

1.1 PURPOSE

- 1.1.1 The purpose of this policy is to describe methods and practices for care and use of stairways and ladders that can be read and understood by all supervisors and employees at TERRY R PITT CONSTRUCTION. This policy establishes guidelines to be followed whenever an employee works with ladders or stairways.

1.2 RESPONSIBILITIES

- 1.2.1 The safety department is solely responsible for this program and has the full authority of top management to make necessary decisions to ensure success of the program. The safety department is authorized to amend these instructions.
- 1.2.2 TERRY R PITT CONSTRUCTION employees have the authority to stop any operation at the jobsite where there is danger of serious personal injury.

1.3 WRITTEN PROGRAM

- 1.3.1 The written program is intended to create an awareness of the hazards, standardize procedures for use and care of equipment, provide a consistent format to train TERRY R PITT CONSTRUCTION employees on the proper procedures to be used, minimize the possibility of injury or harm to employees, and demonstrate TERRY R PITT CONSTRUCTION's compliance with OSHA/ANSI stairway and ladder requirements.
- 1.3.2 TERRY R PITT CONSTRUCTION will review and evaluate this standard practice on an annual basis, when changes occur to the governing regulatory standards, or when facility or client operational changes occur that require a revision of this policy. Effective implementation requires a written program for job safety that is endorsed and advocated by management and that outlines TERRY R PITT CONSTRUCTION's goals and plans. This written program will be communicated to all employees.

1.4 GENERAL REQUIREMENTS

- 1.4.1 All facilities and equipment owned by TERRY R PITT CONSTRUCTION will be maintained in a safe manner. Certain work conditions may contain a reasonable probability of injury that can be prevented by proper maintenance and supervision. No employee will knowingly be subjected to a hazardous condition without all possible protective measures being implemented.
- 1.4.2 Always face the ladder when ascending or descending. Do not stand on top two rungs of a ladder.
- 1.4.3 Ladders will be inspected by a competent person before initial use in each shift and more frequently, as necessary, to identify any visible defects that could cause worker injury. Inspections by a competent person will occur after any occurrence that could affect safe use.
- 1.4.4 Do not carry objects that could cause injury in the event of a fall.
- 1.4.5 Ladders will be used at an angle such that the horizontal distance from the top support to the foot of the ladder is approximately one-quarter of the working length of the ladder (the distance along

the ladder between the foot and the top support). The angle is commonly known as a 4:1 ratio, which may be substituted for the language of one-quarter of the working length of the ladder.

- 1.4.6 Ladders will not be loaded beyond the maximum intended load for which they were built or beyond the manufacturer's rated capacity.
- 1.4.7 Non-self-supporting ladders shall be used at an angle such that the horizontal distance from the top support to the foot of the ladder is approximately one-quarter of the working length of the ladder (the distance along the ladder between the foot and the top support).
- 1.4.8 Rungs, cleats, and steps of portable ladders and fixed ladders (including individual-rung/stapladders) will be spaced not less than 10 inches apart, nor more than 14 inches apart, as measured between center lines of the rungs, cleats, and steps. Rungs, cleats, and steps of step stools will be not less than eight inches apart, nor more than 12 inches apart, as measured between center lines of the rungs, cleats, and steps. Rungs, cleats, and steps of the base section of extension trestle ladders will not be less than eight inches nor more than 18 inches apart, as measured between center lines of the rungs, cleats, and steps. The rung spacing on the extension section of the extension trestle ladder will be not less than 6 inches nor more than 12 inches, as measured between center lines of the rungs, cleats, and steps. The minimum clear distance between the sides of individual-rung/stapladders and the minimum clear distance between the side rails of other fixed ladders will be 16 inches. The minimum clear distance between side rails for all portable ladders will be 11 1/2 inches. The rungs of individual-rung/stapladders will be shaped such that employees' feet cannot slide off the end of the rungs. The rungs and steps of portable metal ladders will be corrugated, knurled, dimpled, coated with skid-resistant material, or otherwise treated to minimize slipping.

