

## Soft Tissue Injury Prevention Tool

### Tip Sheets

**Trade:** Masonry

**Job Task:** Restoration Work - Grouting to Resurface Brick (Stuccoing)

<p><b>General Tasks</b></p> <ul style="list-style-type: none"> <li>➤ Manual grout application to brick walls to resurface old brick.</li> <li>➤ Apprentices provide mortar as needed to swing stage workers using a material hoist.</li> </ul>	<p><b>Common Tools</b></p> <ul style="list-style-type: none"> <li>➤ Hand Trowel</li> <li>➤ Swing Stage or Scaffold</li> <li>➤ Material Hoist to supply grout/mortar to swing stage workers</li> <li>➤ Gloves</li> </ul>
<p><b>Potential Risk Factors</b></p> <p><i>Risk Factors can lead to increased risk for Work Related Musculoskeletal Disorders (WMSD's)</i></p> <p><b>High Hand Grip Force</b></p> <ul style="list-style-type: none"> <li>• Moderate Risk with heavy gripping of trowel for extended periods while wearing gloves to apply mortar to brick and fan back and forth.</li> </ul> <p><b>High Hand Grip Force While Repeatedly Gripping Objects</b></p> <ul style="list-style-type: none"> <li>• Moderate Risk with frequent shoveling of mortar into mixer by apprentice on ground to prepare mortar for swing stage workers. Also, frequent gripping and pulling of material hoist rope to provide materials including mortar up to swing stage.</li> </ul> <p><b>Heavy Lifting</b></p> <ul style="list-style-type: none"> <li>• Moderate Risk when apprentices must frequently supply materials including 5 gallon buckets of mortar to masons on swing stage using a material hoist.</li> </ul>	<p><b>Possible Solutions</b></p> <p><b>Awkward Posture, Heavy Gripping &amp; Vibration Solutions:</b></p> <ul style="list-style-type: none"> <li>• Use a low force material hoist rigging. Evaluate the use of a marine type pulley with low friction ball bearings can significantly reduce the load lifted/pulled.</li> <li>• Alternate hands frequently when applying mortar/grout.</li> <li>• Move swing stage as frequently as necessary to maintain grouting work between waist and shoulder level and promote upright working postures.</li> <li>• Utilize padded bucket seats or portable mechanic's stools to promote comfortable seated work when grouting below waist level.</li> <li>• Rotate to other tasks every 4 hours as feasible to intervene on awkward postures and build in needed recovery time.</li> </ul> <p><b>Potential Benefits</b></p> <ul style="list-style-type: none"> <li>✓ Increases productivity.</li> <li>✓ Increases blood flow and reduce muscle tension.</li> <li>✓ Reduces strain on hand and arm muscles.</li> <li>✓ Reduces exertion of lower back.</li> <li>✓ Reduces awkward work postures and minimize lifting requirements.</li> <li>✓ Reduces awkward forward bending work postures.</li> </ul>
<p><b>Feasibility</b></p> <ul style="list-style-type: none"> <li>• Engineer Control Mobile Scissor Lift</li> <li>• Administrative Control</li> <li>• Work Practice Control</li> </ul> <p><b>Estimated Cost of Intervention</b></p> <ul style="list-style-type: none"> <li>• \$685.00 for Mobile Scissor Lift</li> </ul>	