Effective: 04/19/1994 Revised: 06/01/1995TBD

## .1 Purpose

It is the policy of the City of Tulsa to protect employees from recognized hazards, preventing unsafe ladder use. This policy provides the framework to ensure safe work practices when storing, using, and decommissioning all types of ladders.

## .2 Scope

This policy is intended to provide guidance on the use of ladders, which covers all types of ladders, including portable ladders, fixed ladders, step stools, etc. This policy applies to all non-sworn employees who use ladders.

# .3 Regulatory References

This policy complies with OSHA 29 CFR 1910.23 and OSHA 29 CFR 1926.1050.

### <u>.4</u> <u>Definitions</u>

- <u>Duty Rating</u> The maximum safe load capacity of the ladder, which includes A person's fully clothed weight plus the weight of any tools and materials that are carried onto the ladder.
- Fixed ladder A ladder that is permanently attached to a structure, building, or equipment.
- <u>Ladder Feet/Shoes</u> The component of a ladder support that is in contact with the lower supporting surface.
- **Portable Ladder** A ladder that can be readily moved or carried.
- Rungs/Steps/Cleats Ladder crosspieces upon which a person may step while ascending or descending.
- <u>Side rails</u> The side members are joined at intervals by rungs, steps, cleats, or rear braces.
- Step stool A self-supporting, foldable, portable ladder, non-adjustable in length, 32 inches or less in size, with flat steps and without a pail shelf, designed so that the ladder top cap as well as all steps can be climbed on. The side rails may continue above the top cap.
- <u>Stepladder Also known as a portable "A" Frame ladder with two side rails and steps, typically equipped with a metal spreader or locking device to hold it open securely when in use.</u>
- <u>Top Cap The uppermost horizontal member of a portable stepladder or step stool.</u>

# .5 Roles/ Responsibilities

### .51 Ladder Users

- .511 Prior to using a ladder, the employee shall be trained on ladder use outlined in this policy.
- .512 Select and safely use ladders appropriate for the task.
- .513 Visually inspect the ladder before each use and remove from service if repair or replacement is needed.
- <u>.514 Alert an exempt supervisor or manager when ladders need repair or replacement.</u>
- .515 Assess the task for hazards and determine when fall protection should be worn. Seek an alternative access method if needed.
- .516 Stop working if you think it is unsafe and discuss an alternative access method with an exempt supervisor or manager. Examples of alternative access methods include scaffolds, boom lifts, and bucket trucks.

## .52 Exempt Supervisor

- <u>.521 Ensure ladder inspections are completed and documented at a minimum, every 6 months.</u>
- <u>.522</u> Ensure all ladders and equipment are labeled and maintained in a <u>safe usable condition.</u>
- .523 Ensure ladders are rendered unusable prior to disposal.
- .524 Provide training to all personnel using their ladders as required by the training section .6 of this policy.
- .525 Assure ladder-related job tasks are evaluated for hazards and determine if fall protection is needed for the task. Re-evaluate the job task if the procedure changes or a new hazard is identified.
- .526 Ensure employees are following procedures for safe ladder use.
- <u>.527</u> Provide alternative access methods when the use of a ladder is determined to be unsafe.

# .53 Division/Section Managers

- .531 Ensure job tasks involving ladders are evaluated for hazards, and ensure ladders and/or fall protection systems are available and used as required by this policy.
- .532 Ensure training and record keeping comply with the requirements of

## this policy.

## .54 Safety and Training

- <u>.541 Assist department management teams in determining proper ladder</u> selection and use, upon request.
- .542 Conduct periodic audits to advise departments in maintaining ladder safety documentation compliance.
- <u>.543 Maintain and update this policy to ensure compliance with regulatory requirements.</u>

## .<del>56</del> Program Requirements/Safe-Work Procedures

## .<del>5</del>61 General Requirements

- .611 A ladder shall be provided when an employee requires access where there is a break in elevation of 19 inches or more, and no stairway, ramp, runway, sloped embankment, or personnel hoist is provided.
- \_612 Ladders purchased/used by the department shall meet OSHA/ANSI specifications and be appropriate for the job task. To assist with ladder selection and use, utilize the guidelines in Appendix C Ladder Duty Ratings, Types and Selection for Use, and Accessories.
- .613 Each department with one or more ladders must permanently mark each ladder with a numbering system and maintain an inventory of all ladders using the inventory sheet located in Appendix B, or a comparable inventory method.
- .614 All employees who use ladders must be trained on the type of ladder to be used, prior to its use.
- .615 Ladders shall be maintained in good condition at all times.
- .616 Ladders shall be stored in such a manner as to provide ease of access and to mitigate potential injury when obtaining a ladder for use.
- .617 Ladders carried on vehicles shall be adequately supported to avoid damage sagging and securely fastened in position. This will reduce damage due to road shock.
- .618 If the bottom of the ladder must be placed on an unstable surface, it shall be tied at the top, or an assistant must hold it.
- .619 Three points of contact shall always be used during ascent and descent, and the climber shall face the ladder.

