

VIC PROJECT FEATURE
AUSTRALIA 108

World Class Global



REACH FOR THE SKY

DEVELOPER : World Class Global
MAIN CONSTRUCTION COMPANY : Multiplex
ARCHITECT : Fender Katsalidis
PROJECT MANAGER : Sinclair Brook
CONSTRUCTION VALUE : \$550 million

Australia 108 is an incredible landmark \$550M skyscraper soaring over 300m high, making it the tallest building in Melbourne and home to the highest apartments in the Southern Hemisphere. The project includes 1,105 luxurious apartments and extensive resident facilities including a 25m lap pool, sauna, steam rooms, gym, private theatre, private dining rooms, virtual golf, infinity edge pool, sky garden, and stunning 360 external views.

Rising in the exclusive Southbank district of Melbourne is a new luxury address developed by World Class Global and unlike any other in Australia. Standing at 319m tall, Australia 108 will be the tallest residential building in Australia, soaring to 100-levels above the city with 1,105 premium apartments and 360 degree views of Melbourne.

The building's iconic design is a masterpiece of the internationally renowned architecture firm Fender Katsalidis. "We knew our project had to go where none had gone before," said David Ng, World Class Global CEO. "We wanted to create a statement on the skyline. The building's form is punctuated by the bold Starburst that cantilevers 6m from the building, 210m in the air, and is a truly unique feature housing 2-levels of never before seen luxury amenity."

As a landmark project Australia 108 has been complex to deliver. To construct a tower of this magnitude is rarely attempted in Australia and the Starburst provided its own challenges, having not been attempted before. "We selected Multiplex to lead the construction as they are unparalleled in tall building delivery and value quality and safety as much as we do," said David.

Multiplex introduced new techniques to build Australia 108 including the creation of purpose built platforms from which builders could install the golden panels of the Starburst. An innovative formwork screen system was also used to mitigate the risk of falling objects over the busy streets below, allowing the façade to be installed behind the screen on an electric winch system.

The delivery of Australia 108 represents a milestone in the history of the Australian construction industry and incorporates the most cutting edge technologies. "There are a range of innovations that have occurred in recent years that have been applied to Australia 108," said David.

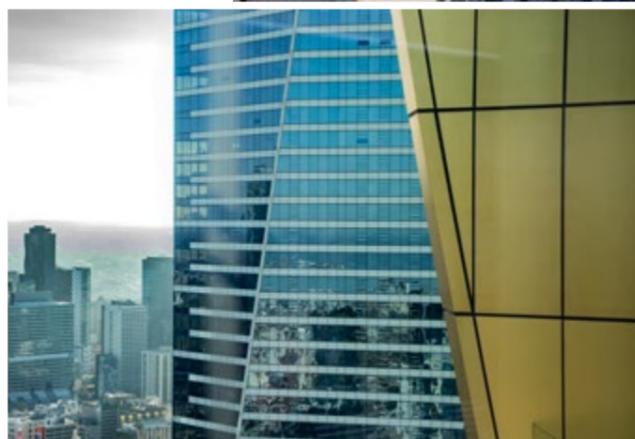
The success of such a complex project is also testament to the contributions of a large team of consultants. "We have an exceptional team working on Australia 108," said David. "This includes Multiplex and our Architects, Fender Katsalidis, the Interior Designers, Carr Design, the Project Managers, Sinclair Brook and many other engineers and consultants. I guess you could say we really have our own community of people devoted to making this building truly extraordinary."

This exceptional project is a highlight in World Class Global's catalogue of developments. "We are so proud of Australia 108 and the outcomes," said David. "We are creating an icon on Melbourne's skyline which will remain part of the city's legacy for years to come."

The Australia 108 project reflects the vision of World Class Global, which is to develop quality projects combining astutely selected locations, impressive architecture and skillful space planning for the benefit of customers and shareholders. Their approach is underpinned by a strongly upheld sense of creativity coupled with a commitment to the finest quality.

