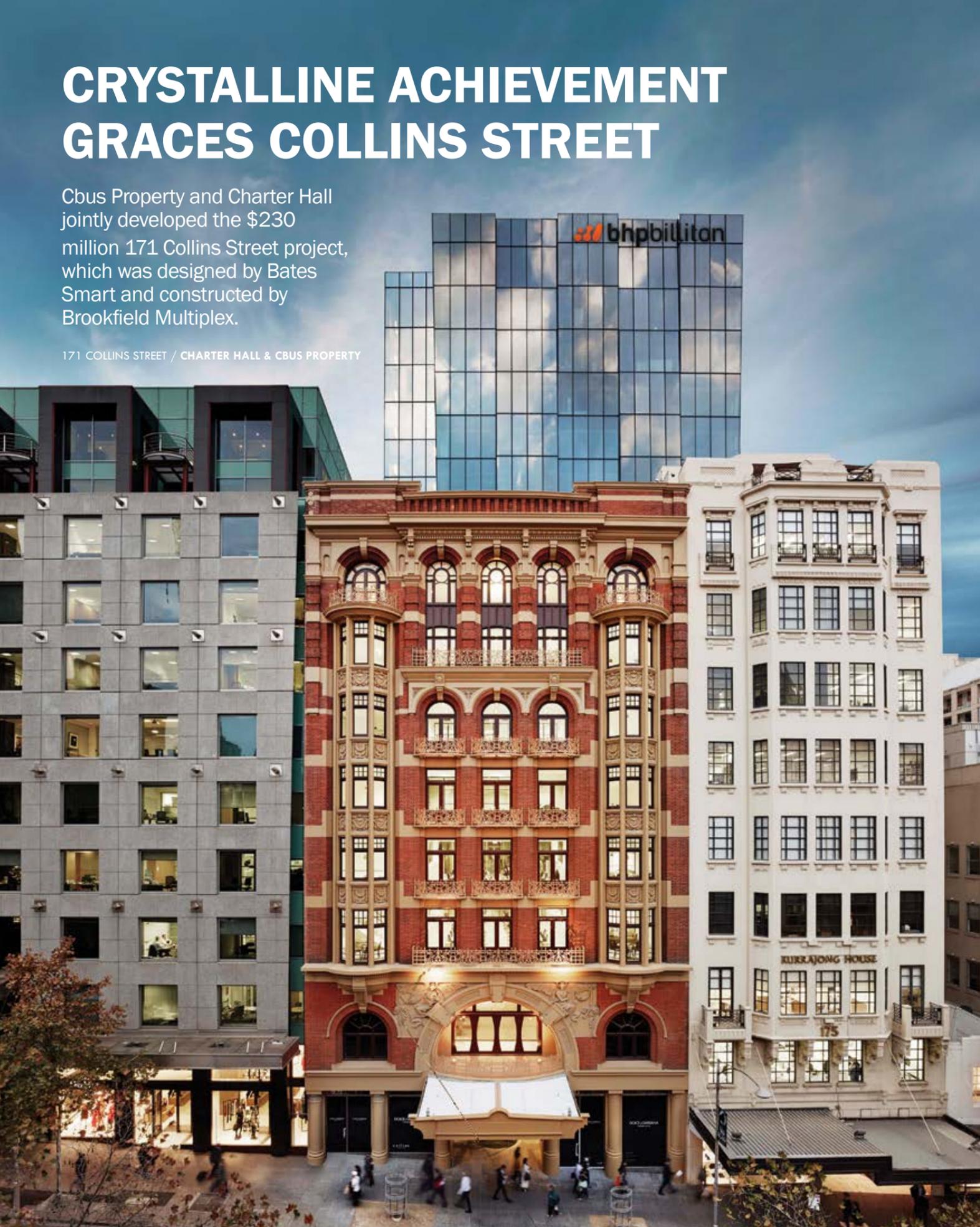


# CRYSTALLINE ACHIEVEMENT GRACES COLLINS STREET

Cbus Property and Charter Hall jointly developed the \$230 million 171 Collins Street project, which was designed by Bates Smart and constructed by Brookfield Multiplex.

171 COLLINS STREET / CHARTER HALL & CBUS PROPERTY



Left 171 Collins Street, superior in both architecture and environmental credentials

**Heritage and leading-edge thinking find harmony at 171 Collins Street.** This visionary project is the first Premium Grade office building to be constructed on Collins Street in 20 years, bringing a new icon to the city. It incorporates the refurbishment of the heritage listed Mayfair Building and the construction of an 18 storey office tower to its rear, comprising 17 floors of Premium Grade office space and a ground floor of high-end retail, lobby and business centre, with the pair linked by a striking nine storey atrium comprising more than 650 individual shards of glass, which enjoys a luxury of space and light befitting a building of this stature.

Cbus Property and Charter Hall jointly developed the \$230 million project, which was designed by Bates Smart and constructed by Brookfield Multiplex. Representing 'World Leadership' in environmentally sustainable design, 171 Collins Street is Victoria's first Premium Grade office building to achieve a 6 star Green Star Office Design V2 rating and is expecting to achieve a 6 star Green Star As-Built rating and a 5 star NABERS Energy rating.

