

SAFETY MEMO

June 26, 2023 – Portable Extension Ladders



Did You know?

Introduction

Small to medium portable extension ladders can be easily moved or carried, allowing access to elevated areas in the workplace or at home. Longer extension ladders require two people to carry and move them due to the weight and length. These ladders should only be used when practical and safe. Appropriate training is required before working with extension ladders.

Safe Practices

Before you use a ladder, whether at home or at work, be sure to follow these guidelines:

- Ensure you are trained in safe ladder usage and erections techniques
- Select the ladder with a proper load rating and material for your task
- Perform an inspection for existing damages or defects
- Use skid-resistant rungs
- Confirm the surrounding area to be a safe, low traffic environment
- Position the base of the ladder on a flat, stable surface
 - The angle of the ladder should be 75 degrees
- Use the 1:4 rule (Figure 1)¹
- One foot away from the building for every four feet in height
- A second person is needed to protect or stabilize the base when first erecting the ladder
- Secure the bottom of the ladder with blocking to prevent the bottom from slipping
- Extend the ladder at least three feet above the upper surface,
- Do not work from the top two rungs of a ladder
- Secure the top of the ladder or tie off the top of the ladder
- Ensure the each section of the extension ladder overlaps the adjacent section by a minimum number of feet
 - Ladders up to 36 feet overlap must be 3 feet
 - Ladders 40 feet and over, overlap must be 4 feet



Figure 1: Photo courtesy of OSHAcademy

- Maintain three points of contact at all times (Figure 2)²
- Keep your body positioned in the center of the ladder
- Always face forward when climbing, looking directly at the ladder
- Do not carry heavy objects up the ladder
- Climb slowly and maintain secure footing
- Do not move or extend the ladder while in use
- When working at heights of 3m (10 feet), fall protection may be needed, check with your local jurisdiction for the exact requirements for work on extension ladders



Figure 2: Photo courtesy of Work Safe B.C.

Injuries

Falls from extension ladders are one of the top causes of occupational injuries. More than 100 people die yearly from ladder-related falls and thousands are left injured³.

Training

Proper training is required before performing work with extension ladders and may change depending on your location. Regulating organizations include:

- Occupational Safety and Health Administration (OSHA) in the United States
- Canadian Centre for Occupational Health and Safety (CCOHS) in Canada
- Agence nationale de sécurité sanitaire de l'alimentation, de l'environnement et du travail in France
- European Agency for Safety and Health at Work in the European Union

In Summary

Allow yourself adequate time to safely setup the extension ladder. Follow the 1:4 slope rule and extend the ladder three feet above the elevated surface. Maintain three points of contact at all times when climbing and descending to ensure proper stability. Ensure the top of the ladder is tied off when using the ladder. Always make safety the number one priority when working with extension ladders.

Execution

Once the proper inspection and setup is complete, it is time to safely perform work. When climbing the ladder, always follow these base rules:

¹ OSHAcademy Occupational Safety and Health Training. Course 805 - Fall Protection in Construction. Retrieved from <https://oshatrain.org/courses/mods/805m4.html>

² WorkSafeBC. Construction Safety Series. Safe ladder use. Retrieved from https://www.dir.ca.gov/dosh/etools/08-001/construction_safety_series.pdf

³ Centers for Disease Control and Prevention. Falls from ladders are preventable: make ladder safety a priority. Retrieved from <https://www.cdc.gov/niosh/newsroom/feature/ladder-safety.html>