General Information

Every year, many people die in ladder-related accidents and thousands suffer disabling injuries. Deaths and injuries from falls remain a major hazard for workers. Every step matters, learn how to use ladders safely.

Proper Use

- Receive instruction and understand how to use ladders safely.
- Choose the right ladder for the job; know the difference in use between a stepladder, an extension ladder, and an articulating ladder.
- Know potential hazards.
- Know the maximum work height (i.e. user’s height + the highest standing level).
- Perform a pre-use inspection. (https://www.ehs.iastate.edu/forms/ladderinsp.pdf)
- If a ladder is damaged remove it from service and identify with a “Do Not Use” tag.
- Ensure the ladder is positioned on firm and level ground.
- Always face the ladder.
- Keep your body centered between the rails of the ladder.
- Maintain three points of contact (i.e. two hands and one foot, or both feet and one hand).
- If necessary, wear a tool belt to carry tools and supplies. That way, you will have both hands free when climbing up and down.
- Stay clear of power lines with a working distance of at least 10 feet. Use a fiberglass ladder if you must work near electricity.
- Protect the work area using barriers or cones.
- Wear slip-resistant footwear.
## Ladder Safety Tips

- Do not position ladders on moveable objects (elevated work platforms) or other objects in an effort to obtain additional height.
- Avoid overreaching – ensure your navel stays within the rails.
- Overloading – consider the worker weight and equipment and don’t exceed the rated limit.
- Do not work from the top two steps.
- Do not try to move a ladder while standing on the rungs.
- Remove all tools and materials from the ladder before moving.
- Avoid using a ladder in doorways or other high traffic areas.
- Avoid using a ladder in inclement weather.

### 1. Ladder Selection

- **Stepladder** – self-supporting ladder that is non-adjustable in length, with flat steps and a hinged design for ease of storage. Intended to be used by one person. Stepladders range in size from 4 feet to 20 feet.

- **Extension ladder** – Adjustable length with two or three telescoping sections.
  - Extend 3 feet beyond the top dismounting surface.
  - Secure to prevent outward or sideways movement.
  - Set up using a 1 to 4 ratio (1 foot out for every 4 feet up).

- **Multi-position ladder** – (Articulated ladder) is a portable ladder with one or more pair of locking hinges that allow the ladder to be set up in several configurations.

### 2. Duty Ratings

The American National Standards Institute (ANSI) has developed ladder ratings based on the amount of weight that can be safely held on a ladder.

<table>
<thead>
<tr>
<th>Type</th>
<th>Weight</th>
<th>Duty</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>250 lbs./113 kg</td>
<td>Heavy Duty</td>
<td>Grade 1</td>
</tr>
<tr>
<td>II</td>
<td>225 lbs./102 kg</td>
<td>Medium Duty</td>
<td>Grade 2</td>
</tr>
<tr>
<td>III</td>
<td>200 lbs./91 kg</td>
<td>Light Duty</td>
<td>Grade 3</td>
</tr>
<tr>
<td>IA</td>
<td>300 lbs./136 kg</td>
<td>Heavy Duty</td>
<td>Grade 1A</td>
</tr>
<tr>
<td>IAA</td>
<td>375 lbs./170 kg</td>
<td>Heavy Duty</td>
<td>Grade 1AA</td>
</tr>
</tbody>
</table>

Source: [https://www.americanladderinstitute.org/](https://www.americanladderinstitute.org/)