

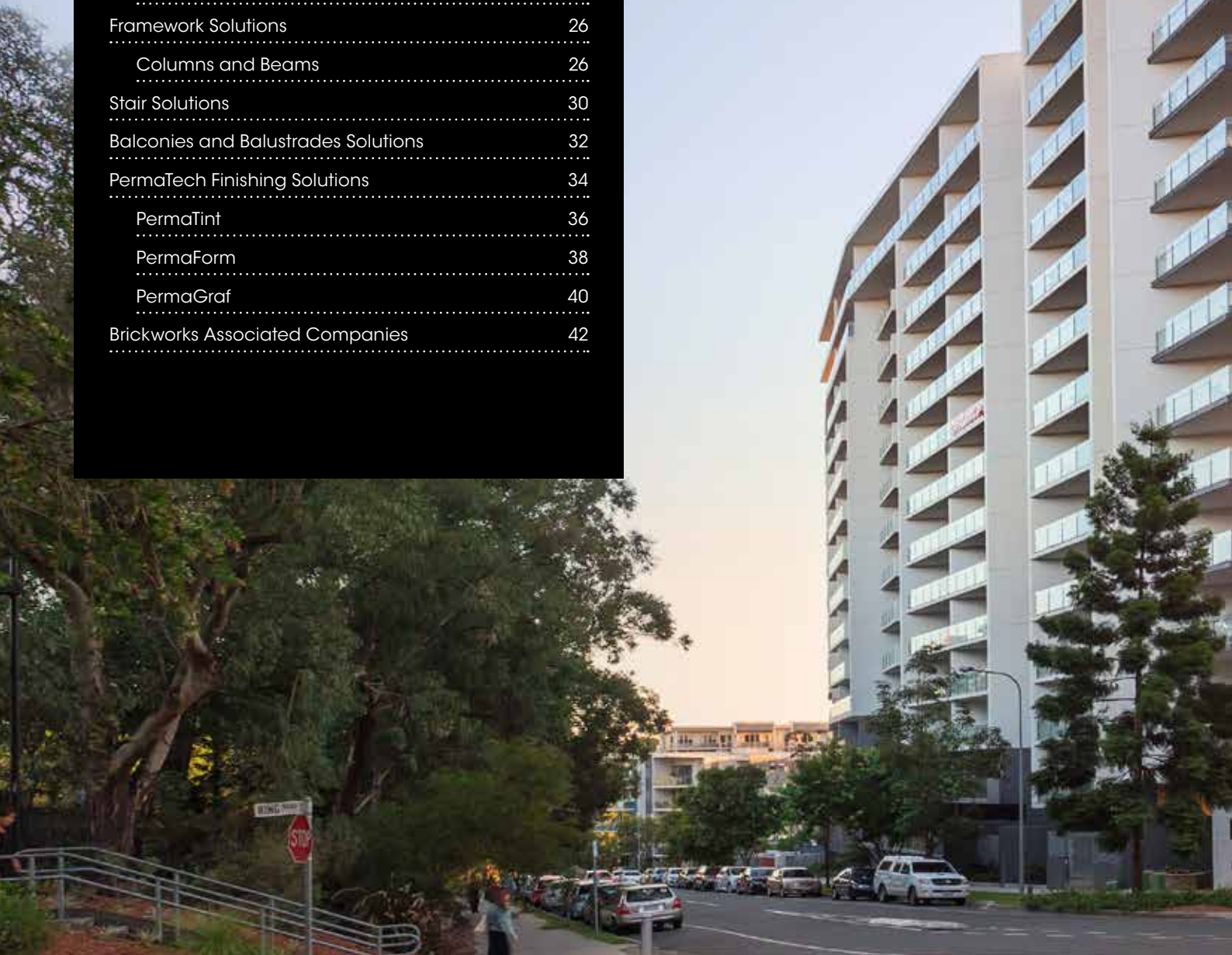
Austral Precast

Building solutions

precast.
build faster,
build smarter,
build better.

Contents

Why Austral Precast ?	4
Benefits of Precast	6
Whole of Structure Precast	8
Whole of Structure Double Wall and Austral Deck	14
Whole of Structure Solid Wall and Austral Deck	16
Walling solutions	18
Solid Wall	18
Double Wall	20
Flooring Solutions	22
Austral Deck	24
Framework Solutions	26
Columns and Beams	26
Stair Solutions	30
Balconies and Balustrades Solutions	32
PermaTech Finishing Solutions	34
PermaTint	36
PermaForm	38
PermaGraf	40
Brickworks Associated Companies	42





Austral Precast

Australia's leading
provider of
Whole of Structure
precast concrete
building solutions.

As part of the Brickworks Building Products Group, our goal is simple, to be Australia's best building products company.

At Austral Precast we believe there is no substitute for quality. That the building material choices you make should not only look great, but stand the test of time. We believe in taking the complex and making it simple.

This belief has placed us in pursuit to be Australia's leading provider of precast concrete building solutions. Austral Precast's relentless focus on, and continued investment in state of the art production facilities is part of what had made us Australia's leading provider of precast concrete building solutions.

We are focused and determined to continuing this journey with research, development and investment sharply focused on solutions enabling the construction industry to build faster, build better and build smarter.

A leader in design
and manufacture
of building products



Why Austral Precast?

World-class style is built on attention to detail, so we're proud of our relentless focus on the use of advanced technology, quality control and commitment to service.

National Capability

Austral Precast is Australia's leading provider of high quality and innovative, customisable precast concrete product solutions.

Operating from four plants located across Australia, using state of the art technology, production techniques and systems, Austral Precast produces a diversified range of customised walling, flooring, framework, stair, balcony, and client specific precast solutions. We take pride in our ability to exceed the expectations of our customers and partnering with them to find solutions that meet their needs.

Your Market

We service a range of markets including; multi-residential, commercial, industrial, community and civil sectors. Austral Precast offers a full product and service package with the ability to design, detail and manufacture a diverse range of precast products and provide industry leading installation services.

A One Stop Shop

We offer everything from: walling, flooring, balconies, stairs, columns, beams, decking, noise barriers, retaining walls, and a collection of finishing solutions to ensure design and creative flexibility.

Advanced 3D Modelling Technology

We build your project in 3 dimensions with startling accuracy. This enables us to identify any potential construction issues that may occur in the design phase so they can be quickly overcome and ensure a seamless construction process.

Modern Production Facilities

At Austral Precast we believe the best results are achieved with the best people using the latest technology and tools. For this reason we invest regularly in upgrading our infrastructure to ensure our customers receive quality product and with a smooth construction process.

A Leader in Precast Building Solutions

Our in-house detailing team are composed of industry experts with qualifications in engineering, architecture, detailing and design. Our team are able to work with, understand and deliver purposeful solutions, identifying the most economical means of constructing your project.

Benefits of Precast

A Cost Effective Construction Option

Significant cost savings are realised through areas such as:

- Manufacture of precast elements concurrent with commencement of early site work.
- Expedited construction
- Reduce time on site
- Reduces site defects
- Reduces propping and scaffolding costs
- Lower site labour cost
- Reduce plant, amenities, tools and materials storage on site.
- Minimise finance cost resulting from reduced build time.
- Earlier revenue receipts because of shorter project times.
- Once precast installation starts, on-site construction and off-site manufacturing can be overlapped, thereby reducing overall site construction time.
- The continued, uninterrupted erection of precast structural components lends itself perfectly to fast track construction schedules.
- Installation incorporates the latest in connection technology, and can proceed swiftly and safely in almost any weather by expert erectors.
- Concrete curing time will not affect project time. Most precast products are trafficable after installation.

Meeting OH&S Requirements and Contribute to On Site Safety

- Most precast products are accessible and trafficable providing safe access to the next part of the construction site.
- Less onsite labour
- Onsite trades, labour and their associated activities are minimised
- Fire resistant
- Most precast products are installed directly from the truck into position without the need for scaffolding
- Safety can be improved onsite with less workers, equipment and material reducing site congestion.



