## The impact of drywall handling tools on the low back.

(El impacto de las herramientas de manipulación de paneles de cartón-yeso en la parte baja de la espalda)

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### Abstract

Carpenters and other construction workers who install drywall have high rates of strains and sprains to the low back and shoulder. Drywall is heavy and awkward to handle resulting in increased risk of injury. The purpose of this study was to evaluate several low-cost coupling tools that have the potential to reduce awkward postures in drywall installers. Five coupling tools were evaluated using the Lumbar Motion Monitor that measures trunk kinematics and predicts probability of low back disorder group membership risk (LBD risk). Workers answered surveys about their comfort while using each tool. The results indicate that use of the 2-person manual lift and the J-handle provide the best reduction in awkward postures, motions, low back sagittal moment, and LBD risk. The two-person manual lift appears to be the safest method of lifting and moving drywall, though using the two-person J-handle also significantly reduces injury risk. Given that carpenters are skeptical about using equipment that can get in the way or get lost, a practical recommendation is promotion of two-person manual lifting. For single-person lifts, the Old Man tool is a viable option to decrease risk of MSDs.

### Enlace