# Why level 4 pre-engineered steel buildings dominate the market today

Currently built in the traditional house style, losing billions of VND to have a beautiful house but not satisfied with the needs of customers. Because such investment is very costly and time consuming. So we will introduce some level 4 pre-engineered steel buildings with the cheapest and least time-consuming construction costs for you to consult.

What is prefabricated steel house? What is a level 4 pre-engineered steel house?

Pre-engineered steel buildings are houses made of steel structures and are fabricated and installed according to the designated architectural and technical drawings. The process of making a complete product (with a combination of inspection steps and quality management) is carried out in 3 main stages: Designing, processing components and erecting at the construction site. All steel structures can be produced in a synchronous manner and then put into construction sites in a short time.

Classification of pre-engineered steel buildings: There are four most typical pre-engineered steel buildings today:

- Industrial prefabricated house
- Civil prefabricated house
- Military prefabricated house
- Commercial prefabricated house

Pre-engineered steel house level 4 is a 1-storey civil prefabricated house with a design like a traditional grade 4 house but it is built with pillars made of prefabricated steel structure and installed according to the available drawings. to build a level 4 prefabricated house, it needs to go through 3 steps: designing, processing and assembling with the total floor area of prefabricated houses of level 4 below 1,000m2.



Characteristics of level 4 prefabricated houses to identify and identify

- The main components of the pre-fabricated cable house 4:
- +) Main frame (column, steel truss).
- +) Other minor structural components: purlin, beams ...
- +) Steel sheet forming.
- +) Corrugated roofing.
- Basic parameters to identify a pre-engineered 4 level house model:
- +) Width: depending on requirements, not limited. The width of the house is calculated from the outer edge of the wall to the outer edge of the wall of a level 4 pre-engineered steel house.
- +) Length: depending on requirements, not limited. The length of the house is calculated from the outer edge of the wall to the outer edge of the other wall of a level 4 pre-engineered steel house.
- +) Height: depending on requirements. The height of the house is calculated from the base of the pillar to the roof border (intersection between the roof and the wall of pre-engineered steel house level 4).
- +) Roof slope: The slope of the slope directly affects the drainage of rainwater on the roof of a preengineered steel house. 4. The roof slope is usually taken as i = 15%.
- +) Step column: is the distance between the vertical columns of pre-engineered steel buildings level 4,

determined based on the length of the house and the purpose of indoor use.

+) Load: impacts on buildings (self weight, roof load, wind load, crane load, floor load, usage load ...)

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#### Reason 1: No need for skilled workers

Prefabricated houses are constructed and installed quite simply. Just build according to technical drawings without considering many other factors. In addition, materials to build steel buildings also need only steel, brains, and some other auxiliary materials to easily build a level 4 pre-engineered steel house.

#### Reason 2: Short construction time

Unlike other buildings, it takes several months or even several years. But pre-engineered steel buildings, on the other hand, only need a few weeks or even a few days, so as human resources work urgently, it is possible to complete a level 4 pre-engineered steel building.

### Reason 3: High level of competition

As stated at the beginning of the article, an immutable principle is that, any product that has many competitors in the branch, the product is even lower. Because customers are sensitive about prices when they need to build pre-engineered steel buildings, any business unit with lower price is more attractive to customers.

The above are three main reasons for the pre-engineered steel buildings of level 4 as the first choice to save costs. The saving of materials in low-pressure areas of the main frame components has helped the level 4 prefabricated house. The price is cheaper than the normal steel house, especially the low-rise houses with the width of less than 60m and the height of the roof below 30m. On the other hand, the time for designing, manufacturing and erecting pre-engineered steel buildings at level 4 is greatly reduced due to the use of pre-designed linkages and predetermined materials.

In addition to saving costs, construction time, level 4 prefabricated houses also have some other advantages such as easy expansion of scale, high uniformity, maximum use space for effective performance. High, light weight compared to other materials reduces the load pressure for the frame

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