



Ladder Safety Program

Approved by: Safety Committee
Updated: October 28, 2014

Purpose:

The purpose of this program is to aid that ladders and climbers comply with regulations and remain safe. This program will cover requirements, ladder inspection, climbing techniques, proper ladder set-up, choosing the correct ladder, and proper care. If you have any further questions please contact your supervisor.

Guidelines:

- If you feel tired or dizzy, or are prone to losing your balance, stay off the ladder.
- Do not use ladders in high winds or storms.
- Wear clean slip-resistant shoes. Shoes with leather soles are not appropriate for ladder use since they are not considered sufficiently slip-resistant.
- Before using a ladder, inspect it to confirm it is in good working condition.
- Ladders that do not pass inspection shall be properly tagged and removed from service.
- The ladder you select must be the right size for the job.
- Duty rating of the ladder selected for the job must be greater than the total weight of the climber, tools, supplies, and other objects placed upon the ladder (no less than a type 1A shall be used).
- The length of the ladder must be sufficient so that the climber does not have to stand on the top rung or step.
- When the ladder is set-up for use, it must be placed on firm level ground.
- If ladder is placed on ice, snow or slippery surface at base or top support points, the ladder must have a secure object or designated person footing the ladder at all time, until able to tie top of ladder to secure tie off point.
- Step ladders over 8 ft must have a person footing the ladder at all times.
- Extension ladders over 16 ft must have a secure object or designated person footing the ladder at all time, until able to tie top of ladder to secure tie off point.
- Only one person at a time is permitted on a ladder unless the ladder is specifically designed for more than one climber (such as a Trestle Ladder).
- Ladders must not be placed in front of closed doors that can open toward the ladder. The door must be blocked open, locked, or guarded.
- Read the safety information labels on the ladder.
- The on-product safety information is specific to the particular type of ladder on which it appears. The climber is not considered qualified or adequately trained to use the ladder until familiar with this information.
- Never jump or slide down from a ladder or climb more than one rung/step at a time.
- Ladders shall not be moved, shifted, or extended while occupied.
- Tag or tow lines are allowed as long as the tag/tow line does not suspend the object or tool while climbing.

Recommended:

- Gloves
- Tool belt

How to Choose the Right Type of Ladder

Ladders are built from one of three basic materials; wood, fiberglass, and metal (aluminum). Wood ladders are not permitted at Mount Snow.

The environment of your work site is the first factor in choosing the material from which your ladder is constructed. For example, if you are working near sources of electricity, a metal ladder should not be used since aluminum is an electrical conductor. Your body can complete an electrical circuit between the electrical power source, the ladder, and then to the ground in the event of a live wire contact incident. An electrical shock while working from a ladder can trigger a fall or cause your heart to stop leading to serious injury or death. On the other hand, if there are no electrical power sources in your work area, the aluminum ladder is the lightest weight when compared to fiberglass or wood.

There are also several kinds of ladders manufactured for a variety of uses. Again, evaluation of your work environment and knowledge of what ladders are available will allow you to choose the right ladder for the job. Each of the following considerations addresses safety issues in your work environment:

- Will the ladder be resting on an uneven surface?
- Is the work area crowded with people and/or materials?
- What obstructions are in the path of the climb?
- How long will the user be standing on the ladder?

Next, the proper ladder length must be selected. It is unsafe to use a ladder that is too long or too short. When using a Step Ladder, for example, standing on the top cap or the step below the top cap is not permitted due to the increased likelihood of losing your balance. Likewise, when using an Extension Ladder, the top three rungs are not to be used for climbing. A Straight Ladder is too long, for example, if ceiling height prohibits the ladder from being set-up at the proper angle. Likewise, an Extension Ladder is too long if the ladder extends more than 3 feet beyond the upper support point. In this case, the portion of the ladder that extends above the upper support point can act like a lever and cause the base of the ladder to move or slide out. Safety standards require a label on the ladder to indicate the highest standing level.

Next, consider the Duty Rating of the ladder. This is an indication of the maximum weight capacity the ladder can safely carry. To figure out the total amount of weight your ladder will be supporting, add:

- Your Weight; plus
- The Weight of Your Clothing and Protective Equipment; plus
- The Weight of Tools and Supplies You Are Carrying; plus
- The Weight of Tools and Supplies Stored on the Ladder

There are five categories of ladder Duty Ratings:

- Type IAA (Extra Heavy Duty) 375 pounds
- **Type IA (Extra Heavy Duty) 300 pounds** (All Mount Snow ladders must have a minimum rating of IA)
- Type I (Heavy Duty) 250 pounds
- Type II (Medium Duty) 225 pounds
- Type III (Light Duty) 200 pounds

The Duty Rating of your ladder can be found on the specifications label. Safety standards require a Duty Rating sticker to be placed on the side of every ladder. Do not assume that a longer ladder has a higher weight capacity. There is no relationship between ladder length and weight capacity.

