



SAFETY DIRECTIVE

Title: Ladders
Issuing Department: Human Resources Department
Effective Date: March 01, 2024
Approved: Curry C. Hale, Human Resources Director
Type of Action: Revision

1.0 PURPOSE

This procedure has been established to provide employees with a uniform directive for the safe and proper use of ladders in the workplace, including the procedure for performing ladder inspections and documentation.

This standard operating procedure covers all types of ladders, including step, extension, and fixed ladders. Ladder users must be able to recognize and avoid ladder hazards and be aware of safe practices in setting up, storing, moving and working with this equipment.

The policies and procedures contained in this directive are intended to assist in identifying and complying with Occupational Safety and Health Administration (OSHA) Safety Standards. In all cases where there is a difference between specific OSHA standards and the ladder use policies set forth in this chapter, the stricter of the two shall apply.

2.0 DEPARTMENTS AFFECTED

This Safety Directive shall apply to all Town of Marana departments and employees who are required to use fixed and portable ladders.

3.0 REFERENCES

- 3.1 29 CFR 1910.23 Ladders
- 3.2 29 CFR 1926.1053 Ladders (Construction or Construction like activities)
- 3.3 ANSI 14.X Ladder Ratings

4.0 DEFINITIONS

- 4.1 Extension Ladder: A straight ladder with two (2) interconnected sections, deployed by use of a rope and pulley or by slide rails.
- 4.2 Fixed Ladder: A ladder that is an integral part of a structure or is affixed to a structure.
- 4.3 Portable Ladder: An A-frame type ladder, secured and locked with a brace consisting of steps on one side of the frame and support brackets on the opposite side of the frame. Some portable A-frame ladders are designed with steps on both sides of the frame.
 - 4.3.1 Ladder Categories:
 - 4.3.1.1 Type IAA-375 pounds extra heavy duty

4.3.1.2 Type IA-300 pounds extra heavy duty

4.3.1.3 Type I-250 pounds, heavy duty

4.3.1.4 Type II-225 pounds, medium duty

4.3.1.5 Type III-200 pounds, light duty

5.0 POLICIES AND PROCEDURES

5.1 Education and Training

5.1.1 All departments/divisions will provide or facilitate training to each employee who is required to utilize a ladder on the following:

5.1.1.1 How to inspect the ladder;

5.1.1.2 How to position the ladder;

5.1.1.3 How to maintain and store the ladder;

5.1.1.4 How to identify ladder type and weight capacity;

5.1.1.5 How and when to dispose of a ladder.

5.1.2 Human Resources shall provide training on the safe use, operation, deployment and inspection of ladders.

5.1.3 When a supervisor has reason to believe that any effected employee who has already been trained does not have the understanding and skill required to safely use a ladder, Human Resource shall retrain or assign additional training to the employee(s).

5.1.4 Circumstances where retraining is required include, but are not limited to, situations where:

5.1.4.1 Changes in the workplace render previous training obsolete.

5.1.4.2 Changes in the types of ladders used render previous training obsolete.

5.1.4.3 An effected employee's knowledge or use of the assigned ladder is unsafe.

5.2 Ladder Inspection

5.2.1 Before every use, each ladder shall be inspected for:

5.2.1.1 loose locks, brace, rungs or steps;

5.2.1.2 loose screws or bolts;

5.2.1.3 broken, cracked or split braces, rails, cleats [safety feet], rungs or steps;

5.2.1.4 burrs, jagged edges and splinters;

5.2.1.5 corrosion, grease, non-compliant paint, oil or rust;

5.2.1.6 free of any recognized damage that could cause injury;

5.2.1.7 presence of manufacturer's use, weight, and warning labels;

5.2.1.8 Fiberglass ladders should be inspected for excessively loose fibers (hair) coming loose from the matrix. Special attention should be given to fiberglass ladders that are severely faded from their original color.

5.2.2 A ladder inspection checklist may be found in Appendix A.

5.2.3 Any ladder found to be damaged beyond repair should be disposed of after complete dismantling or breakage. This will insure that the ladder cannot be used after disposal.

5.3 Safe Ladder Setup. Employees shall ensure the following:

- 5.3.1 All ladders must be placed on firm ground;
- 5.3.2 Do not set ladders on boxes, blocks or other objects that might move;
- 5.3.3 Secure ladders whenever a danger of slippage might occur;
- 5.3.4 Do not use ladders in high wind or during inclement weather conditions;
- 5.3.5 Never set up ladders in front of or around doors, unless the door is posted or locked or guarded;
- 5.3.6 Do not sit on ladders;
- 5.3.7 Use appropriate footwear when climbing a ladder.