1.5 FIBERGLASS AND WOODEN LADDERS

- 1.5.1 Ladders will be maintained in good condition at all times, the joint between the steps and side rails will be tight, all hardware and fittings securely attached, and the movable parts will operate freely without binding or undue play.
- 1.5.2 Ladders will be used only on stable and level surfaces unless they are secured or stabilized to prevent accidental displacement.
- 1.5.3 Metal bearings of locks, wheels, pulleys, etc., will be frequently lubricated. Frayed or badly worn rope will be replaced.
- 1.5.4 Safety feet and other auxiliary equipment will be in good condition to ensure proper performance.
- 1.5.5 All fiberglass/wooden parts will be maintained free from sharp edges and splinters and sound and free from accepted visual inspection from shake, wane, compression failures, decay, or other irregularities.
- 1.5.6 Ladders will be visually inspected frequently and those that have developed defects will be withdrawn from service for repair or destruction and then tagged or marked as *Dangerous - Do Not Use*. Portable ladders with structural defects, such as, but not limited to, broken or missing rungs, cleats, or steps, broken or split rails, corroded components, or other faulty or defective components, will either be immediately marked in a manner that readily identifies them as

defective, or be tagged with *Dangerous - Do Not Use*, and shall be withdrawn from service until repaired. Fixed ladders with structural defects, such as, but not limited to, broken or missing rungs, cleats, or steps, broken or split rails, or corroded components, will be immediately tagged with *Dangerous - Do Not Use* and withdrawn from service until repaired. Defective ladders must be marked in such a way that they are readily identifiable as defective or blocked (such as with a plywood attachment that spans several rungs).

- 1.5.7 Rungs should be kept free of grease and oil.
- 1.5.8 Portable rung and cleat ladders will, where possible, be used at such a pitch that the horizontal distance from the top support to the foot of the ladder is one-quarter of the working length of the ladder (the length along the ladder between the foot and the top support). The ladder will be so placed as to prevent slipping or it will be lashed or held in position. Ladders will not be used in a horizontal position as platforms, runways, or scaffolds.
- 1.5.9 Ladders for which dimensions are specified should not be used by more than one person at a time or with ladder jacks and scaffold planks where use by more than one person is anticipated. In such cases, specially designed ladders with larger dimensions of the parts should be procured.
- 1.5.10 Portable ladders will be placed so side rails have secure footing. The top rest for portable rung and cleat ladders will be reasonably rigid and will have ample strength to support the applied load.
- 1.5.11 Do not place ladders in front of doors unless door is blocked, locked, or guarded.
- 1.5.12 Ladders will not be placed on boxes, barrels, or other unstable bases to obtain additional height.
- 1.5.13 Ladders with broken or missing steps, rungs, or cleats, broken side rails, or other faulty equipment will not be used. Ladders having any of these conditions present will be destroyed and disposed of. Improvised repairs will not be made.
- 1.5.14 Short ladders will not be spliced together to provide long sections.
- 1.5.15 Ladders made by fastening cleats across a single rail will not be used.
- 1.5.16 Ladders will not be used as guys, braces, or skids or for other than their intended purposes.
- 1.5.17 Tops of ordinary stepladders will not be used as steps.
- 1.5.18 When portable ladders are used for access to an upper landing surface, the ladder side rails will extend at least 3 feet (.9 m) above the upper landing surface to which the ladder is used to gain access or when such an extension is not possible because of the ladder's length, then the ladder will be secured at its top to a rigid support that will not deflect, and a grasping device, such as a grab rail, will be provided to assist employees in mounting and dismounting the ladder. In no case shall the extension be such that ladder deflection under a load would, by itself, cause the ladder to slip off its support.
- 1.5.19 On two section extension ladders the minimum overlap will be as follows:

SIZE OF LADDER (FEET)	OVERLAP (FEET)
Up to and including 36	3
Over 36 up to and including 48	4
Over 48 up to and including 60	5

- 1.5.20 Portable rung ladders with reinforced rails will only be used with metal reinforcement on underside.
- 1.5.21 All portable rung ladders will be equipped with nonslip bases when there is a hazard of slipping. Nonslip bases are not intended as a substitute for care in safely placing, lashing, or holding a ladder that is being used upon oily, metal, concrete, or slippery surfaces.
 - 1.5.21.1 Ladder rungs, cleats, and steps will be parallel, level, and uniformly spaced when the ladder is in position for use.
- 1.5.22 Bracing on back legs of stepladders is designed for increasing stability and not for climbing.
- 1.5.23 Step spacing must not be more than 12 inches. Steps will be parallel and level when the ladder is in position for use.
- 1.5.24 Minimum width between side rails at the top, inside to inside, must not be less than 11½ inches. From top to bottom, side rails must spread at least 1 inch for each foot of length of stepladder.
- 1.5.25 A metal spreader or locking device of sufficient size and strength to securely hold the front and back sections in open positions must be properly maintained for each stepladder. The spreader must have all sharp points covered or removed to protect the user.

