Looking at the Drywall Screw

In an Age When Quality is Important, the Drywall Screw is More Than an “Unaffordable Luxury” Even in Residential Construction

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Midyear 1984, and indeed we are living in a new world.
Yet amid all the progress in microcomputers and space ships our basic values persist.
Home ownership is still a primary goal in the “American Dream.” A home of one’s own represents not only the hub of the family unit but a stabilizing factor within society.

As members of the construction industry, we are aware of what increased costs and rising interest rates mean to the prospective home buyer. This problem is compounded when the home buyer perceives that he is paying more yet getting less. Quality in the marriage of craftsmanship and materials becomes critical for the continued growth and expansion of our residential construction industry. This quality awareness begins with the architect and is completed by the contractor.

I would like at this time specifically to address the needs of the interior contractor. The high visibility of his work makes quality his principal concern in sustaining growth. A persistent problem facing him is how to attach gypsum board panels to wood framing. The conventional method of attaching with drywall nails can result in unsightly “nail pops.” This problem—whether due to shrinkage of high moisture lumber, vibration, loose nailing or bowed gypsum—always results in a costly call-back for the contractor.

Nails longer than the recommended minimum framing penetration depth do not solve the problem; in fact they compound the problem, since the severity of nail popping is proportional to nail length.

Screw Solution . . .

The solution, screw attachment of gypsum board panel, is often overlooked as an “unaffordable lux-
“In order to receive compensation for delays and disruptions, a contractor must be prepared to state the relevant events in terms of a scheduling claim.”

But this thinking, however credible at one time, does not stand up to today’s increased labor costs and a manufacturing technology that has reduced the cost of fasteners relative to labor. Doing the job right and doing it once is the way to achieve both economy and quality.

Benefits of screw attachment are many:

1. Increased holding power: 496 lb. as opposed to 133 lb.
2. Reduced wood splitting.
3. Elimination of gypsum fracturing caused by hammering, so less joint compound is used.
4. Achievement of a controlled, consistent depth pattern by use of a depth sensitive screwgun.
5. Bugle head design gives superior holding power and reduces possibility that paper will be cut.
6. Fewer fasteners required, with no double nailing. This reduction translates directly into less joint compound for spotting fasteners, hence less labor. Maximum spacing for screws is 12" O.C. for ceilings and 16" O.C. in wall, compared to 7" and 8" for nails.
7. Cleaner and more uniform applications offered by screw attachment are an advantage in smooth wall applications.
8. Increased rust protection because of superior finish.

The importance of this problem has already been recognized in parts of Utah, Minnesota, Wisconsin, Eastern Canada and the Northeast, where screw attachment of gypsum board has increased dramatically in usage.

The drywall contractor must view his job as a total process that encompasses costs of materials, labor, benefits, overhead and his reputation. Quality work scores high points in the development of a solid reputation, and screw attachment of gypsum board to wood studs means quality.