Durable

- Precast concrete allows increased accuracy and consistent placement of reinforcement when compared to insitu construction. The accurate placement of reinforcement in precast concrete provides the same level of durability with nominal covers 5-10 mm less than are required with insitu construction.
- Precast offers the advantage of placing mature concrete into its in-service environment and loading. This benefit ensures that the concrete is at its best when exposed to aggressive loads. This is in comparison to insitu concrete which ages in the aggressive environment and is unable to immediately carry design loads. Insitu concrete therefore requires

propping and time to age to avoid creep under design load at early age causing permanent deflection in the structure.

Reduced Environmental Impact

- Recycled supplementary cementitious materials such as fly ash and blast furnace slag, silica fume, recycle aggregates and grey water can be incorporated into precast concrete. This diverts materials from landfill, reducing use of virgin materials and the overall environmental burden.
- On site, precast construction reduces air pollution, noise and debris.
- The high-quality finish of precast concrete means that it can be left

untreated and exposed, maximising concrete's thermal mass benefits and to contribute to green energy-management solutions.

- Controlled management of waste with production of precast concrete. Tight control of quantities of constituent material and precise mix proportions mean optimum use of material.
- Standard precast building elements are manufactured in moulds that are re-used many times.
- Any waste materials are more readily recycled because production is in one location.
- Site waste is also reduced as only the finished elements are delivered to the construction site.

PermaTech Finishing PermaTint

Remove the need for on-site painting with our PermaTint colouring solution offered with a 25 year guarantee.



Walling Solutions Solid Wall

Used as non load bearing cladding or load bearing structural elements.



PermaTech Finishing PermaGraf

For photo realistic designs created in concrete PermaGraf offers an ideal solution.



Walling Solutions Double Wall

With many unique advantages, Double Wall is a convincing structure for stairs, basement and retaining walls.



Stairs

Comprehensive range and configurations of precast stairs and shafts can be used immediately, removing the need for temporary access platforms and scaffold.



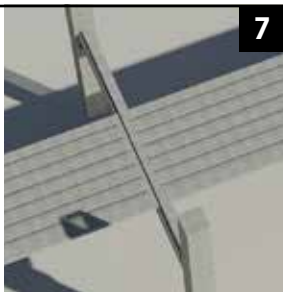
Flooring Solutions Austral Deck

Austral Deck is a revolutionary precast flooring solution eliminating the need for in situ formwork.



Framework Solutions

Beams are core framework elements that are used to provide lateral support between columns.



Framework Solutions

Columns are structural framework elements and can be used as architectural elements, especially when combined with PermaTech finishes.



Vitesse

Enabling the speed and ease of precast while retaining the aesthetic appeal and durability of bricks.

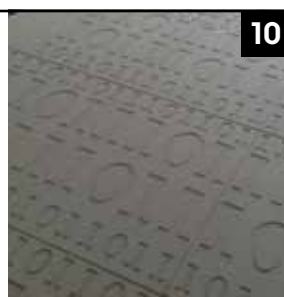


Whole of Structure Precast Solutions



PermaTech Finishing PermaForm

Create imprints, shapes, and designs formed in concrete with PermaForm.



Balconies

Premade with fittings included, and ready to be craned into position, precast balconies offer style and efficiency.



Whole of Structure Precast Solutions

Take the benefits of precast concrete to a whole new level, from walls, to floors, to stairs and framework, there is a precast alternative for the majority of your construction needs.

Discover the benefits of the Precast whole of structure building solution. Whole of structure Precast is a building system focused on increased construction speed, build quality, on site waste and administrative savings.

Comprehensive Range Solutions to Suit any Project.

Austral Precast is proud to offer a comprehensive range of Precast solutions for the construction of walls, floors, stairs, balconies, and structural elements. We service a range of markets and focus on multi-residential, commercial, industrial, community and civil sectors.

As an architect, our range offers you limitless creativity with results that will wow both your clients and peers alike. We believe the style choices you make when building a new project should stand the test of time. With our PermaTech finishing solutions and the durability of Precast concrete this is now possible.

For developers, Precast concrete offers high quality, low risk builds that come in on budget and time.

For engineers, Austral Precast's solutions are comprehensive, easy to design with and offering amazing efficiencies, a strong, safe, low risk and proven solution. Precast is fast becoming the building material of choice.

Solutions from one Source

Your One Stop Shop for Precast Solutions.

Austral Precast' clear focus on delivering whole of structure solutions is compelled by our comprehensive offering of Precast walls, floors, stairs, balconies and balustrades as well as structural columns and beams.

We believe in adding value to our customers utilising a collaborative approach through early engagement in the design process. Our expertise allows us to address design and construction challenges before construction commences along

with providing cost saving opportunities through efficient Precast design.

Offering concept design support, state of the art 3D design detailing software, manufacture, storage and installation, Austral Precast is your one stop shop for whole of structure Precast supply.

Cost Savings

Reduce Costs with Whole of Structure.

Precast concrete is a high performance construction material providing significant benefits in terms of quality, design, safety, construction efficiency, and project costs. It moves work offsite, greatly decreases waste, speeds up erection and reduced vulnerability to weather, all while providing significantly reduced site supervision, equipment hire and wage cost. A whole of structure project can provide up to a 35% reduction in construction time.



Whole of Structure Precast Solutions

Discover a range of building solutions

Walling Solutions

Suitable for use as a façade, functional wall or an ideal solution for structural load bearing applications. Solid Wall and Double Wall offers limitless creativity combined with a magnitude of functional construction advantages.

Façade and Cladding

Solid Wall Precast cladding offers all the benefits of precast concrete including thermal mass, sound insulation, longevity and cost efficiency. All this with the ability to use a range of finishes for a façade that suits your design style.

Load Bearing Structural Walls

Double Wall Precast concrete is the ideal solution for structural framework. A load bearing panel can eliminate the need for structural framing.

Flooring Solutions

Austral Deck - Permanent Formwork Solution

Austral Deck is a flexible solution designed to be installed with the entire range of Austral Precast Walling, Framework, Stairs and Balcony Solutions offering a complete precast building solution.

The solution can easily accommodate varied designs, shapes, thicknesses, penetrations and cast-in fittings.

The permanent formwork is an ideal and economic solution for

constructing concrete floors for single or multi level structures, concrete decks and platforms and to construct roofs and lids.

Framework Solutions Columns and Beams

Precast concrete columns and beams form the framework on and into which walls, floors, balconies and stairs can be attached to create the overall project envelope and create a whole of structure solution.

The Austral Precast framework solutions is an efficient and economical replacement to the cast in situ concrete or a steel structure frame.

The comprehensive range of austral precast framework solutions are designed to aid the construction of all building functions, single or multi level structures, various spans and to cater for a variety of applied loads.

Stairs Solutions

A comprehensive range and configuration of custom made precast stairs and stair shafts suit any application. A flexible solution with the ability to adjust the number of steps, rise, run and width of each stair flight.

Precast concrete stairs offer significant benefits during the construction phase of a project providing rapid installation and early safe access to subsequent floors for trades and materials.

Precast concrete stairs are the obvious choice for fire escape stairs. Precast stairs are particularly suitable to the construction of high traffic stairwells.

Providing safe vertical access between floors in multi level construction, precast stairs can be used in a range of projects including, multi level residential and commercial complexes, industrial and transport sector

Balcony and Balustrade Solutions

Like the rest of the structural precast range, balconies are designed to our clients' requirements. Our extensive experience ensures an excellent finish with careful detailing. Balconies can be designed, detailed and manufactured as plate floor elements, or solid precast elements.

Permatech Finishing Solutions

Ultimate precast concrete finishing solution, supplied prefinished with no further materials, labour or applications required, PermaTech can eliminate the need for onsite scaffold and trades for post finishing.

The sky's the limit, from artistic designs, photographic images, shapes and textures in any colour you can imagine, PermaTech brings your imaginative designs to life.

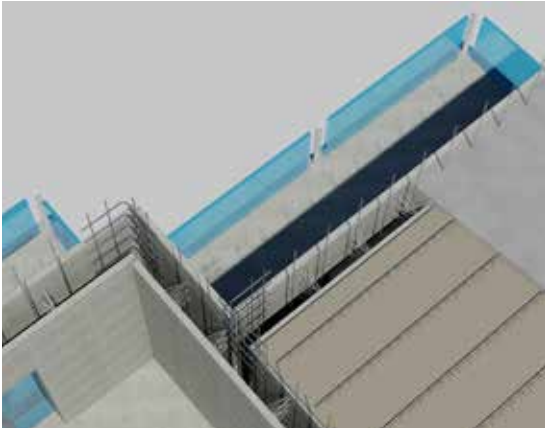
Use the finishes individually for eye catching designs or combine them to create inspiring art in concrete.



