
Vertical Transportation

Capability Statement

Buildings | Australia & New Zealand





A community of experts

Stantec's global network of designers, engineers, scientists and project managers work together at the intersection of community, creativity and client relationships. Careful balancing of these priorities results in projects that advance the quality of life in communities across the globe.

But wherever Stantec is located it is our local teams who have the skills, experience and knowledge to drive the projects in their own back yards. In Australia and New Zealand (ANZ), our local offices of award-winning multi-disciplinary engineers have been helping both private and government clients build communities for over 60 years.

Our people have long-standing client relationships and are inspired to advance the communities in which they live, delivering cost-effective, quality consultancy services.

Whether we're partnering with clients to design a hospital or mixed-use development, a research facility or industrial park, an education campus or airport, we design with community in mind because we believe in the **power of places to transform lives, to meet the needs of a community today, to help fulfil its potential tomorrow.**

Our global business

25K

Employees

400+

Locations

6

Continents

#01

From start to finish. Our team leaders continue to manage the projects for which they tender, right through to completion. Change in team management causes delays and undermines a project's stability and design direction. Continuity is more conducive to achieving your goals within programme and budget.

#02

Value-adding innovation. Stantec's Creativity & Innovation program encourages our global network of engineers to develop tools, processes and technology. These creative ideas might save time at the design stages of a project, reducing client costs. Others offer powerful marketing potential for stakeholder engagement. Celebrating our best ideas with investment means they are fully developed to benefit all our clients and communities, wherever they may be.

#03

The right experience. From research stations in Antarctica to solar projects in rural Australia. From bespoke luxury residences to affordable high-rise apartments. From stadiums to play parks... and everything imaginable in between. We have the right skillsets to help you achieve your construction goals.

#04

Focus on buildability. Engaging with engineers in the early stages can save time and money in the long-term. Pragmatic spatial considerations, site-appropriate construction methods, informed materials selection, compliance with legislation and consideration of the operational environment. Our advice gives reassurance to stakeholders, boards and financiers that all factors have been fully considered.

#05

We're at the right tables. Our people are active proponents within Australia's property industry, seeking positive change on behalf of their communities. The influential tables at which we sit include the Urban Development Institute of Australia, the Property Council of Australia, Consult Australia and Green Building Council of Australia.



We don't just say we deliver outstanding solutions and client service. We prove it.

Stantec has been recognised numerous times at the independently assessed Beaton Client Choice Awards in Australia and New Zealand.

