



Screw Hollows –

Why they occur and what care to take.



At the time of writing this article the season is changing as we move from a hot dry summer to a damp autumn and winter. At the same time, we were getting feedback that screw heads appeared to be shrinking on a few jobs.

We took this up as a small project and set up varied tests for fact finding. What we have learnt can be briefly summarised as follows:

- Wallboard demonstrates hygroscopic and thermal expansion and contraction.
- Screws are likely to be fixed to different depths in the board.
 - a – Flush to the board surface
 - b – Just seated below the surface
 - c – Over driven screws

Things to watch out for:

If insufficient amount of glue/ adhesive is applied, then there is the chance for the assembly to move.

Metal battens, if stressed on application, will try and revert to their original shape resulting in movement. The board that sits on the metal batten has more give and will pick up the movement.

Moisture control is key throughout the whole job.

Timber battens absorb moisture and can cause movement by pushing the board while the screw stays in the fixed position. (The maximum moisture content of timber framing at the time of lining must not exceed 18%.)

Moisture movement occurs around screw heads, more so on over driven screws. The moisture can come from compounds and paints. Adding water to these compounds and thinning paints can increase the likelihood of problems. Delayed shrinkage may also occur if each coat is not completely dried before the next coat.

Most of the cases of screw hollows occurred on ceilings, only occasionally on the walls. The ceilings we believe exhibit these more so due to the pull of gravity coupled with the weight of insulation.



To avoid call backs each part of the job needs to be done well.

In summary, it is not just one component responsible for the screw heads to hollow. Each bit plays its part and it all comes together when the painter comes in and does the first coat. This emphasises even more the need for each part of the job to be done well.

For further information call the
GIB® Helpline 0800 100 442.