

THE PROCESS OF ASSEMBLING A STEEL BUILDING: WHAT TO EXPECT



Having selected your steel building, is the price inclusive of installation? If not, it is well worth getting quotes for installation. Purchasing your steel building from National Steel buildings means you have the price from design to handover of the completed building.

PREPARATIONS BEFORE ASSEMBLY

Prepare your ground, ensuring the site is level and removing foliage or other obstructions.

Then [before the assembly](#), lay your foundation. If using concrete, leave enough time to dry, from 72 hours, depending on the weather and thickness of the concrete. Depending on the site and the size of your new steel building, draw up a Site Waste Management Plan with the project manager to manage debris and waste during the prep, construction and post-construction phases.

Utilities to the site for the build and future use need to be considered before laying the foundation.

ARRIVAL TO THE SITE

Make sure access is unhindered on the day of arrival. The delivery wagon or wagon will need a clear entrance, exit point, and turning area. If gantry cranes or MEPs – Mobile Elevated Platforms, will be in use, they need space to manoeuvre and check for trees, bushes and fences too close to the site. Also, earmark a place to put a generator if required.

For a household assembly, it is an excellent idea to let your neighbours know this is happening and an approximate time scale, which you can get from the company. A small building can be assembled in a day or two, but a larger, more complex steel building could be extended.

7 STEPS OF THE ASSEMBLY PROCESS

You can use this general overview for any size or complexity of steel building. The bigger and more complex the build, the more processes and checks are involved, affecting the completion time.

1: **Unloading**, preferably to a pre-planned area.

2: **Framing** – this consists of your primary I-Beam columns and rafters. These are the heaviest and strongest pieces of your steel building that need bolting together and then fastening to your structure. All your primary steel is pre-cut, pre-punched and welded for an easy installation. This construction and bolting of the steel frame together occur on site. This process includes,

- Assembling roof beams on the ground
- Erecting steel columns
- Hoisting steel beams

- Secondary structures connection are attached; this includes,
 - rods
 - roof purlins
 - wall girt
 - roof and wall bracing
 - sag rod, etc
- Correction of any primary structure deviation
- Installing crane beans and mezzanine, if included in the design

3: **Attaching steel panels to the frame;** these are the walls and roof of the building.

4: **Installation of Doors & Windows**

5: **Adding Insulation** to provide thermal protection. Plus, weather stripping the roof prevents leaks

6: **Finishes,** using drywall and paint, the interior and exterior surfaces of the building are finished.

7: **Utilities,** installing plumbing, electrical and heating, ventilation and air conditioning as required.

There is a simple process to erecting your steel building, but that is not to say it is easy. Following the exact measurements and the appropriate sequence of assembling your structure is imperative to avoid costly mistakes.

This is where National Steel Buildings can help. The experience of the design team, construction and assembly engineers ensures the safe and correct assembly of your steel building.