### Equipment/Task Name
Using Hand-Operated Power Tools

### Departments Impacted
Art & Architecture Department

### Purpose
A **power tool** is a **tool** that is actuated by an additional **power** source and mechanism other than the solely **manual** labor used with **hand tools**. The most common types of **power tools** use **electric** motors. **Internal combustion engines** and **compressed air** are also commonly used.

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**General Precautions:** Eye protection must always be worn.

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<tr>
<th>TASK</th>
<th>HAZARDS</th>
<th>CONTROLS</th>
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</thead>
</table>
| **1. Prepare for Use** | Slips, Trips, and Falls. | • Clean work area before starting.  
• Make sure area is well lit. |
|  | Flying Parts. | • Secure and tighten all parts before starting.  
• Use proper tool accessories. |
|  | Bodily Injury. | • Check and replace any broken or damaged parts.  
• Wear appropriate eye protection. |
| **2. Check condition of the blade, if applicable.** | Lacerations. | • Avoid contact with blade teeth.  
• Be sure the tool is unplugged. |
| **3. Check that the guard is in working condition and in the proper position, if applicable.** | Lacerations. | • Avoid contact with blade teeth.  
• Be sure the tool is unplugged. |
| **4. Plug in power tool.** | Injuries from starting tool when in the “on” position. | Ensure tool is in the “off” position before plugging in.  
Inspect condition of cord before plugging in. If cord is in poor condition, do not use the tool until the cord has been repaired. |
|  | Potential electrocution from cord in poor condition. |  |
| **5. Operating power tool.** | Lacerations. | • Avoid contact with blade teeth.  
• Don’t operate tools in explosive atmospheres such as areas with vapors from flammable or combustible liquids. |
|  | Fire | • Check cord and ground prong for damage.  
• Grounded tools must be plugged into properly installed grounded outlets.  
• Do not force polarized plugs into an outlet. |
### Safe Operating Procedures

SOPs are designed to help employees identify hazards, limitations, PPE, & safety training for specific equipment/tasks.

**Environmental Health and Safety, 414 J.M. Smith Hall**

| Bodily Injury | • Do not use grounding adapters improperly.  
|              | • Do not use power tools in rain or wet conditions.  
|              | • Make sure that cutting will not come into contact with any utilities.  |
| Eye Injury   | • Disconnect the plug from power source before making any adjustments or changing accessories.  
|             | • Do not wear loose clothing or jewelry.  
|             | • Tie long hair back.  
|             | • Ensure that material being operated on is secured.  |
| Inhalation of Dusts or Particles | • Wear safety glasses or goggles as appropriate. Some tasks may also require a face shield.  |
| Back or Muscle Strain | • Do not overreach.  
|                 | • Keep feet shoulder length apart.  |

### Required Training:

<table>
<thead>
<tr>
<th>1. Operation of the tool.</th>
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<tr>
<td>2. Specific safety instructions may be required for various tools.</td>
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</table>

### Required Personal Protective Equipment (PPE):

| 1. Safety glasses or goggles. |
| 2. N95 dust mask or respirator (as needed). |
| 3. Hearing protection (as needed). |
| 4. Gloves (as needed). |

### SOP ID: A006

<table>
<thead>
<tr>
<th>Related Documents</th>
<th>Art Shop Manual</th>
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</thead>
</table>

### Creation/Revision Date: 9/2018

Suggestions, questions, or comments? Please contact EH&S