- .6110 keep their body centered between the side rails, and move the ladder to a more suitable position instead of overreaching.
- .6111 Only one person shall be on a ladder at one time, unless the ladder is specifically designed for more than one climber (such as a trestle ladder).
- .6112 All on-site employees are required to take immediate corrective action to eliminate any unsafe acts or unsafe conditions that could or would result in an accident.
- <u>.6113 Areas where ladders are used shall be kept clear of materials and debris.</u>
- .6114 Non-self-supporting ladders should be used on level surfaces, and angled according to the 4:1 rule, one foot out for every four feet of ladder height (i.e., if an 8-foot ladder is leaned against a wall, the feet of the ladder should be placed 2 feet out from the wall).
- <u>.6115</u> A non-self-supporting or leaning ladder must extend at least 3 feet above the level to which the user is climbing.
- <u>.6116 A ladder shall be the proper length and Duty Rating for the intended</u> work. Refer to Appendix C for guidelines.
- .6117 Fixed ladders shall only be provided and used for access from one structure level to another where operations necessitate regular travel between levels.
- <u>.6118 Fixed ladders will be used at a pitch no greater than 90 degrees from</u> the horizontal.
- .6119 All new fixed ladders or replacement sections shall be equipped with a personal fall arrest system or ladder safety system if the ladder length equals or exceeds 24 feet above a lower level.
- .6120 All existing fixed ladders must be equipped with a personal fall arrest system, ladder safety system, cage, or well if their length equals or exceeds 24 feet above a lower level. By November 18, 2036, all existing fixed ladders that equal or exceed 24 feet above a lower level shall be equipped with a personal fall arrest system or a ladder safety system, in accordance with OSHA 1910.28(b)(9)(i)(D).

## .62 Prohibited Actions

- .621 Ladders shall not be painted because painting may hide defects.
- <u>\_.622</u> <u>Do not make or use "homemade" ladders.</u><u>Wood ladders should be sanded to remove splinters.</u>

- .623 A ladder shall not be used as a horizontal plank, platform, or scaffold. The increased strain placed upon it will weaken it or break it outright.
- .624<u>If the bottom of the ladder must be placed on an insecure surface, it shall be tied at the top or an assistant must hold it.</u>
  - Employees shall not stand on the top step/rung or top cap of a step ladder to work.
- .625 When <u>Lladders shall not</u>must <u>b bee</u> placed in front of doors openings, passageways, trafficways, or areas where they can be accidentally struck or displaced, <u>opening toward the ladder unlessecure the ladder or ensures the door is blocked openarea is barricaded</u>, <u>locked or guarded</u>.
- <u>Ladders shall not be placed on boxes, barrels, or other unstable bases to obtain additional height.</u>

Only one person shall be on a ladder at one time.

Always face the ladder when ascending or descending.

- To support the top of a ladder at a window opening, aboard should be lashed across the back of the ladder extending across the window and providing firm support against the building wall or window frame.
- <u>Short ladders shall not be spliced together to form temporary extensions.</u>
- .628 Articles should not be carried by hand while climbing. A hand line, tool belt, tool lasso, etc., should be used to raise or lower tools and or materials.
- .629 <u>All\_Conductive (metal) ladders are electrical conductors and shall not be used for electrical work or in the vicinity of electrical equipment components. Keep all ladders and other tools at least 10 feet away from any power lines.</u>
- Areas where portable ladders are used shall be kept clear of rubbish and waste materials. Unused materials shall be safely stored.
- <u>Fixed ladders only shall be provided and used for access from one structure</u>
  <u>level to another where operations necessitate regular travel</u>
  <u>between levels.</u>
- .6210 Do not use a pPortable ladders shall not be used as a fixed ladder.

- .6211 Ladders will shall not be loaded beyond the maximum intended load for which they were built or beyond their manufacturer's rated capacity. Ladders need to have the load capacity of the task being performed.
- .6212 Ladders shall not be used on slippery surfaces without slip-resistant feet, unless properly secured.

Three points of contact shall always be used during ascent and descent, and the climber shall face the ladder.

