


Soft Tissue Injury Prevention Tool

Tip Sheets

Trade: Carpenters/Laborers

Job Task: Formwork - Building Gang Forms (Walls) On-Site

<p>General Tasks</p> <ul style="list-style-type: none"> ➤ Layout materials ➤ Construct gang forms ➤ Install plywood sheeting 	<p>Common Tools</p> <ul style="list-style-type: none"> ➤ Saw Horses ➤ Material Stands ➤ Screw gun ➤ Nail Gun ➤ Material Handling Carts ➤ Tool Belt
<p>Potential Risk Factors <i>Risk Factors can lead to increased risk for Work Related Musculoskeletal Disorders (WMSD's)</i></p> <p>Extreme Forward Back Bending</p> <ul style="list-style-type: none"> • Extreme Forward Back Bending when constructing gang forms below knee level, fastening plywood sheeting using a standard screw-gun, and cutting materials including plywood below knee level. <p>Heavy Lifting</p> <ul style="list-style-type: none"> • Moderate Risk, may be a Higher Risk job if lifting heavy awkward materials such as plywood frequently. Workers may lift up to 75 sheets of 5/8" plywood a day, weighing approximately 65 lbs each. 	<p>Possible Solutions</p> <p>Awkward Posture Solutions:</p> <ul style="list-style-type: none"> • Use a screw-gun with handle extension to fasten sheeting while maintaining an upright posture. • Construct forms at least 20 inches above the ground to promote upright postures. Forms can often be elevated on beams or stands. • Use saw horses or plywood stack to raise material for cutting. • Locate saw horses alongside plywood stacks to allow for sliding of plywood as opposed to lifting. • If screw-gun extension is not available minimize awkward back postures associated with repetitive fastening by rotating every 2-4 hours between ground work and other tasks that promote upright postures. • Stretch frequently, particularly performing back extension stretches. <p>Lifting Solutions:</p> <ul style="list-style-type: none"> • Slide plywood on edge instead of lifting as much as possible. • Use tilt up method to raise materials for easier sliding or lifting. • Use two person crews whenever possible to minimize single person lifting and handling of heavy materials. <p>Potential Benefits</p> <ul style="list-style-type: none"> ✓ Reduces both the frequency of lifting and awkward lifting postures. ✓ Increases blood flow and reduce muscle tension. ✓ Increases productivity. ✓ Reduces exertion of lower back.
<p>Feasibility</p> <ul style="list-style-type: none"> • Engineer Control – Extension or sawhorse • Administrative Control • Workplace Control <p>Estimated Cost of Intervention</p> <ul style="list-style-type: none"> • Depends on manufacturer • \$38.00 (approx.) –pair of sawhorses 	