

THE CARE AND FEEDING OF DETAILERS

Overlooked, misunderstood, and often maligned, structural steel detailers nevertheless play a critical role in bringing projects to life.

BY JACK METCALFE

WHEN ASKED BY MSC TO CONTRIBUTE A COLUMN, I, like so many novice writers, began to panic and search for a subject. But then it struck me: I'm a detailer! So allow me to introduce you to "What you've always wanted to know about detailers—in one page or less."

Usually far from the excitement of steel members being hoisted by a crane, or far from the thunder and sparks that come from the fabrication shop, detailing is accomplished in relative obscurity. The detailer is more often than not in a different city than his client, and perhaps even a different country. Unless there is a schedule crisis, an RFI, or a revision, many in the construction field don't even know that detailers exist—or if they do, they think that it is actually a computer that does all the drafting and the detailers just push the buttons. Many old-time contractors and some inexperienced project managers believe that detailer drawing rooms are a part of the fabricator's in-house organization. Project owners and GCs believe the detailer is controlled by the fabricator and is subject to his dictates. They are often astonished to discover that we detailers are now, more often than not, an independent business organization with our own clients, schedules, overhead, employees, and sales to worry about. Times have changed, and the detailer must now

wear many hats, not just that of a "produce or perish" draftsman serving one master. But whether an independent entity or part of a fab shop, the detailer must still be a part of the construction team.

There is an old adage about how the more things change, the more they remain the same. As a detailer who has been privileged to serve the fabricated steel construction industry for more than just a few years, it is tempting to believe that. Sure, the callus on my finger has diminished and has been replaced with carpal tunnel, but the holes in mating material still have to match. Erection diagrams are now frequently called "member placement plans," but the detailer still has to show the erector where, and sometimes

how, the member is to be properly located in the structure. The design drawings may now be issued in version "eleventy-seven" of someone's software, but it is still the detailer who has to interpret the intent of the design into a set of zero-defect shop and field drawings. Changes in design now often come disguised as "approval comments" instead of revisions, but making the necessary changes to mill orders or shop and erection drawings still costs time—and time is still money no matter how fast electronic changes are supposed to be. The electronic RFI and clarification sketch may have replaced the fax, which replaced snail mail, which replaced the phone. But all of us in the construction business still struggle with costs and delays caused by incomplete or erroneous design information.

Back in the day, any detailing errors the checker found would have to be "scrubbed" by the detailer from his/her drawing, using a rubber eraser, and the corrections made manually with a pencil—an arduous task that made drafters strive for perfect drawings and consequently made for better detailers. Now, in most drawing rooms, it's done with the CAD system, but the work still requires a checker, and the drafter still has to "back check" and agree with any checker's corrections before fixing the drawing.

And I'm sure that many high-tech gurus would be surprised to learn that there are still a number of highly skilled manual drawing rooms in existence, turning out some very sophisticated work. (I can remember when a mouse was something that snuck into your drafting table drawer and made a nest in the pencil shavings.)

At one time, the only names we had to be familiar with were Smolley, Bruhn, Inskip, Webster, our squad boss, and the paymaster. Now, we have to know HP, Dell, Jobber, Blodgett, Gates, and Google. But regardless of who you know, what you know is still the trademark of a quality detailer. How many other craftspeople have to be knowledgeable in estimating, welding, scheduling, mathematics, scheduling, connections development, spatial concepts, camber, scheduling, mill practices, scheduling, graphics, tension, compression, scheduling, overhead, erection techniques, sales, computers, scheduling, estimating, paint systems, partnering, design-build, and OSHA—not to mention scheduling?

A few issues ago, MSC ran an enlightening article on visiting a fabricator ("A Complete Fabrication", 3/08, p. 68). I would suggest that you visit a detailer—or talk to a group like AISC, NISD, or SEAA, all of whom will be happy to share with you their knowledge of this little-known but highly important member of the steel construction team.

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Have an opinion you'd like to share in "Topping Out"? Send your feedback to Geoff Weisenberger, senior editor, at weisenberger@modernsteel.com.