Proper Ladder Set Up:

- Always do a site inspection prior to setting up a ladder. Look for any hazards that might interfere with you safely performing work on the ladder. i.e. (Hazards on the ground, overhead, doorways, walkways or traffic areas)
- Block/foot the ladder, this can be with a secured block on flat terrain, with another person or tied to a secure object. *See Figure A*
- Ladder levelers and stabilizers may be used to help ensure proper ladder set up .
- Ladder should be set up at a 75 degree angle. The horizontal distance from its top support point to the foot of the ladder is 1/4 of the unsupported length of the ladder. Or, equal to 75° degree angle at level grade, i.e. (for every 4 feet up, the ladder should be 1 foot out). *See figure A.*
- When lifting a ladder, lift with your legs and follow a safe lifting policy.
- In order to prevent tipping the ladder over sideways due to over-reaching, the user must climb or work with the body near the middle of the steps. The ladder should be set-up close to the work. Never attempt to move the ladder without first descending, relocating the ladder, and then re-climbing. Do not attempt to mount the ladder from the side or step from one ladder to another unless the ladder is secured against sideways motion.
- Side rails or grab rails shall extend at least 36" above landing.

Additional Step Ladders Set Up Guidelines:

- A Stepladder requires level ground support for all four of its side rails. If this worksite condition does not exist, a stepladder should not be selected for the job.
- A Stepladder must not be used unless its base is spread fully open and the Spreaders locked. Stepladders are not to be used as Single Ladders or in the partially open position.
- The braces on the rear of a stepladder are not intended for climbing or standing and must not be used for that purpose. Note, however, that special stepladders are available with steps on both the front and rear and are intended for two users at the same time.
- The anti-slip feet at the bottom of the stepladder side rails must be present and in good condition prior to using the ladder. The ladder must not be used on ice, snow or slippery surfaces unless suitable means to prevent slipping is employed.

- A stepladder must never be placed upon other objects such as boxes, barrels, scaffolds, or other unstable bases in an effort to obtain additional height.

The Three Point-of-Contact Climb:

When climbing a ladder, it is safest to utilize Three Points-of-Contact because it minimizes the chances of slipping and falling from the ladder. At all times during ascent or descent, the climber must face the ladder and have two hands and one foot, or two feet and one hand in contact with the ladder cleats and/or side rails. In this way, the climber is not likely to become unstable in the event one limb slips during the climb. It is important to note that the climber must not carry any objects in either hand that can interfere with a firm grip on the ladder. Otherwise, Three Points-of-Contact with the ladder cannot be adequately maintained and the chance of falling is increased in the event a hand or foot slip occurs. Factors contributing to falls from ladders include haste, sudden movement, lack of attention, the condition of the ladder (worn or damaged), the user's age or physical condition, or both, and the user's footwear.

Although the user's weight or size typically does not increase the likelihood of a fall, improper climbing posture creates user clumsiness and may cause falls. Reduce your chances of falling during the climb by:

- wearing slip-resistant shoes with heels and heavy soles to prevent foot fatigue;
- cleaning the soles to maximize traction;
- use a tool belt or an assistant to convey materials so that the climbers hands are free when climbing;
- climbing slowly and deliberately while avoiding sudden movements;
- keeping the center of your belt buckle (stomach) between the ladder side rails (or within the width of the cleats) when climbing and while working. Do not overreach or lean while working so that you don't fall off the ladder sideways.

Proper Care

A thorough inspection must be made when the ladder is initially purchased and each time it is placed into service. Clean the climbing and gripping surfaces if they have been subjected to oil, grease or slippery materials. Working parts, bolts, rivets, step-to-side rail connections, and the condition of the anti-slip feet (safety shoes) shall be checked. If structural damage, missing parts, or any other hazardous defect is found, the ladder must not be placed into service, tagged out and either discarded or competently repaired.

Ladders exposed to excessive heat, as in the case of fire, may have reduced strength. Similarly, ladders exposed to corrosive substances such as acids or alkali materials may experience chemical corrosion and a resulting reduction in strength. Remove these ladders from service.

Ladders with bent or broken side rails must be destroyed.

In the event a ladder is discarded, it must be destroyed in such a manner as to render it useless. Another person must not be afforded the opportunity to use a ladder that has been deemed unsafe.

When transporting ladders on vehicles equipped with ladder racks, the ladders must be properly supported. Overhang of the ladders beyond the support points of the rack should be minimized. The support points should be constructed of material such as wood or rubber-covered pipe to minimize the effects of vibration, chafing and road shock. Securing the ladder to each support point will greatly reduce the damaging effects of road shock.

Storage racks for ladders not in use should have sufficient supporting points to avoid sagging which can result in warping the ladder. Other materials must not be placed on the ladder while it is in storage.

