### Job Hazard Analysis

**JHA Name:** Jig Saw  

**Assessment Date:** 06-24-14  
**Revision Date:** 05-19-17  
**Building or Location:** Faribault Campus  
**Department or Program:** Carpenter

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<th>Description of Individual Tasks or Assignments:</th>
<th>Tools, Equipment, or Machinery Used when Performing Task:</th>
<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>
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</table>
| Cutting & Trimming Arbitrary Curves in Wood or Similar Material, other materials (metal, cement board, etc.) | Jig Saw | Impact  
**Example:** Person(s) can strike an object, or be struck by a moving or flying/falling object (e.g., fragments, chips, particles, sand, dirt/debris). | X | Potential exposure to flying fragments, particles and debris generated from cutting (e.g., injuries to eyes) | X |
| Penetration or Cut  
**Example:** Person(s) can strike an object, be struck by an object, or fall upon an object or tool that would cut or otherwise break the skin. | | X | Potential exposure to bladed/cutting equipment (e.g., injuries to hands, arms, legs), potential exposure to wood slivers/splinters (e.g., injuries to fingers, hands) | X |
| Crush or Pinch  
**Example:** An object(s) or equipment/machine may crush or pinch a body or body part | | X | Potential exposure to crushing and pinching hazard from dropping lumber (e.g., injuries to feet) | X |
| Chemical or Harmful Dust  
**Example:** 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: "May also have or create ignition potential." | | X | Potential exposure to nuisance dusts (e.g., respiratory irritation/discomfort) | X |
| Heat  
**Example:** Exposure to radiat heat sources, sparks, and splashes or spills of hot material | | | | |
| Light (optical) Radiation  
**Example:** Exposure to strong light sources, glare, or intense light exposure which is a byproduct or a process. Note: "This category may also include hazards presented from lack of light (e.g., working in dark spaces/areas)." | | | | |
| Electrical Contact  
**Example:** Exposure, contact, or proximity to live or potentially live electrical objects. | | | | |
| Ergonomic/ Human Factors  
**Example:** Working in cramped spaces, repetitive movements, awkward postures, vibration, heavy lifting, etc. Note: "This category may also include unique hazards presented from tasks that require demanding or challenging degrees of mental and/or physical effort to be exerted by an individual. See Physical Effort Definition/Examples category for further explanation of physical effort." | | X | Potential exposure to source of vibration (jig saw) (e.g., injuries to hands, arms), potential exposure to repetitive movements, lifting light to moderately heavy loads, and bending/twisting (when moving lumber) (e.g., Muscular Skeletal Disorders) | X |
| Environmental  
**Example:** Exposure to noisy environments, hot or cold work environments, poor weather conditions, working at a height, and any other conditions in the workplace that could cause danger, discomfort, and/or negative health effects. | | X | Potential exposure to loud/prolonged noise (jig saw) | X |
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**Assessment Date:** 06-24-14  
**Revision Date:** 05-19-17  
**Building or Location:** Faribault Campus

### Description of Individual Tasks or Assignments:

- Cutting & Trimming Arbitrary Curves in Wood or Similar Material, other materials (metal, cement board, etc.)

### Tools, Equipment, or Machinery Used when Performing Task:

- Jig Saw

### Personal Protective Equipment Requirements:

| Eyes & Face: | Safety Glasses with Side Shields or Goggles (Required when operating jig saw) |
| Head & Ears: | Hearing Protection Devices (Required when operating jig saw) |
| Whole Body: |  |
| Feet: | Safety Shoes (Required when handling lumber) |
| Hands: | Anti-Vibration Gloves (Optional/Available when operating jig saw), Leather Gloves (Required when handling lumber with rough or sharp edges) |
| Respiratory: | N95 Particulate Masks (Optional/Available not required) |
| Other: |  |

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

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 objects weighing up to 50 lbs.
4. **Physical Strength (Moderate to Heavy)** - Ability to handle objects weighing over 50 lbs.
5. **Physical Balance** - Ability to maintain balance and physical control
6. **Coordination** - Harmonious functioning of body parts (e.g., eye/hand, hand/foot, etc.)
7. **Dexterity** - Skill and ability in using hands, fingers, and feet
8. **Endurance** - Ability to sustain a prolonged stressful effort or activity with limited opportunity to rest

### Other Considerations:

1. **Penetration or Cut Hazards:** Blades are guarded to prevent operator contact; adjust guard to only allow for minimum exposure of cutting surface of blade. Pressure sensitive deadman switches are located in hand controls of jig saws. Before cutting make sure blade depth and bevel adjusting locking levers are tight and secure. Keep hands and your body away from the saw’s blades and saw’s cutting path. Always keep your second hand on saw’s auxiliary handle or motor housing. Never hold lumber being cut in your hands or positioned across your legs. Secure all materials being cut. Make sure the blade comes to complete stop if cutting is interrupted, and never remove the saw from the work piece while the blade is in motion.
2. **Ergonomic Hazards:** Personnel should receive Ergonomics training (including warning signs and conditions of ergonomic/human factors hazards). Maintain a firm grip with both hands on the saw. Jig saw transfer vibrations can be reduced/minimized by regular preventive maintenance of the equipment (keeps equipment running smoothly). ”NOTE: Jig saws are only operated for very short periods of times in most College environments in comparison to other General Industry, and/or Construction applications.” Make sure your grip and footing are secure when using jig saws to prevent strains and slips. Keep all jig saw blades sharp by replacing dull or damaged blades (dull blades can cause personnel to use more force to complete tasks, which can increase chances of slipping, breaking, and kickback). Support (e.g., with saw horses, workbenches, etc.) large panels or lumber being cut.

3. **Environmental Hazards:** Always disconnect power before making adjustments or changing accessories on saws. Check work areas for hidden pipes, wires, and other objects that could accidently be contacted by saw blade. Personnel should make sure to only use blades with the correct size and type for the application needed. 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
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### Related Safety Programs and Policies:

- 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.

### Certification:

- **Name:** Al Kluever
- **Date:** 05-19-17