
Portable Ladders (Mobile Ladder Stand, Mobile Ladder Platform)

Musculoskeletal Disorders (MSD) Prevention/Ergonomic Guidance

for Stakeholders

Regarding Use of Ladders in Industrial Workplaces



Mobile Ladder Stand



Mobile Ladder Platform

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 handrails, if specified by manufacturer (e.g., for a grade over 50°, manufacturer may recommend holding handrails)
- Face proper direction for climb/descent according to manufacturer (e.g., for a grade over 50°, manufacturer may specify facing the ladder when descending)
- Carry only objects (if allowable, as per manufacturer) that do not impair ability to climb/descent and maintain balance, and do not block field of view

Receiving/Placing/Removing Objects

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)
 - Avoiding rising up on toes when reaching above to place object

Standing posture

- Keep both feet on the ladder

Characteristics of object

- Lift object with one hand (less than 9 kg, male; 6 kg, female)
- Lift object with two hands:

	Male	Female
Lifting:	object lighter than:	object lighter than:
below shoulder height	21 kg	12kg
above shoulder height	16 kg	8 kg

Working

- (Mobile ladder stand) Be readily able to achieve three-point contact (two feet and one hand in contact with the ladder)
- (Mobile ladder stand *and* platform) Do not overreach beyond ladder rail (i.e., with noticeable back flexion and arms fully extended)
- (Mobile ladder stand *and* platform) Avoid forceful or jerky pushing/pulling 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.