2022 Beaton Client Choice Awards Winner:

- Best Provider to Property

2019 Beaton Client Choice Awards Winner:

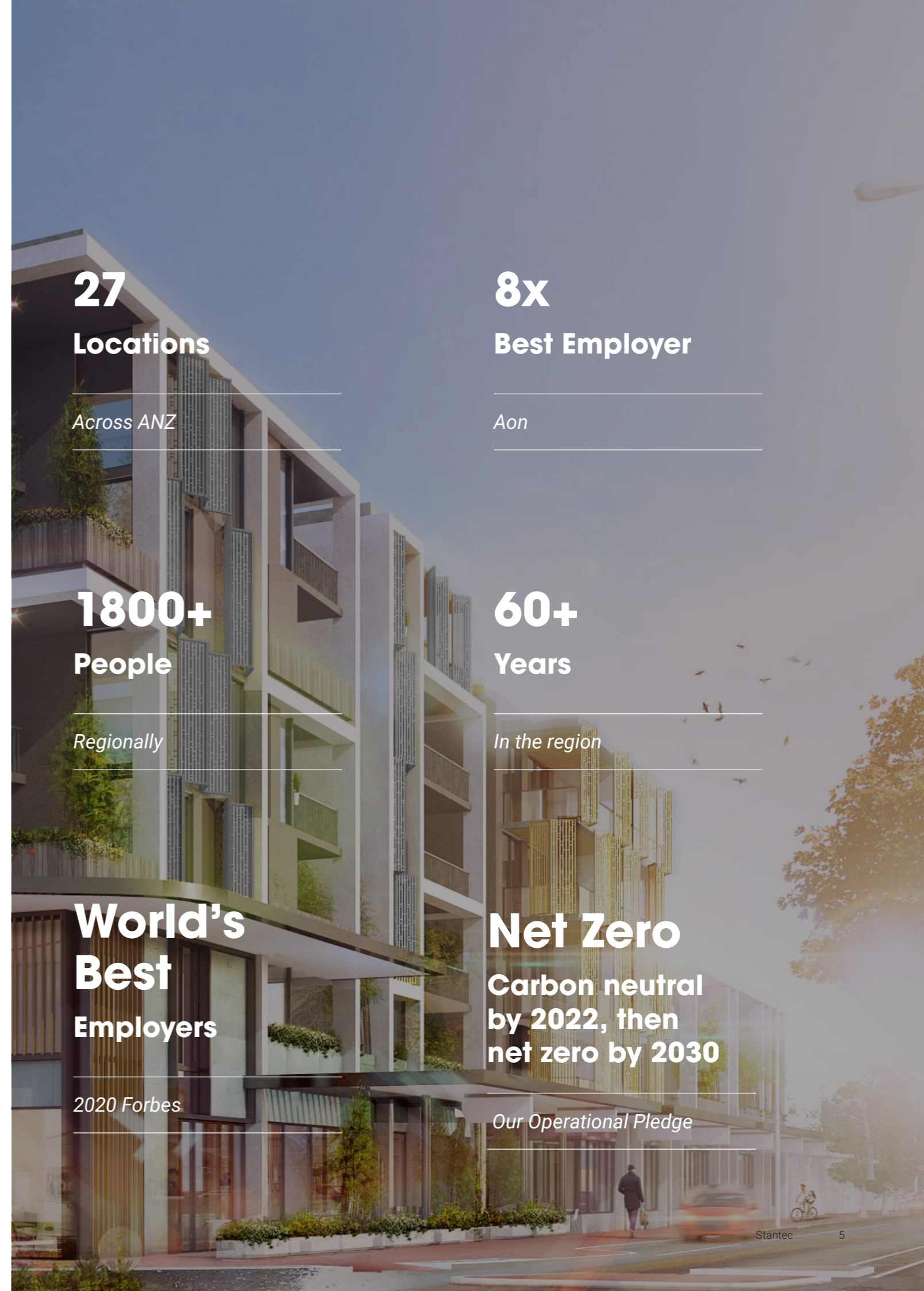
- Most Client Focused Consulting Engineer

2017 Beaton Client Choice Awards Winner:

- Best Consulting Engineering Firm (revenue \$50m-\$200m)

2016 Beaton Client Choice Awards Winner:

- Best Provider to Property Sector



27
Locations

Across ANZ

8x
Best Employer

Aon

1800+
People

Regionally

60+
Years

In the region

World's
Best
Employers

2020 Forbes

Net Zero
Carbon neutral
by 2022, then
net zero by 2030

Our Operational Pledge

Vertical Transportation

Vertical Transportation (VT) is essential for the successful operation of buildings and the efficient movement of people and goods. Whether the objective is pedestrian flow, evacuation or high speed transport, our team is committed to ensuring buildings work effectively and efficiently.

We are skilled in designing vertical transport solutions for large and complicated jobs through to boutique projects and challenging sites that require a specialised and innovative approach.

WE'RE PART OF A MULTI-DISCIPLINE TEAM

Our team of dedicated VT specialists work alongside our engineering disciplines to offer system design that integrates effectively with other building services.

VT systems are designed in consultation with fire engineering, electrical systems and sustainability teams, ensuring that the most appropriate solution is achieved.

WE'RE EXPERIENCED IN:

- High rise offices and residential buildings
- Busy hospitals
- Transport hubs
- Bespoke spaces including theatres and museums
- Hotels
- Public transport facilities
- Sports, culture and the arts venues

SERVICES WE OFFER

- Passenger lifts
- Goods lifts
- Escalators
- Moving walks
- Disability compliant platform lifts
- Scissor hoists
- Refurbishment of existing installation/modernisation for passenger/goods lifts, moving walks and escalators





Making buildings work efficiently

We understand the importance of undertaking traffic studies to ensure the right number of lifts is installed for the building.