"At World Class Global, we always deliver the highest quality product but never forget to tailor to the needs of our residents' desires," said David. "Going forward we will continue to raise the bar for the world of luxury lifestyle."

For more information contact World Class Global, email sales@australia108.com.au, website www.australia108.com.au



Below Minesco was responsible for the incredible unitised façade of the Starburst of Australia 108.

With a proven track record in architectural façade systems and the ability to provide a full design and construction service, Minesco were appointed to deliver the façade works for the Australia 108 project. They were engaged in September 2017 and will remain onsite until around mid 2020.

“All the façade elements were custom designed by Minesco and their partners as part of our design and construct appointment,” said David Leone, Project Manager. “All the systems we used underwent a whole testing procedure against key factors including wind load and movement of the building. All the systems we used were designed around these key requirements while meeting the architectural intent that we needed to align with.”

One of the most complex aspects of the building façade is the Starburst on Levels 69-71, which contains the residential facilities and is inspired by the Commonwealth Star on the Australian flag. “A lot of the unitised façade for the Starburst was applied offsite to steel trusses,” said David. “That scale of unitised prefabrication was quite challenging.”

To deliver such a complex and ground breaking project within the required timescales required careful planning and this was a large part of Minesco’s work. “A key part of the delivery was the logistics, monitoring and running the fabrication process,” said David. “We undertook a lot of background monitoring to ensure that what was delivered was fit for purpose, ready to install and met the project’s quality requirements.”

A large offsite facility was set up for storing materials arriving from overseas, altering and completing quality assurance checks. “Nobody really sees that side of it but it’s a huge portion of the work,” said David. “A lot of coordination was done behind the scenes to ensure that the trucks arrived with the right product at the right time.”

The collaborative working relationship with the lead contractor, Multiplex, was integral to the project’s success. Minesco have worked with Multiplex before on a number of projects. “We have a strong existing

relationship and they have been great to work with,” said David.

