

DOUBLE WALL

product brochure

PRECAST PERMANENT FORMWORK SYSTEM FACILITATING MONOLITHIC CONSTRUCTION

Austral Precast Double Wall consists of a pair of precast reinforced concrete shells connected by lattice reinforcement trusses to form a cavity that is core filled once installed on site. Double Wall enables greater savings in installation costs and time while adding monolithic design advantages to the many other benefits of the Austral Precast whole of structure offer.

With the quality advantages of class 2 concrete finishes to both faces and production in Austral Precast's automated precast manufacturing facilities, Double Wall is a convincing argument.

Features and benefits

- An excellent solution for any load bearing wall including basements, shafts, core walls, and other functional walls.
- Double Wall can be supplied in varying overall wall thicknesses from 180mm to 400mm depending on the structure and loading requirements.
- Both faces of each Double Wall panel are cast to a class 2 finish.
- Installation efficiency is achieved due to relatively large and light weight panels and the reduced effort required for jointing, welding and formwork.
- Can be installed with smaller capacity cranes than traditional solid wall precast due to the reduced weight of the hollow wall.
- Can be integrated with Austral Precast's flooring and column solutions for simultaneous whole of structure construction.

An efficient permanent structural formwork

- Precast concrete solution replacing conventional cast in situ construction.
- Double Wall forms a monolithic, reinforced concrete structure after the cavity is filled with premixed concrete.
- Suitable for walls with high engineering performance requirements such as core, shear and retaining walls.
- An efficient solution for boundary or basement walls with restricted access.
- Minimal excavation required when employed as a retaining wall. This offers cost and time savings when compared to conventional retaining walls or soil reinforced walls.
- Eliminates the need for welded or bolted panel to panel connections.

Suitable for construction where watertightness is essential

- Suitable for tanks and other liquid retention applications.
- Withstand water hydraulic pressure up to 0.2MPa (20m water head).
- Water tightness is maintained by the properties of the Double Wall and installation techniques (See Double Wall Technical Guide for reference).
- Meets relevant Australian Standard AS 3735 – 2001 Concrete structures for retaining liquids.

Superior fire and combustibility performance

- Precast concrete panels are highly fire resistant and are non-combustible. The fire resistance level is determined by the thickness of the wall as specified in AS3600-2018.



APPLICATIONS

Double Wall has many applications including

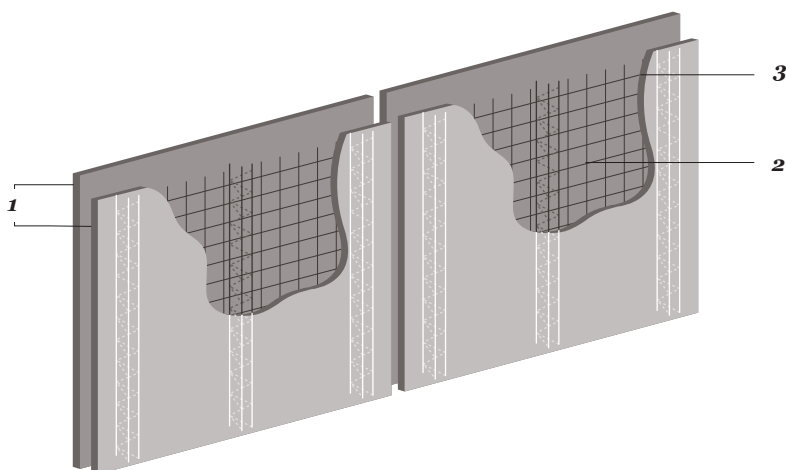
- Façade and Cladding.
- Load bearing and shear wall structural elements.
- Stair and lift shafts.
- Functional partitions providing privacy between building spaces and the outside environment.
- Retaining walls for basement and soil retaining.
- Noise barriers.
- Fire and blast control and barrier.
- Concrete liquid retaining structures/tanks.

Double Wall solutions combined with Austral Deck offer a unique construction solution to build

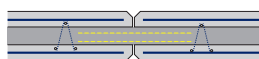
- Multi level residential and commercial complexes.
- Education Institutes: Schools, Universities and Libraries.
- Industrial Warehouses.
- Accommodation Facilities: Hotels, Health, Aged Care Correctional Facilities.
- Health Care Institutions.
- Recreation Centres: Cinemas, Theatres, Community, Centres and Clubs.
- Infrastructure and Transport Sector: Tunnels, Railway Stations, Airports.

FACTORY MANUFACTURED COMPONENTS

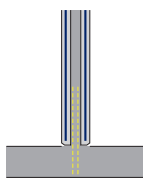
- 1** Precast Concrete Shells
- 2** Steel Reinforcement
- 3** Steel Lattice Girder



Double Wall



Plan view



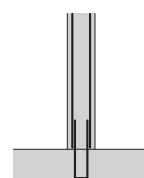
Section view

- Precast steel
- Site placed steel
- Precast concrete shells
- Site placed concrete core fill

Conventional Pour In Situ Wall



Plan view



Section view



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Proud Supporters



Austral Precast is part of the Brickworks Group

The product images in our brochures give a general indication of colour for your preliminary selection.

We also recommend you view current product samples before making your final decision.

Austral Precast is proudly ISO 9001 compliance standard accredited.