

Reducing plasterboard manual handling

Construction Occupational Health case study COH05

The problem

Plasterboard is widely used in construction to line internal walls and ceilings. Workers often have to handle the sheets manually and may need to do so in a restricted space, eg a stairwell. The 8' x 4' sheets are difficult to grip and unwieldy, particularly if there is a wind.

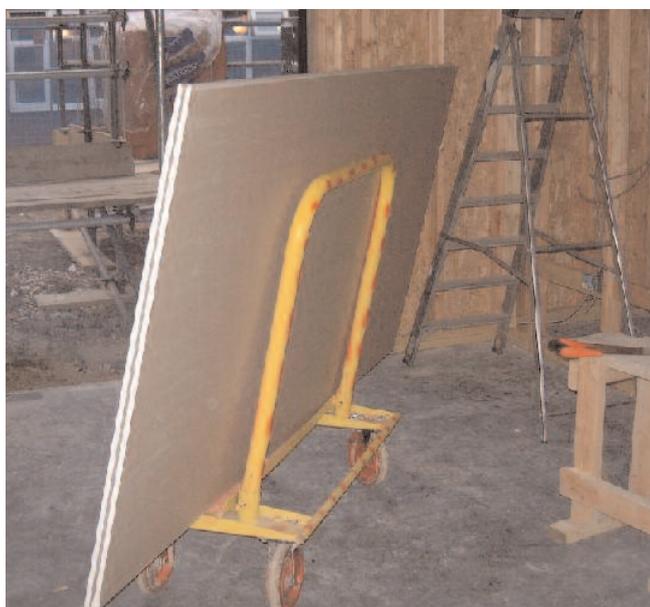
The risks

Workers found that awkward postures were used when lifting and carrying plasterboard. Increased effort was needed to control the boards when carrying them along narrow or cluttered walkways. This presented a significant risk of musculoskeletal injury, given the heavy weight (up to 32.5 kg) and sheet size.

The solutions

The company used a small crane that was already on site to lift packs of plasterboard into the building. Other improvements included:

- a panel trolley to transport sheets to the point of use; and
- a simple foot-operated 'board lifter' to raise the plasterboard ready for fixing.



Figures 1 and 2 Panel trolley



The benefits

- Reduced lifting and carrying in cramped conditions.
- Reduced handling of heavy and unwieldy panels when fixing plasterboard to walls.
- Better working postures when fixing plasterboard to walls.
- Simple solutions that are easily implemented.
- Efficiency gains and less spoilage of materials.

Key points

Make sure that materials can be lifted into the building while there is still access. Take account of maximum floor loadings when thinking about the need to distribute materials.

Good housekeeping is important for the efficient use of panel trolleys.

Initial outlay to acquire the panel trolley and board lifters was recovered through less time lost and efficiency gains.

Designers and contractors should consider whether the risk of injury can be reduced even further by specifying half-size boards.



Figures 3 and 4 Board lifting tool