We ensure the most efficient and economical solution is designed, regardless of whether the priority is moving large volumes of people at peak times, or moving heavy goods.

Ensuring that the right number of lifts is installed within a building is crucial for its efficient operation, and our team are skilled in finding the balance between optimum performance and cost-efficiency.

Providing expert advice on the appropriate number of lifts is paramount during the conceptual and schematic design phases of any project. We have vast experience in using simulation software like Elevate to assist in our ability to provide sound and reasoned advice.

LIFT RELIABILITY

Reliability of VT is important to ensure continual access for all users. Stantec is constantly engaging with lift trades to ensure we are consistently up to speed with the latest technologies available on the market.

Stantec's experience and knowledge of the market ensures that when providing the performance specification for a project, the end product is one that is suitable for the installation and will stand the test of time.

LIFT UPGRADES

Our team have carried out a number of lift upgrades and modernisation to improve performance, reliability and safety. Key projects include:

- Royal Perth Hospital - 14 lift replacements servicing various levels
- Department of Mines and Petroleum, - mineral housing, 7 lift replacements
- Dumas House, West Perth - 6 lift replacements, servicing various levels
- Department of Housing and Works, East Perth - 4 lift replacements, servicing 8 levels



VCCC

The Victorian Comprehensive Cancer Centre is a purpose-built centre-of-excellence for cancer research, treatment, care and education. The 130,000-square-metre facility is the new home of Peter MacCallum Cancer Centre, new cancer research and clinical services for Melbourne Health and the University of Melbourne. Located in Melbourne's prestigious Parkville Biomedical Precinct the VCCC aims to become one of the top 10 facilities of its kind in the world.

It was designed to deliver maximum functional area with a blend of clinical, administrative and research facilities and includes 96 overnight inpatient beds, 110 same-day beds, a dedicated clinical trials unit and accommodation for families of country patients. The facility also provides more than 20,000 square metres of dedicated research space for up to 1,200 researchers, eight operating theatres, two procedure rooms, eight radiation therapy bunkers, education and training facilities, and eight gardens and terraces comprising low-allergenic plants and materials.

Stantec are proud to have contributed to this highly collaborative team by providing electrical, security, vertical transportation and sustainability services.

Project value: \$1 billion
Completion: 2016



Fiona Stanley

The \$2 billion Fiona Stanley Hospital is the largest building project ever undertaken by the WA State Government. This new health care facility is the major tertiary hospital in the south metropolitan area of Perth providing 783 beds including a 140-bed \$225.7m state rehabilitation service. The hospital includes 150,000sqm of floor space over five main buildings with state-of-the-art technology built into every level of the hospital.

Vertical Transportation initiatives included:

- Gearless, energy efficient drives and innovative solutions to lift recall for special hospital services
- Integration of the lift installation with automatic guided vehicles systems, security, CCTV and IELVS

Project value: \$2 billion
Completion: 2013
Vertical Transportation:
 43 lifts in total
 6 banks of 4 lifts



Optus Stadium

The multi-purpose 60,000 seat new Perth Stadium is a world-class venue. We provided design and documentation for the electrical, fire engineering, fire protection, mechanical, sustainability, technology and vertical transportation components of the project.

The commitment to a 'fans first' stadium has resulted in an innovative design ensuring an exceptional event atmosphere and home ground advantage that can only be experienced by being there. Key design and 'fans first' features include:

- Future-proofed stadium technology will be provided, including full 4G Wi-Fi coverage across the Stadium and Sports Precinct.
- The Stadium will include the widest range of seating and hospitality options of any stadia in Australia.
- Designed to increase the seating capacity within the existing structure, adding up to 10,000 additional seats.
- The unique bronze façade uses anodised aluminium which reflects WA's unique geology by day and, using state of the art LED lighting, home team colours by night.

- The seating bowl maximises the atmosphere, gives fans exceptional views and brings them close to the action, providing a special home ground advantage for our teams.
- The lightweight fabric roof covers 85% of seats and responds to Perth's climatic conditions. At night, it will present a spectacular glowing halo effect.