1.6 PORTABLE STEPLADDERS

- 1.6.1 Stepladders of one of the following types specified should be used:
 - 1.6.1.1 Type I--Industrial stepladder, 3 to 20 feet for heavy duty, such as utilities, contractors, and industrial use.
 - 1.6.1.2 Type II--Commercial stepladder, 3 to 12 feet for medium duty, such as painters, offices, and light industrial use.
 - 1.6.1.3 Type III--Household stepladder, 3 to 6 feet for light duty, such as light household use.

1.7 PORTABLE RUNG LADDERS

- 1.7.1 Single ladder longer than 30 feet should not be used.
- 1.7.2 Two section extension ladders longer than 60 feet should not be used.

- 1.7.3 Trestle ladders, extension sections, or base sections of extension trestle ladders longer than 20 feet should not be used.

1.8 METAL LADDERS

- 1.8.1 Ladders must be maintained in good usable condition at all times.
- 1.8.2 If a ladder is involved in any of the following, immediate inspection is necessary:
 - 1.8.2.1 If ladder tips over, inspect side rails for dents, bends, or dented rungs. Check all rung-to-side-rail connections; check hardware connections; check rivets for shear.
 - 1.8.2.2 If ladders are exposed to oil and grease, equipment should be cleaned of oil, grease, or slippery materials. This can easily be done with a solvent or steam cleaning.
- 1.8.3 Ladders having defects are to be marked and taken out of service until repaired by either maintenance department or the manufacturer.
- 1.8.4 A simple rule for setting up a ladder at the proper angle is to place the base a distance from the vertical wall equal to one-fourth the working length of the ladder.
- 1.8.5 Portable ladders are designed as a one-man working ladder based on a 200-pound load.
- 1.8.6 The ladder base section must be placed with a secure footing.
- 1.8.7 The top of the ladder must be placed with the two rails supported, unless equipped with a single support attachment.
- 1.8.8 When ascending or descending, the climber must face the ladder.
- 1.8.9 Ladders must not be tied or fastened together to provide longer sections. They must be equipped with the hardware fittings necessary if the manufacturer endorses extended uses.
- 1.8.10 Ladders should not be used as a brace, skid, guy or gin pole, gangway, or for other uses than that for which they were intended, unless specifically recommended for use by the manufacturer.
- 1.8.11 Metal ladders will not be used when work is performed on or near electric circuits.
- 1.8.12 TERRY R PITT CONSTRUCTION will purchase only ladders without structural defects or potential accident hazards such as sharp edges, burrs, etc. TERRY R PITT CONSTRUCTION will purchase ladders meeting industrial grade specifications. Homemade or in-house constructed ladders will not be used by TERRY R PITT CONSTRUCTION.
- 1.8.13 No new metal ladders will be purchased. All metal ladders removed from service for any reason will be replaced with fiberglass ladders.
- 1.8.14 All procurement and disposal of ladders will be performed through or with the knowledge of the safety department. Ladders will be destroyed beyond use prior to disposal to prevent further use.

Procurement of ladders will be based on the type of work anticipated to be performed and in accordance with this standard practice instruction and applicable OSHA regulations.

1.9 TRAINING

- 1.9.1 TERRY R PITT CONSTRUCTION will provide a training program for each employee using ladders and stairways, as necessary. The program will enable each employee to recognize hazards related to ladders and stairways and train each employee in the procedures to be followed to minimize these hazards.
- 1.9.2 TERRY R PITT CONSTRUCTION will ensure that each employee is trained by a competent person in the following areas, as applicable:
 - 1.9.2.1 Nature of fall hazards at the jobsite
 - 1.9.2.2 Correct procedures for erecting, maintaining, and disassembling the fall protection systems to be used
 - 1.9.2.3 Proper construction, use, placement, and care in handling of all stairways and ladders
 - 1.9.2.4 Maximum intended load carrying capacities of ladders used
 - 1.9.2.5 Standards of this policy
- 1.9.3 Retraining will be provided for each employee as necessary so that the employee maintains the understanding and knowledge acquired through compliance with this section

