



KEVIN O'CONNOR

& ASSOCIATES LTD

ENGINEERS • SURVEYORS • PLANNERS

engineering, surveying and resource management services

Shop Drawing - Frequently Asked Questions...

What is Steel Shop Drawing?

Steel Shop Drawing is the amalgamation of the Engineering and Architectural drawings into a three dimensional working model of the structural steel components. These models are detailed accurately combining all the steel components, their connections and welds with a zero tolerance. Once a model is complete, drawings are created which splits the model into the individual items on drawings. These drawings are supplied in three categories.

These are;

- | | |
|----------------------|--|
| Parts | - Individual items |
| Assemblies | - A collection of Part drawings combined to make up a component |
| Marking Plans | - Detailed plans showing both the building set out and also how the individual components are combined together to form the working structure. |

What does it cost to get shop drawings done?

The cost of shop drawings is dependent on the size and complexity of the structure. Generally speaking on average, we like to keep our pricing around the \$200.00 per tonne mark.

What is an RFI?

RFI or '*Request for Information*', is where when detailing a project, we for any number of reasons are not totally sure of the design intent. In these instances, we formally write an RFI, of which is forwarded to the client, project managers or consultants for answering.

What is an EWPA?

EWPA or '*Extra Works Pre-Acceptance*', is where for numerous reasons the structure has changed from the original design and requires that we re-work our model and drawings. These are sent out prior to commencement of re-work to ensure all parties are privy to any additional cost that could relate to the required changes.

What is a PSR?

We are currently in the process of implementing the use of a PSR of '*Project Status Report*'. This will be supplied to the client on a weekly basis, giving the client a breakdown of where the project is at. The PSR supplies information like, the number of RFI's asked/answered/outstanding, intended issue date, delay time on the project and any general comments about how the project is progressing. Along with these we also supply a web browser of the model.

What is a Web 3D Model Browser?

A web 3D model browser is an interactive internet page (*for use with internet explorer 6 or higher*) that allows the operator to view, rotate or flythrough the 3D model in its current assembled state. Tekla Structures Model Browsers can be produced in two formats.

They are;

- | | |
|--------------|---|
| Solid | - which shows the model complete with the components assembled and bolted together. |
| XML | - Where the model is supplied without showing the bolts but instead will include the main component part and assembly marks (these can only be supplied once numbering has been performed on the model. Numbering is only preformed when the model is at a complete stage, before creating drawings). |



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Shop Drawing - Frequently Asked Questions...continued

Who will benefit from getting Shop Drawings produced?

Everyone from consultants, fabricators, project managers, right through to the client can benefit from getting shop drawings produced. Through the use of 3 dimensional drawing packages with today's technology, we as detailers work through any possible problems before any cutting, welding or erecting is done. Therefore the utilisation of shop drawings becomes a very in depth checking process to which can eliminate timely and costly re-work which may otherwise result.

I have a Project in Auckland I need shop drawings for, but your office is in Palmerston North?

In today's connected world, location is not a problem. We can model structures anywhere in the world and forward drawings in electronic pdf format. The only problem we can foresee from not being on location, is the need for site measuring. This is overcome by getting either our client (usually the fabricator) or a project manager on site to provide any necessary site dimensions, of which are usually written up and asked for formally through the RFI process.

How do I go about getting Shop Drawings produced?

If you have a project and would like to get Shop Drawings produced for it, the best idea is to forward any consultants documentation (i.e. Architectural and Structural drawings. Any scheduled quantities can also be very handy) to Kevin O'Connor and Associates office. This can either be supplied electronically or posted to the following:

Email: reception@koa.co.nz or Shop Drawing Manager Brendon.Schaare@koa.co.nz

Mail: P.O. Box 600, Palmerston North, New Zealand

Delivery/ Courier: 71 Pitt Street, Palmerston North 4410, New Zealand

On receipt of your information, a tender price will be calculated and supplied formally in the form of an engagement letter. From here if you would like to proceed, all you need to do is sign the appropriate areas on the short-form engagement letter and return it to the office.

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