

# [Different types of portable buildings construction essay](https://assignbuster.com/different-types-of-portable-buildings-construction-essay/)

Portable steel buildings are made from different components and are prefabricated at a different location. Portable steel buildings are used in an industrial environment, for various purposes, like storing equipment, shelter for workers, temporary offices and security check posts.

These buildings are made from lightweight and high strength steel that ensures portability and long life. The base of these buildings has two tubular openings, which are used to lift the building with the help of a forklift. Apart from the basic steel framework, they are covered with a layer of galvanized steel for added strength and finish.

The base of these buildings is covered with a thick layer of fiberglass to enable insulation against electric shocks. The interiors are designed according to the needs of the user. The floor is covered with thick plywood planks or vinyl floor tiles to give it a smooth finish. The building has openings for doors and windows, which can be fitted with metal, plastic or wooden doors and windows, as per the needs of the user. They have inbuilt fixtures and fittings for electrical wiring, telephone wiring and air conditioning. The walls and ceiling are covered with fire resistant material for added safety.

Portable steel buildings are available in different sizes and can be customized according to requirements. New doors and windows can be added to the existing framework and existing door and window positions can be altered to suit different work environments.

Laboratory tests conducted on steel buildings, with the help of earthquake simulation machines, have shown that these buildings are resistant to high magnitude tremors. Small steel buildings can be installed inside standard houses where family members can take shelter during an earthquake. People can stay unharmed, as the steel structure is unaffected even if the whole house collapses onto the building.

## Portable Modular Buildings

Portable modular buildings are made from different components, which are prefabricated and assembled onsite. Modular buildings and the components for prefabricated buildings are manufactured in a controlled, factory environment.

A portable modular building has all the necessary components, like walls, floor tiles, windows, plumbing, electrical wiring, heating and cooling systems. Simply put, a modular building refers to any building or structure that is pre- constructed in a factory.

A modular building is very different from traditional site-constructed, permanent buildings. These structures are very versatile and are available in different shapes and sizes. They can be used for different purposes, such as school classrooms or bullet- proof security spaces. They can be used as short-term spaces or as a permanent facility. They can be used as stand-alone structures or built inside an existing structure. Most of these buildings are made from lightweight and high strength steel or aluminum.

Apart from structural advantages, a portable modular building offers other benefits such as low cost, quick possession, customized quality, extension and rearrangement. The most significant advantage offered by these buildings is that, they can be assembled in a very short period. This is due to the planned, design blueprint used for building these structures. Building designs are lab tested before they are cleared for final production. This enhances quality and reduces manufacturing time and the cost.

It is important to be definite about specific requirements. National and local construction standards must be followed during the installation of modular or pre-fabricated structures. The type of foundation laid during the installation process, should comply with locally prescribed model construction codes. The use of portable modular buildings will only increase in the coming years. According to research, more than 75 percent of all building constructions will use some form of pre-fabrication, within the next 10 years.

## Portable Commercial Buildings

Portable commercial buildings consist of different components. They are prefabricated in a factory environment and assembled onsite. Components used in these buildings are manufactured according to design specifications provided. They are then delivered to preplanned building sites for installation.

A portable commercial building can be customized to include different components such as walls, floor tiles, windows, plumbing, electrical wiring, heating and cooling systems. A portable commercial building refers to any building or structure that is pre- fabricated in a factory environment.

Portable commercial buildings are very different from conventional steel and concrete buildings. These structures are very versatile and are available in different shapes and sizes. They can be used for a variety of purposes such as office spaces, warehouses and manufacturing units. They can be used as temporary spaces or as a permanent facility. The basic framework of most commercial buildings is made from lightweight and high strength steel or aluminum.

Apart from the structural advantages, a portable commercial building offers other benefits, such as low cost, quick possession, better quality, extension and relocation. The most significant advantage offered by these buildings is that they can be assembled in a very short span of time, unlike permanent buildings. Each and every building design is tested in a laboratory before they are cleared for final production to enhance quality and reduce manufacturing time and cost.

Commercial users, such as corporate organizations, need to be sure of their requirements before selecting a particular type of portable modular building. It is important to follow the construction standards prescribed by government agencies, during the installation process. The demand for portable commercial buildings is expected to increase in the coming years. Market research indicates that more than three-fourth of all building constructions will use some type of portable construction within the next ten years.

## Portable Wood Buildings

Portable wood buildings are made from different types of wooden planks and plywood boards. They are prefabricated at a different location and assembled onsite. Portable steel buildings are used in industries as well as domestic households, for storing equipment. They can also be used as temporary workplaces, shelter rooms and security check posts.

These buildings are made from lightweight and high strength wood that ensures portability and long life. These buildings are designed to provide balance and can be lifted and transferred with the help of a forklift. The exterior is coated with weather resistant paint to provide protection against water and excessive sunlight that can damage the building.

The base of these buildings is made from pressure treated runners, placed on concrete blocks. Floor leveling is done with the help of pressure treated lumber and shingle scraps. The interiors can be designed according to the needs of the user. The floor is covered with thick plywood boards or vinyl floor tiles to give it a smooth finish. The building has openings for doors and windows, which can be fitted with metal, plastic or wooden doors and windows, as per the needs of the user. They can be customized to include fixtures and fittings for electrical wiring, telephone wiring and air conditioning. The walls and ceiling are covered with fire resistant material for added safety.

Portable wooden buildings are available in different standard sizes and can be customized according to user requirement. New doors and windows can be added to the framework and the existing door and window positions can be altered to suit different work environments.

Some manufacturers offer wooden homes as complete knocked down kits, which can be assembled onsite. Users, who want to avoid the hassles of assembling these kits, can take the help of trained personnel.