## Job Hazard Analysis

**JHA Name:** Portable Ladder

**Decription of Individual Tasks or Assignments:**
Using Ladders to Perform Tasks at Heights above Work Surfaces

**Tools, Equipment, or Machinery Used when Performing Task:**
Portable Ladders (Extension, Step, Straight, Specialty, and/or Multi-position)

<table>
<thead>
<tr>
<th>Hazard Type(s) Associated with Task or Assignment</th>
<th>Check for Exposure</th>
<th>Specific Hazard Exposure</th>
<th>Check if Exposure Recommends or Requires a Style of PPE?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Impact</td>
<td>X</td>
<td>Potential exposure to impacts from falling off ladders (e.g., whole body injuries). Personnel (in areas occupied by persons using ladders) have potential exposure to be struck by items falling or dropped by personnel using ladders</td>
<td>X</td>
</tr>
<tr>
<td>2 Penetration or Cut</td>
<td></td>
<td>anca person can strike an object, be struck by a moving or flying/falling object (e.g., fragments, chips, particles, sand, dirt/debris).</td>
<td></td>
</tr>
<tr>
<td>3 Crush or Pinch</td>
<td>X</td>
<td>Potential exposure to moving parts on adjustable ladders- A-Frame and Extension- that could pinch (e.g., injuries to hands and fingers)</td>
<td>X</td>
</tr>
<tr>
<td>4 Chemical or Harmful Dust</td>
<td></td>
<td>Exposure to chemicals (i.e., hazardous substances and harmful physical agents), infectious agents from spills, splashing, physical contact, and/or exposure to dusts, vapors, fumes, or gases that could cause illness, irritation, burns, asphyxiation, breathing/vision difficulty, sensitization, infection, or other toxic health effects (i.e., acute or chronic). Note: &quot;May also have or create ignition potential.&quot;</td>
<td></td>
</tr>
<tr>
<td>5 Heat</td>
<td></td>
<td>Exposure to radiant heat sources, sparks, and splashes or spills of hot material</td>
<td></td>
</tr>
<tr>
<td>6 Light (optical) Radiation</td>
<td></td>
<td>Exposure to strong light sources, glare, or intense light exposure which is a byproduct or a process. Note: &quot;This category may also include hazards presented from lack of light (e.g., working in dark spaces/areas).&quot;</td>
<td></td>
</tr>
<tr>
<td>7 Electrical Contact</td>
<td>X</td>
<td>Potential exposure to electrical fixtures and power lines (e.g., shock and electrocution)</td>
<td></td>
</tr>
<tr>
<td>8 Ergonomic/Human Factors</td>
<td>X</td>
<td>Potential exposure to repetitive movements (e.g., repeatedly traveling up and down ladders), lifting light to moderately heavy loads, and bending (e.g., Back and other Muscular Skeletal Disorders)</td>
<td></td>
</tr>
<tr>
<td>9 Environmental</td>
<td>X</td>
<td>Potential exposure to falls when working on ladders (e.g., whole body injuries)</td>
<td></td>
</tr>
</tbody>
</table>
Job Hazard Analysis

Portable Ladder

Assessment Date: 09-16-13
Building or Location: Faribault & North Mankato Campuses

Revision Date: 05-15-17
Department or Program: Multiple Departments & Programs

Description of Individual Tasks or Assignments:
Using Ladders to Perform Tasks at Heights above Work Surfaces

Tools, Equipment, or Machinery Used when Performing Task:
Portable Ladders (Extension, Step, Straight, Specialty, and/or Multi-position)

Personal Protective Equipment Requirements:

Eyes & Face: Hard Hats (Required whenever work is performed over personnel)

Head & Ears: Boots/Footwear should provide adequate traction for climbing ladders (Required)

Whole Body: None

Feet: None

Hands: None

Respiratory: None

Other: None

Other Control Measures or Requirements (Engineering & Administrative Controls):

1.) Impact Hazards, 3.) Crush or Pinch Hazards, 9.) Environmental Hazards: Personnel should receive Fall Protection training (including the proper selection/use of ladders, and hazards associated with working at heights). 7.) Electrical Shock: When removing spent bulbs or ceiling tiles, check for electrical wiring in the immediate area that could accidentally cause shock. College personnel are not permitted to work on ladders in areas near power lines. These maintenance/repair/construction tasks will be contracted to an approved vendor. 8.) Ergonomic/Human Factors: Personnel should receive Ergonomics training (including warning signs and conditions of ergonomic/human factors hazards). Tools and equipment should be selected in anticipation of the operator's need and physiological stature (e.g., ergonomic/human factors considerations), and to help reduce repetitive climbing and descending of ladders. Tools needed should be carried in a tool belt or pulled up with rope once the operator has reached the destination height. Miscellaneous Considerations: Select an appropriate ladder for the task, height, and environment where it will be used. Verify the ladder's duty rating weight is sufficient for the operator and tasks being performed (i.e., Operator weight + materials being carried weight). Inspect cleats, rungs, treading, footings/pads, and framing components before use; on extension ladders inspect pulleys, ropes, and locks for excessive wear. If any defects are found, the ladder should immediately be tagged from service until repaired. “NOTE: Only qualified individuals using approved parts may repair ladders.” Place ladders on a level surfaces before climbing, and completely open A-Frame ladders (cross bracing locked completely) before accessing. Always face the ladder when ascending or descending and keep your body between the ladder's side rails. Never stand on the top two rungs of ladder. When using extension or straight ladders, the ladder should reach a minimum of three feet above its “support point” and it should also be secured at this point. In addition, when using extension or straight ladders, personnel must abide by the 1 to 4 rule (e.g., every 4’ of vertical climb height = 1’ of horizontal distance from ladder base and the fixture its resting upon). Operators of tools, equipment, and machinery should read and follow all Manufactures' recommendations/requirements (e.g., inspections, servicing/maintenance, safe usage, etc.). Any tools, equipment, or machinery found damaged, defective, or otherwise unsafe should immediately be removed from service and not used until repaired or replaced. Personnel should always consult their Supervisors on the selection and use of PPE for the tasks being performed.

Physical Effort Definition/Examples

1.) Physical Mobility- Movement from place to place on the job, considering distance and speed 2.) Physical Agility- ability to maneuver body while in place or in static position 3.) Physical Strength (Light to Moderate)- Ability to handle routine office materials and tools 4.) Physical Strength (Moderate to Heavy)- Ability to handle 50lbs+ objects, considering frequency 5.) Dexterity - skill and ability in using hands, fingers, and feet 6.) Physical Balance- ability to maintain balance and physical control 7.) Coordination- harmonious functioning of body parts (e.g., eye/hand, hand/foot, etc.) 8.) Endurance- ability to sustain a prolonged stressful effort or activity with limited opportunity to rest

Note: "This JHA provides only the minimum PPE/safety requirements necessary to safely complete the task or assignment, and the JHA only covers the hazards or exposures that are most likely to be encountered. Nothing within this JHA bars or restricts personnel from requesting higher degrees of PPE or control to mitigate workplace hazards. In addition, South Central College personnel (e.g., employees and students) are required to complete any applicable safety or on-the-job trainings required prior to performing their positions or participating in their programs of study. Finally, South Central College personnel should consult their supervisors/instructors, the college’s written safety programs/policies, and/or the Security & Safety Director whenever they have questions or concerns."

Certification: This document certifies a hazard assessment was conducted meeting the provisions specified under 29 CFR 1910.132 (d) and South Central College's related safety programs and policies.

Name: Al Kluever
Date: 05-15-17