Detailers: Where to Find Them and How To Keep Them

BY HUGH DOBBIE, RSD, ASCT, MBA

Recruitment and training efforts are more important than ever when it comes to molding new steel detailers.

A HALF-CENTURY AGO, IT WAS considered normal for North American fabricators to train their own detailers. Alternatively, they would import them from Britain and Europe. Wages were not high compared to shop personnel, and it was difficult to move between one fabricator and another—particularly with the larger companies. There seemed to be an unwritten law that they would not poach from one another.

My own recollection of those days is that when the recession of the 1960s hit, the fabricators had a difficult time holding on to their detailers. They didn't have enough when they had a big job and had too many when they were in between large projects. Long-time detailers would at times be laid off until demand picked up, when they might again be rehired. Some of the more entrepreneurial detailers looked at how they could weather the highs and the lows of the fabricator's office.

It was about this time that detailing companies started to emerge. They filled a need by servicing the fabricators when they needed more detailing staff. The detailing companies had the flexibility of working for a variety of fabricators and could employ their own staff where the work was needed. Unfortunately, with the emergence of this new detailing industry, very few companies engaged in training detailers as the fabricators had done in the past. As a result, over the last five decades there has been a general attrition in detailing forces in North America, and few institutions now cater to training steel detailers.

An Obscure Career

Steel detailing is not generally considered a highprofile job and very few high school students set their sights on detailing as a career. Most people, in fact, don't know what a detailer is or does. People get into the industry through relatives or friends or by default when they are looking for a job, as I did.

So where do we find bright young candidates who might become detailers? One option is to recruit them in high school. This can be accomplished on career days by visiting schools and extolling the virtues of the steel detailing industry. Offering scholarships can also serve to encourage students to consider a career in detailing. Colleges that provide structural engineering technology programs can be yet another source of recruits.

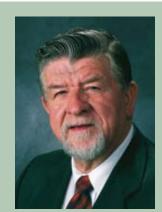
Lately, we have found another excellent vehicle for hiring: new immigrants from abroad. Often, immigrants with engineering and architectural degrees are frustrated because they can't find employment in their discipline. In many cases they are required to take additional courses and need experience in North America before they can be accepted into their chosen profession. I have found that many of these individuals, through frustration, end up taking jobs far below their qualifications. I have also found that with training in steel detailing, these individuals make excellent candidates for our industry.

Technological Attraction

Attracting new blood into the industry is essential to our goal of meeting the fabricator's and the owner's requirements. We can encourage potential detailers into the profession by successfully using new technology. Drafting is no longer identified as merely producing drawings for a specific task. With the arrival of computers, drafting has become a much more exciting vocation, particularly with the 3D programs now available. The level of automation has now reached the point where even a junior detailer can produce shop detail drawings after only a few weeks of training. A junior detailer can be taught how to build a 3D model on the computer and add pre-selected connections in the appropriate locations. He or she can quickly, with adequate supervision, become a valuable member of the team. Unfortunately, the detailer's depth of experience at this stage is limited and further training is required. In

the long run, the detailer must constantly expand his or her knowledge of the craft.

AISC's Detailing for Steel Construction is a good reference. The information is useful and important for anyone in the steel detailing industry. The AISC Committee on Steel Detailing began considering how this material could effectively be communicated to would-be and/ or junior detailers. As the committee prepared sample questions and answers and developed methodologies for conveying this information to detailers, the decision was made to develop a web-based course for detailers that could be taken anywhere in the country with the benefit of a computer and a high-speed Internet connection.



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As stated above, most of today's steel detailing is done with the aid of sophisticated 3D modeling software. Unfortunately, while students very quickly pick up *how* to detail using a computer, they do not have the detailing experience to understand *what* they are doing. With this new AISC web-based steel detailing program, we expect to close this gap. Many companies are investing heavily in steel detailers. Approximate basic costs to outfit a detailer today are listed in the table on the left.

So, now you have to spend \$41,550 over three years to equip your detailer, and you have not even given him or her any actual detailer training yet, save for software training. This is where the AISC Detailing for Steel Construction Web-Based Course comes in.

The course costs \$9,500 for non-members. AISC members receive a 25% discount, and National Institute of Steel Detailers (NISD) members a 10% discount. These discounts can be combined, so someone who is both an AISC and NISD member receives a 35% discount and pays \$6,175. That translates to \$2,088 per annum for three years or 55% of the annual cost of maintaining the software. It also equates to 13% of the cost for training and equipment for three years.

From the beginning, it's been apparent that we must be prepared to invest in outfitting and training detailers; it has been proven that investment in technology and training pays dividends in the long run. That said, it may be prudent nowadays to have detailers sign employment contracts—with special provisions regarding repayment of training fees, for example—if an employee leaves before three years.

In an effort to cut costs, some companies have resorted to outsourcing their detailing to India, China, the Philippines and other countries. Time differences can make this arrangement challenging and a strong North American detailing force is still essential to providing the necessary liaison with the fabricator, engineer, etc.

In the end, detailers are a hot commodity in North America right now. Train them well. Pay them well. Treat them well, and I am sure this will bring rewards for all involved.

Detailer "Start-up" Costs (total over 3 years and per year):		
Computer	\$2,500	\$833
Desk, chair, bookshelf, etc.	800	267
3D software	25,000	8,333
Annual maintenance	11,250	3,750
Basic training on software	2,000	667
Total Cost	\$41,550	\$13,850