

# 5 Reasons Why You Need Structural Steel Detailing Services

Structural steel detailing services are extremely important when it comes to designing and building structures, especially if the structure in question is going to be in a dangerous area prone to natural disasters or fire. Proper structural steel detailing services to ensure that all of the steel in the structure will be strong enough to withstand any force that's put on it from outside sources, such as wind, rain, flooding, etc., while also ensuring that the structure is properly insulated from heat and cold when needed to keep it functional and safe for people who use it regularly.

## 1) It Helps Eliminate Design Flaws

A structural steel detailer works with engineers to ensure all elements of a building design are carried out on-site. If there's a flaw in the design, it can be remedied before construction begins. Skipping structural steel detailing services is like skipping an algebra class: you may end up getting your answer, but it probably won't be 100% correct and could lead to bigger problems down the road.

It Helps Prevent Costly Fixes Later On: Let's say that after construction has begun, you notice that one area isn't properly secured or structurally sound. Without consulting with a structural steel detailing service first, you would have to fix it immediately—and pay handsomely for the materials needed for repair. With structural steel detailing services, small fixes can be made sooner rather than later so they don't become big fixes later on. The longer something goes unaddressed during construction, typically means much more money that needs to be spent later on fixing it.

## 2) It Improves Construction Efficiency

Saving time and money in construction is no easy feat. However, if you're willing to put in the work at every step of construction, there are ways to improve efficiency. Even if Structural Steel Detailing aren't able to complete a project without any delays or cost overruns, reducing even one step along the way can be an effective method for saving money and reducing headaches. As far as contractors go, structural steel detailing services can be invaluable when it comes to speeding up the process and ensuring things stay on schedule throughout construction. The steel itself needs to line up precisely with architectural drawings and other structures already in place. The same goes for workers: not only do they need to make sure their steel structure fits properly with existing designs, but each piece of structural steel also must fit perfectly with those next to it; otherwise, finishing all projects will take longer than expected.



It improves quality: Although we often hear about projects going over budget and behind schedule during construction, building issues are frequently due to poor quality materials being used during production—often due to subpar detailing processes. If your contractor isn't using reliable products from top-of-the-line manufacturers, chances are you'll run into problems before long.

### **3) It Reduces Accidents onsite**

The biggest reason that structural steel detailing services are important is that they help reduce accidents onsite. That's a no-brainer, but it's important to understand why it happens so you can take advantage of these benefits. There are several reasons for accidents on a construction site, but a major factor is a human error. When architects and engineers work together to ensure all drawings show precisely what will be built, construction workers have a much easier time doing their jobs. If every measurement is clear and there's no room for interpretation, builders will know exactly what needs to be done each day. It helps keep things running smoothly. By eliminating common errors that occur during construction, detailing help keep projects on schedule and reduces costs over time.

### **4) It Enables Better Communication Between Contractors**

When you're building a steel structure, there are multiple contractors involved. The structural engineer designs and creates a blueprint. The contractor follows these blueprints and builds what is called shop drawings. These shop drawings include all of the necessary information for construction: measurements, specifications, and more. But they aren't necessarily detailed enough to be sent to fabricators and manufacturers – so that's where structural steel detailing services come in handy. While an engineer can provide blueprints, it's up to you or your team of experts to bring those blueprints to life on paper – complete with dimensions, details, and accuracy – which is where structural steel detailing services comes into play. If you want everything constructed according to plan and built correctly down to every last detail (and we assume you do), then structural steel detailing services will help make sure it gets done right.

**The Fabricator Has Better Control Over Quality:** When we said that structural steel detailing allows for better communication between contractors, we didn't mean just in terms of understanding one another's roles; we also meant in terms of quality control. A fabricator receives documents from a contractor, such as shop drawings with notes about any issues or

concerns along with how they were addressed by using calculations and adjustments. A fabricator will work with these files to ensure everything is in order before manufacturing.

## **5) It Ensures Building Safety**

An essential element in any building is structure. Buildings must be able to withstand harsh weather conditions, heavy loads, and much more without collapsing or sustaining major damage. The safety of building occupants is always a primary concern, and having structural steel detailing services allows you to ensure that your building will be safe and protected from natural disasters and everyday wear and tear. Simply put, having detailed structural engineering in place gives you peace of mind during potentially dangerous situations—that's why architects need to get these services involved early on in the construction process. So if your business requires a high-rise office complex or skyscraper that can stand strong against challenging weather conditions, it might be smart to call in a structural engineer. When professionally installed and designed with load-bearing support in mind, high rises can endure extreme winds, rainstorms, and other types of external pressure while keeping people inside safe from harm's way. That's something no business owner wants to gamble with. Using professional architecture services also saves money by avoiding costly mishaps down the road because improperly placed structures cause serious problems when subjected to undue stress from outside forces such as wind gusts and earthquakes.