"We are extremely proud of this significant achievement which solidifies 171 Collins Street's position as a world leader in sustainable design; a building that is superior in both architecture and environmental credentials," said Adrian Taylor, Head of Wholesale Partnerships, Charter Hall.

The facade has a woven crystalline appearance, created through angled high performance double-skinned argon-filled glazing units featuring a white ceramic frit pattern that gives the building an appearance of a jewel-like object. The frit reduces glare and improves thermal efficiency, as well as enabling the facade to provide a subtle and dramatic backdrop to the spires of St Paul's Cathedral, enabling them to be more clearly delineated in the CBD skyline. It was in fact one of the Development Approval conditions that the new tower complement, rather than obstruct, the Cathedral's fine architectural heritage, as viewed from Flinders Street.

Located at the 'Paris-end' of Collins Street, the building integrates a new generation of workplace environment linking the luxury and sophistication of Collins Street with the intimacy of Flinders Lane. In total it delivers an NLA of approximately 33,500sqm, comprising approximately 30,200sqm NLA in the office tower, and 1,700sqm NLA over 7

levels in the Mayfair Building. The remaining NLA includes retail space which showcases Dolce & Gabbana's first Australian flagship store in the Collins Street frontage of the Mayfair Building, and celebrated chef, Andrew McConnell's new restaurant, SuperNormal, which is planned for Flinders Lane.

Through the grand double height entrance, an elegant ground floor lobby provides a new thoroughfare with a direct pedestrian link connecting Collins Street and Flinders Lane, which displays meticulous craftsmanship and breathtaking engineering. Distinctive elements of the lobby include extensive granite stone on the floor and travertine to the walls and a shimmering woven glazed screen which frames the atrium and echoes the crystalline detailing of the building's exterior, reflecting natural light through the lower levels of the office tower and the Mayfair Building. On Flinders Lane the crystalline motif continues, with the facade of the podium levels incorporating machine-grooved glass assemblies which echo the brickwork texture of surrounding buildings.

BHP Billiton have leased the eight uppermost of the tower's large, open floors for their global headquarters, other major commercial tenants include Egon Zehnder, McGrathNicol, VicSuper and Evans & Partners who leased the seven boutique office floors of the Mayfair Building.

Unique features of the side core configured tower include a fire stair well on both the north and south side of the core, with one side of clear glass walls which winds its way up the side of the building and between floors, providing added light and the flexibility to traverse multiple levels.

An innovative under floor air distribution (UFAD) system has been installed which delivers air directly to office areas from floor level, delivering improved energy efficiency and more finite degrees of comfort control. Low VOC and low formaldehyde fitout, finishes and floor coverings have been specified, to maximise indoor air quality and deliver employee health benefits which translate into improved productivity.

The floor to ceiling double glazing delivers excellent natural light to all office floors and the design of the atrium ensures light is reflected deep into the entrance, the expansive lobby and the office floors of the Mayfair Building as well as the first eight floors of the office tower.

A premium concierge service is exclusively available to building tenants, offering VIP services from the custom-designed reception desk at the main entrance to the building. The building's premium amenity includes secure, bright and welcoming storage for 282 bicycles with a dedicated access ramp separate from cars, an air compressor for pumping up tyres, and numerous change rooms including showers, access card controlled lockers and a drying room for building occupiers exclusive use. There are also 137 secure car parking spaces and 24 motorcycle spaces, with shuttle lifts from the basement levels which deliver people directly into the ground floor atrium.

Other key sustainability features include rainwater harvesting, grey water recycling, gas fired cogeneration engine, T5 lighting systems and dimming capacity on all lights within the building. The project's vertical transport systems are destination-controlled to save energy and minimise waiting and travel times. Building staff and visitors are encouraged by design to consider the broad, naturally-lit stairs which arise from the Flinders Lane entrance as an alternative to using the escalators or lift when accessing the building from Flinders Lane.

"We have delivered a genuine, new Premium Grade asset for Melbourne to admire and be proud of; a building to keep. Bates Smart was commissioned to design the building because of their long history and portfolio of buildings that are unashamedly modern, but with a timelessness, credibility and integrity about them," added Truman Dare, Senior Development Manager, Cbus Property.

"This is a landmark development for Melbourne and one which heralds a new era of office building design in Melbourne and Australia. The crystalline features of the design exemplify the rich and prestigious status of this site and are brought to life in an elegant and refined vertical woven sculpture," said Kristen Whittle, Director, Bates Smart.

"The historic Mayfair Building is embraced by the new tower through the atrium, which is wrapped by a nine story curtain of glass that pulls everything together and makes the old and new work in harmony," concluded Whittle.

