



# Eco Vative Panels

Ecovative panels Modular Precast Building Systems are a modern versatile innovative product, for use in industrial, commercial, residential, educational or healthcare facilities. The modular system offers a wide range of construction options to suit all budgets.

# **Product List**

Product	Description
Eco801Wall	80mm Cladding Panel
Eco802Wall	80mm Dividing Wall Panel
Eco1501Wall	150mm External Wall Panel
Eco1502Wall	150mm External Wall Panel With Service Holes
Eco1301Roof	150mm External Roof Panel
Eco1302Roof	150mm External Roof Panel with Service Holes
Eco1303Roof	150mm External Roof Panel with Waterproof Membrane
Eco1304Roof	150mm External Roof Panel with Waterproof Membrane and Service Holes
Eco1501Floor	150mm Floor Base Panel
Eco2601Floor	260mm Multi level Floor Panel
Eco150Fence`	150mm Thick Fence Panel
Eco150Retainer	150mm Retainer wall Panel with External reinforcing Membrane
Eco150Pool	150mm Pool Panel with Waterproof Membrane

# Product Application Description

### Eco801Wall

The panel is ideal for light structural applications such as cabin and donga walls, short roof spans and as a cladding system applied to a sub frame for traditional out of date building systems. These panels offer a low cost solution for renovating and cladding.

### Eco802Wall

The increased strength of this panel is engineered for an internal application as a dividing load bearing wall panel. The panel can also be used as an exterior load bearing panel on small scale building projects.

# Eco1501Wall

The Eco1501 Panel provides an R-value of 8+. This panel has been designed as a roofing and wall system and can span large lengths when installed correctly with the Ecovative Homes prefabricated system. This panel can also be used as an internal dividing system or as an external system for single and multi storey projects.

### Eco1502Wall

Has the same properties as the ECO1501 External Panel but is equipped with service holes making it easier for onsite contractors to connect services.

### Eco1301Roof

This roof panel has high insulation properties and at 130mm thick, this panel only weighs 48kg per square metre.

### Eco1302Roof

The light weight insulated panel is fully equipped with service holes to easily install lights at any location. This is a perfect option for situations where no internal lining is required.

#### Eco1303Roof

The Eco1303Roof Panels are pre coated with a special grade of waterproofing membrane.

### Eco1304Roof

Specially coated waterproof membrane is pre-coated at the factory and fully equipped with service holes.

### Eco1501Floor

This floor panel is primarily used for cabins and house floors. Manufactured with special reinforced sections and lifting points as required. Only weighing 111Kg per square metre, this light durable panel can take the load of the building and is easily transported and moved due to its light weight.

#### Eco2601Floor

Used for flooring, these panels have been designed and engineered to take the load. Manufactured with special reinforced points, makes this panel ideal for ground level and multi level floors.

### Eco150Fence

This unique fencing panel with high acoustic properties is easy and fast to install. An ideal option for areas where machinery and footings are difficult to achieve this system is equivalent to the look of a normal block fence. Each 1.8x1.2 panel weighs only 60kg each and can be finished with complimentary moulded capping and columns from Ozzyform Industries moulding range. Decorative Finishes are available stone, brick etc.

#### Eco1503Retainer

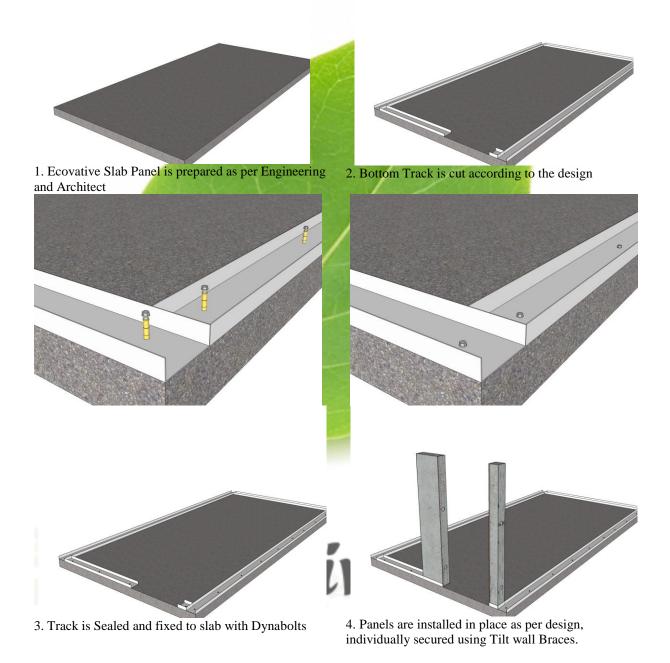
"Hold back the dirt!" With this engineered system the reinforced and waterproof panel can be installed fast, easily and cost effectively. A variety of Finishes to choose from e.g. Rock walls, timber, etc.

