



# THE BASIC GLOSSARY

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## Prefab<sup>NZ</sup> OF PREFABRICATION

Call it prefab, offsite, modular or...

Here we make a start at demystifying the innovative design and construction world of the future.  
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A  
B



### block

Another term for a volume, module, pod or unit. It is a three-dimensional room-sized prebuilt piece.

C



### cartridge

Closed panel containing services, ducts, electrical conduits etc.



### cassette

A structural floor panel usually of steel or timber that may or may not contain services.



### chunk

A grouping of pre-formed materials into a complex component or module, prior to assembly at the construction site.



### CLT - Cross Laminated Timber

A generic name given to large structural building panels made from solid wood boards glued together in layers. Like plywood, CLT panels are very strong because the layers of boards run in opposing directions.



### closed panel

A panelised element that consists of framing with cladding or lining, or both. It may also include integrated services such as plumbing ducts and electrical conduits. See also open panel.



### complete buildings

*or complete building prefabrication*

Fully-finished volumetric construction. It is typically yard or factory finished internally (and possibly also externally), to make a single building or parts of a multi-unit building. In New Zealand, complete building prefabrication includes the traditional transportable housing industry.



### component-based or componentised

Components are relatively small scale items that are invariably assembled offsite, such as light fittings, windows, and door furniture. It includes structural members (trusses and frames), fittings, fixtures, and joinery that is cut, sized or shaped away from the site for assembly on site.



### custom building

Custom designed buildings, or custom-built on-site from “standard” materials with on-site labour-intensive processes.

D  
E  
F



### flat-pack

This is a collection of panels transported in one package to site. Refer to panelised prefabrication.

G  
H



### hybrid-based or hybridised prefabrication

Hybrid-based prefabrication is also referred to as semi-volumetric prefabrication. It consists of a mixture of volumetric or modular units and non-volumetric or panelised units (module plus panel). It may also include component and site-built elements.

I  
J  
K



### kit, kit-of-parts, or kitset

This is the set of components prepared away from the construction site which are then assembled on site. Refer to component-based prefabrication.

L  
M



### mobile home

This is an obsolete term for manufactured housing in the United States. Mobile or manufactured buildings incorporate their own chassis for transportation by road. A mobile home is manufactured away from site, and transported to the site in a largely completed state with minimal on-site labour. The mobile term is sometimes used incorrectly in New Zealand to refer to transportable dwellings that do not have a chassis.



### mod-lines

After a modular home has been set in place, or assembled on site, the joints between the modular volumes are finished. This is referred to as finishing the mod-lines. This work includes exterior cladding, interior linings and any joining of wiring, plumbing or mechanical systems.



### modular building

This is usually a building designed using three-dimensional volumes, units or pods. Sometimes it also refers to a building that is made up of standard materials in set sizes or 'modules'. A modular building meets local building codes and is permanently fixed to a foundation on site.

N  
O



### open panel

An open panel is a panelised element that consists of framing without cladding or lining. See also closed panel.

P



### panel-based or panelised

These are planar units that do not enclose usable space, such as panel systems and cladding panels. They may include windows, doors or integrated services, and are either open-framing or closed-in with cladding and/or lining. They are transported to site as flat-packs.



### pod

A pod is a non-structural volume. A utility pod contains bathroom, kitchen or laundry functions. The open-source UNIpod includes all three functions. Refer to volumetric prefabrication.



### portable building

Portable buildings are generally those intended for short-term temporary applications such as utilities at events or site offices. Portable housing infers a small dwelling such as a cabin, studio or sleep-out. It is a commonly misused term, and the term transportable is more applicable to permanent housing. Both portable and mobile terms infer a temporary lifespan and lower quality.



### pre-

This prefix indicates any work that is carried out away from site. The specific type of work follows the prefix. For example, "pre-engineered" or "pre-assembled".



### pre-cut, pre-sized or pre-shaped

This refers to materials that are cut, sized or shaped away from site for assembly at the site. Refer to component-based prefabrication.



### prefab, prefabricated or offsite

This term is wide open to interpretation but generally refers to on-site assembly from pre-built components. The components are either generally available when the structure is designed or they are created specifically for the project or designed for reproduction.



### pre-nailed

This refers to complex components of materials that are cut, sized or shaped and joined together using nail-plate technology. Nail-plate technology comprises engineering software, computer-controlled cutting machinery, and steel plate fasteners. It is a technique commonly used for roof trusses and wall framing in traditional New Zealand housing construction.



### PMC - Permanent Modular Construction

This is a North American term for a building made up of three-dimensional structural volumes or modules fixed to a foundation for long-term use.

Q  
R  
S



### semi-volumetric prefabrication

This is an interchangeable term with hybrid prefabrication. Refer to hybrid prefabrication.



### setting

The process of setting a prefabricated house is the assembly at site of modular volumes transported by truck and positioned by crane. The final site-based work is construction to exposed joints between modules, or mod-lines. Refer to mod-lines.



### SIPs - Structurally Insulated Panels

Panels are typically made using expanded polystyrene (EPS), or polyisocyanurate rigid foam insulation sandwiched between two structural skins of metal or oriented strand board (OSB). SIPs are used as building panels for floors, walls and roofs in residential and commercial buildings.



### stick-based prefabrication

Stick prefabrication refers to lengths of timber which are pre-cut, pre-sized or pre-shaped puzzle-type pieces brought to site for assembly. Refer to componentised or pre-cut prefabrication.

T



### transportable building

Transportable buildings are newly built to order from a yard or factory in order to be moved to another location. Existing older buildings that are moved to a new location are known as relocatable. Refer to complete building.

U  
V



### volumetric

Volumetric prefabricated units enclose usable space and are then installed within or onto a building or structure. They are typically fully finished internally, such as toilet/bathroom pods or plant-rooms. Refer to pod.