Create a Monolithic Structure

1

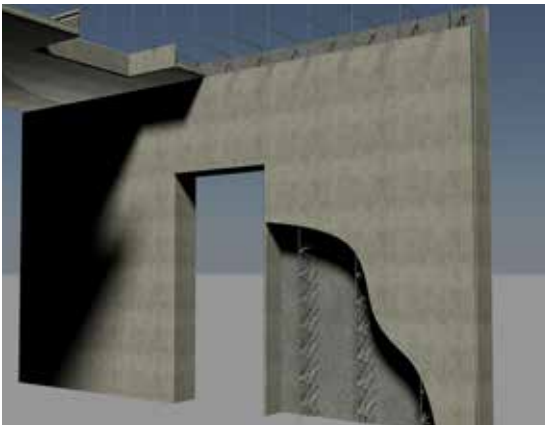
Use Double Wall to create a monolithic structure, eliminating structural framework and the need for mechanical panel to panel connections.



Ease of Construction and Formwork Solution

2

A permanent edging formwork pre attached to Double Wall to form the openings for doors and windows, to ease construction of concrete walls and eliminate the need for site formwork.



Stairs and Lift Shaft Solution

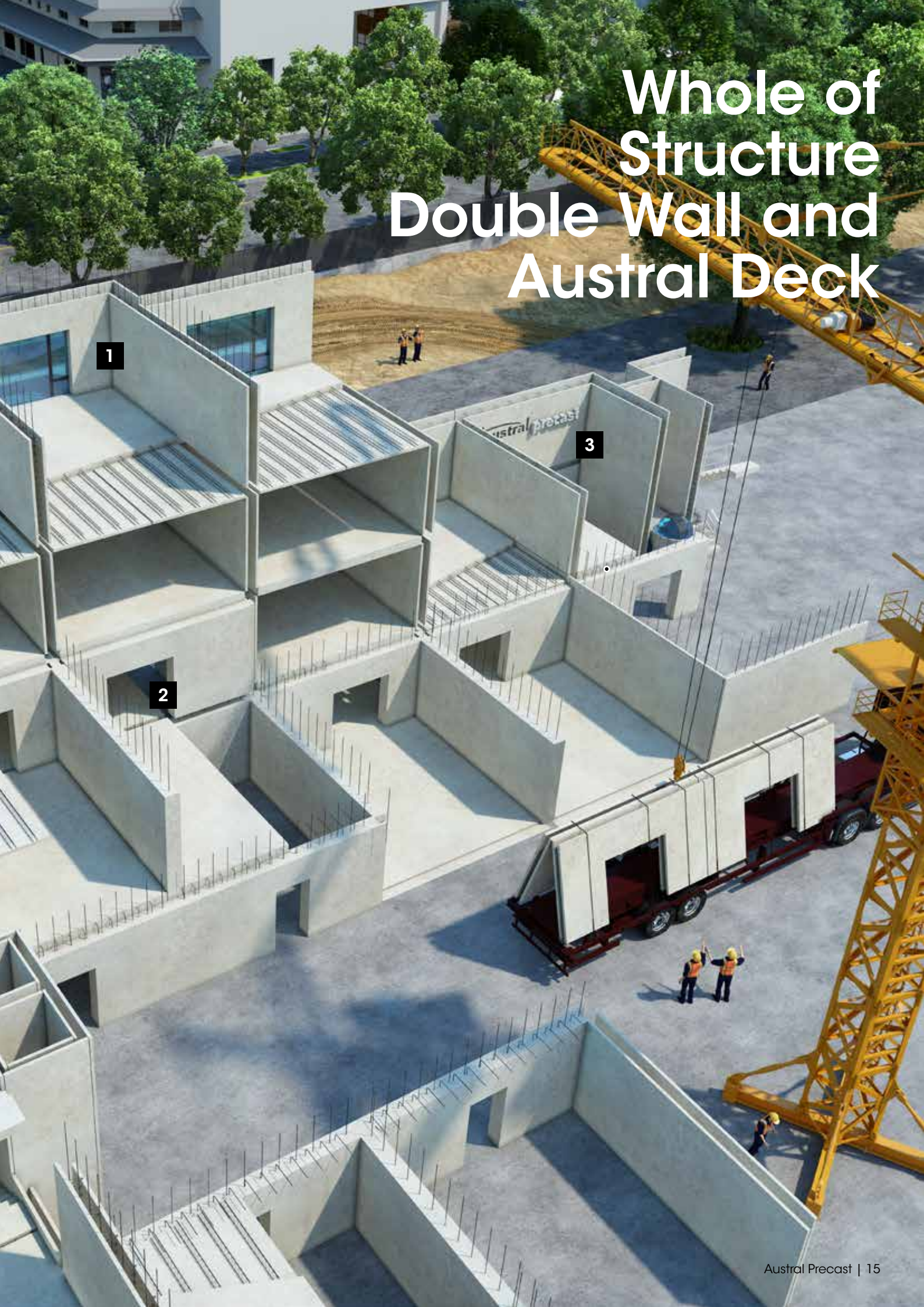
3

Double Wall is the ideal solution for stairs, lift shafts and basement walls.



3

Whole of Structure Double Wall and Austral Deck



Suitable as a **facade**
or **functional wall**.

1

Creates a
safety barrier
during construction

2

Structurally solid. Solid
Wall can **eliminate**
the need for
structural framing

3

Functional walls
provide **excellent**
sound insulation

4

Limitless creativity.
PermaTech Finishing
Solutions can be
used to **add colours,**
formed finishes,
graphics to the
panels surface.

5

Door and
window openings
incorporated into the
precast Solid Walls
and cast into the
panel in factory.

6

Designed to be
installed with
Austral Deck to
facilitate installation
efficiency.

7

Precast efficiency.
Vitesse is the fast,
efficient approach
to traditional brick
construction.

