Structure-after-design
Most contractors will agree that cost is designed in. Customer requirements and site conditions, blended with architects’ willingness to surpass themselves, often result in projects that seem to be reaching new heights in cost. That said, as steel detailers we recommend that the customers not only discuss their projects with the architects, but also with the structural engineering group. Get a sound structural design recommendation first and then walk it through with the architectural firm in order to get the body and shape onto the skeleton.

I really enjoyed “Banking on Sustainability” (July MSC, p 26). This is exactly what we recommend: a fresh look at the dynamics of doing things. I congratulate Mr. Christensen on his approach and I hope that it confirms a trend in the industry. I’d like to add that you can bank on the experience of the structural engineering group every time.

As steel detailers we are quite far down the food chain and have little say in major projects. We leave this to the structural engineering group, but in many cases they too have their hands tied. Let’s change that.

Mario Lapointe
North American Steel Detailing

On a Misleading Note?
Zoruba and Liddy did an excellent job of outlining the specifications relevant to current structural steel (SteelWise, March 2007). But in one of their listed items, namely Direct-Tension-Indicator Washers, ASTM F959, they offered a note “e” to their table that stated: “Washers that express colored dyes when compressed are not covered by ASTM.”

This note may be misleading because our Squirter DTI washers are produced to the requirements of ASTM F959 and installed according to the corresponding procedures in the RCSC specification. The orange silicone itself is not covered by ASTM, but a DTI having this feature can still be approved on jobsites and used exactly as a non-squirting DTI is used.

We believe the squirt feature, when calibrated on Skidmores on bolts at jobsites, as the manufacturer recommends, can enable the bolt installers and inspectors to be better and more efficient, and therefore improve the constructability of steel structures.

Chris Curven
Applied Bolting Technology Products

Charlie Carter, P.E., S.E., chief structural Engineer with AISC, responds:
Thank you for helping us to clarify our intent. We should have said that, when washers that express colored dyes when compressed are used, they are used following the same procedures as conventional DTIs.

No Mixing, No Welding
I would like to augment the answer that was given to the first question in the August Steel Quiz, which asked about the difference between “filler metal” and “weld metal.” The term filler metal refers to the chemistry and physical properties of the welding metal by itself. The term weld metal refers to the chemistry and physical properties of the weld deposit. This metal is a combination of the effects of the welding process, the chemistry of the filler metal, and the chemistry of the base metal. The answer, as given, did not include the effect of the base metal. If there is no mixing of the filler metal and base metal, the joining process is either brazing or soldering, not welding.

D. Robert Lawrence II, CWI, CWE