The design acknowledges Western Australia's unique sporting, cultural and First Nations heritage. The Sports Precinct landscape provides a spectacular vista across the Swan River to the City.

Project value: \$700 million

Completion: 2018

Vertical Transportation:

- 14 passenger lifts
- 14 escalators
- 5 goods lifts

Awards:

Prix Versailles 2019
Sports Award

2018 Project of the Year
The Stadium Business
Awards, London



Blundstone Arena

Hobart's Blundstone Arena in Bellerive has a long standing tradition of hosting international cricket over the years. More recently, AFL football fixtures have also added to the range of sport being hosted at the venue. With the increased demand for quality seating, together with the much anticipated ICC World Cup, Cricket Tasmania added a new 5000 seat boutique grandstand on the western side of the ground.

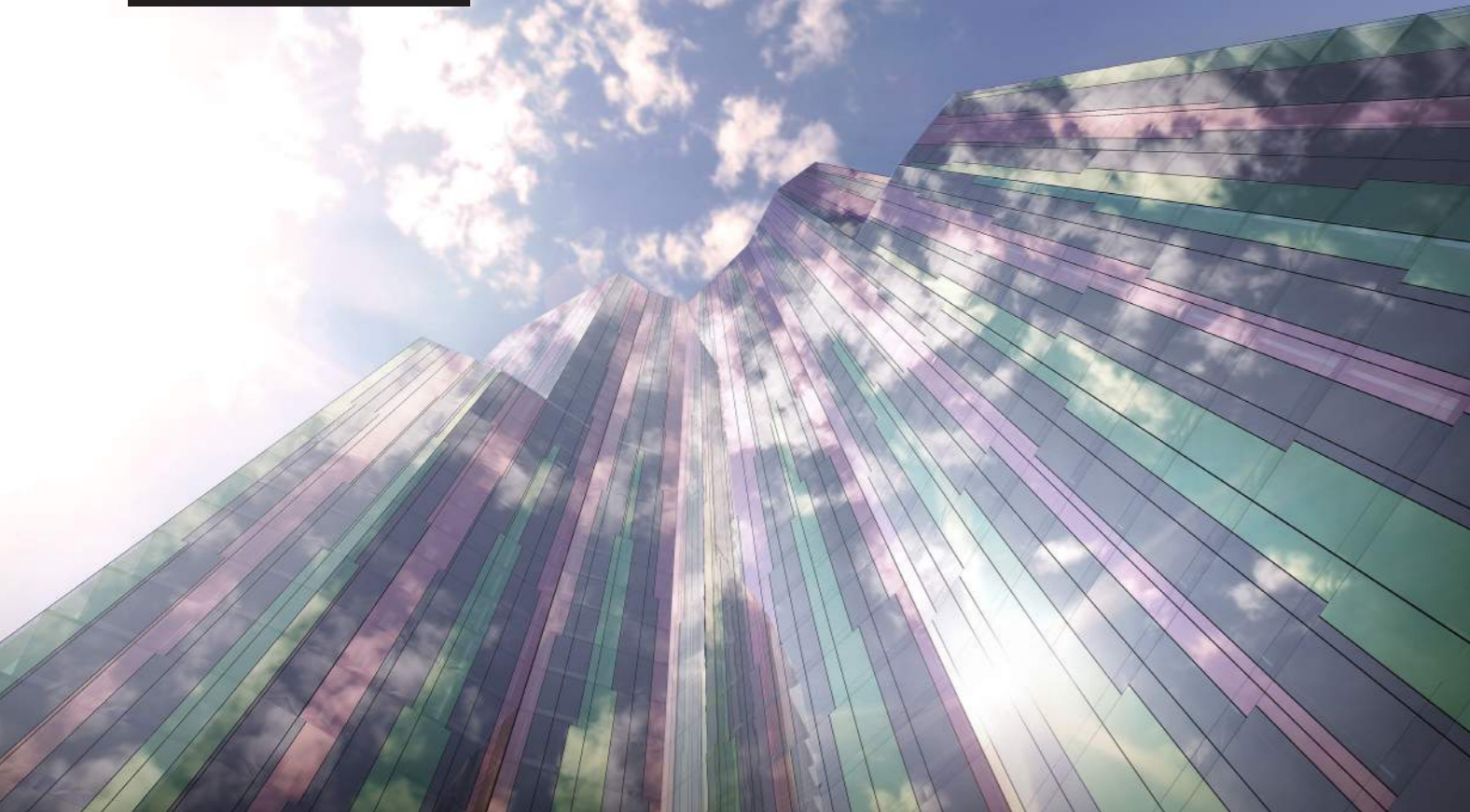
We worked closely with architects DWP Suters and Artas along with Cricket Tasmania to deliver the new Ricky Ponting stand. The new stand houses state of the art facilities include a warm-up area complete with public viewing areas, flexible