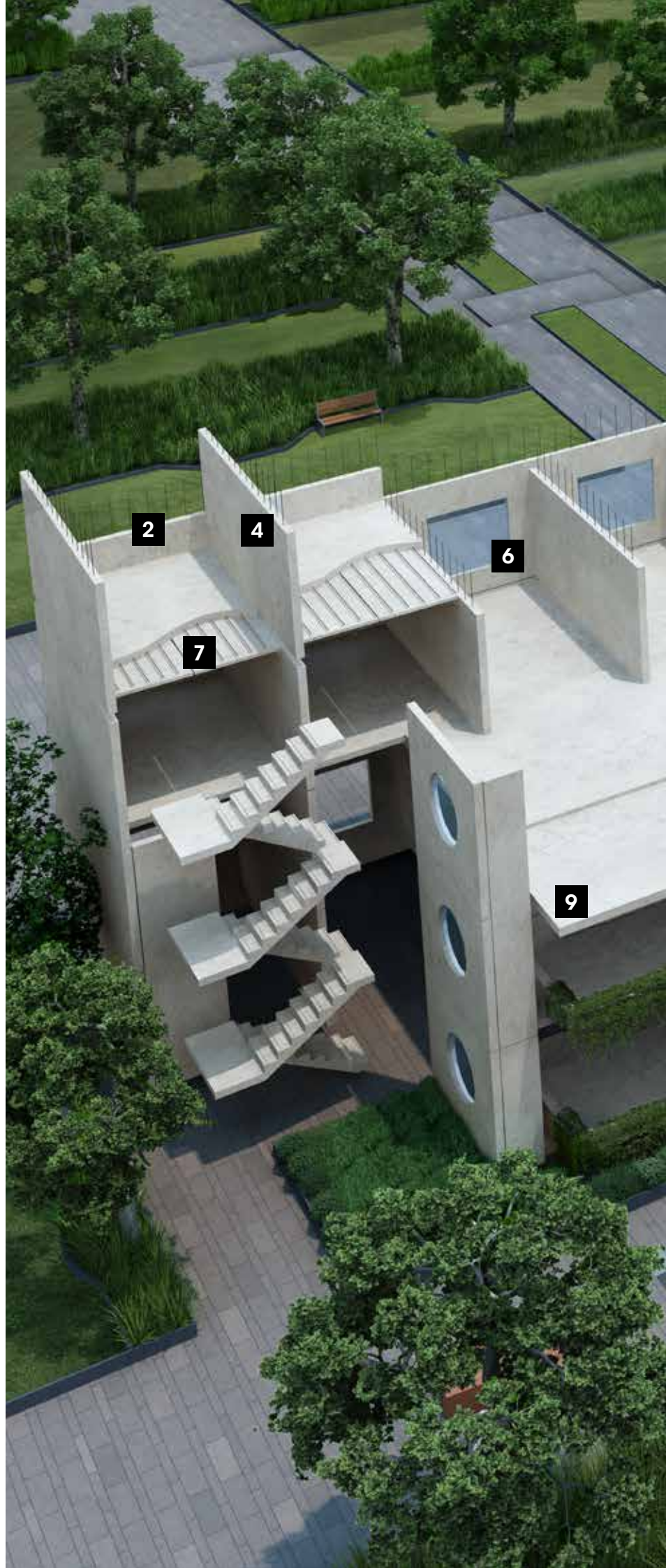
8

Precast balconies
supplied as pre-finished
structure or as structural
platform formed using
Austral Deck.

9

Precast concrete
columns and beams
form the framework on
and into which walls,
floors, balconies and
stairs can be attached.

10



Whole of Structure Solid Wall and Austral Deck



Walling Solutions

Solid Wall

Solid Wall are cast in factory and delivered on site, ready for installation. Suitable for use as a façade, functional wall or an ideal solution for structural load bearing applications, Solid Wall offers limitless creativity combined with a magnitude of functional construction advantages.

Features and Benefits

Design Flexibility

- A range of mechanical connections have been developed by our design and technical team to facilitate installation efficiency.
- When used as structural panels, solid wall can eliminate the need for structural framing.
- Provide excellent sound insulation properties.
- Due to their mass, solid walls can reduce the need for artificial heating and cooling thereby reducing energy costs by creating a thermal barrier that reduces internal temperature fluctuations.

Limitless Creativity

- PermaTech finishing solutions can be used to add colours, formed finishes, and graphics to the panels surface to capture attention and add creative flair.
- Door and window openings can be incorporated into the precast solid wall panels and cast into the panel at the factory.

Applications

- Load bearing structural panels
- Non load bearing cladding panels
- Shear walls
- Retaining walls
- Noise barriers
- Cladding walls can be used to create a striking building façade, offering economy in the number of elements used, style in finish, and cost efficiency across the project.



Walling Solutions

Double Wall

Precast elements facilitating monolithic construction. Austral Precast Double Wall consists of a pair of precast reinforced concrete shells connected by a lattice girder (trusses) fabricated from reinforcement bar, forming a cavity.

Characterised by its reduced weight, Double Wall enables greater savings in installation costs and time while adding monolithic design advantages to the many other construction advantages the Austral Precast whole of structure offer brings. With the many installation advantages, shorter superstructure construction time and monolithic design advantages, Double Wall is a convincing argument.

Features and Benefits

- Achieves incredible on site time and cost savings because the entire structure, walls, floors and shafts are cast simultaneously.
- Joins to create a monolithic structure eliminating joints and wet joints. Ideal for cores, shear walls and basements.

An Efficient Permanent Structural Framework:

- Is an excellent solution for any load bearing wall including: basements, shafts, core walls, and other functional walls.
- Double Wall is custom designed, the overall wall thickness can vary between 200mm to 400mm depending on the structure and applied loads.
- Double Wall will form a solid concrete structure after the cavity is filled with premixed concrete.
- Installation efficiency is achieved due to relatively large and light weight panels, the enhanced jointing method, removing the need for caulking, welding and formwork.
- Both surfaces of the Double Wall panel achieve an off form finish.
- Crane load capacity can be reduced due to the reduced weight of the hollow wall.
- Hybrid solution replacing conventional cast in situ operation.
- Due to the water tightness of the Double Wall panel, the need to waterproof the back side of the wall minimises the amount of excavation required especially when employed as a retaining wall. This offers cost and time savings, increasing project efficiency when compared to conventional retaining walls or soil reinforced walls.
- Construction activities are mainly performed within and inside the boundary.
- Double Wall panels act as a permanent casting frame, replacing the need for onsite casting moulds which require access from both sides of the wall.

Suitable for Construction where Watertightness is Essential:

- Withstand water hydraulic pressure up to 0.2MPa (20m water head).
- Water tightness is maintained by the property 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.

Employed in Association with Precast Flooring Achieves:

- A monolithic structure, eliminating structural framework and the need for mechanical panel to panel connections.- Construction efficiency results from increased speed of construction and less on site material to handle.



Applications

Double Wall has many applications Including:

- Facade and Cladding
- Load bearing and shear wall structural elements.
- Stair 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 structure.

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.
- Transport Sector: Railway Stations, Airports.

Components



1 Precast Concrete Shell

2 Steel Reinforcement

3 Steel Lattice Girder

Flooring Solutions

Austral Deck

Austral Deck is a permanent formwork and precast concrete decking solution. The Austral Deck flooring system can easily accommodate varied designs, shapes, thicknesses, penetrations and cast-in fittings.

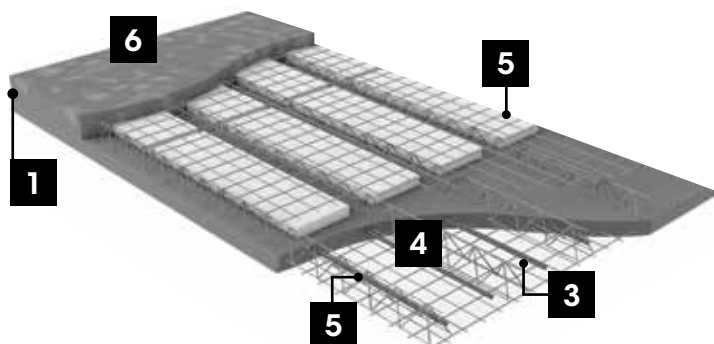
As a revolutionary permanent formwork, the Austral Deck solution combines precast concrete panels with a cast in-situ topping to create a suspended concrete slab. Austral Deck is a flexible solution designed to be installed with the entire range of Austral Precast Walling, Framework, Stairs and Balcony Solutions offering a complete precast building solution.

Austral Deck incorporates triangular truss reinforcement (lattice girder) providing a bond between the precast and in-situ concrete. These trusses increase spans between temporary props during construction and contribute to the reinforcement mass of the final slab.

Austral Deck is a factory made precast panel that can be designed and manufactured to suit a variety of building functions and occupancies, catering for a range of imposed and permanent loads. Lengths of panels are generally limited to 12m and its standard width is 2.5m for handling and transport purposes. Austral Deck comes in a standard thickness of 70mm (60mm in Western Australia only) to suit various slab design specifications.

Austral Deck is an ideal and economic solution to construct concrete floors for single or multi level structures.

Components



- 1** Austral Deck
- 2** Steel Lattice Girder
- 3** Steel Reinforcement if Specified
- 4** Steel Mesh Cast in Austral Deck
- 5** Void Formers
- 6** In-Situ Concrete Topping



Austral Deck Post Tensioned

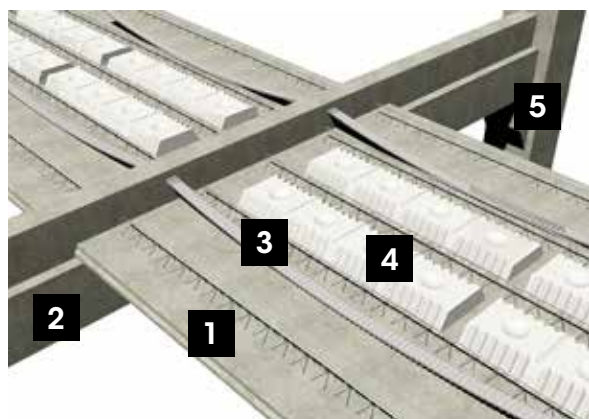
The flexibility of Austral Deck means it is well suited to accomodate slab post tensioning components.