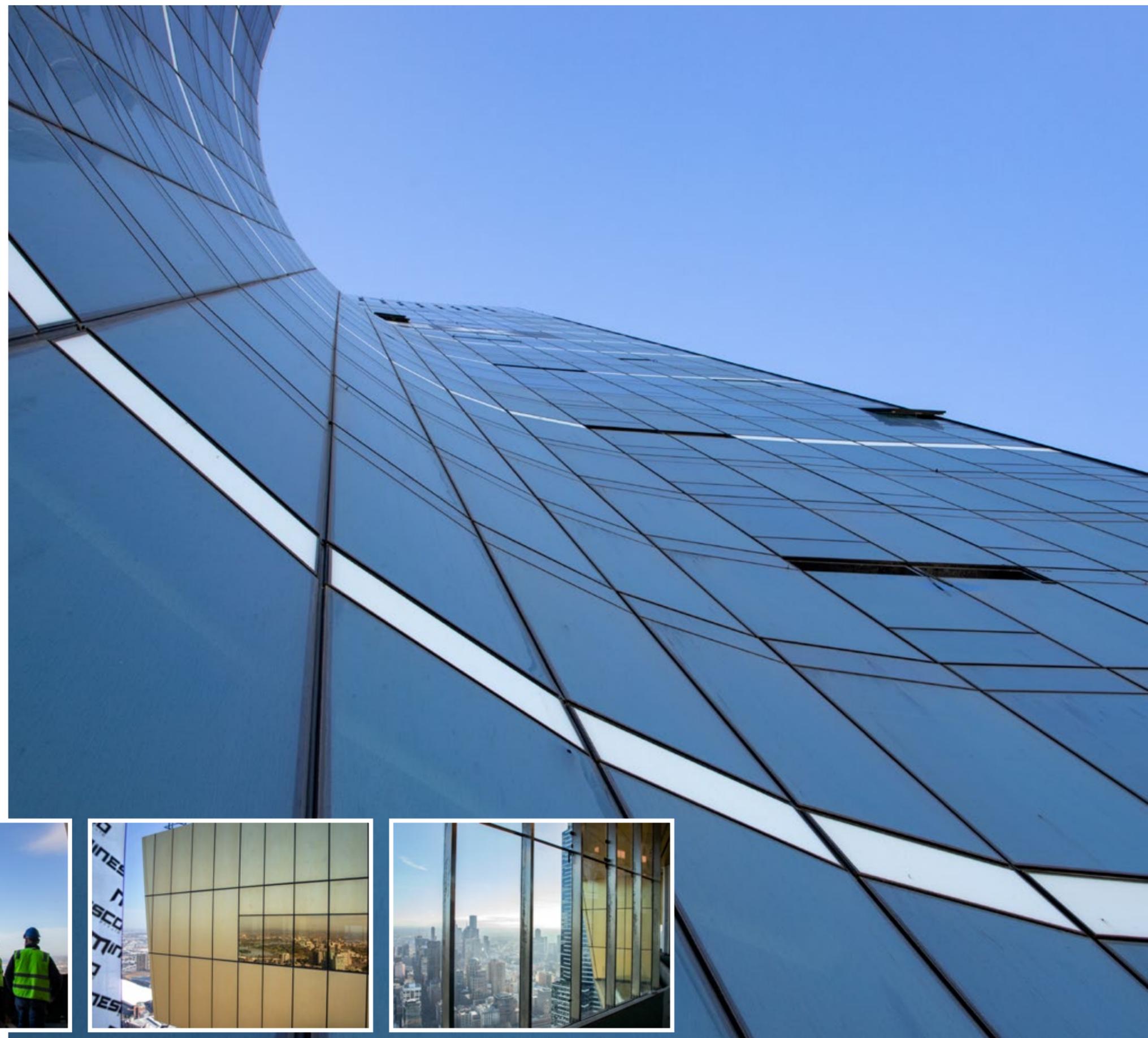
“The project went well,” said David. “Our contribution will be highly visible and it’s a spectacular building. This is what we all love doing in the company and it has been a privilege. We are really happy with the result to date.”

Minesco design, supply and install a wide range of façade systems including curtain walling, architectural panels, aluminium doors and windows, shopfronts and skylights. For over 40 years they have been a leader in the façade industry and has a strong reputation for successfully completing complex projects with innovative solutions.

From their head office in Tullamarine Victoria, Minesco are able to deliver projects of all scales in Victoria and around Australia. Their portfolio of completed projects includes a broad range of government work, commercial work, hospitals and other facilities.

The company operates two manufacturing facilities in Melbourne which include a range of computerised cutting, milling, assembly and glazing equipment. Their ability to complete manufacturing works locally gives them much greater control over quality as well as the ability to respond rapidly to design changes.

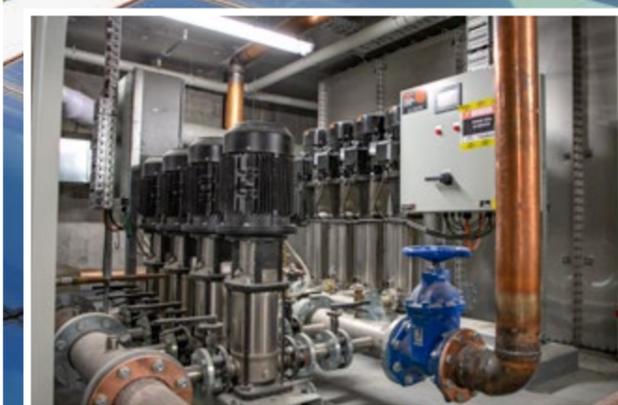
For more information contact Minesco, 15 Hewitt Way, Tullamarine VIC 3043, phone 03 8318 8800, fax 03 9338 1888, email admin@minesco.com.au, website www.minesco.com.au



Below DYWIDAG supplied over 300 tonnes of specialised bar systems to produce the best structural solution.