change room facilities and corporate hospitality provisions. In addition to the game-day facilities, the Ricky Ponting stand also houses Cricket Tasmania's new headquarters.

With a strong underlying sustainable approach and utilising full 3 dimensional documentation, the new stand is state of the art in more ways than one. We designed the upgraded CCTV and public address systems, with particular consideration for the stadium acoustics. We also provided the fire engineering for the project, designing cutting edge evacuation modelling throughout the new and existing stands.

Project value: \$30 million

Completion: 2015



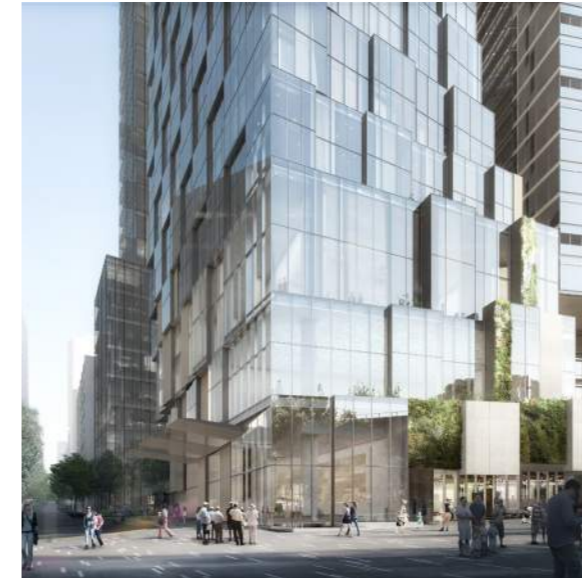
Project value:
\$340 million

Completion:
2019

Swanston Central

Located in the middle of Melbourne University and RMIT campuses, the Melbourne CBD development consists of a new mixed-use residential complex with 1,040 apartments and 2,254m² of retail.

The retail component is largely located within an existing heritage building. Being over 70 storeys high, Swanston Central is to become one of the tallest residential buildings in Victoria, as well as becoming a landmark that will provide a combination of functions including residential, commercial and recreation.



1 Alfred Street, Circular Quay

Project value:
\$400 million

Completion:
2022

One Circular Quay is a premium mixed-use development in a prime location at 1 Alfred Street, overlooking iconic Sydney Harbour. A 61 storey residential tower occupies the western end of the site, alongside a 28 storey luxury hotel with public space at ground level. The towers share a 6 level basement car park.

Our engineers collaborated with the Sustainability team leader to target 5 Star Green Star ratings in Design and As Built categories.



201 Elizabeth Street

Project value:
\$350 million

Completion:
2023

The impressive redevelopment at 201 Elizabeth Street, Sydney will provide a new 50-storey mixed use hotel, retail and residential tower. The high-profile project aligns with the City of Sydney's CBD vision, providing 10 levels of commercial space, a 5-star hotel and high-end residential apartments integrating living, employment opportunities and a unique Sydney CBD vista.

Our team are consulting on the design and construction, including demolition of the existing 38 storey office building and 2 levels of basement.



