



STANDARD OPERATING PROCEDURE

FALL PROTECTION

WORKING FROM LADDERS

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Revision Summary Change		
Rev	Revision Date	Change Description
A	6-Jun-2024	Issued for Review
B	26-Jul-2024	Issued for Final KBM DSM Review
01	3-Oct-2024	Issued for Use



Table of Contents

1.0 PURPOSE 3

2.0 SCOPE 3

3.0 DEFINITIONS / ACRONYMS 3

4.0 ROLES AND RESPONSIBILITIES 4

5.0 PROCEDURE 5

6.0 BEST PRACTICES 8

7.0 REFERENCES & EXAMPLES 9



1.0 PURPOSE

Our employees' safe use of these ladders is of foremost importance to our company. This Standard Operating Procedure (SOP) aims to ensure the safe and proper usage of ladders on construction sites in compliance with the Occupational Safety and Health Administration (OSHA) and American National Standards Institute (ANSI) standards. It outlines guidelines for ladder selection, inspection, setup, and safe climbing practices to prevent accidents and injuries.

2.0 SCOPE

This SOP applies to all personnel involved in construction activities where ladders are used as a means of access or working platforms.

3.0 DEFINITIONS / ACRONYMS

TERMS / ACRYNOMS	DEFINITION	REFERENCE
Corporate Standard Definitions	Glossary	



4.0 ROLES AND RESPONSIBILITIES

POSITION	ROLE AND RESPONSIBILITY
DESIGNATED SIGNER	<ul style="list-style-type: none">• Must review and approve every fall protection permit on their project.• Designated by district leadership and assigned on the TSCD matrix.
DESIGNATED INSPECTOR	<ul style="list-style-type: none">• Responsible for initial inspection of fall protection systems to ensure correct installation.
PROJECT MANAGER	<ul style="list-style-type: none">• Oversee implementation of fall protection program.• Ensure employees are trained and understand the fall protection requirements.
GENERAL SUPERINTENDENT	<ul style="list-style-type: none">• Review, approve fall protection permits.• Ensure the fall protection hierarchy of controls is followed.• Ensure the fall protection permit is complete with all supporting documents attached.
SUPERINTENDENT	<ul style="list-style-type: none">• Develop the fall protection permit with the goal of eliminating fall risk by following the hierarchy of controls (eliminate, prevent, restrain, arrest, administrative).• Verify the craft have appropriate training, understand the plan/permit.• Verify the permit is being adhered to in the field.• Ensure all approvals are obtained.• Ensure the team is trained on the inspection process and it is being tracked.• Confirm rescue equipment is available.
FIELD ENGINEER	<ul style="list-style-type: none">• Participate in development of the fall protection permit.• Confirm fall distance vs fall clearance required.• Verify that the crew has the correct fall protection equipment.• Track and document all fall protection equipment and device inspections.• Verify the permit is being adhered to in the field.• Confirm rescue equipment is available.
FOREMAN	<ul style="list-style-type: none">• Participate in the development of the fall protection permit.• Verify the permit is being adhered to in the field.• Ensure all craft employees working on the permit are properly trained to utilize their fall protection equipment and devices.• Review fall protection permit with crew prior to task and confirm signed off.• Confirm rescue equipment is available.
CRAFT	<ul style="list-style-type: none">• Follow the fall protection permit being utilized in the field.• Only use fall protection equipment you have been trained to use.• Inspect all fall protection equipment and devices prior to every use.



5.0 PROCEDURE

5.1 TRAINING

All employees using ladders will be trained by a competent person to recognize hazards related to ladders and procedures to follow to minimize these hazards. Training shall include the following areas, as applicable:

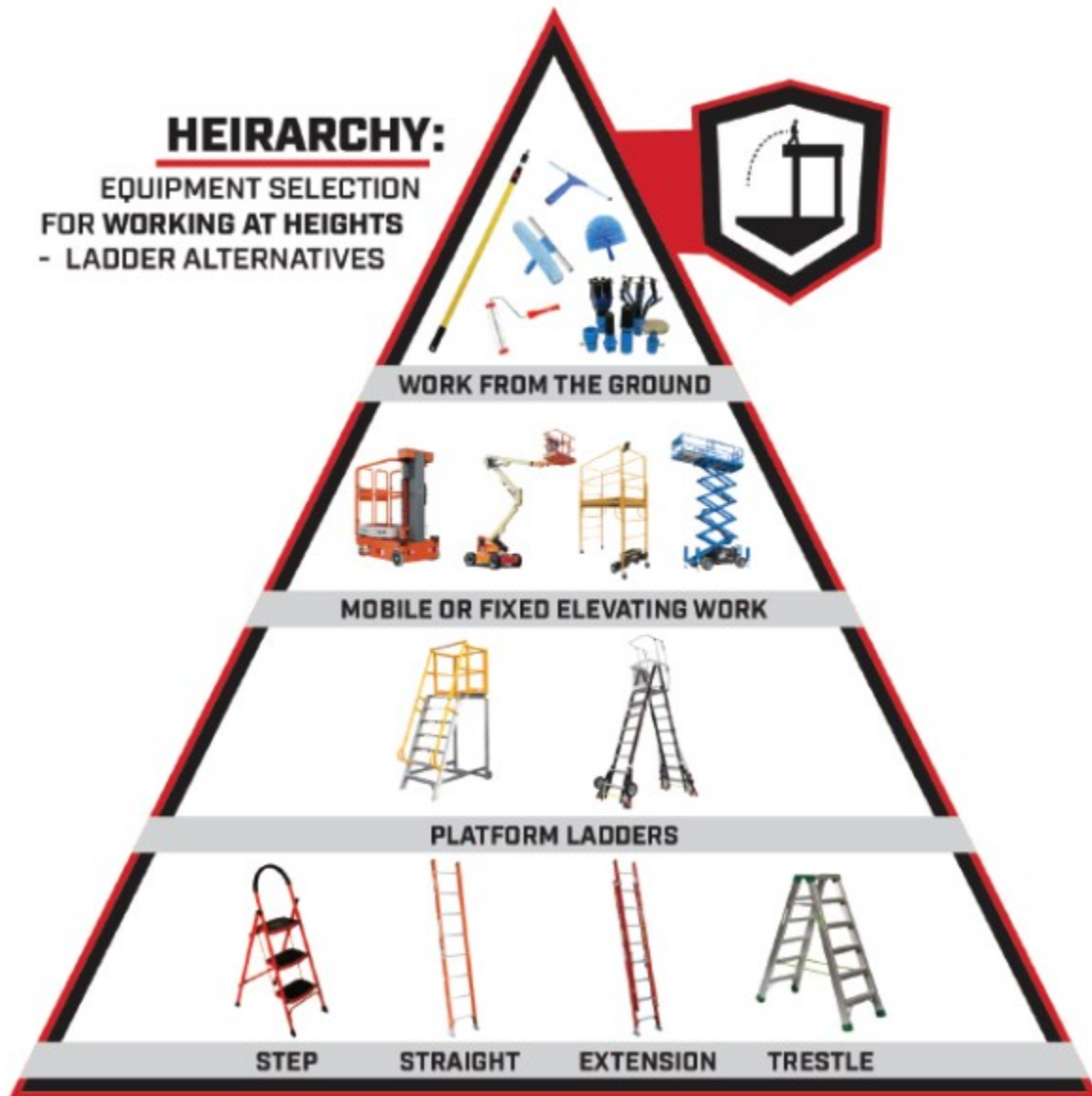
- 5.1.1 The correct procedures for erecting, maintaining, and disassembling the fall protection systems to be used.
- 5.1.2 The proper construction, use, placement, and care in handling of ladders
- 5.1.3 The maximum intended load capacities of the ladder.
- 5.1.4 Any applicable parts of this section
- 5.1.5 Retraining shall be provided as necessary so that the employee maintains the understanding and knowledge.

5.2 INSPECTION

- 5.2.1 Ladders will be inspected prior to each use and after any occurrence that could affect its safe use. Ladders will be inspected daily to make sure they are damage free, i.e. – no cracks, splinters, loose bolts, rotted wood, broken hardware, split side rails, broken or missing rungs.
- 5.2.2 Damaged ladders will be red tagged and removed from service and destroyed.

5.3 NEED FOR FALL PROTECTION

Falls from ladders are one of the leading causes of occupational injuries. The following is the hierarchy of controls that shall be considered:



5.3.1 **ALL ladders require a JHA with Superintendent approval.**

5.3.2 If a ladder must be used, the type, height, duty rating, and material must be considered. All elements of safe ladder use, maintenance and inspection must be followed.



5.4 FALL PROTECTION

5.4.1 PORTABLE AND FIXED LADDERS

5.4.1.1 When climbing or descending more than 24 feet off the ground, user shall be in fall protection equipment with approved anchorage. The anchor point for personal fall protection on a ladder must be determined by a Competent Person, be located overhead, and meet the requirements for anchorage.

5.4.1.2 A personal fall arrest, restraint, or positioning system is required when working at or above the 4th rung of the ladder. This excludes platform ladders. When visually restricted, work will require a fall protection permit and equipment regardless of height. (i.e. welding hood, full face respirator)

5.5 GENERAL REQUIREMENTS

5.5.1 Aluminum ladders shall not be used.

5.5.2 Ladders used on the project will be either a factory-made ladder or a job-built ladder.

5.5.3 Ladders must be tied off or held by another employee during use.

5.5.4 All ladders will be built in accordance with ANSI and OSHA regulations.

5.5.5 When step ladders (A-frame) are being used, they must be used as they were intended, fully opened. They will not be leaned up against vertical surfaces and climb unless the ladder is designed to do so.

