Guidelines for Ladder Safety

Personnel using ladders are to follow safe work practices for ensuring safety as well as Cal/OSHA regulatory compliance [Title 8, California Code of Regulations, Sections 3277-3280]. General safe practices that employees are to be trained on include, but are not limited to the following:

Ladder Selection/ Inspection/ Maintenance:

A. Ladder Selection:

<table>
<thead>
<tr>
<th>Proper size</th>
<th>Stepladders: General rule-- the user can safely reach no higher than 3-4 feet above the ladder top. Stepladders longer than 20 feet shall not be used.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duty rating</td>
<td>The ANSI Duty Rating labeled on the ladder indicates the maximum safe load capacity of the ladder (person &amp; tools)</td>
</tr>
</tbody>
</table>
| Ladder material    | * Fiberglass: Electrically non-conductive, and preferred for most uses.  
                       * Aluminum: Strong and lightweight, however cannot be used near electricity.  
                       * Wood: Electrically non-conductive when dry, however can be more sensitive to extreme weather (heat, moisture). |

B. Inspection/ Storage:

<table>
<thead>
<tr>
<th>Inspection</th>
<th>Prior to each use, inspect ladder for the following:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Free of cracks, splits, corrosion, and protruding nails, screws and splinters</td>
</tr>
<tr>
<td></td>
<td>• Steps/ rungs free of oil/grease</td>
</tr>
<tr>
<td></td>
<td>• Steps/ rungs firmly attached to side rails</td>
</tr>
<tr>
<td></td>
<td>• Safety feet/base and other hardware in good condition</td>
</tr>
<tr>
<td></td>
<td>• Movable parts operate smoothly without binding or excessive play</td>
</tr>
<tr>
<td></td>
<td>• Ropes in good condition (for extension ladders)</td>
</tr>
</tbody>
</table>

If ladder is found defective, immediately remove from service for repair or destruction and mark “Danger, Do Not Use.” Temporary fixes shall not be made.

| Storage            | Store in an area sheltered from direct sunlight and rain. Ladders should be kept in horizontal position, with supports to prevent sagging. |

Cont’d. – next page
### Safe Ladder Use

#### A. Location
- Set up ladders away from where they can be accidentally struck or displaced
  - If necessary to work in occupied work areas, walkways, or roadways, barricade off a highly visible safety zone
  - Ladders shall not be placed in front of doors unless the door is locked or a guard is posted
- Never use metal ladders around exposed electrical equipment and wiring and keep ladders and tools at least 10 feet away from overhead lines at all times. If safe clearance is a concern, contact Facilities- Utilities Dept. at x3-2281 for assistance
- Keep access to and from ladders clear of mud, materials or debris

#### B. Ladder Setup
- Set up on a flat surface. Large flat wooden boards braced under the ladder can level a ladder on uneven ground and provide better footing on soft ground
- Ladders shall not be set on boxes, barrels, or other unstable bases to gain height
- Stepladders: Always open stepladder fully and ensure spreader bars are locked
- Single/ Extension Ladders:
  - For proper ladder angle, set ladder base 1 foot away from the wall for every 4 feet of ladder length
  - When accessing a roof or other elevated location, the ladder shall extend 3 feet above the roof/ elevated location.
  - Secure the ladder at the top to prevent it from slipping sideways or at its base from slipping outwards.
    - When not possible to tie at the top or secure it at its base, have a person brace the ladder at ground level (most suitable for ladders up to 16 ft. long)

#### C. Climbing
- Ensure shoes are free of mud, grease, or other substances that could cause a slip or fall
- Face ladder and use both hands; maintain three points of contact at all times
- Do not hand-carry tools/ materials; carry items on tool belt or raise/ lower items by hand lines or other means
- Never climb the bracing on the back of stepladders

#### D. General Use
- Do not stand/work on the top 3 rungs of a single/ extension ladder. For stepladders, do not stand/work on the topcap or first step
- “Belt Buckle Rule”: Stay centered, don’t let your belt buckle go past either side rail
- When working, keep at least 3 points of body contact with ladder:
  \[
  2 \text{ feet} + [1 \text{ hand or hips or chest}]
  \]
- Only one person at a time on a ladder
- Never adjust or move ladder while on the ladder
- Avoid working on ladders in high winds

Contact EH&S at (650)723-0448 for any questions regarding ladder safety.