Project value:
\$800 million

Completion:
2016

Ritz Carlton Melbourne

We were engaged on Stage 1 (Towers 1 and 2) of the West Side Place project at 250 Spencer St project in Melbourne. Tower 1, a tall high rise stands at 280+ meters, includes a Ritz Carlton Hotel, function spaces and also features luxury residential apartments.

The second tower features luxury residential apartments. This project includes a ground floor lobby, retail precinct and basement car park facilities.

Ritz Carlton, Elizabeth Quay

Project value:
Undisclosed

Completion:
2019

Our Perth-based team delivered the Ritz Carlton at Elizabeth Quay's Lot 9 & 10 project designed by our Melbourne Office. The project encompasses a Ritz Carlton Hotel and residential apartment development within the Elizabeth Quay precinct.

Over a shared three-storey basement car park and back of house facility, the project encompasses a 206-room premium hotel facility, function areas, multiple food and beverage outlets and approximately 379 residential apartments.

The project is targeting a 5 Star Green Star Custom rating as developed in partnership with the Green Building Council of Australia.

Even Hotel, Auckland

Project value:
\$200 million

Completion:
2020

The first EVEN Hotel to be built outside the US will be constructed in Auckland on the former New Zealand Herald site. The 37-storey tower will transform Auckland's skyline and includes both the EVEN and Holiday Inn Express brands. The project will provide 200 4-star EVEN Hotel rooms on the upper floors, on top of the 290 3-star Holiday Inn Express located on the lower floors.

We are providing all major engineering design services, including structural, civil, mechanical, electrical, hydraulic, vertical transportation and fire protection from our Sydney office. The construction site is highly constrained, fronting the main thoroughfare of Albert Street in Auckland's CBD.

The building is being designed to resist seismic forces in accordance with New Zealand's strict design standards.



Forrest Chase Redevelopment

Project value:
\$160 million

Completion:
2019

Vertical Transportation:

- 7 passenger lifts
- 2 goods lifts
- 6 escalators

The Forrest Chase Redevelopment is a major revitalisation of the existing commercial and retail precinct in the heart of the Perth CBD.

This project involves a major upgrade to the existing façade, mechanical and electrical systems.

Sustainability initiatives include Section J using a JV3 performance approach and a 4 Star Green Star retail centre rating.

As part of the Green Star rating, we were involved in a detailed analysis of the energy consumption of the project and completed a full range of sustainability initiatives.



Midland Gate

Project value:
\$100 million

Completion:
2019

Vertical Transportation:

- 1 passenger lift
- 10 travellators

This staged project sees a fully-enclosed, single-level centre expand to approximately 69,000m² of gross lettable area. It includes a new fresh food precinct, an expanded dining offer and 215 retailers.

Our team have worked through multiple iterations of the project concepts since 2010 to develop a feasible solution and integrate the existing centre with the new build. BIM modelling of building services was undertaken to ensure the design is accurate to the actual cost of the project.

We are Green Star Accredited Professionals who have achieved a certified 4 Star Green Star Design Review for the project.



Project value:
\$249 million

Completion:
2016

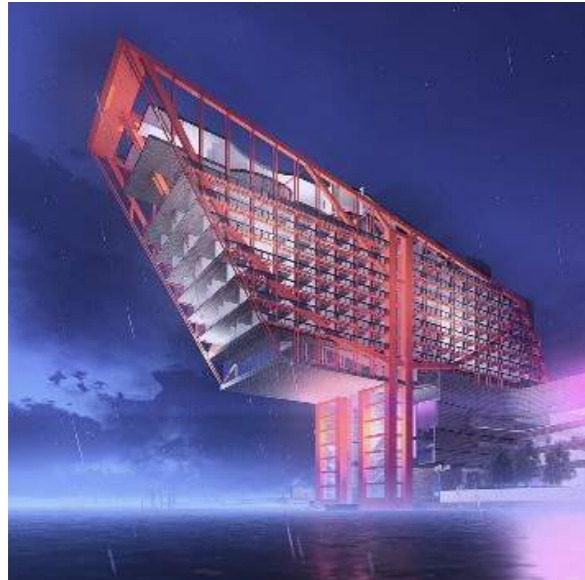
Vertical Transportation:

- 3 passenger lifts
- 3 escalators

Perth Busport

The Perth Busport project represents a key piece of the transportation strategy for Perth, and is critical to the finalisation of Perth City Link, connecting the CBD with Northbridge. The project includes an inclined entry tunnel to the east, an entry tunnel to the south, with a central passenger terminal accessed via three pedestrian entry portals.

