

# Everything You Need To Know About The Metal Building Construction Process

Today, metal building construction is a popular and growing trend within the United States. Metal provides durability and versatility, and these [metal buildings now account for over half of new non-residential structures in the US](#), thanks to their ability to be constructed faster than other prefabricated structures, at a much lower cost.

Additionally, metal buildings are energy-efficient and last for a very long time. However, before beginning, you need to understand everything related to the metal building construction process.

## The Overall Metal Building Construction Process

There are a lot of plans that work cohesively when you are conceptualizing and completing steel buildings. You need to carefully understand every part of this process, as any mishaps during it can ruin your project. If you want to know more about the metal building construction process, here is a simple breakdown of everything that takes place:

### Planning Phase

Planning is the first phase of any construction project. You need to meet with the construction and design team that will work on your metal building project. The team members will discuss some essential details like budget, requirements, and any additional features desired. This step should also include possible plans for future expansion.

### Engineering Phase

The engineering phase includes the design and the conceptualization of the plan. You and your team need to visualize what the prefabricated metal buildings will look like when completed and start drawing a soft copy of your ideas. However, this process can take some time, and the end result may not look exactly like what you have envisioned. Hence, it is important that you work with experts to meet your requirements. The plan will be made clear through detailed specifications.

### Ordering Phase

Immediately after you plan and design the metal building, you need to order the different parts and components. While the process may sound easy, in reality, it is anything but.

It is possible that you understand technical nuances and might be looking for specialized metal equipment. As such, you need to choose a brand that can deliver you customized parts like frame systems, accessories, base, and other pieces.

## **Manufacturing Phase**

This is a process where you do not need to put in too much effort. Once your plans are finalized, you need to send them to the metal building construction company. The manufacturer will then fabricate your order according to your specifications. While you can choose to send the plans over on your own, hiring a contractor is a much better and safer option.

## **Site Preparation Phase**

As the materials are getting manufactured according to your specifications, it is time to get the construction site ready. In most cases, the land on where you are planning the construction is purchased by the merchant to whom you are providing the service. Also, ensure that you comply with local zoning codes and have the proper site plan approvals.

As for laying the prefabricated steel buildings' groundwork, some basic tasks include grading, tree and vegetation removal, and stone excavation. The ground needs to be prepared for pouring the foundational concrete slab. You also need to secure the anchor bolts of the metal building.

## **Delivery Phase**

As you are getting done with the site preparation phase, your orders will get delivered to the site. Be sure to make multiple inspections to ensure that your orders arrive according to specifications in perfect condition. You need to have the receipt of your order, and you need to be available during the checking and the verification of your orders.

If you find anything missing or not up to specification, you have to notify the supplier immediately, or else they will not be held responsible later. If you are not planning on installing the parts immediately, the order needs to be delivered, packed, and protected.

## **Installation Phase**

In this phase, the foundations and the skeleton metal structures of the metal building will be installed. You will have to set up support columns, I-beams, and secondary framing. You need to place the wall studs (or Girts) at two-foot centers for the best strength.

You can assemble the girders on-site and place them into appropriate positions. For additional strength, you can install the purlins at two-foot centers. You will also have to frame for openings like windows and doors.

## **Construction Phase**

Once the concrete foundation and the framings are in place, you can start with the metal building's construction. It is during the construction phase when you see your metal building

taking its final form. In this phase, ceilings, floors, windows, doors, and temporary plumbing are installed.

Additionally, you also need to install and secure the wall panels (indoor and outdoor) to the secondary framing. As you are putting up the walls, you can then install the insulation. As for the roof, you have to check whether the roof panels will protect the building against rough weather conditions depending on your region.

## **Finishing Phase**

As you get done with the essential construction work on the metal building, you will approach the finishing phase. In this phase, the indoor and outdoor elements of your building will be completed. Some of the tasks included in this phase include the final installation of the plumbing and electricity lines, painting the ceiling and floors, and floor layering.

If there are any customizations that you would like on the metal building and have been included in the building plans, you can get it done during the finishing phase. Once done, your facility will be ready for use.

## **Final Walkthrough**

The final walkthrough is the phase where you will be issued a Certificate of Occupancy. The local building inspector will hand you the certificate after they inspect and walk through the facility. Once this certificate is furnished, you can officially start using the building for your purposes.

## **Conclusion**

So you see, the metal building process is relatively more straightforward than what you might have perceived before. If you are looking to buy the best steel structures, look no further than [Brand Name] 's quality buildings. While the company may be new, they are rapidly emerging into a full-scale operation, serving nine states from their Elkin, NC shop.

[Brand Name] is known for providing the best metal building parts at very affordable prices. They will always answer your call; so pick up your phone and get your own prefabricated metal building today!