





Soft Tissue Injury Prevention Tool

Tip Sheets Trade: Concrete Work

Job Task: Formwork - Layout on Slab Surveyor

General Tasks

- Manual handling of large 4-6" diameter hose to direct and place concrete. A secondary rope hold is also used to help handle the hose.
- If pouring concrete above an open deck the direction and major movement of hose is controlled by pump truck operator and hose is suspended above deck.
- If pouring concrete under a closed deck, hose dragging is required to place concrete, as hose is not suspended.
- Each footing may take up to 5-30 minutes of continuous concrete pouring depending on the size of the footing.
- Intermittent recovery time is built in to job tasks when exchanging concrete trucks and waiting for new trucks to arrive.

Common Tools

→ 4-6 diameter hose connected to boom of pump truck for directing and placing concrete.

Potential Risk Factors

Risk Factors can lead to increased risk for Work Related Musculoskeletal Disorders (WMSD's)

Extreme Forward Back Bending

 Moderate Risk with frequent forward back bending when shooting control lines at ground level.

Continuous Squatting

 Moderate Risk with frequent squatting when holding prism at ground level.

Continuous Kneeling with Knee Contact

• Moderate Risk with frequent kneeling when holding prism at ground level.

Possible Solutions

Awkward Posture Solutions:

 Minimize awkward back bending, kneeling and squatting by rotating every 1-2 hours between operating the Total Station and holding peanut level and prism at ground level.

Potential Benefits

- ✓ Increases productivity.
- ✓ Increases blood flow and reduce muscle tension.
- ✓ Reduces strain on hand and arm muscles.
- ✓ Reduces exertion of lower back.





Feasibility

- Engineer Control

 Knee Pads with Velcro Closure
- Administrative Control
- Work Practice Control

Estimated Cost of Intervention

• \$19.95 for Knee Pads with Velcro Closure