- <u>.63 Inspections and Maintenance</u>
  - .546321 Ladders shall be visually inspected for broken or defective parts prior to each use. Notify department management of any issues identified during inspection.
  - .632 Unsafe, damaged, or defective ladders shall be immediately removed from use for repair or destruction and tagged or marked as "Dangerous, Do Not Use".
  - .633 Ladders shall be inspected at a minimum -every six months using the ladder inspection checklist located in Appendix A. Departments may use a similar/comparable inspection form, if approved in writing by the Safety and Training section of Human Resources.
  - , and those which have developed defects shall be withdrawn from service for repair or destruction and tagged or marked as "Dangerous, Do Not Use".
  - .634 Inspections shall be documented with the date and signature of the person who performed the inspection-and file a copy. A copy of the inspection report must be maintained on file with the department for a minimum of 2 years.
  - <u>.635 Ladder identification number and labels shall be intact and</u> readable.
  - .636 The joints between the steps and side rails shall be tight, all hardware and fittings securely attached, and the movable parts shall operate freely without binding or undue play.
  - .637 Metal bearings of locks, wheels, pulleys, etc., shall frequently be lubricated per the manufacturer's specifications.
  - <u>.638</u> <u>Ladders shall be maintained in good condition at all times. The joints between the steps and side rails shall be tight, all hardware and fittings securely attached, and the moveable parts shall operate freely without binding or undue play.</u>

Metal bearings of locks, wheels, pulleys, etc. shall frequently be lubricated.

Frayed or badly worn ladder rope shall be replaced. When present on

#### ladders.

- <u>.639</u> Safety feet and other auxiliary equipment shall be kept in good condition to ensure proper performance.
- Ladders shall be stored in such a manner as to provide ease of access or inspection and to prevent the danger of an accident when withdrawing a ladder for use.
- .1 Ladders carried on vehicles shall be adequately supported to avoid sagging and securely fastened in position. This will reduce damage due to road shock.
  - <u>.6310</u> <u>Ladders shall not be painted because painting may hide defects.</u>

    Wood ladders should be sanded to remove splinters.
  - Ladders shall be inspected every six months, and those which have developed defects shall be with drawnwithdrawn from service for repair or destruction and tagged or marked as "Dangerous, Do Not Use". Inspections shall be documented with the date and signature of who performed the inspection and file a copy.

Do not make improvised repairs on ladders.

- .6311 Muddy or slippery ladder feet/shoes shall be cleaned and free of grease and oil.
- .6312 Rungs and steps shall be kept clean and free of grease and oil.
- .2 Do not make or use "homemade" ladders.
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- Straight ladders should form a triangle when placed against a wall or object for climbing. When properly placed., the bottom side of the triangle should be about one fourth as long as the vertical side (i.e., if the ladder is leaned against a wall 8 feet high, the feet of the ladder should set 2 feet out from the wall).
- .5 A straight ladder should be long enough to extend at least 3 feet above the level to which the user is climbing.
- .6.1 A ladder shall not be used as a horizontal plank, platform, or scaffold. The increased strain placed upon it will weaken it or break it outright.
- .7.1 If the bottom of the ladder must be placed on an insecure surface, it shall be tied at the top or an assistant must hold it.
- .8.1 Employees shall not stand on top of a step ladder to work.
- <u>9.1</u> Ladders shall not be placed in front of doors opening toward the ladder unless the door is blocked open, locked or guarded.

10.1 Ladders shall not be placed on boxes, barrels or other unstable bases to obtain additional height. .11.1 Only one person shall be on a ladder at one time. .12.1 Always face the ladder when ascending or descending. 13.1 To support the top of a ladder at a window opening, aboard should be lashed across the back of the ladder extending across the window and providing firm support against the building wall or window frame. Short ladders shall not be spliced together to form temporary .15 .16.1 Muddy or slippery shoes shall be cleaned and free of grease and oil. .17.1 Rungs and steps shall be kept clean and free of grease and oil. .18.1 Articles should not be carried by hand while climbing. A hand line should be used to raise or lower tools and materials. .19.1 All metal ladders are electrical conductors and shall not be used in the vicinity of electrical equipment. .20.1 Areas where portable ladders are used shall be kept clear of rubbish and waste materials. Unused materials shall be safely stored. Fixed ladders only shall be provided and used for access from one structure level to another where operations necessitate regular travel between levels. .22.1 Do not use a portable ladder as a fixed ladder. Exempt supervisors and leadsmen are required to take immediate corrective action to eliminate any unsafe acts or unsafe conditions which could or would result in an accident. Ladders will not be loaded beyond the maximum intended load for which they were built or beyond their manufacturer's rated capacity. Ladders need to have the load capacity of the task being performed Three points of contact shall always be used during ascent and descent, and the climber shall face the ladder.

# .7 Training:

.71 The City of Tulsa will ensure each employee has been trained by a competent person on the inspection, setup, use, placement, and care inof-

handling of all ladders; the maximum intended load-carrying capacities of ladders; and the standards contained in §1926.1050 ——OSHA 29 CFR 1910.23 and OSHA 29 CFR 1926.1050.Ladders and Stairways.

.72 Retraining will be provided for each employee if an injury occurs, unsafe practices are observed, at the request of the employee, or as deemed necessary by management, so that the employee maintains the understanding and knowledge acquired through previous training.

# .8 Disciplinary Action

<u>Failure to follow safe work practices outlined in this policy may result in disciplinary action up to and including termination.</u>