
Sliding, Fixed, Portable (Extension, Single) Ladders
Musculoskeletal Disorders (MSD) Prevention/Ergonomic Guidance
for Stakeholders
Regarding Use of Ladders in Industrial Workplaces



Sliding



Fixed



Extension



Single

Section 73 of Regulation 851 (Industrial Establishments) made under the Occupational Health and Safety Act prescribes the required features and use of portable ladders in the context of an industrial workplace. Non-compliance with Section 73 may create a hazard for the worker. Requirements for the instruction/training of workers, maintenance of equipment, and the use of personal, protective equipment, such as fall arrest, may also apply in specific circumstances. In addition to legal requirements relating to the features and use of ladders, workplace parties should also consider safe practices, such as: the correct choice of ladder in specific circumstances, how to set it up, its weight capacity, and environmental conditions in which the ladder is being used in the workplace.

Musculoskeletal disorder (MSD) prevention/ergonomic **safe practices** should be considered while:

Climbing/Descending

- Use both hands to climb/descend, and maintain three-point contact (two hands and one foot OR two feet and one hand in contact with the ladder)
- Face the ladder

Receiving/Placing/Removing Objects

- Use only one hand to receive goods, maintain three-point contact (two feet and one hand in contact with ladder)

Range of movement

- Keep hands above knee level when reaching down to grasp objects
 - Keep belt buckle (i.e., navel) within centre of ladder when reaching sideways (belt buckle stays within outer edges of side rails)
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- Avoid leaning backward while moving objects (i.e., when size of object interferes with its movement across the ladder)
 - Avoid rising up on toes when reaching above to place object

Standing posture

- Stand no higher than the top step indicated by the manufacturer
- Keep both feet on the ladder

Characteristics of object

- Lifting object with one hand weighing **less than** 9 kg (male), or 6 kg (female), *and* maintaining three-point contact (two feet and one hand) with ladder

Working

- *Sliding/fixed ladder* – maintain three-point contact (two feet and one hand) with ladder
- *Extension/single ladder* – be readily able to achieve three-point contact (two feet and one hand) with ladder
- *Sliding/fixed/extension/single ladder* – Keep belt buckle (i.e., navel) within centre of ladder when reaching sideways (belt buckle stays within outer edges of side rails)
- *Sliding/fixed/extension/single ladder* – Stand no higher than the top step indicated by manufacturer
- *Sliding/fixed/extension/single ladder* – Avoid forceful or jerky pulling/pushing movements where there is the potential for an unexpected reaction

This Guidance Note has been prepared to assist the workplace parties in understanding their obligations under the Occupational Health and Safety Act (OHSA) and its regulations. It is not intended to replace the OHSA or its regulations and reference should always be made to the official version of the legislation.

It is the responsibility of the workplace parties to ensure compliance with the legislation. This Guidance Note does not constitute legal advice and has no legal effect. If you require assistance with respect to the interpretation of the legislation and its potential application in specific circumstances, please contact your legal counsel.

While this Guidance Note will also be available to Ministry of Labour inspectors, they will apply and enforce the OHSA and its regulations based on the facts as they may find them in the workplace. This Guidance Note does not affect their enforcement discretion in any way.

For further information on ladder safety, contact your health and safety association
www.healthandsafetyontario.ca.