from the platform.
8. Step ladders must not be used as a support for scaffolds or as planks for scaffolds.



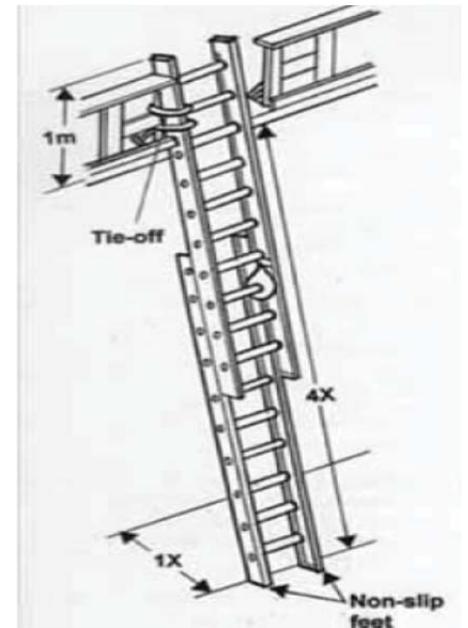
## Extension Ladders

### Extension Ladder Inspections:

The following is a check list for careful inspection of an extension ladder (aluminum or fiberglass):

Look over your ladder carefully before each use. Observe the following:

1. SIDERAILS - splits, fractures, severe warp.
2. RUNGS - bent, broken, missing, worn, thin, loose, or missing rivets.
3. RUNG - broken, nuts or bolts missing.
4. LOCKS - broken or missing rung lock trippers or rung lock tripper springs (dogs).
5. SAFETY FEET - worn or missing slip resistant pads, missing nuts or bolts, broken or badly bent, missing or badly worn spurs.
6. ROPE/LANYARD - for extension ladders up to and including 12 m (40 ft.) in length, the lanyard
7. (pulling rope) should be of synthetic material, Should not be less than 6 mm in diameter and should have a minimum breaking strength of 250 kg (550 lbs.). Replace badly worn rope and rope that has been degraded due to ultraviolet exposure, cuts or abrasion.
8. Do not set a ladder on a scaffold, box or other object.
9. Once an extension ladder is set up, lock the top section in place. Extension ladder sections must overlap by at least 3' for ladders up to 32'; by 4' for ladders 32' to 48'; and by 5' for ladders 48' to 60' tall. Both rails must rest evenly on the resting Spot.
10. Always wear shoes with slip-resistant soles.



### Extension Ladder Safety:

1. Ladder bottom should be placed about  $\frac{1}{4}$  of ladder height from wall.
2. Ladder should extend at least 3 feet above edge of roof edge.
3. Do not step on top 4 rungs of extension ladder.
4. Ensure hands are on rails, as are your shoes and the rungs.
5. Keep at least 10 feet away from all power lines.
6. Tie off extension ladders.
7. Check ladder rating.
8. Do not tie ladders together.
9. Use two people to carry and set up a ladder, if possible.
10. Set the ladder on firm, level ground. Use ladder levelers on uneven ground. Secure the ladder by tying it down, using slip-resistant feet, or by having someone hold it in place. A ladder on a slick surface must be tied in place or held.
11. Keep the area around the top and bottom of a ladder clear. In passageways, doorways, or where traffic or other activities can occur, secure the ladder or block off the area.



*Acknowledgements - Mount Allison University*