

## 122 Design Tips in 90 Minutes

Best Presentation at the 2010 Structures Congress/NASCC: The Steel Conference

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At the 2010 SEI Structures Congress/NASCC: The Steel Conference in Orlando, Florida, participants selected the presentation they found to be the “Best of the Best” among those offered during the three days of technical sessions. This year’s winner for best presentation was: *122 Design Tips in 90 Minutes*, presented by Dr. James Fisher and Michael West of Computerized Structural Design (CSD), a nationally known and respected full service engineering company which maintains its headquarters in Milwaukee, Wisconsin. Dr. Fisher completed his PhD in Structural Engineering with the University of Illinois in 1968; he is a licensed Structural Engineer in several states. Mr. West obtained his Bachelors in Architecture from the University of Illinois in 1971 and an MBA from the University of Wisconsin in 1977. He is a licensed Architect, as well as a licensed Professional Engineer in the state of Wisconsin and maintains licensure in several states.



Michael West



Dr. James Fisher

Dr. Fisher and Mr. West are both principals with CSD and have been active within the structural engineering community providing leadership through various committee memberships within AISC and ASCE, by working as lecturers within various universities and through their active advocacy for the use of structural steel when considering a new building. They noted that educators spend the limited time they have with students teaching fundamentals and theory. Given the work load of an engineering student, there may or may not be an opportunity within the student’s educational experience to work on a project that can provide the opportunity to consider the importance of serviceability when designing a steel structure. Dr. Fisher and Mr. West discussed practical methods to make a project understandable and constructible when design is complete, emphasizing that time is money during the construction of a project and that good planning during the development of a project could save time during its fabrication and erection. They provided a variety of steps to remember along the path of project development, emphasizing practical actions that can be taken to make a structure easier and faster to fabricate and erect, thus saving time during construction and money for their client. Their presentation was based upon the broad experience they have gained through their collective 75 years in the structural engineering profession, and provided a practical

discussion of considerations that should be taken to heart when putting together plans for a steel structure. Simple guidance like reading and thoroughly understanding the AISC Code of Standard Practice, maintaining open and clear lines of communication with fabricators, detailers and erectors throughout the development process and ensuring that fabricators, designers and erectors remain in sync are practical steps toward saving time and money on a project. Dr. Fisher noted that the engineer should not forget that their primary job should be to produce complete and well laid out sets of plans, and not to simply do calculations. The production of a proper set of plans can save money and provide clear guidance toward the completion of the project, with

a minimum of concerns during construction.

By reiterating simple yet profound guidance that many engineers in the audience could relate to through their own experiences, the authors of *122 Design Tips in 90 Minutes*, Dr. James Fisher and Mr. Michael West, were able to connect with their audience and speak to them in a very direct manner, as if across a drafting table or at a building job site rather than a conference room podium. The appreciative audience responded by selecting this paper as the 2010 SEI Structures Congress/NASCC: The Steel Conference Best Presentation. If you would like to enjoy this outstanding presentation it is available for review at: [www.aisc.org/UploadedContent/2010NASCCSessions/E2/](http://www.aisc.org/UploadedContent/2010NASCCSessions/E2/)

*Dr. James M. Fisher has specialized in structural steel research and development. He has spent a large part of his career at his firm Computerized Structural Design investigating building systems and the study of economical structural framing systems. In recent years, he has become recognized as an authority in the performance of structures, the design of heavy industrial structures, the design of Metal Building Systems, and the design of light gage steel structures.*

*Mr. Michael A. West, during his tenure with Computerized Structural Design, has been responsible for architectural and structural design for numerous projects in the area of industrial, commercial and industrial buildings. He has also been responsible for the structural design of numerous low and mid rise buildings.*

Photos of this years Best Presentation award winners were provided courtesy of the American Institute of Steel Construction