For residential applications spanning 10m, it is recommended that post tensioning is employed.

The combined precast post tensioned solution offers many advantages compared to cast in situ post tensioned

solutions including; reduction in concrete volume, post tensioning amount and rate.

Components



- 1** Austral Deck
- 2** Precast Beam
- 3** Post Tensioning Conduit
- 4** Void Formers
- 5** Precast Column

Flooring Solutions

Austral Deck

Austral Deck is easy to design with and fast to install, saving time and money across the construction life cycle. A flexible and adaptable formwork, Austral Deck integrates well with Austral Precast walling solutions, covering the entire structure including cantilevers and balconies.

Features and Benefits

A unique Flooring Solution

- An Austral Deck panel is part of a composite floor system that provides rigid formwork and becomes part of the final structure. During construction the panel can stand construction loads and be used as a platform for workers and materials.
- An effective way to maintain the structural integrity of a monolithic slab.
- Composite platforms and shear connection panels can be constructed easily with partial or full-length gaps or pockets of concrete block-outs. The gaps will be located to accommodate structural beam configurations. This allows for the placement of the Austral Deck directly over precast, cast in-situ concrete or steel beams. Trusses and steel reinforcement can remain uninterrupted through these gaps for structural continuity.
- The permanent formwork system has been approved by many state road authorities, providing safer and more efficient construction of bridge superstructures.
- The high quality off form Class 2 finish on the under side of the Austral Deck floor eliminates the need for gyprock or plaster the ceiling.

A flexible and adaptable Formwork Replacement

- Austral Deck imposes minimum restrictions on designers and builders. Custom made sizes and shapes can be manufactured to suit construction layout and design specifications.
- Austral Deck panels can cover the entire width of a structure, including the cantilever beyond the external support.
- The system integrates well with concrete or steel framed structures and within the entire Austral Precast product offering.
- Cast-in items such as ferrules, conduits and other service fixings and penetrations can be accommodated during the manufacture of Austral Deck.
- Balconies and edge forms can be cast within the Austral Deck panel. These can eliminate edge formwork and scaffold costs. Integrated edge forms allows for early installation of temporary or permanent balustrades.
- Safety rails can be prefitted to the panels prior to installation, improving site safety.

Economic and fast to install

Austral Deck offers all the advantages of a precast concrete system;

- Reduction in formwork and propping compared to conventional formwork.
- To further increase efficiency on site, Austral Deck panels may be produced with void former blocks attached to the top of the precast. These formers reduce the volume of in-situ concrete topping volumes and reduces the overall mass of the floor structure typically by 30%.
- Construction trades can commence working on the structure immediately after installation. Services ducts and conduits can be installed and accommodated into the cast in-situ portion of the slab.
- Panels can be lifted straight into position, reducing conventional installation time. An average 10 panels (covering an area of 150m²) can be installed hourly. The panels have a relatively thin layer of concrete, which makes it lighter to transport and install.
- The excellent fire, thermal and acoustic advantages of Austral Deck are superior to other light weight flooring options.
- Off form Class 2 finish is easily achieved, no extra work is required on the Austral Deck soffit.

Applications

The permanent formwork is an ideal and economic solution for constructing concrete floors for single or multi level structures, concrete decks and platforms and to construct roofs and lids.

Structural Flooring

- Multi level residential and commercial complexes
- Education institutes: Schools, Universities and Libraries
- Industrial Warehouses
- Accommodation Facilities: Hotels, Health, Aged Care and Correction Centres
- Health Care Institutions
- Carparks
- Recreation Centres: Cinemas, Theatres, Community Centres and Clubs

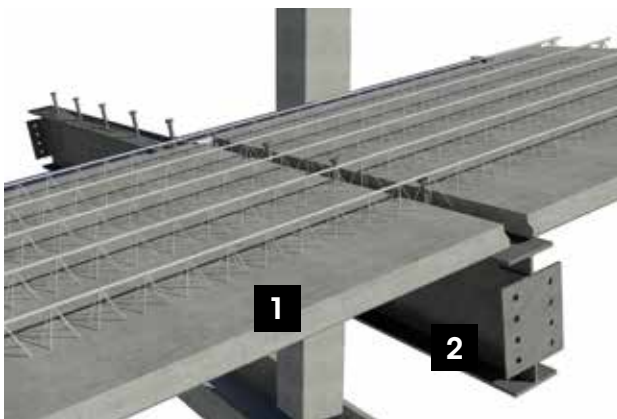
Decks and Platforms

- Traffic and Pedestrian Bridges
- Curved on and off ramp structures
- Rail Platforms
- Marine Jetties and Platforms

Roofs and Lids

- Tunnel and shaft roof panels
- Culverts
- Tank lids

Components



1 Austral Deck

2 Steel Beam

An ideal and economic solution for single or multi level structures

Precast Framework Solutions

Columns and Beams

Austral Precast offers a range of standard structural framework solutions with precast columns and beams. The Austral Precast Framework solution is an efficient and economical replacement to the cast in situ concrete or a steel structure frame.

Precast concrete columns and beams form the framework on and into which walls, floors, balconies and stairs can be attached to create the overall project envelope and create a whole of structure solution. Supplied in off form finish or using PermaTech finishing solutions for a unique effect, columns and beams act as the buildings structure.

Features and Benefits

Design Innovations

- The precast Framework is designed to be installed with the entire Austral Precast elements offering a complete precast building solution.
- Create an ideal framework for supporting precast structural, facade and cladding wall panels and setting for installation of Austral Deck.
- The standard range offered by Austral Precast are comprehensive and simultaneously eases the design process for engineers while offering architects limitless creativity.

Economic and fast to install

- The simplicity of the design combined with using mechanical connection contributes to speed of erection.
- Minimal propping is achievable using precast columns and beams.
- Precast Beams and Columns provide a clean, finished look for the structural component of the building. A variety of finishes can be applied if required.

- Precast structural elements can be manufactured to maximum lengths (column height for up to three levels, beams spanning up to 12m). Construction of multiple levels can commence at the same time, reducing construction time.

Applications

The comprehensive range of Austral Precast framework solutions are designed to aid the construction of all building functions, single or multi level structures, various spans and to cater for a variety of applied loads. These include:

- Multi level residential and commercial complexes.
- Education institutes: Schools, universities, and libraries
- Industrial warehouses
- Accommodation facilities: Hotels, health, aged care and correction centres.
- Health care institutions
- Recreation centres: Cinemas, Theatres, Community Centres and Clubs.
- Transport sector: Pedestrian Crossing, Car Parks, Railways and Airports

✓ Double height column "upper part" pre installed



✓ Double height column "minimum prepping"



