LADDER RATINGS

The American National Standards Institute (ANSI) adopted and issued a code of safety requirements for portable ladders. The code, last revised in 1982, sets out the properties and design specifications for wood (A14.1), metal (A14.2) and reinforced plastic (A14.5) ladders. Completed ladders must also be capable of passing a variety of test requirements as set out in the code.

<table>
<thead>
<tr>
<th>ANSI TYPE</th>
<th>DUTY RATING</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>TYPE 1A</td>
<td>300 lbs.</td>
<td>Extra Heavy Duty Industrial</td>
</tr>
<tr>
<td>TYPE I</td>
<td>250 lbs.</td>
<td>Heavy Duty Industrial</td>
</tr>
<tr>
<td>TYPE II</td>
<td>225 lbs.</td>
<td>Medium Duty Commercial</td>
</tr>
<tr>
<td>TYPE III</td>
<td>200 lbs.</td>
<td>Light Duty Household</td>
</tr>
</tbody>
</table>

* OSHA essentially follows the guidelines set by ANSI. Therefore, industrial users should purchase and properly use Type 1A and Type 1 ladders to be in compliance with OSHA regulations. Type II and Type III are NOT permitted on the job site.

** The Duty Rating means that the ladder is designed to meet these loads with a safety factor of four (4) when set and used properly at 75-1/2° to the horizontal.

LADDER SELECTION

Select the highest duty rating necessary to cover the total amount of the weight that will be applied to the ladder.

Example:

- Materials: 53 lbs.
- Safety Equipment: 2 lbs.
- Your weight plus clothing: 195 lbs.
- Tools: 9 lbs.
- Total: 259 lbs.

Ladder Required - Type 1A 300 Lbs.

LADDER MATERIALS

<table>
<thead>
<tr>
<th>MATERIAL</th>
<th>ADVANTAGES</th>
<th>DISADVANTAGES</th>
</tr>
</thead>
<tbody>
<tr>
<td>WOOD</td>
<td>Low initial cost. Non-conductive. Good strength-to-weight ratio.</td>
<td>Heavier and less durable than aluminium or fiberglass.</td>
</tr>
</tbody>
</table>

LADDER COMPONENTS

- PULLEY
- FLY SECTION
- END CAPS
- TOP
- REAR SIDE RAIL
- LOCKING SPREADERS
- REAR FOOT
- FRONT FOOT
- ROPE
- RUNG LOCK
- RUNG
- STEP
- SIDE RAIL

LADDER TYPES

- SINGLE STEPLADDER - Has steps on one side and is a self supporting climbing tool for applications at low to medium heights. 3' to 16'.
- DOUBLE FRONT STEPLADDER - Has steps on both sides and is a self supporting climbing tool for low to medium heights. 3' to 16'.
- PLATFORM STEPLADDER - Provides a large platform to work on and is self supporting.
- TRESTLE LADDERS - May be used alone or with a second trestle ladder to support planking systems. Up to 16'.
- STRAIGHT LADDERS - A non self supporting single straight ladder section used for mid-range heights. 8' to 20'.
- EXTENSION LADDERS - A non self supporting adjustable ladder for mid-range to high work levels. 8' to 40'.

For further Information check with your ladder manufacturer or refer to ANSI A14 for additional guidelines.
DO inspect your ladder carefully ----when you buy it and before each use. Look for missing, damaged or loose parts.
DO make sure that working parts move freely and that there are no missing nuts, bolts, rivets or locks.
DO follow label instructions. Start by carefully reading all labels. These instructions are gathered from years of experience and they are offered for your benefit.
DO be sure that the ladder feet are on solid ground.
DO wear shoes that have soles that do not slip. Make sure they are free of mud, oil, or anything slippery.
DO check for frayed or damaged cords when using power tools. Use only cords with grounded outlets.
DO climb facing the ladder. Center your body on the steps. Use a firm grip. If possible, have someone hold the ladder for you.
DO keep your body centered on the ladder while working.
DO hold the ladder with one hand while working with the other, whenever possible.
DO keep children away from ladders while working.
DO move materials with extreme caution. Be careful pushing or pulling anything while on a ladder.
DO use a ladder only when you are mentally and physically alert.
DO securely tie down the ladder when transporting it on a vehicle.
DO store ladders out of reach of children.
DO keep ladders protected from excessive heat and the weather.

DON'T use or repair a bent or damaged ladder. Send it back to the factory for repairs or replace it.
DON'T test a ladder by jumping on it. This could damage or weaken the ladder, and you may slip or fall.
DON'T use on slippery surfaces or uneven ground.
DON'T set up a ladder where it could possibly touch electrical devices or wires.
DON'T set up a ladder on a wet or icy surface unless you tie down the legs.
DON'T climb down a ladder with your back to the ladder, or carry a load in your arms.
DON'T over-reach, lean to one side or stand on one foot.
DON'T hurry or skip steps when getting on or off a ladder.
DON'T try to move a ladder while on it by bouncing "walking" the ladder.
DON'T leave a ladder unattended.
DON'T position the ladder where it blocks foot traffic or where it could be bumped by a door.
DON'T place a ladder on boxes, chairs, furniture, or other things which are movable to try to climb higher.
DON'T climb from one ladder to another.
DON'T climb a damaged ladder.
DON'T climb a ladder when ill or physically alert.
DON'T drop or throw ladders.
DON'T use a ladder as a pry bar.
DON'T use a ladder as a work bench. Hammering, sawing and grinding can weaken key components.
DON'T use a ladder that has been exposed to fires, acids, caustics or other strong chemicals.

**HOW TO CHOOSE THE RIGHT SIZE**

<table>
<thead>
<tr>
<th>HEIGHT TO SUPPORT POINT</th>
<th>USE THIS LENGTH LADDER</th>
<th>MAX WORKING LENGTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>to 9-1/2' Max.</td>
<td>16'</td>
<td>13'</td>
</tr>
<tr>
<td>From 13-1/2&quot; to 17-1/2'</td>
<td>24'</td>
<td>21'</td>
</tr>
<tr>
<td>From 21-1/2' to 25'</td>
<td>32'</td>
<td>29'</td>
</tr>
<tr>
<td>From 28' to 31'</td>
<td>40'</td>
<td>35'</td>
</tr>
</tbody>
</table>

**THE PROPER WAY TO SET UP A LADDER**

<table>
<thead>
<tr>
<th>HEIGHT TO GUTTER OR SUPPORT</th>
<th>HORIZONTAL DISTANCE FROM SUPPORT TO LADDER</th>
</tr>
</thead>
<tbody>
<tr>
<td>9-1/2'</td>
<td>2-1/2'</td>
</tr>
<tr>
<td>13-1/2'</td>
<td>3-1/2'</td>
</tr>
<tr>
<td>17-1/2'</td>
<td>4-1/2'</td>
</tr>
<tr>
<td>21-1/2'</td>
<td>5-1/2'</td>
</tr>
<tr>
<td>25'</td>
<td>6-1/2'</td>
</tr>
<tr>
<td>28'</td>
<td>7'</td>
</tr>
<tr>
<td>31'</td>
<td>8'</td>
</tr>
</tbody>
</table>