# Eco1503Pool

Build a modular pool with the Eco10503Pool Panel and "keep the heat in with heated pools". This highly insulated waterproof panel is coated with a special flexible membrane. Panels can be flat packed and installed onsite or preassembled at the factory and delivered onsite. Suitable for large and small pools!



# **Assembly**

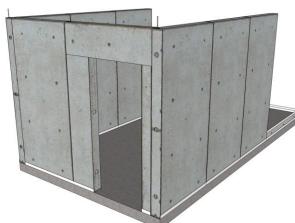




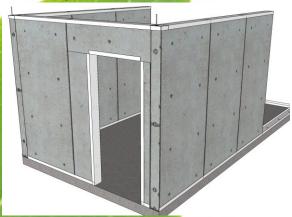
5. Lintels are put in place



7. Bottom access holes on the panel are used to Chemset the Cyclone Rods



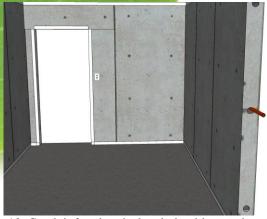
6. Cyclone Tie down rods are installed



8. Top cap, Door surrounds and window surround track is seal and installed.

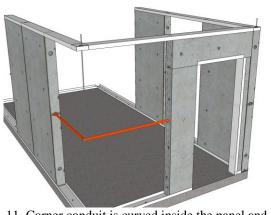


9. Cyclone Rods Are fastened with nut and washer

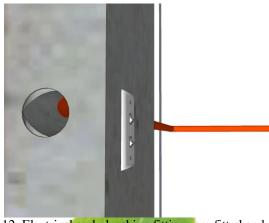


10. Conduit for electrical and plumbing are installed.

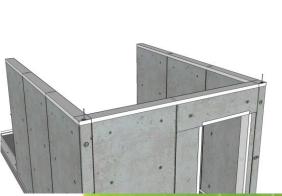




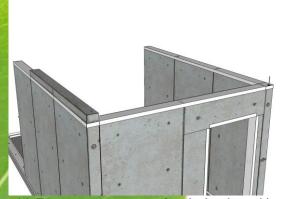
11. Corner conduit is curved inside the panel and can still be accessed externally at this stage.



12. Electrical and plumbing fittings are fitted and connected.



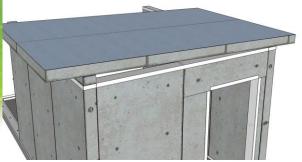
13. Ready for Roof Install



14. Top precast component is calculated to achieve required slope attached to panel.



15. Roof Panels are fastened using 170mm TEX

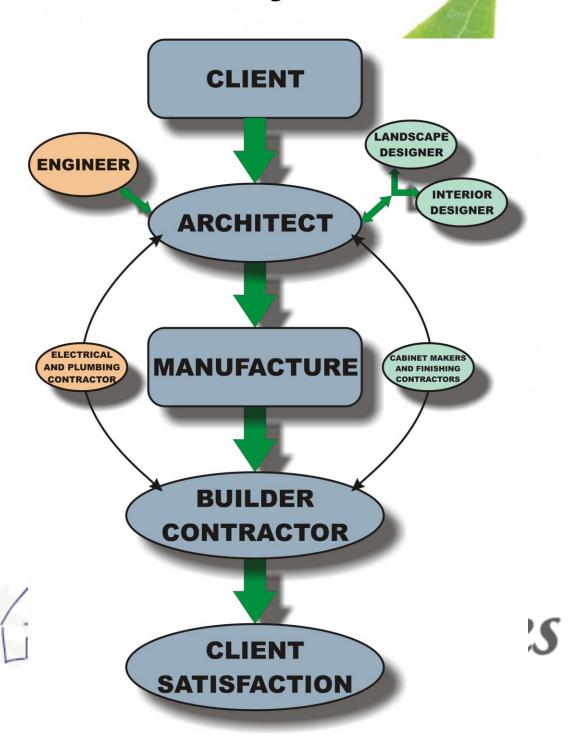


16. Ozzyform Waterproofing Membrane is applied.



# Eco Vative Panels

# **Processing Schedule**







# **Product Benefits**

90% of Ecovative Homes construction is manufactured off-site thus minimising the cost and the construction activity onsite together with the associated disruptions and risk of that work to the tenants and neighbours.