Standard Mechanical Connections



Column Shoe And Bolts



Dowel And Cast-In Grout Tube



Bolted Base Plate

Precast Framework Solutions

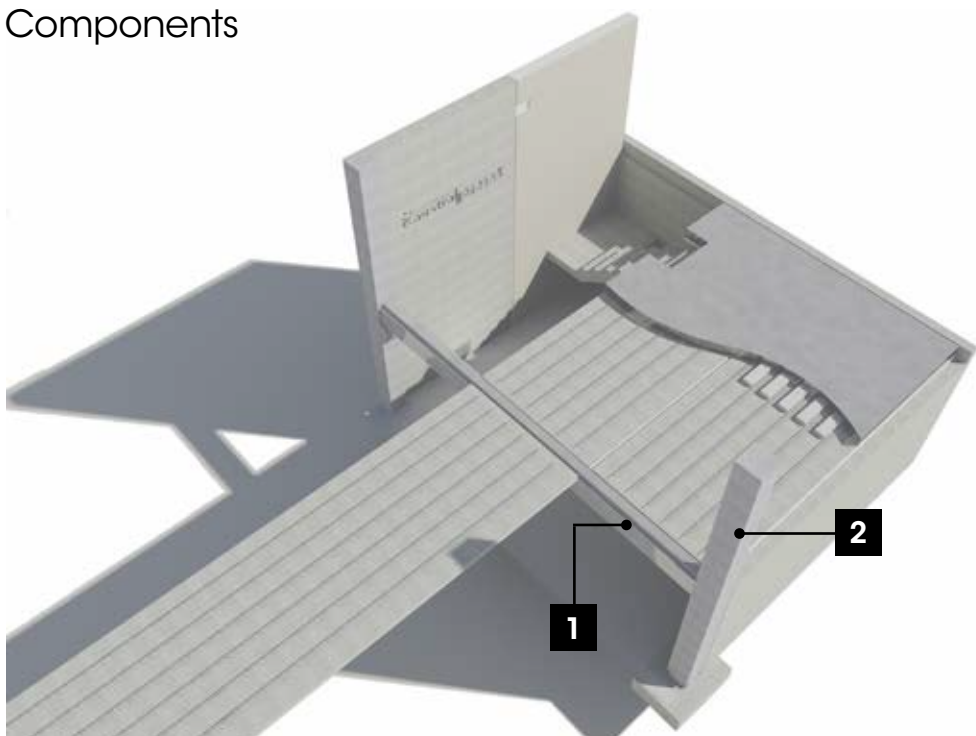
Columns and Beams

Comprehensive Range

The Austral Precast range of square and rectangular precast columns and beams are designed to accommodate a wide variety of building functions, occupations load capacities and to suit various construction methods.

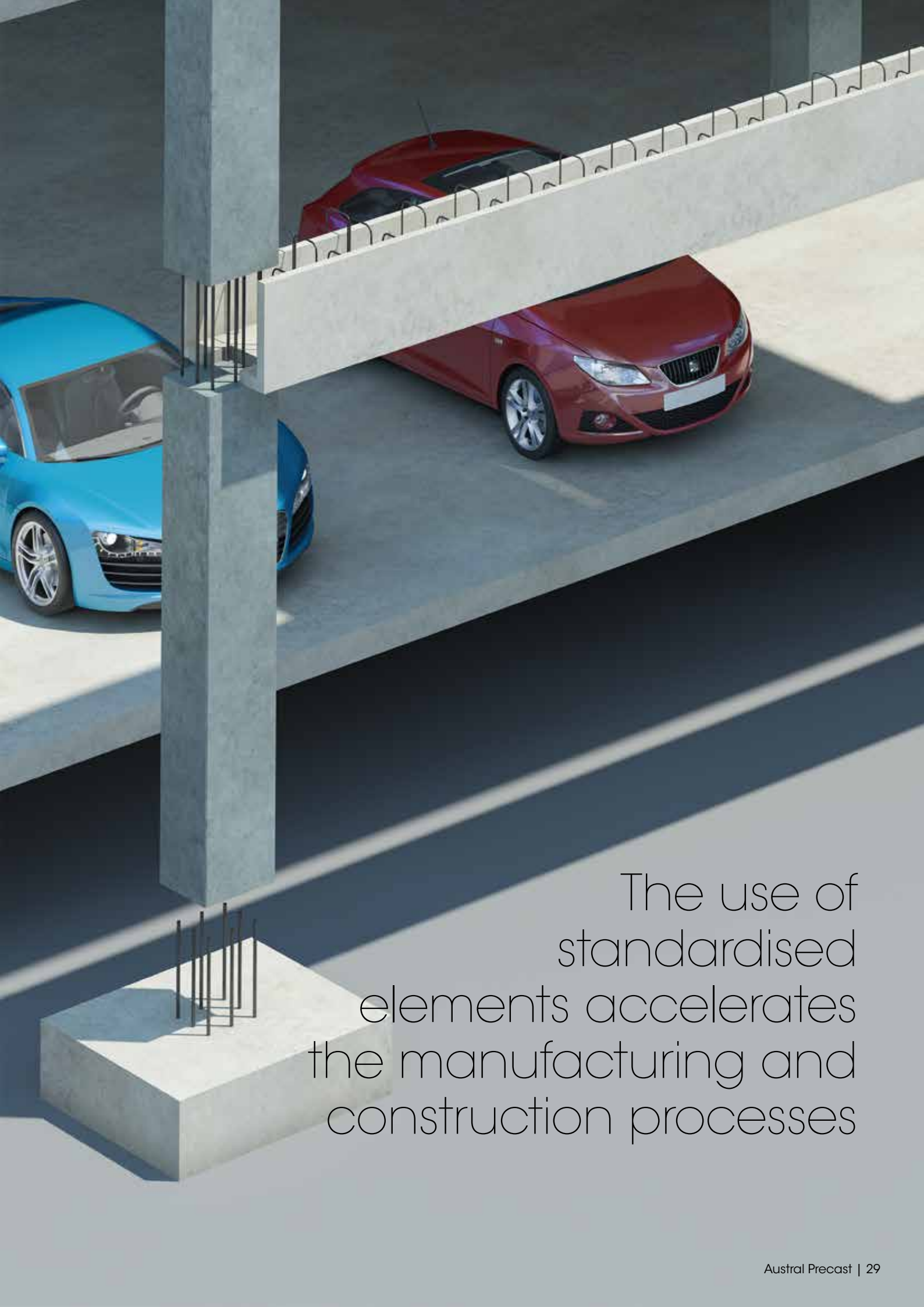
The use of standardised elements accelerates the manufacturing and construction processes, thus reducing project cost.

Components



1 Inner Precast Beam

2 Double Height Precast Column



The use of
standardised
elements accelerates
the manufacturing and
construction processes

Precast Stair Solutions

Stairs and Shafts

An elegant and efficient solution to stairways on multi-level buildings.

Austral Precast offer a comprehensive range and configurations of precast stairs and stair-shafts, custom made to suit your design. A flexible solution with possibility of adjusting the number of steps, the riser, the going, the width of the stair and wide varieties of arrangements. Precast concrete landings are offered in conjunction with stairs and can be designed as individual units or can be manufactured as a complete precast stair flight and attached landing.

Features and Benefits

Precast concrete stairs offer significant benefits during the construction phase of a project providing rapid installation and early safe access to subsequent floors for trades and materials. Precast concrete stairs offer a host of benefits including:

- precast stairs and shafts offer a fast, efficient and cost effective option, reducing labour on site, being fast to install and providing immediate access to all floor areas.

Enhancing Site Safety

- Secure means of access from floor to floor thereby increasing site safety.
- Eliminates the need for temporary stairs during construction.
- Safety rails and handrail can be pre installed prior to installation.
- Precast Stairs can be provided with cast-in non-slip abrasive inserts at the nosings.

An Engineered Solution

- The monolithic top and bottom landings eliminate the need to form and pour landings on-site.
- The advanced mechanical connection speed the installation process and removes the need for propping.
- Precast stairs are designed and manufactured to any specific floor height, application and available stair-shaft space.

A Durable Solution

- Precast Stairs are a pre-finished/ pre-engineered solution to forming and pouring concrete on-site.
- The high quality finish gives a durable concrete staircase for a long maintenance free life.
- Precast concrete will not rust, rot or burn (min. 2 hour fire rating).

Applications

Precast concrete stairs are the obvious choice for fire escape stairs. Precast stairs are particularly suitable to the construction of high traffic stairwells. Providing safe vertical access between floors in multi level construction, the precast stairs can be used in

a range of projects including:

- Multi level residential and Commercial complexes.
- Education institutes: Schools, Universities, and Libraries
- Industrial Warehouses
- Accommodation facilities: Hotels, Health, Aged care and Correction centres.
- Health care institutions
- Recreation centres: Cinemas, Theatres, Community centres and Clubs.
- Transport sector: Pedestrian crossing, Car parks, Railways, Airports.



Common Precast Stairs Configurations



1 U Shape Stair Single Middle Landing



2 U Shape Stair Double Middle Landing



3 Scissor Stair Direct Flight

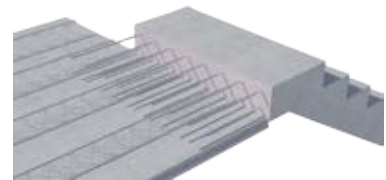
Standard Mechanical Connections



1 Steel Angle And Dowels Connection



2 Middle Landing Connection



3 Steel Reinforcement Connection

Precast Balcony and Balustrade Solutions

A key architectural feature on many apartment and high-rise buildings, well designed and carefully detailed balconies add to the character of the building.

