

THE BENEFITS OF GOOD DESIGN DRAWINGS

It is now an accepted fact that the quality of Australian design documentation has been in general decline for the past decade. A decreased quality of design documentation quality has caused a subsequent increase in the workload of Steel Detailers.

All construction projects have a fixed and quantifiable amount of documentation work required between concept design and the completion of shop detailed fabrication drawings. This workload is shared by designers and steel detailers. It is in the best interest of the project that each participant in this process take responsibility for their prescribed tasks and that these tasks and responsibilities in the documentation process are clearly defined so as to minimise confusion and maximise efficiency..... because if the designer doesn't complete his drawings the steel detailer has to do it for him.

Where Contract Documents are incomplete, confusing or time consuming to interpret, cost and delay is invariably added to the project.

Design consultants with reputations for excellence in design documentation attract better tender prices to projects than those with poor reputations. Clarity, consistency and completeness are the key documentation issues for Engineer to focus on in preparing contract Drawings and Specifications.

Each year, the Australian Institute of Steel Detailers (Qld) recognizes this excellence with their Design Documentation Awards. A judging panel drawn from the membership of the AISD determines a winner for each of two categories, one for Structural Documentation and another for Architectural Documentation. The awards are presented to the successful nominees at the annual ASI Queensland Steel Awards night. The judging criteria for the awards are the **AISD Documentation Check Lists** which focus on the particular aspects of design documentation that affect steel detailers. These checklists are used in industry and can be applied to different documentation tasks which affect the detailed steelwork specification requirements and will, in turn, simplify co-ordination.

The AISD Design Documentation Checklists can also be used;

- by the principal's representative to determine scope and responsibilities of the design consultants
- as an in-house document by design consultants
- at the first co-ordination meeting with the steel contractor
- by Steel Detailers on receipt of contract documents

Use of the checklists will also clarify the expectations of each member of the steelwork procurement team and help realize key benefits to the whole project including;

- Reduce risk of construction delays
- Improved confidence in pricing & quoting work
- Fewer disputes between the builder and principal
- Minimise variations
- The most efficient use of everyone's time.
- Simpler, faster and more economic.

For every construction project the contract drawings and specifications are the primary medium of communication.

Therefore:

The quality of their definition, the clarity of their presentation and the explicitness of their content will largely determine the economic and technical success of the steel construction project.



2007 Winner of the ***Excellence in Design Documentation Quality – Structural***
Sinclair Knight Mertz for their documentation of the Boral – Gypsum Store project in Brisbane.
L to R – Clayton Roxborough (President AISD. QLD), Alex Milligan (Lead Structural Engineer - SKM) & Stuart Gordon (Draftsman - SKM)

The Australian Institute of Steel Detailers has published these checklists for use by design consultants and steel detailers in an effort to provide a proactive solution, at a grass-roots level, to the declining quality of design documentation,. These checklists are freely available on our website at www.qisd.org.au along with much more information about steel detailing and the AISD. We would welcome the opportunity to offer our support to any group seeking to improve the quality of design documentation in the steel construction industry.