

Safe Work Procedure		Soldering – Electric and Torch																													
Department / Area: Physical Plant Services	Approved By: Regional Manager of Physical Plant Services	Date Created: September 5 2014	Review Date: Revised date:																												
Potential Hazards: Fill in those that apply <table border="0"> <tr> <td>H</td> <td>M</td> <td>L</td> <td>Risk for Injury</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td>Fire – torch (open flame)</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td><input type="checkbox"/></td> <td>Chemicals – soldering fumes</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td><input type="checkbox"/></td> <td>Extreme Heat – burns from soldering tip, solder</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td>Awkward / sustained postures – forward bending</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td>Electrical</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td>Flying Particles</td> </tr> </table>		H	M	L	Risk for Injury	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Fire – torch (open flame)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Chemicals – soldering fumes	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Extreme Heat – burns from soldering tip, solder	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Awkward / sustained postures – forward bending	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Electrical	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Flying Particles	Personal protective equipment / devices required / other safety considerations: <ul style="list-style-type: none"> ➤ Eye Protection / Face Shield ➤ Gloves ➤ Fire Extinguisher ➤ Hot Work Permit ➤ Ventilation ensuring fumes not exposed to operator. ➤ Air Monitoring if required ➤ Organic vapor cartridge mask if ventilation not adequate. Refer to manufacturer of product for safe use. 	
H	M	L	Risk for Injury																												
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Fire – torch (open flame)																												
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Chemicals – soldering fumes																												
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Extreme Heat – burns from soldering tip, solder																												
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Awkward / sustained postures – forward bending																												
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Electrical																												
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Flying Particles																												
		Training / Reference Information: <ul style="list-style-type: none"> ➤ SCHIPP Module 1 Training ➤ MSDS Training ➤ Hot Work Permit ➤ Department Orientation 																													
<p>Note: Signs and symptoms of a musculoskeletal injury (MSI) can include pain, burning, swelling, stiffness, numbness/tingling, and/or loss of movement or strength in a body part. Report these to your supervisor.</p>																															
<p>Employers must ensure that workers are trained and follow this safe work procedure.</p> <p>Steps to perform this task safely:</p> <p><u>Electric Operation</u></p> <ul style="list-style-type: none"> ➤ Hot Work Permit completed. ➤ Fire Extinguisher present. ➤ Inspect equipment for any obvious damage. Ensure tip element is secure. ➤ The work area should be free of debris / clutter to reduce risk for slips, trips, or falls. ➤ Leave soldering probe in its stand to heat up. Ensure the cord and any flammable materials are not close to the soldering probe. Never touch soldering tip to see if it is hot. ➤ Ensure the environment is well ventilated so fumes are not exposed to operator. A fume hood, fan, or organic capor cartridge may need to be used. Refer to Manufacturer safe use instructions. ➤ All-Purpose solder is satisfactory for general use. Do not use acid cord solder on electrical wires or circuits. ➤ To solder, heat the metal not the solder. Place the tip on the metal, and feed the solder to the tip to release the flux, apply solder to the metal until it flows freely. Keep your hand out of the path if solder were to drip. ➤ Always keep the heated soldering gun in its stand when not in use or when it is cooling down. Do not leave a hot soldering gun / iron unattended. ➤ De-energize the tool once you are finished using it and before changing bits, blades, discs, belts, etc. Let the tool cool before touching the blade, bit, etc. to change it. 																															

Torch Operation

- Hot Work Permit completed.
- Fire Extinguisher present.
- Inspect equipment for any obvious damage.
- The work area should be free of debris / clutter to reduce risk for slips, trips, or falls.
- Ensure the environment is well ventilated so fumes are not exposed to operator. A fume hood, fan or organic vapor cartridge may need to be used. Refer to Manufacturer safe use instructions.
- Ensure gas is on and ignite torch, keeping flame away from your body.
- Be aware of dripping solder so it doesn't make contact with self or others.