Like the rest of the structural precast range, balconies are designed to our clients' requirements. Our extensive experience ensures an excellent finish with careful detailing. Balconies can be designed, detailed and manufactured as plate floor elements, using Austral Deck or as solid precast elements.

Features and Benefits

Design Innovation and Flexibility

- Precast balconies are designed and manufactured to any custom shape and configuration.
- Precast Balconies are designed with a sloped top surface, step down and a drip edge on the underside for proper drainage and water run-off step.
- Floor drains can be incorporated.
- Precast balconies can be either supplied as pre-finished structure or as structural platform supplied as Austral Deck.
- Balconies can be made with a standard (non-slip) light broom finish.

Cost Effectiveness

- Balconies can be erected with floor units prior to pouring saving installation time.
- No need for formwork plus propping can be eliminated.
- Speed of erection of precast balconies ensures project programme is maintained.

Safety

- Installing precast balconies at the same time as the floor gives a complete and safe working platform.
- Safety rails, balustrade and upstands can be pre installed prior to installation.

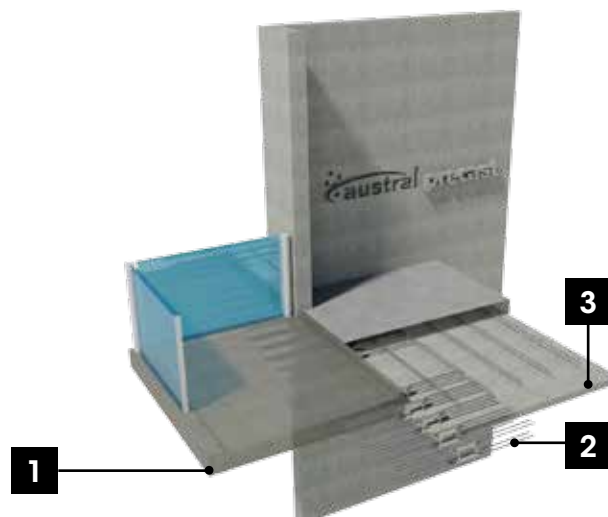
Applications

Precast concrete balconies are an ideal and economic solution for projects including:

- Commercial Offices Including High-Rise
- Hotels
- Multi-Unit Residential
- Education
- Health and Aged Care
- Housing
- Clubs, Libraries, Churches and Community centres

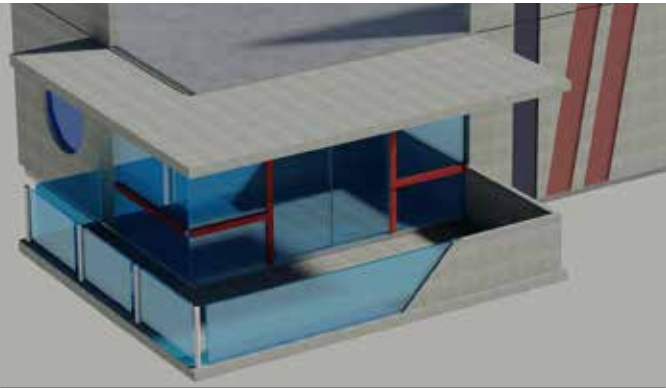
Components

- 1 Precast Concrete Balcony
- 2 Balcony Mechanical Connector
- 3 Austral Deck

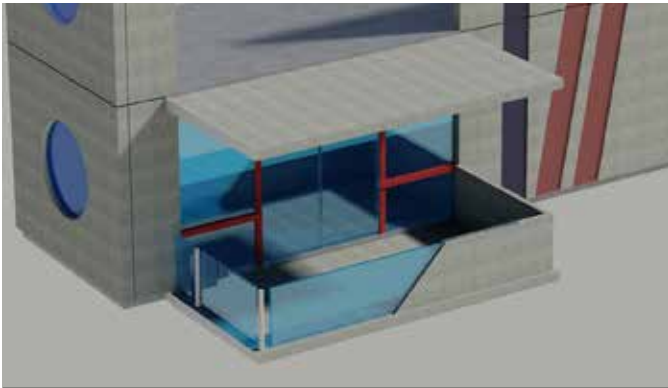




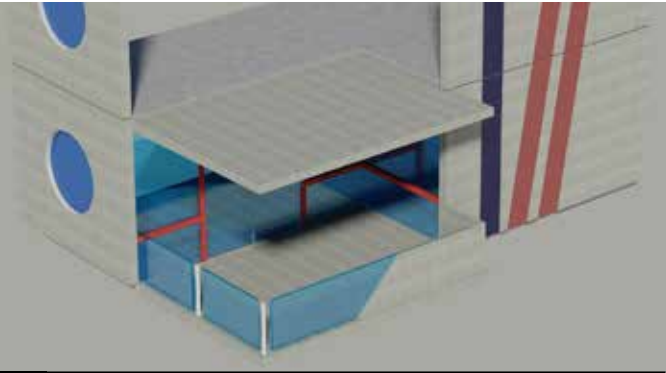
Common Precast Balcony Configurations



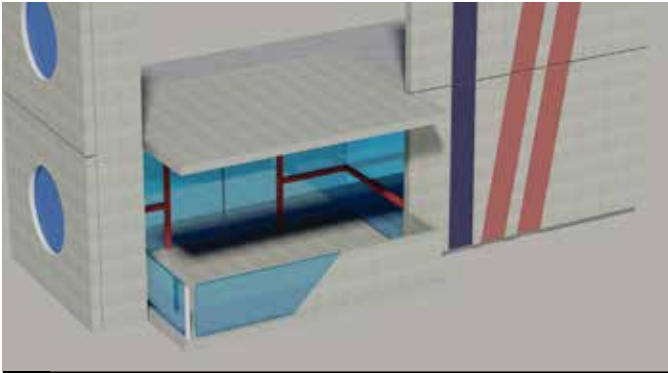
1 Cantilever Precast Balcony, External Corner



2 Cantilever Precast Balcony



3 Cantilever Precast Balcony, Internal Corner



4 Supported Slab Recessed Balcony



PermaTint

A colouring solution offering a vast array of long lasting colour options.

PermaForm

Allows shapes and textures to be imprinted into the panels surface.

PermaGraf

Photographic images in outstanding detail embedded in the concrete's surface.

PermaTech Finishing Solutions

PermaTint, PermaForm, PermaGraf

We believe the style choices you make when building a new project should stand the test of time. With PermaTech this is now possible. It is the ultimate precast concrete finishing solution.

The sky's the limit, from artistic designs, photographic images, shapes and textures in any colour you can imagine, PermaTech brings your imaginative designs to life. Use the finishes individually for eye catching designs or combine them to create inspiring art in concrete.

Supplied prefinished with no further materials, labour or applications required, PermaTech can eliminate the need for onsite scaffold and trades for post finishing. More importantly, the finishes achieved are long lasting and designs are created with intricate detail unmatched by many competing alternatives.

Features and Benefits

- A truly consistent finish and outstanding attention to detail with unlimited potential for design concepts.
- Colours and finishes used to create panels today can be replicated in the future for building expansion.
- Maintenance is reduced thanks to superior colour and finish longevity and durability.
- The need for scaffolding and labour required to apply finishes on site are removed, offering time and cost savings for the project.
- Architectural design freedom with the ability to cast precast elements in an infinite array of colours, patterns and textures with the freedom to produce highly individualistic and unique project specific designs.
- The required finishes are incorporated into the precast elements rather than applying onsite.
- Precast elements can incorporate any combination of the PermaTech finishes for added creativity.

Applications

- PermaTech allows the creation of façade panels which can be used to create a striking building façade, offering economy in the number of elements used, style in finish, and cost efficiency across the project.
- PermaTech can be applied to either solid walls or double walls.
- Various PermaTech finishing solutions can be combined to create truly distinctive designs.
- Ideal solution for:
 - Balustrades
 - Noise Barriers.
 - Retaining Walls.