5.5.6 Ladders shall be placed on a solid, level base and the area at the top and bottom shall be kept clear of tripping hazards.

5.5.7 Straight ladders shall be positioned so that the horizontal distance from the top support to the foot of the ladder is one quarter (4 to 1 ratio) of the working length of the ladder.

5.5.8 Side rails or grab rails shall extend at least 36" above the landing when used for access. When extension ladders are used for access to another level, walk-through rail extensions should be used. Walk-through rail extensions can be bought from [Guardian Fall Protection: Safe-T Ladder Extension System, Model# 10800](#).

5.5.9 **NEVER** carry tools or materials on a ladder. Always face the ladder and grip it with both hands. Always use 3 points of contact. Use a load rated canvas bag or the equivalent to raise and lower tools.

5.5.10 Do not rush on ladders. Clean your feet of mud, grease, and ice to prevent slips and falls.

5.5.11 Never use the top two steps of a ladder.

5.5.12 Never lean or reach to the side of a ladder. Your belt buckle should always remain within the side rails.

5.5.13 Never paint a ladder.

5.5.14 Fixed ladders, if used, will be provided with cages, wells, ladder safety devices, self-retracting lifelines, or vertical static lines with rope grabs where the length of climb is equal to or exceeds 24 feet.



5.5.15 Do not carry tools, materials, or other items in your hands while climbing a ladder.

5.5 REQUIREMENTS FOR JOB MADE LADDERS

- 5.5.1 All job made ladders must comply with [Kiewit Design Drawings](#).
- 5.5.2 All job made ladders must be built from high-grade straight grained lumber that is free of cracks and through knots.
- 5.5.3 Single cleat ladders shall not exceed 30' in length and shall be 15" to 20" wide.
- 5.5.4 2" x 4" or larger lumber shall be used for side rails of single cleat ladders up to 16' long. 2" x 6" or larger lumber shall be used for side rails of single cleat ladders 16'1" to 30' long.
- 5.5.5 A double cleat ladder shall not exceed 24' in length and shall be used when it is the only access to a work area for 25 or more employees, or when simultaneous two-way traffic is necessary.
- 5.5.6 Minimum side rail and mid-rail dimensions for double cleat ladders are 2" x 4" for ladders up to 12' long and 2" x 6" for ladders 12' 1" to 24' long.
- 5.5.7 Side rails should be continuous; however, if splicing is necessary, they must be as strong as a continuous rail of the same length.
- 5.5.8 Cleats shall be 2" x 4" with filler blocks nailed to each rail between the cleats.
- 5.5.9 Cleats shall be secured to each rail with three 10d common nails and shall be spaced 12" from top to top.
- 5.5.10 Plywood covers shall be installed over filler blocks and rungs in continuous 8 ft sections. Covers shall be attached with 16d nails spaced approximately every 6-8 inches.
- 5.5.11

6.0 BEST PRACTICES

- 6.1 Read and follow all labels/markings on the ladder.
- 6.2 Read and follow all labels/markings on the ladder.
- 6.3 Avoid electrical hazards! – Look for overhead power lines before handling a ladder.
- 6.4 Always inspect the ladder prior to using it. If the ladder is damaged, it must be removed from service and tagged until repaired or discarded.
- 6.5 Always maintain a 3-point (two hands and a foot, or two feet and a hand) contact on the ladder when climbing. Keep your body near the middle of the step and always face the ladder while climbing.



- 6.6 Only use ladders and appropriate accessories (ladder levelers, jacks or hooks) for their designed purposes.
- 6.7 Ladders must be free of any slippery material on the rungs, steps or feet.
- 6.8 Do not use a self-supporting ladder (e.g., step ladder) as a single ladder or in a partially closed position.
- 6.9 Do not use the top step/rung of a ladder as a step/rung unless it was designed for that purpose.
- 6.10 Use a ladder only on a stable and level surface, unless it has been secured (top or bottom) to prevent displacement.
- 6.11 Do not place a ladder on boxes, barrels or other unstable bases to obtain additional height.
- 6.12 Do not move or shift a ladder while a person or equipment is on the ladder.
- 6.13 An extension or straight ladder used to access an elevated surface must extend at least 3 feet above the point of support. Do not stand on the three top rungs of a straight, single or extension ladder.
- 6.14 The proper angle for setting up a ladder is to place its base a quarter of the working length of the ladder from the wall or other vertical surface (see diagram).
- 6.15 A ladder placed in any location where it can be displaced by other work activities must be secured to prevent displacement or a barricade must be erected to keep traffic away from the ladder.
- 6.16 Be sure that all locks on an extension ladder are properly engaged.
- 6.17 Do not exceed the maximum load rating of a ladder. Be aware of the ladder's load rating and of the weight it is supporting, including the weight of any tools or equipment.

7.0 References & Examples

[LSA Guidelines](#)

[LSA Toolkit](#)