

# **CASSETTE FLOORING**

YOUR NEXT STEP IN PREFAB

#### Building is starting to undergo a mini-revolution...

It began in mid-rise commercial construction when builders aimed to speed up erection time on site. The best way to do this is through pre-fabrication in a factory. When in a controlled environment, quality improves, weather delays decrease and you can stockpile a building ready for fast assembly.

The residential market is now following, and floor systems are an ideal starting point. Flooring cassettes form instant working platforms to give WHS/OHS advantages, speed up construction and increase build quality.

Many projects, both houses and low-rise, will benefit from using floor cassettes. Each situation is different and Meyer Timber® has the expertise to make your project a success. We partner with your preferred Frame and Truss Plant or Timber Merchant for delivery. Stay ahead of the competition – give Meyer Timber® a call to discuss your next step in prefab.



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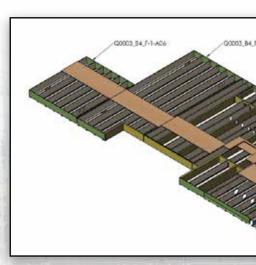
## **HOW IT WORKS**

### DESIGN

- Documents provided by the builder are architectural drawings and engineering drawings as for a standard floor system.
- Meyer Timber® completes the cassette floor design in 3D using high-end CAD/CAM software.
- The designer optimises the panel layout for installation speed and ease of transport.
- In addition, holes for AC ducting and/or plumbing can be included.
- Meyer Timber® prepares both manufacturing drawings and overall layouts showing the install sequence for carpenters on site.

#### **MANUFACTURE**

- The design software exports directly to a Hundegger Turbo-drive saw allowing all timber members to be precision cut including service holes.
- The various joists and beams are then locked into position on the Meyer Timber® floor fabrication jig.
- Floor sheets are bonded to the joists using a polyurethane adhesive. This allows the flooring to act as a stressed skin rather than moving independently of the joists and can increase stiffness by up to 40%.
- Fabrication of floors in the factory environment allows for higher levels of speed and precision than is possible on the worksite. Every panel goes through rigorous quality checks.

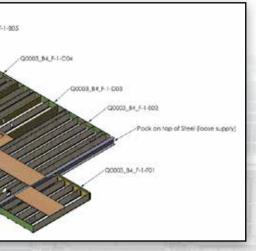


















#### **INSTALLATION**

- Panels are lifted into position by crane. Safe lifting points are built into each cassette. The lifting screw/hook combination is an engineered system for peace of mind.
- Panels arrive stacked in a logical order to maximise install speed.
- Depending on space constraints for a particular site, panels can be craned directly from the delivery vehicle or un-loaded to be installed later.
- All materials required to complete the installation are provided; any loose beams, flooring glue and screws for fixing off.
- The floor provides an instant working platform. The first-floor frames can be lifted up straight away to maximise the use of the crane.
- Meyer Timber® provides on-site training and support to carpenter crews.

#### **CONSIDERATIONS**

- Repeatability. Cassette floors are more cost effective when there are more identical panels. House or unit designs which are repeated are ideal.
- Ease of Transport. Panels need to fit easily onto a truck. Typical max widths are either 2.4m or 2.7m to fit in with common sheet flooring sizes.
- Number of lifts. Large sites in particular are measured by "crane time" so reducing the number of panels is the most cost-effective solution.
- Overall weight. Small panels that can be man handled are still extremely quick to install and may be necessary on sites with difficult access.
- Components are usually existing materials such as I-Joist, LVL and OSB so optimisation of these may affect the final layout.



#### **BENEFITS**

**Installation speed.** Typical residential floors can be installed in under an hour. The limiting factor is generally how fast the crane can drop them in!

**No waste.** No more joist and flooring offcuts.

Quality. Manufacture in the controlled factory environment allows for high levels of precision and quality.

**Structural benefits.** Cassette floors are up to 40% stiffer than conventional floors. Pre-cut service holes preserve the integrity of the joists.

**Easier service coordination.** Optional holes for AC and/or plumbing make life easier for the trades.

Cost savings. Reduced site costs and overheads. Construction speed means builders get paid earlier.





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