

PANELISED BUILDING SYSTEM



Fast and affordable housing solutions

The natural solution for you.

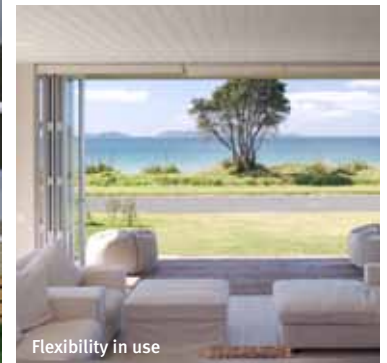




Flexibility in design



Flexibility in fit-out



Flexibility in use

Housing revolution

Builders can now build faster and smarter by using prefabricated panels. The new Panelised Building System™ (PBS™), developed by Carter Holt Harvey will change the way you think about housing design and construction. Cost effective PBS is readily available through accredited frame and truss fabricators.

Benefits

- Up to 40% faster construction time
- Suitable for slab on ground, raised subfloor and sloped site construction
- Flexibility in final finishes
- Lower on-site waste
- Easy installation and integration of services
- Available termite protected – Terminator 25 year guarantee* – for your peace of mind
- Reduction in need for skilled labour
- Panels sourced by builders through existing frame and truss fabricators
- Engineered system utilising quality Carter Holt Harvey products

Saving time and money

The lengthy time taken to construct residential homes in Australia using conventional building systems such as brick veneer is one of the most important challenges facing the housing market today. After all time costs money. Delays associated with conventional on-site construction methods include the lack of availability of trades and weather delays. Both can be major impediments to improving housing affordability.

In response to this, Carter Holt Harvey, Australia's largest wood products supplier, has developed the Panelised Building System (PBS), which consists of cost-competitive, lightweight and strong prefabricated building elements. Panels utilise well known, trusted and durable Carter Holt Harvey products such as ECOply® structural plywood, SHADOWclad® plywood cladding and LASERframe® structural framing.

PBS solutions are especially suited for construction in remote and regional areas. PBS could also be used to build faster in metropolitan areas and for high performance floor systems in residential two storey houses.

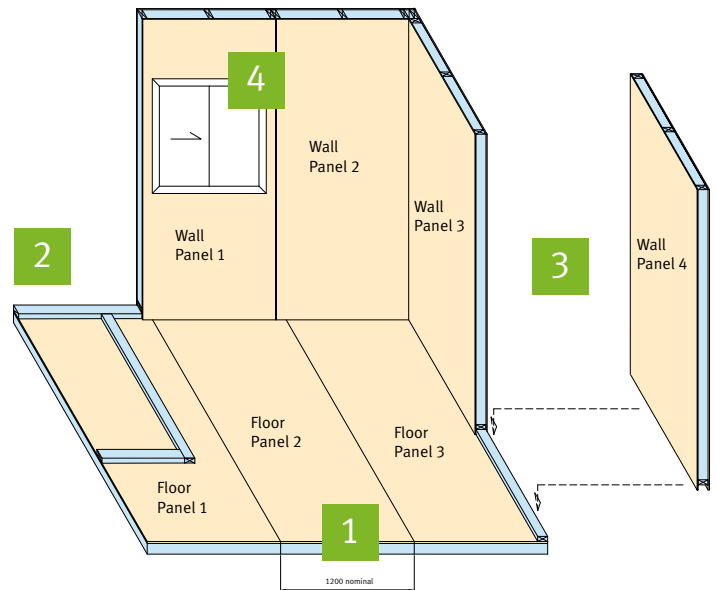
This building system is an important step in the journey to improve housing affordability.



* The guarantee is provided by the chemical supplier for the benefit of the property owner. It is a limited and conditional guarantee covering the provision of replacement product in Australia. The full terms and conditions are available at www.chhwoodproducts.com.au/guarantees

The main design elements of a PBS house:

1. Floor panels
2. Bottom plate
3. Walls panels
4. Pre-installed openings (optional)
5. Ceiling panels
6. Conventional trussed roof
7. Final finish on outside (optional)



PBS – the pieces of a perfect puzzle

PBS is a construction system which allows for faster, easier on-site construction. The system consists of standard prefabricated panels that can be effectively locked together on-site in an endless number of combinations.