Below CDC Plumbing & Draining delivered the drainage and hydraulics systems to the Australia 108 project.



The construction of supertall buildings such as Australia 108 requires innovative products and solutions. DYWIDAG has an enviable reputation for highly reliable geotechnical and post-tensioning systems and lifespan management products. They work with government authorities, asset owners, construction companies and design offices to support infrastructure projects. DYWIDAG played a key role working with the designers on the Australia 108 structure to reach new heights.

“High rise buildings are often slender and can have stiffness issues,” said Sander van Ameijde, Managing Director. “The core in the middle of the floor is very slender and may deform in the wind. To minimise bending, the core is connected to the columns on the outside with outrigger walls. This results in concentrated loads in the outrigger wall and we need to contain these forces. The problem can’t always be solved with normal rebar but our higher strength reinforcement bars had the performance to make it work.”

DYWIDAG worked with the design team to identify the best structural solution providing higher strength reinforcement with a large bar diameter up to 75mm and then supplied over 300 tonnes of specialised bar systems to the project.

DYWIDAG may be found across a dozen sectors including high rises, bridges, stadiums, car parks, wind towers, slope stabilisation and dams. Their systems are found in iconic projects like the Freedom tower, the Golden Gate bridge, ANZAC bridge and the Sydney Opera House.

Launching their Australian office in 2002, DYWIDAG is now the nation’s largest manufacturer and supplier of specialist ground reinforcement and support products. Globally, DYWIDAG has been operating since 1865 and has offices in 95 countries with inhouse milling and fabrication. “End to end tracking is important for our quality control,” said Sander. “It’s all about a controlled process, our aim is to make infrastructure safer, stronger and smarter.”

DYWIDAG offers the most extensive range of civil engineering products available on the market. DYWIDAG’s technical expertise and experience in planning and installation, allows them to partner with customers to achieve the best results for the most challenging structures.

For more information contact DYWIDAG-Systems International, 24 Groves Road, Bennetts Green NSW 2290, phone 02 4081 5500, email civilenquiries@dywidag-systems.com.au, website www.dsicivil.com.au

Through constant innovation and development of expertise over the last 40 years, CDC Plumbing & Draining have grown to become Australia’s industry leader in commercial plumbing. They have an extensive track record of working with Tier 1 contractors to deliver Australia’s biggest building projects on time and on budget.

CDC were appointed by the lead contractor, Multiplex, to deliver the hydraulic and drainage installations to the landmark project, encompassing 1,105 apartments in total.

Delivering the tallest project in Australia by roof height is not without challenges. “The higher you go the harder it gets,” said Glenn Brandt, Site Foreman. “The cranes are working flat out so loading of materials and fitout gear is a challenge. Luckily, we have a core group of people that we can rely on. Every two weeks we would receive a detailed programme and we had no problems sticking to it and achieving the best outcome.”

As Australia 108 neared completion, new challenges arose. “Residents had already started to move in to Level 66 and below,” said Glenn. “We needed to minimise disruption for them and which required a fair bit of coordination with Multiplex to ensure.”

A strong relationship with Multiplex was a key factor in delivering such a major project. “We have been working with them for many years,” said Glenn. “We need to trust each other both in the office and onsite to get the job done.”

“We have seen this building grow from nothing and to have been a part of that is really special.”

CDC is uniquely positioned with the skilled team and infrastructure to deliver major projects. With the highest level of onsite quality management in the industry, CDC has demonstrated their ability to deliver the best results time and time again.

For more information contact CDC Plumbing & Draining, 13 Aerolink Drive, Tullamarine VIC 3043, phone 03 9272 9000, fax 03 9272 9099, email reception@cdclumbing.com, website www.cdclumbing.com