A long-lasting alternative
to the on-site painting
of precast panels



PermaTint

Endless Colours

Colour options are endless, and finishes, from metallic, translucent, to natural stone can be achieved with ease and in a vast array of choices. PermaTint is a colouring solution, but not as you know it.

Discover colouring that goes beyond paint and actually binds with the concrete panel to which it's applied, creating a long lasting, deep finish which will never peel and is UV, mould, mildew and weather resistant. From substrate to surface PermaTint embeds itself in the panel for a finish with unmatched longevity, resistant to fading, and cracking.

Austral Precast is so confident in the longevity of the finish we offer an industry leading 25 year colour guarantee. The factory-applied PermaTint Solution is a long-lasting alternative to the on-site painting of precast panels.

Features and Benefits

- 25 Year Guarantee on PermaTint colours.
- Colours and finishes used to create panels today can be replicated in the future for building expansion.
- A truly consistent finish and outstanding attention to detail with unlimited colour options.
- Maintenance is reduced thanks to superior colour and finish longevity and durability.
- Removes the need for scaffolding and labour required to apply finishes on site, offering time and cost savings for the project.

Colour

PermaTint is available in variety of finishes and virtually any colour. Below are the standard finishing options:

Opaque



Cityscape



Moonlight



Pewter



Asphalt

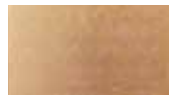


Maize



Vivid Violet

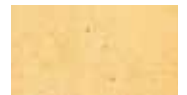
Metallic



High Glimmer



Antique Brass



Sunset Grove



Silver Chrome

Translucent



Purple Royalty



Ocean Blue



Red Crimson



Black Onyx



Beige Marble



Grey Granite

Stone

PermaForm

Bringing Design to Life

Three dimensional designs brought to life. Shapes, artistic designs, and intricate details are formed in concrete, and designed to last a lifetime.

The PermaForm process takes liquid concrete and moulds it into limitless creations with patterns and finishes mimicing anything from timber grain, hewn stone to any number of imaginative designs with unprecedented definition.

Features and Benefits

- Provide visual effect to liven the surface character.
- Achieve original artistic (sculptural, graphic) expression.
- Design freedom. PermaForm can replicate images and letters, through to faces and landscapes.
- Simulate or replicate other materials such as stone walls, stacked slate. The factory applied finish removes the need to scaffolding and labour required to apply such materials on site, offering time and cost savings for the project.
- Affordable finish solution. Moulds used to create PermaForm finishes are reusable and the cost to create them can therefore be spread across multiple panels.





PermaGraf's flexibility raises the bar in architectural design





PermaGraf Concrete Goes Graphic

**If you can photograph
it, PermaGraf can put
it in concrete.**

PermaGraf uses a patented Finnish technology to instill photo realistic images into the top layer of the panels surface, colour impressions are created using 256 shades of grey.

Bring your project to life incorporating anything from a human face, dramatic landscape, creative pattern, to shapes or lettering.

Enabling true creativity, PermaGraf's flexibility raises the bar in architectural design creating unimaginably exciting facades with the unmatched durability of structural concrete construction.

Features and Benefits

- Designs created are virtually unlimited. Photo realistic images, geometric patterns, and any customised designs can be created using PermaGraf.
- Superior longevity and durability, will never fade.
- Maintenance is minimal.
- Photo realistic images.
- Can be scaled, oriented, and its shade can be controlled reflecting the architectural impression.



^ Austral Bricks®



^ Austral Precast®



^ Austral Masonry®

Associated Companies Brickworks Group of Companies

BRICKWORKS

Brickworks Building Products™ is one of Australia's largest and most diverse building material manufacturers. Under the Brickworks Building Products™ umbrella are some of Australia's best known building materials brands.

Our products include bricks, pavers, masonry blocks, retaining wall systems, precast concrete panels, concrete and terracotta roof tiles, timber products and specialised façade systems.

With a broad product portfolio and manufacturing and sales facilities across Australia, Brickworks Building Products™ is uniquely placed to service the demands of the building industry.

With over 1200 staff across Australia and New Zealand, we pride ourselves on our commitment to product and service excellence and our leadership position.



Founded in 1908, Austral Bricks® is Australia's largest, best-known and most efficient clay brick and paver manufacturer.

Austral Bricks® add distinct style to any type of home. Their natural colours and textures enable you to create striking façade contrasts or more traditional neutral colour tones. By investing in new technology Austral Bricks® now produce bricks with a variety of surface finishes, exciting colours and different sizes.

The result is a wonderful range of bricks for you to build a stylish, contemporary home.



BOWRAL BRICKS

When Bowral Bricks began production in 1922, a teenage Don Bradman was still scoring runs for the local side. Today their distinctive dry-pressed bricks are highly valued by discerning architects and builders across the country. The unique combination of traditional craftsmanship and modern technology will ensure that the Bowral Bricks brand will remain the benchmark for brick excellence for many years to come.



With a heritage reaching back to 1862, Nubrik™ premium-quality bricks are still moulded the traditional way on century-old presses. Their time-honoured expression of authenticity and elegance is acknowledged by architects, builders and discerning homebuyers who also value their rich colour blends, solidity and crisply-defined edges.



Since 1853, Daniel Robertson® has helped build Australia with building products that combine craftsmanship with architectural excellence. In a world of mass production, where qualities are constantly compromised, Daniel Robertson® premium-quality clay bricks are highly prized for their unique character, earthy appeal and individual charm.



Backed by a proud history of more than a century of brickmaking experience, NZ Brick Distributors™ offers New Zealand's most comprehensive range of high quality bricks and pavers in an unmatched palette of colours, textures and sizes, backed by a nation-wide sales and distribution network.



^ Bristle Roofing™



^ Auswest Timbers®



^ Terraçade



Austral Masonry™ is a leading manufacturer and supplier of concrete masonry products focused on providing functional but stylish solutions to the civil, residential, commercial and industrial building and construction markets.

Our passion is to create products to meet the technical and functional demands of the building industry, while also delivering architecturally striking and fashionable finishes to completed building projects. Our range of products includes standard grey concrete blocks, coloured architectural concrete blocks with a range of different finishes and a comprehensive range of retaining walls, pavers and garden edging.



In just a few years, Austral Precast® has become Australia's premier supplier of high-quality, innovative and customisable precast concrete building solutions. Using state-of-the-art technology, production techniques and systems, our precast division produces a offer Walling, Flooring, Framework, Stairs, Balcony and Balustrade and collection of PermaTech finishing solutions to ensure design and creative flexibility. To meet the construction industry's ever-increasing demands, the company operates from four plants located along the eastern seaboard and in Western Australia.



For almost a century, Bristle Roofing™ has delivered stylish and innovative roofing products for Australian homes. Bristle is now one of Australia's largest manufacturers and installers of quality roof tiles and the exclusive Australian distributor of La Escandella premium-quality clay roof tiles from Spain. Product innovation, manufacturing expertise and first-class service guarantee a strong, low maintenance roofing solution that will look great and perform superbly for generations.



From production facilities in Western Australia, Victoria and the ACT, Auswest Timbers® manufactures a diverse range of timber products. Jarrah, karri and chestnut timbers are processed into a range of decorative, seasoned products for furniture and joinery, flooring, decking, staircase components, veneers and fence screening. Green structural timbers are also processed for mine, wharf and rail track construction, as well as for floor joists, roofing timbers and roof tile battens.



FASTER. BETTER. STRONGER.

Pronto Panel is a non-load bearing panel system that can be used both internally and externally. Pronto Panel's durable, lightweight and simplistic nature makes it perfectly suitable for both residential and commercial applications.



Façade systems are a cost-and time-efficient approach to cladding commercial and upscale residential buildings. The Terraçade™ system, developed in Australia by Brickworks Building Products, combines the visual appeal and colourfastness of terracotta with the low maintenance and functional efficiency demanded in today's competitive market.

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VIC

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Trading hours

For trading hours please visit www.australprecast.com.au

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terraçade
TERRACOTTA FACADE SYSTEMS

australmasonry



nubrik
AUTHENTIC BRICKWORK



bristileroofing

BOWRAL BRICKS

Pronto Panel

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.