Detailing & Shop Drawings
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MetalFab
2017
San Antonio
Purpose of Class
* What does a detailer provide
* Quality of Design Documents
* Approval Process
* Liability & Shop Drawings
* How do I find a detailer
What can a detailer provide
BB&T Pavilion Railing Collapse
Place to ask for info
Provide a guide for your shop
AISC COSP: “….design documents are to clearly show the work to be performed.”

Naamm COSP: “….the architect/engineer is responsible for the suitability, adequacy, and legality of all aspects of design in the plans & specifications.”

AIA Position on Design Documents: ???

AIA Position on Shop Drawings: “…not a part of the contract documents…are not a responsibility of the architect.”
Kansas City Hyatt – Before grand Opening
Kansas City Hyatt – Day after Collapse
The Structure Of the Walkways

Before
- 1 1/8-inch suspension rods
- Welded joint

8-inch box beam
- Welded joint

After
- Nut and washer on threaded end of suspension rod
- Tear through joint in box beam on 4th-floor walkway

Adapted from The Kansas City Star

Engineers who have examined the fallen walkways of the Kansas City Hyatt Regency have concluded that a design change nearly doubled the weight on the beams of the upper bridge. The original design, at left, would have had rods from the ceiling to the second-floor walkway. Instead, the lower bridge was suspended from six shorter rods bolted to the fourth-floor walkway's beams, above.
☐ CONFORMS TO DESIGN CONCEPT
☐ CONFORMS TO DESIGN CONCEPT WITH REVISIONS NOTED
☐ NON-CONFORMING -- REVISE & RESUBMIT

THIS SHOP DRAWING HAS BEEN REVIEWED FOR GENERAL CONFORMANCE WITH DESIGN CONCEPT ONLY AND DOES NOT RELIEVE THE FABRICATOR/VENDOR OF RESPONSIBILITY FOR CONFORMANCE WITH DESIGN DRAWINGS, SPECIFICATIONS, AND APPLICABLE CODES, ALL OF WHICH HAVE PRIORITY OVER THIS SHOP DRAWING.

By ___________________________ Date _________

SHADYDELL DESIGN & ASSOCIATES
Jaeger vrs Henningson et al
Waggoner vrs WW Steel
Elevator Floor Openings
Hand Drawn by Experienced Detailer
Are these Cad drawings OK? Can you tell?
The Missouri Board of Review, in their final ruling on the Kansas City Hyatt case, noted the importance of having an experienced detailer on the team by stating

“….detailers are the bridge between the design professionals and the trades, blending the intent of the design with the abilities of the construction industry.”
Mezzanine Stair that failed for finish
Who’s responsible for OSHA Violation?
Presentation

Drawings

Plan of Chaise Lounge Framing

Plan View of Driveway Gates

Trylon

Metal Works
How does a detailer add value
- We can help reduce costs
- Checked drawings reduce shop & field errors
- Material Lists simplify ordering & limit excess
- Field drawings expedite erection
- One place to address all issues before steel is in your shop
Northeast Library   Washington DC
Our Lady of Fatima Shrine
Malvern, PA
Spiral Stair for Historic St John the Baptist Church in NJ
How to find a good detailer

• Referrals from other fabricators
• Nomma Social Blog
• Suppliers, Architects, & General Contractors
• NISD (www.nisd.org)
• AISC (www.aisc.org)
• See “Vetting a detailer” on AISC Presentations
• Ask for samples & references (and call them)
In House or Subcontract?

Paying the bill

Bedroom Detailer

Cheap Detailing
Ain’t CHEAP!

Next time....
Stick with J.B. Long, Inc!

www.jblong.com
Questions/Comments?

Thank you for attending

Sign up a new member!!!