



case study

Construction madness

By Lisa Beally

March is here and you know what that means ... madness, basketball madness. As a design firm in today's construction market, you have your own madness. You might not be competing against 64 other design firms in the bidding madness, but you are still competing. What sets your company apart from the other design firms bidding on a particular project?

Now is the time to review your processes as today's consumers are demanding quality products and services, as well as cost-saving ideas.

Are you specifying pneumatic tools and fasteners? If you are designing with cold-formed steel or concrete, you owe it to yourself and your customers to take the time to review pneumatic fastener technology.

Pneumatic fastener technology is advancing faster than traditional fastening methods. Did you know that pneumatic fasteners can be used here?

- Multiple layers of steel
- Headers
- Tracks, floors and ceiling
- Substrate to steel
- Roof/floor deck
- Trim to steel

Look at your process from the ground up. The building is framed using 16-gauge track and stud to concrete slab. How is the track attached to the concrete? Pin and powder? It's messy, dangerous, loud and requires licensing.

Think of the different attachment methods a contractor on your project has to consider:

Track to Concrete

- In the time it takes to load the pin and powder, the pneumatic fastener could have been shot.
- No licensing, the tools are lighter and safer.
- Pin it, baby!

Stud/Track

- Put away screws and screw gun, keep clamps, get out that pneumatic tool and coil of pins.
- Clamp and shoot—pin it, baby!

Exterior Gypsum

- A screw and pin combination is the best bet.
- Tack the board up with screws like normal to help pull it tight to the studs.
- Come back and pin it, baby!

CFB

- You should be getting the feel for this by now.
- Get out your pneumatic tool and pin it, baby!

Roof/Floor Deck to Steel

- That's right, pin it, baby!
- Think you are done with pins now? Guess again!

Subfloor to Concrete


- Again with the pin and powder? Or were you thinking of using Black Mastic? Haven't you been paying attention?
- Pin that subfloor to the concrete.
- Save time and money with pins, and think how happy your customer will be that there are no gas or VOC issues to worry about.
- Pin it, baby!

Trim on the Inside of the Exterior Walls

- That's right, there's a pneumatic pin for that, as well.
- Pin it, baby!

Still not convinced? Let's talk about the technology itself. Pneumatic fasteners are designed with ballistic points shaped like a bullet, allowing the fastener to pierce the steel. Most of the pins will have a knurl on them, creating additional surface area for the steel to rebound around. The thinner the steel the more aggressive the knurl should be, allowing a greater surface area for the steel to rebound around. When the pin is shot from the tool, the force of the delivery system forces the pin into the steel, the compressive force of the steel causes it to rebound around the pin forming the bond. All of this happens seven to 10 times faster than installing a screw and can claim a 2.6 safety factor.

Pins will not replace screws in every application, but I challenge you to review your design to see how many of your applications might be pinned. Think about it, the contractors get those "pain in the xxx" fastening jobs out of their way and shorten their total time on the job. Savings that give you the opportunity to win more design bids. Get in the game by contacting your local supplier and telling them you want to pin it. See you at the top!

For more information on pin fastening of cold-formed steel, contact the Steel Framing Alliance in Washington, D.C., or visit www.steel framingalliance.com. 

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