# WALL SYSTEMS

Solid, continuous concrete walling can be manufactured and constructed with great accuracy, saving time and hassles when it comes to on-site installation. There is no risk of concrete walls rotting or being damaged by termites and because of its inherent durability, concrete walling requires minimal maintenance over the lifetime of your home.

### **BENEFITS**



### **SPEED OF INSTALLATION**

Prefabricated panels or insulating formwork walls can greatly reduce construction time, enabling you to fast-track to lock-up and completion



#### **EXCELLENT ACOUSTICS**

Solid concrete walls help reduce noise entering your home, an important consideration as urban housing densities increase



#### SOLID, SECURE, LOW Maintenance

Concrete walls create a strong, airtight envelope around your home, protecting you and your family from the worst of the elements



#### **BENEFITS FOR BUILDERS**

Speed of construction - contractors can complete the walls for a single-storey house quickly



#### **THERMAL PERFORMANCE**

Thermal mass of concrete walling contributes to an even, comfortable temperature distribution in the home throughout the year



#### **BENEFITS FOR HOMEOWNERS**

Safe and secure – provides long term resistance to natural disasters such as floods, cyclones and bushfires



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### **INSULATING CONCRETE FORMS**

### Insulating concrete forms (ICFs) are a type of permanent form work used in the construction of concrete walls

Unlike normal formwork that is stripped away once the wall has hardened, ICFs stay in place as a permanent part of the wall assembly, providing an additional layer of thermal insulation as well as a barrier against air and sound transmission. ICFs come in two basic configurations - hollow-core blocks that stack and interlock, and individual panels or planks that connect with plastic or steel ties. Steel reinforcing is used to ensure the overall structural integrity of the finished concrete wall.

### **PRECAST CONCRETE PANELS**

#### Precast panels are manufactured off-site in a controlled factory processby pouring concrete into moulds. The hardened panels are then transported to site and installed as external and internal structural walling

The advantage of precasting is that it allows for a high degree of precision and finish quality. An insulation layer can also be incorporated into the panels to provide even better thermal performance in exterior walling applications. Precast panels have long been popular for the construction of commercial buildings. But increasingly, home designers, builders and owners are turning to precast panels to take advantage of the speed of construction and resulting cost savings.

## **PERMANENT FORMWORK**

As its name suggests, formwork is used to 'form up' a wall on site before concrete is poured. It effectively acts as a mould to shape and support the concrete until it is strong enough to carry its own weight

Sometimes the formwork is left in place after the concrete has hardened. This is known as permanent formwork. The use of permanent formwork reduces overall construction time, and is particularly useful in situations where it's difficult to remove the formwork because of access restrictions.

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