

## Soft Tissue Injury Prevention Tool

### Tip Sheets

**Trade:** Carpenters/Laborers

**Job Task:** Clean-up - Debris Removal and Loadout

<p><b>General Tasks</b></p> <ul style="list-style-type: none"> <li>➤ Sweeping &amp; General Cleanup</li> <li>➤ Remove Debris from job site including scrap lumber and materials.</li> <li>➤ Shoveling debris into wheelbarrows or large bins</li> <li>➤ Large bins are then moved by crane and emptied.</li> <li>➤ Debris removal involves frequent shoveling with 2-3 minute breaks approximately every 5-6 minutes while bin is being moved by crane or wheelbarrow is being emptied.</li> </ul>	<p><b>Common Tools</b></p> <ul style="list-style-type: none"> <li>➤ Broom</li> <li>➤ Material Handling Cart</li> <li>➤ Debris Bin (6'X40" Diameter)</li> <li>➤ Wheelbarrows</li> <li>➤ Scoop Shovels</li> <li>➤ Flat Nose Shovels</li> <li>➤ Large Scoop Shovels</li> </ul>
<p><b>Potential Risk Factors</b> <i>Risk Factors can lead to increased risk for Work Related Musculoskeletal Disorders (WMSD's)</i></p> <p><b>Continuous Moderate Forward Back Bending</b></p> <ul style="list-style-type: none"> <li>• Moderate Risk with extensive shoveling to load out debris into large bin.* The use of standard shovel handles promotes frequent forward bending postures. This can be a highrisk job when shoveling debris for extended periods of time.</li> </ul> <p><b>High Hand Grip Force While Repeatedly Gripping Objects</b></p> <ul style="list-style-type: none"> <li>• Extensive shoveling to load out debris into large bins and wheelbarrows. *</li> </ul> <p><b>Highly Repetitive Motion</b></p> <ul style="list-style-type: none"> <li>• Extensive shoveling to load out debris into large bins and wheelbarrows. * ** <b>Heavy Lifting</b></li> <li>• Laborers often carry stacks of materials such as 2X4's and single sheets of plywood from nearby stacks to wall form location. Occasional lifting of heavy steel grates to cover holes from booms.</li> </ul> <p>* Particularly true if crew size is relatively small. ** The use of large scoop shovels and type of debris also increases grip strength requirements for each load lifted.</p>	<p><b>Possible Solutions</b></p> <p><b>Lifting Solutions:</b></p> <ul style="list-style-type: none"> <li>• Slide plywood on edge instead of lifting.</li> <li>• Use tilt up method to raise plywood and other materials for easier sliding or lifting.</li> <li>• Use saw horses to position plywood at waist level for cutting. Locate saw horses alongside plywood stacks to allow for sliding of plywood as opposed to lifting.</li> </ul> <p><b>Awkward Posture Solutions:</b></p> <ul style="list-style-type: none"> <li>• Use saw horses to position plywood at waist level for cutting. Locate saw horses alongside plywood stacks to allow for sliding of plywood as opposed to bending and lifting.</li> <li>• When feasible, rotate between wall work and ground work for ½ day to reduce awkward work postures and minimize material handling demands.</li> <li>• Use saw horses to elevate plywood when pre drilling multiple holes per sheet.</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> </ul>
<p><b>Feasibility</b></p> <ul style="list-style-type: none"> <li>• Engineer Control – Sawhorses</li> <li>• Administrative Control</li> <li>• Work Practice Control</li> </ul> <p><b>Estimated Cost of Intervention</b></p> <p>\$37.00 (approx.) for Sawhorses (pair)</p>	 