A competent person should inspect all ladders twice a year. The department head should maintain documentation of these inspections.

ACKNOWLEDGEMENT

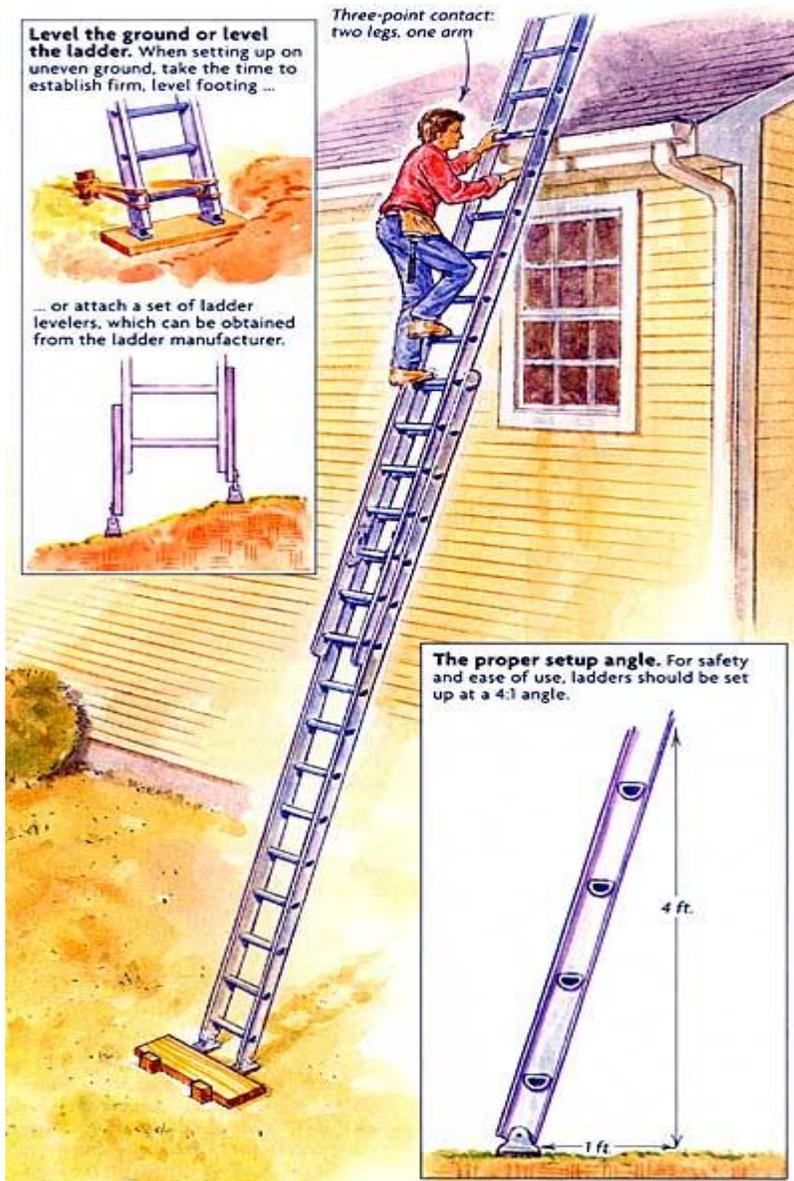
I have read and understand the Ladder Safety Program and agree to comply with its content. Furthermore, I understand that any questions may be directed to my supervisor or manager.

Employee Name _____

Employee Signature _____

Date _____

Figure A



LADDER INSPECTION FORM

Ladder Number: _____ Date of Purchase: _____ Size _____

Type of Ladder:

Step _____	Job-Made Ladder _____
Single Ladder _____	Fixed Ladder _____
Extension Ladder _____	Mobile Ladder Stand _____

ITEM	INSPECT	Good	Damaged	N/A
Rails	Check for bends, splits, cracks or other defects			
Steps/Rungs	Check for bends, splits, cracks or other defects			
Top	Check for bends, splits, cracks or other defects			
Step/Rung Braces	Check for bends, splits, cracks or other defects			
Locks	Check for functionality			
Guides	Check for functionality			
Hardware	Check top irons, hinges, etc. for functionality			
Metal Components	Check for excessive rust and or corrosion			
Rivets	Check integrity of all heads and crimps			
Nuts/Bolts	Check to insure nuts are intact and not stripped			
Welds	Check for cracks or damage			
Safety Shoes	Check shoes are attached and in good condition			
Ropes/Pulley	Check for damage to ropes and/or pulleys			
Ladder level	Check condition for proper operation			

Conclusion:

Remove from service and destroy: _____ Tagged by: _____

Remove from service for repair: _____ Tagged by: _____

Remain in service: _____

Inspection by: _____ Date: _____