

Soft Tissue Injury Prevention Tool

Tip Sheets

Trade: Carpenters/Laborers

Job Task: Formwork - Form Footings

<p>General Tasks</p> <ul style="list-style-type: none"> ➤ Formwork of footings can be performed for up to 8 hours a day by several workers at a time. ➤ Materials used are cut into fairly small pieces to construct short runs of formwork. ➤ For longer formwork runs, panels (3'X8') are often pre-made and moved into position by crane. 	<p>Common Tools</p> <ul style="list-style-type: none"> ➤ Nail Gun ➤ Hammer ➤ Sledge Hammer ➤ Skill Saw ➤ Saw Horses ➤ Tool Belt
<p>Potential Risk Factors</p> <p><i>Risk Factors can lead to increased risk for Work Related Musculoskeletal Disorders (WMSD's)</i></p> <p>Continuous Extreme Forward Back Bending</p> <ul style="list-style-type: none"> • Moderate Risk when forming footings. When forming short runs, there is a frequent change in posture, which minimizes this risk factor. However, when forming long runs, continuous forward bending is often required. <p>Heavy Lifting</p> <ul style="list-style-type: none"> • Moderate Risk with frequent lifting and lowering of materials weighing up to 55 lbs. Most materials can be team lifted or lifted near waste level when using tilt up-walk up method of lifting. May be a HIGHER RISK job if a single worker frequently lifts 70 lb panels instead of team lifting or using crane to move heavy materials. 	<p>Possible Solutions</p> <p>Awkward Posture Solutions & Lifting Solutions:</p> <ul style="list-style-type: none"> • Slide panels on edge instead of lifting whenever possible. • Use tilt up method to lift panels and other materials for easier sliding or lifting. • Team lift all materials weighing more than 50 lbs and when moving multiple pieces of materials. • Limit the carrying of multiple pieces of materials to no more than 50-60 lbs per load. • Use saw horses to cut all materials at waist level. • Locate all materials and saw horses near work location to minimize material handling requirements. • Rotate workers between formwork tasks such as cutting materials and constructing formwork every 2-4 hours. • Use a larger hammer than a standard 2202 Carpenters hammer to drive stakes for formwork. <p>Potential Benefits</p> <ul style="list-style-type: none"> ✓ Increases productivity. ✓ Increases blood flow and reduce muscle tension. ✓ Reduces strain on hand and arm muscles. ✓ Reduces exertion of lower back. ✓ Reduces awkward work postures and minimize lifting requirements.
<p>Feasibility</p> <ul style="list-style-type: none"> • Engineer Control • All-Steel Folding Sawhorses • Administrative Control • Work Practice Control <p>Estimated Cost of Intervention</p> <p>\$36.99 for All-Steel Folding Sawhorses (Pair)</p>	