5.4 Climbing and Standing on Ladders Safely. Employees shall ensure the following:

- 5.4.1 Always face a ladder when climbing up or down;
- 5.4.2 Do not allow your centerline or belt buckle to move beyond the side rails or over reach while standing on ladders;
- 5.4.3 Avoid carrying materials or tools when climbing a ladder. Climb the ladder first then pull up the materials with a rope;
- 5.4.4 Rungs and steps should be clear of grease, oil, wet paint, and moisture;
- 5.4.5 Do not climb onto a ladder from the side or from the back;
- 5.4.6 Do not slide down a ladder;
- 5.4.7 Do not stand on the top two rungs or steps of a ladder.

5.5 Proper Use and Care of Ladders. Employees shall ensure the following:

- 5.5.1 Metal ladders, except rolling ladders and step stools, are no longer permitted and will be replaced with fiberglass ladders;
- 5.5.2 Fiberglass ladders will be required for all electrical work;
- 5.5.3 Use warning signs, a spotter or setup barriers near/around a ladder before use in trafficked areas;
- 5.5.4 Do not move a ladder while someone is on it;
- 5.5.5 Never use a ladder if impaired;
- 5.5.6 Do not leave tools or materials on top of ladders;
- 5.5.7 Only one person on a ladder at a time, with the exception of twin ladders;
- 5.5.8 Do not use a ladder on a scaffold;
- 5.5.9 Do not try to rock or jump a ladder to move it;
- 5.5.10 Make sure ladders are properly secured when transported;
- 5.5.11 Do not paint any ladder. Painting could hide potential defects;
- 5.5.12 Remove defective ladders from service.

5.6 Step Ladder Safety. Employees shall ensure the following:

- 5.6.1 Never use a step ladder over 20 feet in length;
- 5.6.2 Always open a step ladder completely and make sure the spreader is locked before use;
- 5.6.3 Do not straddle a step ladder.

5.7 Extension Ladder Safety

- 5.7.1 The sections of an extension ladder should overlap enough to retain the strength of the ladder; see table A below;
- 5.7.2 Never splice or tie two short ladders together;
- 5.7.3 When using a ladder for access to a landing, it must extend three (3) rungs or three (3) feet above the landing;
- 5.7.4 The top of an extension ladder should rest against a flat, firm surface;
- 5.7.5 Elevate and extend extension ladders only from the ground;
- 5.7.6 When practical, secure extension ladders at both the base and the top.

Table A	
Length of the Ladder	Required Overlap
Up to 36'	3 Feet
Over 36' to 48'	4 Feet
Over 48' to 60'	5 Feet

5.8 Extension Ladder Setup. Employees shall:

- 5.8.1 Ensure no overhead hazards exist before extending ladder;
- 5.8.2 Lay the ladder on the ground when it is collapsed;
- 5.8.3 Pick up the ladder and walk it to an upright position, making sure it will not be contacted by trees or electrical wires;
- 5.8.4 Slide the bottom of the ladder outwards to the proper angle (4:1, see Appendix B) and set the feet correctly;
- 5.8.5 Extend the ladder by pulling the extension line;
- 5.8.6 Make sure the rungs on the upper half of the ladder are properly secured by the locking mechanism;
- 5.8.7 If possible, tie the ladder off or have someone steady the ladder as you climb it.

5.9 Fixed Ladder Safety. A Fixed ladder shall:

- 5.9.1 Be secured to an object or building;
- 5.9.2 Are capable of supporting their maximum intended load;
- 5.9.3 Have a 15" clearance to all points from the center;
- 5.9.4 Have all defects repaired as soon as possible;
- 5.9.5 Be replaced when a defect is not repairable.

