

## Ergonomics in Construction

### The problem:

- , Back sprains and strains are the most common disabling injuries for construction workers. Laborers, carpenters, electricians, roofers and plumbers/pipefitters have the most injuries. Many of these are from overexertion and bodily motion. Injury sources include containers, wood/lumber, and tools.
- , Working below the knees, working above shoulder height, doing repetitive jobs, and moving heavy things are common risk factors for ergonomic injuries. The average cost of a disabling claim is \$13,562.

**The solution:** Ergonomics is the science and art of fitting the job to the workers. Here are a few key questions to help you better fit the job to the workers.

- ? How is the work planned and organized and laydown areas set up so materials are handled, moved or carried the minimum distances and number of times?
- ? How are access paths and walkways kept level, clear and slip-resistant, to prevent slips and falls?
- ? How can the work be set up so it can be done above the knees and below the shoulders? (i.e., on a waist-level work table or saw horses)
- ? How can the work also be done in a sitting position to prevent prolonged standing, stooping, kneeling or squatting?
- ? For repetitive or long duration jobs, how can workers take breaks or trade off with other workers doing different jobs?
- ? How is material handling equipment (such fork lifts, cranes, hoists, pallet jacks or carts) available to move heavy materials or containers?
- ? How are powered and non-powered hand tools selected and maintained to reduce awkward postures, forceful exertions, contact stresses, and vibration?