Extension Ladder Safety

James J. McAlister, Extension Safety Specialist, Oregon State University

Take three steps to safety:
1. Select right type of ladder for job to be done.
2. Check ladder for missing rungs, defective rungs or rails, poor construction, or dilapidated condition.
3. Use common sense—ladders are simple, effective, and dangerous.

Selection
An extension ladder is a straight ladder that is adjustable in length. It consists of two or more straight sections traveling in guides or brackets so arranged as to permit length adjustment. It is designed to provide the greatest allowable length for a general purpose ladder. Extension ladders are usually selected for reaching heights of 12 to 44 feet.

Each section of an extension ladder should overlap the adjacent section by a minimum number of feet, depending on overall length. For extension ladders up to 36 feet long, overlap should be at least 3 feet; for ladder lengths between 36 and 48 feet, overlap should be at least 4 feet. In addition to overlap, the top of ladder should extend 3 feet above the greatest working height.

Recommended Lengths of Extension Ladders for Different Heights

<table>
<thead>
<tr>
<th>Height you want to reach</th>
<th>Recommended length*</th>
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<tbody>
<tr>
<td>9-1/2 feet</td>
<td>16 feet</td>
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<tr>
<td>13-1/2 feet</td>
<td>20 feet</td>
</tr>
<tr>
<td>17-1/2 feet</td>
<td>24 feet</td>
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<tr>
<td>21-1/2 feet</td>
<td>28 feet</td>
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<tr>
<td>24-1/2 feet</td>
<td>32 feet</td>
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<tr>
<td>29 feet</td>
<td>36 feet</td>
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<tr>
<td>35 feet</td>
<td>42 feet</td>
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*The additional length also allows for placing ladder so that the space between bottom of ladder and wall or support is at least 1/4 the vertical length of ladder.
Common Sense

- Place ladder on solid, secure footing.
- Extend ladder when no one is on it.
- Adjust length of an extension ladder only when your eye level is below level of locking device so you can see when lock is engaged.
- Always face ladder when going up or down.
- Take one step at a time.
- Carry work tools or other materials in tool pockets or attached to a tool belt.
- Raise and lower heavy materials with a rope.
- Move ladder to where work can be done without reaching far to either side of ladder.
- Keep the bottom of ladder free of materials, traffic, swinging doors, etc.
- Never leave ladders upright and unattended if children are around.
- Do not use ladders as guys, braces, gin poles, skids, scaffolds, etc. or substitute for any use other than intended purpose.
- Never repair a ladder with improvised parts or techniques.

Ladder Condition

In addition to not being bent, cracked, loose or broken, the ladder should have rope, shackle, pulley, rung locks and slip-resistant feet.
- Pulley should be at least 1-1/4 inches in diameter.
- Rope should be at least 5/16 inches in diameter.
- Rung locks should swing freely and show no damage from misuse.
- Rung locks may be either spring or gravity type.
- Ladder feet should have rubber, plastic or other slip-resistant safety tread or shoes attached to foot brackets.
- Ladder feet should have specially-designed steel points or ice-pick plates if ladder is to be used on soft or slick surfaces or ice.
- Ladder should be equipped with stops to insure that it cannot be extended too far.

This fact sheet prepared and approved for publication by Extension Service, Oregon State University.