Using the Ecovative Modular panel building system has great benefits on small and large scale projects. As the panels are constructed in a controlled factory environment, we reduce waste through more precise construction techniques, inventory control and avoiding damage to materials. A significant reduction to the construction timeline of a building is achieved as there are no weather delays and multiple buildings can be produced simultaneously.

Improvements to site safety are greatly increased due to the removal of a large portion of construction activity.

Manufacturing design and procurement techniques can be applied to achieve better results than onsite construction due to the scale of repetition. As a result, Manufacturing is more efficient, reliable and cost effective.

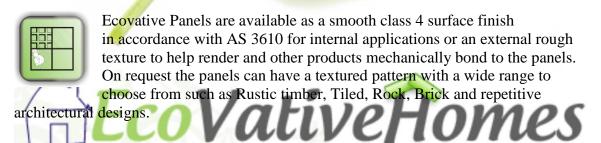
# **Ecovative Panel Characteristics**

#### Flexible and Accessible



Service holes of 60dia and 35dia (depending on panel size and application) are placed at 5 locations on the panel giving enough space to run power and water at ground level, Mid-level, roof level and vertically on either side. Refer to fig 1.1 of the product data sheets for locations. Any size panel can be manufactured. The size of Ecovative panels will be primarily determined by architectural design considerations allowing for design flexibility.

### Finish textures



### **Thermal Energy efficient and Acoustic**



The core is an excellent form of sound insulation. This is achieved by reflecting and absorbing the energy of the sound waves and acts as a damping sound baffle. The thermal conduction and heat transfer is reduced by the Polystyrene Core. EcovativeHomes roof, wall and floor system have superior insulating properties creating a uniform temperature throughout the

living space. After the Ecovative panels are installed and fully sealed they act as a thermal battery keeping the house cool in summer and warm in winter. With no heating or cooling the ambient temperature will remain comfortable all year round.

# **Durability and Longevity**



The characteristics of the precast concrete properties give Ecovative panels much higher resistance against damage caused by fire, Extreme weather conditions, abrasion resistance, permeability, chemical attacks etc. Ecovative panels have inherent fire containment characteristics which add safety and security. This should improve insurance rates and mortgage approvals.

### Fire and Safety



The Expanded polystyrene core contains fire retardant material and will not support combustion. The concrete contains no combustible products and will not support flames.

## **Environmental Impact**



EcovativeHomes offers an environmentally friendly alternative to other building systems on the market and greatly reduces the impact on the environment by using less concrete. Ecovative panels Manufacturing plant has an ongoing research and development program, monitoring and testing. Waste management and recycling programme. Ecovative Panels are

produced efficiently with no pollutants and results in minimal waste with simple disposal solutions. The high insulation values of our buildings reduce the amount of energy required for heating and cooling saving our customers money and saving the environment. All components of our building system are 100% recyclable materials. The Ecovative Panel weighs 85% less than the equivalent concrete panel reducing CO2 emissions caused from concrete manufacture by 85%.

# **Quality Control**



The Ecovative panels system undergoes an intensive quality control procedure by an independent company to ensure all our products are above standards before leaving the factory. Our onsite lab enables us to ensure that all products are accurately tested and reported for consistent quality.

Certified production, Rigorous semi-annual independent inspections ensure uniform and consistent appearance and tolerances, as well as low long-term maintenance.





#### Australian owned and manufactured

EcovativeHomes is a 100% Australian owned company. All our products are manufactured here in Australia and 100% of raw materials are sourced from Australian companies.

### **Economical**



Sustainable Ecovative Panels are plant-produced in standard/custom designs. Cost and material savings in structural material consumption and natural resources can be realized through controlled production controlled factory conditions. Less labour intensive than traditional systems. Fast completion times make the Ecovative panel system more economical for

Australian families.

### **Speed**



Ecovative precast panels offer benefits Unmatched by tilt-up panels. The innovative advantages Result from the factory-controlled conditions under which they are cast and the speed with which they can be delivered and erected on site. Approx. 120 lineal meters/day can be achieved with a basic crew. Precast panels ensure schedule delays are minimized, site congestion

and safety concerns are alleviated, post-erection fireproofing is eliminated, interim financing costs are reduced and contractor risk is reduced.

# Weatherproof



Ecovative panel Precast concrete is resistant to rain penetration, flood damage and windblown debris. It can also withstand many winters of freeze-thaw cycles unlike other materials, which can deteriorate quickly with such regular exposure to expansion and contraction.

## Wi-Fi Compatible



With homes and offices increasingly wired for information technology, it is good news that precast concrete buildings do not interfere with radio signals, local Wi-Fi or internet networks. This makes precast the most technology-friendly material for homes and places of work.