Traffic studies were undertaken by our team to ensure the vertical transport solution catered for the current day expected use and future predicted commuter numbers. The design includes three lifts and five escalators. By working closely with the managing contractor, the Public Transport Authority, the Department of Fire & Emergency Services, and the wider design team, we were able to identify critical concerns at nominated design review stages. This resulted in a robust design for this unique development in Western Australia.



Hotel at MONA

Project value:
Undisclosed

Completion:
Undisclosed

Hotel at MONA (HOMO) is a 172 room, 5-star hotel that will sit next to the Museum of Old and New Art (MONA) in Hobart. The project will also consist of a three-storey public library, a conference centre, 1,075 seat theatre, additional gallery spaces, health spa, outdoor performance area, as well as additional retail spaces designed for restaurants and bars.

We are delivering multi-disciplinary services engineering for this exciting next stage of the MONA development. The project includes multiple different site usages including, an office, theatre, convention centre, gallery, exhibition, library, day spa, accommodation, restaurant and casino spaces. MONA's focus on sustainability, ecology and environmental impact has been complemented by our willingness to experiment and push the envelope with high efficient and innovative environmental design.



State Theatre Centre, Perth

Project value:
\$90 million

Completion:
2010

Vertical Transportation:

- 5 passenger lifts
- 2 x 3,000kg goods lifts

Perth's landmark theatre facility comprises of a 575-seat proscenium arch main theatre, a 200-seat studio theatre, an open air courtyard that doubles as an outdoor performance space and two large rehearsal rooms.

The vertical transport elements included five passenger lifts servicing seven levels and two 3,000kg class C goods lifts servicing four levels. The complex lift system is interfaced with the access control system, which also allows management to disable access to parts of the centre that are not in use at the turn of a key.



Project value:
\$265 million

Completion:
2020

Vertical Transportation:

- 6 passenger lifts
- 5 escalators
- A 15,000kg exhibition lift
- 1 kitchen goods hoist
- 1 bespoke disabled platform lift

Perth Museum

The New Museum for Western Australia is scheduled to open in 2020. The Project includes the refurbishment and revitalisation of the existing heritage-listed buildings as well as a contemporary new building.

We are part of the Multiplex team, with architects HASSELL+OMA, delivering the project.

Site planning is formed around a large undercover outdoor space that is the central entry point of the New Museum. The buildings will include a 1000m² temporary exhibition gallery for special exhibitions, as well as a range of flexible and dynamic gallery and public spaces.

Included within the project is a 15,000kg rated exhibition lift, which is currently the largest lift installation within the southern hemisphere produced by the KONE elevator company.

Our role involves the technically challenging design of all engineering services, with specialist input and assistance from international practice Atelier Ten.

This exciting project will create a modern civic and learning environment that shares the stories of this State's people and place, acting as a gateway to explore all of Western Australia.



Project delivery and offering

Buildings ANZ project coordination

No matter what the project, no matter what your needs are, we have the team to help make it happen.

A Stantec Project Engineer will be:

- Responsible for ensuring cohesive team delivery
- The first point of contact for the client

What does this mean for our clients?

Not only will you receive the very best from all Stantec consultants, you will receive seamless design integration across all Stantec disciplines. This will result in identifying and minimising scope-gap, cost or programme risks.



PROJECT DISCIPLINES



Working together

Communities are fundamental. Whether around the corner or across the globe, they provide a foundation, a sense of place and of belonging. That's why at Stantec, we always design with community in mind.

We care about the communities we serve—because they're our communities too. We're designers, engineers, scientists, and project managers, innovating together at the intersection of community, creativity, and client relationships. Balancing these priorities results in projects that advance the quality of life in communities across the globe.



Connect with us



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