



LADDERS

Potential Hazards

1. fall from elevated heights
2. cuts/lacerations
3. falling objects
4. slip, trip or fall

Personal Protective Equipment Required

- | | | |
|-----------------|--------------------|-----------------|
| Hard hat | CSA Boots | Eye protection |
| Hand protection | Hearing protection | Skin protection |
| Respirator/mask | Face protection | (clothing) |

PRELIMINARY ACTIVITIES

Where multiple trade activity is scheduled, the general contractor is to review in advance the priority of work and schedule the appropriate time frame to allow each trade to complete their scope of work. Prior to any work commencing supervisors must conduct a hazard assessment of all applicable work areas. Any hazards that are found during the hazard assessment must be addressed prior to any work commencing.

DO'S:

1. Make sure a competent person has inspected the handrail before use.
2. Ensure that the handrail is properly secured.
3. Ensure nails are not protruding.
4. Ask a supervisor if you're not sure if working conditions are safe.

DON'Ts:

1. Use a worn or damaged ladder
2. Locate a ladder too close to electrical power lines
3. Carry tools and materials on ladders
4. Over-extend or lean-out on a ladder
5. Allow more than 1 person on a ladder at a time
6. Do not place a ladder against flexible or moveable surfaces.
7. Do not stand a ladder on any of its rungs.

SAFE WORK PROCEDURE

This program outlines the proper procedures to be taken when inspecting, maintaining, storing and using portable aluminum, fiberglass, metal, and wood ladders on the job. Always follow safe work procedure and be aware of the hazards when using ladders.

Falls from portable straight and extension ladders are a significant cause of injuries in construction. Portable ladders should only be used for short-term work where a safer means of access, such as scaffolds, elevating work platforms, stairs, man lifts, etc. is not available.

INSPECTION PRIOR TO USE:

Ensure that the commercially manufactured ladder conforms to CSA and/or ANSI standards and that the manufactures labels and CSA labels are presented, intact, and legible.

Inspect the ladder prior to use. Items to look for when inspecting ladders include:

1. missing or loose rungs,
2. damaged or missing anti-slip rail feet,
3. loose fasteners,
4. faulty spreaders,
5. material cracks or decay (especially for wood),
6. exposed fiberglass fibers (fiberglass ladders),
7. exposed nails/splinters or sharp edges,
8. excessive wear, rust, twisted or bent rails and rungs,
9. broken stop on hinge spreader,
10. loose or damaged hinges,
11. missing or damaged extension locks,
12. defective or missing extension pull cords,
13. lubrication of working parts,
14. ladder wobble



LADDER SET UP:

1. Place the stepladder on a stable, level base.
2. Secure the ladder at top and bottom.
3. Face the ladder when climbing up or down and keep the centre of your body within the side rails.
4. Keep three points of contact when on a ladder.

GENERAL SAFE WORK PRACTICES:

1. Choose the proper type and grade of ladder for the job. Check the manufacturer's ratings and ladder marking's to ensure it is set-up and used properly.
2. Inspect the ladder to ensure no bent or damaged steps/rungs or side rails and that all parts are in working order.
3. Have another worker assist with carrying and placing the ladder in position.
4. Hold the ladder in place or secure ladder at bottom and ensure the base is level, solid and stable.
5. Evaluate that the upper contact point of the ladder to ensure it is solid and structurally sound.
6. Locate the base of the ladder 1 metre out from the wall for every 4 metres of height.
7. Ensure that there is proper section overlap for an extension ladder. (one metre, for a ladder less than 11 m in length, 1.25 m for a ladder between 11 m and 15m, 1.5 m for a ladder over 15 m in length).
8. Secure the ladder at the top and extend the ladder at least 1 meter above the landing, if using the ladder for access from one level to another.
9. Before mounting a ladder, clean the boot soles if they are muddy or slippery.
10. Once the ladder is secured and placed at the correct elevation and angle, face the ladder and climb using the 3 point contact rule at all times. (Tools and materials should not be carried, but hoisted separately once in a safe position).
11. Secure the ladder at the top and extend the ladder at least 1 metre above the landing if using for access/egress.

PREPARATION

The lower ends of the ladder shall be placed on a firm and level base. Single and extension ladders must be equipped with no slip safety feet, tied off or otherwise secured to prevent "kicking out" or slipping.

1. The upper part of the side rails shall be rested upon a bearing surface of ample strength to support the load of the ladder and other applied loads.
2. All site constructed ladders are to be built in accordance with WorkSafeBC Requirements.
3. All portable ladders are to be inspected prior to each use. Ladders with loose broken or missing rungs, split side rails or other defects shall be taken out of service and not used until repaired.
4. If work is to be done off of a ladder, new regulations require that the ladder must be tied off and that full fall arrest must be worn.
5. Standard ladders shall not exceed the following limits:
 - stepladders - 20 feet
 - single ladders - 30 feet
 - extension ladders (two sections) - 48 feet
 - extension ladders (more than two sections) - 66 feet
6. Standard ladders must be CSA grade 1 or ANSI grade A-1 (Industrial) rated. Grade 2 & 3 ladders (light-residential) are not suitable for heavy construction work.

HANDLING AND USE

The feet of single and extension ladders shall be set 25% of the working height away from the supporting object and extend three feet above the supporting object.

1. Ladders in use must be secured to prevent movement.
2. No workers shall work on the top two rungs of a single or extension ladder, or on the top two steps of a step ladder.
3. Always face a ladder when climbing up or down.



4. Never go up or down a ladder without the use of both hands. If materials must be handled, hoist them up or down by rope.
5. No more than one person is to use or climb a ladder at one time.
6. Ladders shall not be placed on boxes, barrels or any unstable surface to gain more height.
7. Do not over reach while working from a ladder.
8. Ladders shall not be placed in front of doors or windows, which open towards the ladder, unless precautions have been taken to ensure there is no contact between the door or window and the ladder.
9. Do not place a ladder against a window pane.
10. Ladders used in corridors, stairwells or aisles must be barricaded.
11. Ladders used in locations where they may be struck by workers or equipment in the area, must have a watcher stationed at the bottom. Ladders must not be left standing in such a location when not in use.
12. Metal ladders or wire reinforced wooden ladders, must not be used in proximity to energized powerless or other electrical equipment unless authorized in writing by the WorkSafeBC
13. The upper half of an extension ladder shall not be used as a single ladder.
14. Do not use ladders in a horizontal position as runways or scaffolds.

CLEAN UP AND STORAGE

1. Ladders should be kept clean and free of dirt and other debris.
2. Wooden ladders shall not be painted. If protective coatings are used they shall be transparent.
3. Ladders shall be stored in proper dry storage areas following use.