Small panels (2.7 m high x 1.2 m wide):

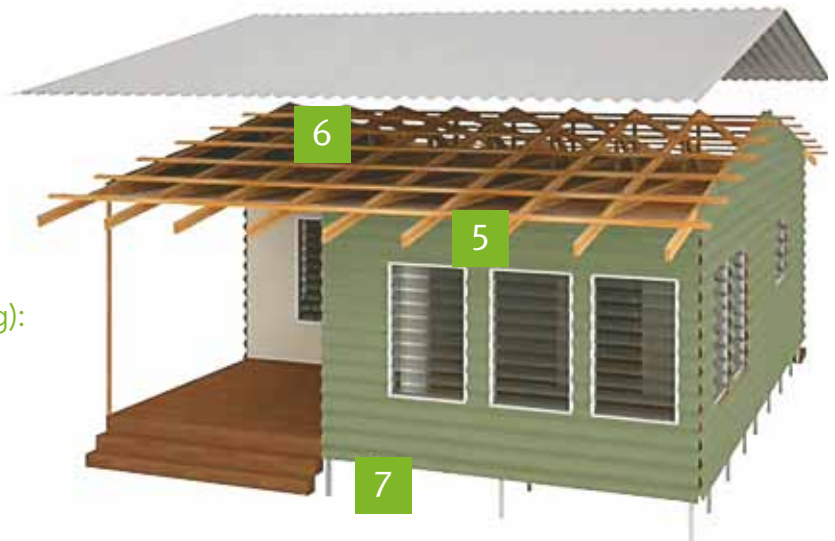
- Able to be constructed by two people
- No specialised lifting equipment required

Large panels (2.7 m high x 6 m long):

- Used where crane access is available
- Allows faster build time to lock-up

Large floor panels (2.4 m wide x 10 m long):

- Easy build floor solutions for residential applications
- Instant working platform assists to reduce OHS issues
- Stiffer floor system (integrating composite action)



Finish and Insulation

Internal lining specifications depend on the client and level of finish required. An enclosed panel with BD ECOply internally provides a suitable surface for a high grade paint finish. To match common residential construction the panels can be supplied as an open system for plasterboard installation on site.

External lining can be supplied with SHADOWclad plywood cladding, or bracing ply to get to lock-up, which is then covered with a proprietary cladding system.

Insulation is installed to required levels within the panels to provide the same energy rating levels as with standard construction, and to meet BCA requirements.

Services (electrical & plumbing):

Where panels are lined on both sides, services are easily incorporated by:

- Easy feed electrical as there are no noggings in wall panels
- Internal lining simplifies electrical installation – just drill and screw power points to plywood
- Option for ‘chaser wires’ to be installed to simplify on-site work
- Plumbing installed through removable access sheets



Image courtesy of Bléuscape Design

Design Flexibility

PBS solutions offer cost effective, efficient construction options yet still provide architects and building designers design flexibility and freedom. From basic low cost structures, through to townhouse developments and high-end homes, the possibilities are endless.

Design support

To obtain the full benefit of PBS, consultation with the Carter Holt Harvey technical development team in the early design stage is recommended. Together with an architect, designer or draftsman, our team can advise on material selection, design parameters, and other cost saving measures. See the Carter Holt Harvey PBS design guide to maximise the efficiency of PBS in your project.

Engineering

PBS solutions are engineered to ensure that they comply with the BCA. This is achieved in all wind zones, including the cyclonic areas in the northern regions of Australia. The PBS solution is an engineered system for use with Carter Holt Harvey products only. The use of any non approved wood products in the manufacture invalidates any engineering or fabrication certification by Carter Holt Harvey.

PBS Fabrication

Carter Holt Harvey is in the process of developing a network of accredited fabricators to manufacture PBS panels. The tolerances required to ensure correct assembly, along with quality and material checks, are part of this accreditation. Accredited fabricators can be found by contacting Carter Holt Harvey on ☎ **1800 808 131**.

This project was supported by funding from the Australian Government Department of Agriculture, Fisheries and Forestry under its Forestry Industries Development Fund program.

Available from:

Technical Support

☎ **1800 808 131**

chwoodproducts.com.au/pbs

 **CarterHoltHarvey**
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