

Reduce bending to materials

Construction Occupational Health case study COH01

The problem

On most sites brick and block laying at ground level involves bending down repeatedly to the stack and mortar spot board as well as to the wall that is being built. The combination of awkward postures and continuous handling can contribute to discomfort and a risk of injury.



Figure 1 Bending to trowel mortar and lay bricks at ground level



Figure 2 Stacks of brick are placed on the scaffold to raise their height and reduce the need to bend



Figure 3 Raising the height of a mortar spot board reduces the risk of injury from repeated bending

The risks

Repeated bending or stooping can injure the back, neck and knees. There may also be a risk of repetitive strain injury to the arms or wrists when using a trowel at awkward angles.

The solution

Bricklayers used a scaffold with the base lift set at 500 mm above ground level. Bricklayers stood on the ground and received materials from the scaffold. This reduced the need to bend.

The contractor also recognised that the risk of injury could be reduced by using blocks to raise the height of mortar spot boards.

The benefits

- Brick/blocklayers found that these improvements made the work easier and more comfortable.
- The risk of musculoskeletal injury reduced and production rates improved.

Notes

- Adjustable foldaway spot board stands are widely available.
- The scaffold base lift needs to be planned into the sequence of work.
- The additional cost of erecting a base lift is minimal.