6.0 RESPONSIBILITIES

- 6.1 Human Resources has overall responsibility for the Town's safety programs. Human Resources shall assist departments in reviewing the condition of ladders during facility inspections.
- 6.2 Department heads, managers and supervisors are responsible for ensuring that the requirements of this directive are fully implemented in their work areas. The Department shall ensure that all affected employees that are required to use ladders shall be familiar with the Town policy regarding safe operation and pre-use inspection of ladders.
- 6.3 Supervisors shall instruct employees on the safe operation and use of ladders and shall ensure that pre-use ladder inspection is performed and documented by the employees. The Supervisor shall ensure that safety defects identified during the pre-use inspections shall cause the ladder to be immediately removed from service and that repairs are made by the manufacturer or manufacturer's representative or otherwise the ladder is removed from service and disposed of.
- 6.4 Employees shall set-up and use a ladder according to the manufacturer's instructions and shall not overload a ladder past the working capability. Employees shall perform pre-use inspections of ladders.

7.0 ATTACHMENTS

- 7.1 Appendix A. Ladder Inspection Checklist
- 7.2 Appendix B. Inspection / 4 to 1 Rule

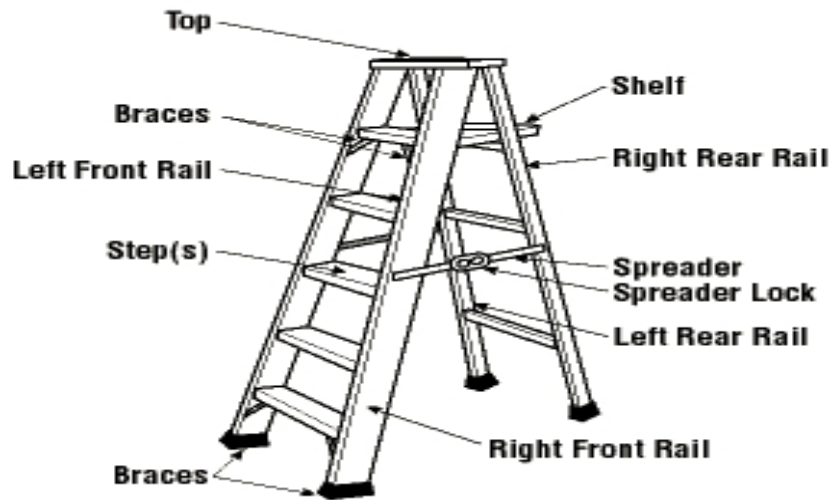
Attachment A

Ladder Inspection Checklist

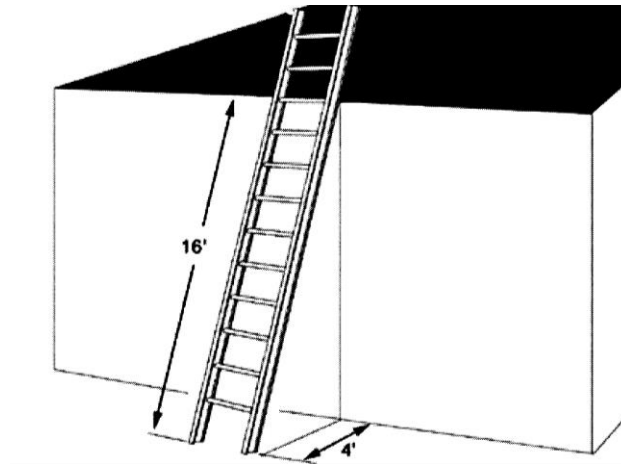
Employee	
Department	
Date	
Ladder Type	
Ladder Location	

Condition	No	Yes (Remove from service)	Date of Repair
Loose steps or rungs (considered loose if they can be moved at all)?			
Loose nails, screws, bolts, or other metal parts?			
Cracked, spilt, or broken uprights, braces, or rungs?			
Slivers on uprights, rungs, or steps?			
Damaged or worn non-slip bases?			
Step ladders			
Wobbly (from side strain)?			
Loose or bent hinge spreaders?			
Stop on hinge spreaders broken?			
Loose hinges?			
Broken, split, or worn steps?			
Extension ladders			
Loose, broken, or missing extension locks?			
Defective locks that do not seat properly while extended?			
Worn or rotted rope?			
Report any damaged or defective ladders to a supervisor - remove from service			

Appendix B



Ladder Inspection



Ladder Set-up 4 to 1 Rule

REVISION HISTORY

<i>REV</i>	<i>DESCRIPTION OF CHANGE</i>	<i>DATE</i>
OR	Original Release	07/01/2014
REV	Revision	03/01/2024

Caution: A copy of this Safety Directive is an uncontrolled document. It is your responsibility to ensure you are using the current version. The electronic version is the only acceptable and controlled Safety Directive.