

Steel Detailer interview questions

careertips.com.au: common questions and what they're really testing

What to expect

Steel detailer interviews focus on your ability to interpret drawings, use detailing software, and coordinate with engineers and fabricators. You will likely be asked to discuss your technical process, how you check compliance, and how you handle design issues that arise during a project.

- **Technical:** Questions about software, standards, and drawing interpretation.
- **Process:** Questions about your step-by-step approach to producing shop drawings and checking them.
- **Behavioural:** Questions asking for examples of how you have handled design issues, deadlines, or teamwork.
- **Scenario:** Hypothetical situations where you must decide how to proceed when something is wrong or unclear.
- **Safety and compliance:** Questions about Australian standards, quality checks, and safe design.
- **Client-facing:** Questions about communicating with engineers, architects, and fabricators.

Typically a phone screen with a recruiter or hiring manager, then a technical interview where you may be asked to interpret a drawing or discuss a past project. Some employers include a practical test using Tekla or AutoCAD, or a site visit to meet the fabrication team.

1. Walk us through your process for producing a shop drawing from an engineering drawing, including how you check it for compliance with AS 4100.

Why they ask

This tests your technical method and your knowledge of Australian steel standards.

How to structure your answer

A step-by-step walk-through: start with interpreting the drawing, then modelling, then checking, then issuing. Be specific about software and standards.

Example answer

"I start by reviewing the engineering drawings and specifications, making sure I understand the loads, member sizes, and connection requirements. I then set up the model in Tekla Structures, using the grid and levels from the architectural drawings. As I model, I check each connection against AS 4100 and the project specification. Once the model is complete, I run clash detection with the services and architectural models, then generate shop drawings. Before issuing, I do a self-check on dimensions, bolt sizes, and weld details, and if anything is unclear I raise a query with the engineer. The final drawings are issued to the fabricator with a clear revision number."

2. Tell me about a time you identified a design issue that would have caused problems on site. How did you handle it?

Why they ask

This looks at your attention to detail and how you communicate problems.

How to structure your answer

STAR: situation, task, action, result. Keep it concise and focus on the action and outcome.

Example answer

"On a previous project, I was detailing a steel roof frame and noticed that a beam connection clashed with a duct that had been added late in the design. The fabricator was about to start cutting steel. I

flagged it with the project engineer and the services coordinator, and we agreed to reroute the duct slightly. I updated the model, issued a revised drawing, and the fabricator cut the steel correctly the first time. The installation went smoothly and we avoided a costly rework."

3. You are detailing a steel frame and notice a connection that appears under-designed for the loads shown. The engineer is unavailable, and the fabricator wants to proceed. What do you do?

Why they ask

This assesses your judgement under pressure and your commitment to safety and compliance.

How to structure your answer

Explain your immediate action, then how you escalate and communicate, and finally how you prevent the issue from being missed.

Example answer

"I would not let the fabricator proceed. I would document the issue with a marked-up drawing and a clear description of my concern, then send it to the engineer by email and follow up with a phone call. If the engineer is truly unavailable, I would contact the project manager or another senior engineer to get a decision. I would also put a hold on the shop drawings for that connection so it cannot be fabricated until it is resolved. Safety and structural integrity come first, and it is better to delay than to build something that might fail."

4. How do you use Tekla Structures to manage clashes and ensure your model matches the architectural and structural drawings?

Why they ask

This tests your software proficiency and your approach to coordination.

How to structure your answer

A tool-specific walk-through: explain how you import references, run clash checks, and resolve issues.

Example answer

"I start by importing the architectural and structural reference models into Tekla. I set up the grid and levels to match the architectural drawings, then model the steel members and connections. Once the model is built, I run a clash check against the services, architectural, and other structural models. Any clashes are reviewed and either resolved by adjusting the steel or by raising a query with the relevant consultant. I keep a log of clashes and their resolution so the team can see what has been changed. Before issuing drawings, I do a final visual check to make sure the model matches the latest drawings."

5. What Australian standards and codes do you refer to when detailing steel, and how do you ensure your drawings meet them?

Why they ask

This checks your knowledge of the regulatory framework and your quality control process.

How to structure your answer

List the key standards, then explain how you apply them in your checking process.

Example answer

"The main standards I use are AS 4100 for steel structures and AS/NZS 5131 for fabrication and erection. I also refer to the National Construction Code for fire and structural requirements. When detailing, I check member sizes, connection details, bolt grades, and weld sizes against these standards. I keep a checklist that I go through before issuing any drawing, and I make sure the fabricator has the relevant standards on hand. If there is a conflict between the drawings and the standards, I raise it with the engineer and get a written direction before proceeding."

6. Describe how you work with fabricators and engineers when a drawing needs to change late in the piece. How do you keep everyone informed?

Why they ask

This looks at your communication and coordination skills, which are vital in steel detailing.

How to structure your answer

Use a recent example and structure it as a communication process: how you notified people, what you changed, and how you confirmed everyone was on the same page.

Example answer

“Recently, an engineer asked for a change to a connection on a multi-storey project after the shop drawings had been issued. I immediately called the fabricator to let them know not to proceed with that connection, then I updated the model and drawings. I sent a revised drawing with the changes clearly clouded and a new revision number, and copied the engineer and project manager. I followed up with an email summarising the change and asked the fabricator to confirm they had received it. I also updated the drawing register. Keeping everyone informed avoids mistakes and keeps the project moving.”