*For more information contact Charter Hall, 03 9903 6112 or [www.charterhall.com.au](http://www.charterhall.com.au) or Cbus Property, 03 9639 0131 or [www.cbustproperty.com.au](http://www.cbustproperty.com.au) or visit [171collins.com.au](http://171collins.com.au)*

Over the last quarter of a century, G&S Joinery and Rigger Contracting have developed the kind of skill base and capabilities which can complete a scope of works which might otherwise take half a dozen subcontractors and suppliers. The 171 Collins Street project is an excellent example, from the Heritage façade joinery through to façade restoration works and construction of one-of-a-kind items that would otherwise have been unobtainable.

G&S Joinery and Rigger Contracting are sister companies, with the Joinery operation undertaking all the offsite fabrication, including carpentry, joinery, concrete and glazing works; and Rigger Contracting completing the onsite works of installation, brickwork refurbishment and other tasks. The same highly-trained crew of tradesmen work across the two companies, under the experienced supervision of Director, Greg Deveson.

At 171 Collins Street there were a number of highly challenging aspects to their work. The original arched windows in the façade of the building had to be completely replaced, and all the windows in the nine-storey heritage building removed and refurbished.

“We had to take them out without scaffolding – there was about a month of planning involved beforehand,” Greg Deveson explained.

“We used static lines from inside the building. Because the old glass in the windows was so fragile, we used a laminated film on the inside of the glass, then opened the windows, put three glass suckers outside on each window, then brought the glass inside.

“We had to stop traffic and trams at key points – and all up it took a week to get all the windows out.”

Using shop drawings templated from the original building, G&S Joinery crafted 3 framed arched windows in western red cedar – two measuring 2.4m wide with an apex height of 3.6m, and one window 6.1m wide with an apex height of 3.8m. The laminated glazing was also cut and installed in their workshop.

“It took us over 1,000 hours to make them,” commented Greg.

“They were made by two of my staff who I trained as apprentices 20 years ago, assisted by two of our current apprentices.”

The other windows were dipped in a special chemical bath, stripped, reglazed with glass which meets the current BCA Section J requirements, re-puttied and repainted at the workshop, before being reinstalled by the Rigger Contracting team. New architraves were also made and installed for all the windows. In all, the entire operation required twelve staff over four months.

Rigger Contracting also refurbished the Heritage façade, including chemical stripping of the brickwork with E-Strip, an ecologically safe product; cleaning, repairs, and repainting.

One of the biggest challenges was the pilasters which are a feature of the front of the building. No specialist precasting company in Australia was found which was able to fabricate replacements, and to order them from China would have meant months of delay and extra logistical difficulties. Greg Deveson decided G&S were up for the job.

“No-one could tell me how to make those pilasters. I gave it considerable thought, and decided if I can make them in timber, I can make them in concrete – it just requires making them in timber in reverse and using that for a mould,” he said.

“We used the drawings from the Heritage Architect as the basis for the moulds, and we made those and poured the concrete in our own workshop. Job done – and a major item ticked off.”

One of the reasons G&S can so confidently resolve these kinds of near-impossible construction challenges is the sheer breadth of in-house skill. Greg Deveson holds an Unlimited Builders license, and is a member of the MBA with a firm commitment to training and retaining excellent tradesmen.

The company’s team of a dozen qualified carpenter- joiners can also complete plastering, glazing, concreting and brickwork, with ongoing training developing these multi-skilled hands-on abilities.

Over the last 25 years, the company has trained 18 apprentices, and 9 of those are still on staff. In 2007, G&S Joinery was recognised with an MBA Award for their contribution to training.

And it’s not only trade skills that are cultivated – safety awareness is also a strong focus, and having been LTI-free for over a decade is

proof of the quality of the safety culture the company has developed.

G&S Joinery and Rigger Contracting are currently at work on 700 Bourke Street, where the scope includes constructing a \$500,000 timber theatre floor. Other recent projects include Sheds Two and Four at Duke Dock, South Wharf, which the two companies dismantled, refurbished at their workshop, and then reconstructed onsite; and substantial joinery and restoration works at Hamer Hall including the removal and archiving of the chandelier.

Together G&S Joinery and Rigger Contracting have also undertaken the removal and refurbishment of all the windows at Victoria’s Heritage State Library, and the carpentry and joinery package at 2 Treasury Place. In addition, they have undertaken numerous correction services projects as far afield as Townsville, Sale and Eden.

No matter how difficult a project is, or how complex and detailed its specifications, together Rigger Contracting and G&S Joinery can find a way to construct excellent results. For this team, the saying ‘where there’s a will, there’s a way’, would make a fitting mission statement.

**For more information contact Rigger Contracting,** phone 03 9357 8838, fax 03 9357 8868, mobile (Greg Deveson) 0418 382222, email: [admin@gsjoinery.com.au](mailto:admin@gsjoinery.com.au)







When technology changes, as it inevitably will, the proprietary flooring system installed by Tate Tasman Access Floors (TTAF) at 171 Collins Street means occupants can move with the times, without having to dismantle sections of the walls or ceiling to do it.

TTAF supplied and installed 29,000m<sup>2</sup> of the company's Tate Tascom™ CF450CL-CF106SES heavy grade access floor system, an airtight access floor designed to support the as designed under-floor air distribution (UFAD) system.

The system is comprised of modular panels which can be easily relocated to suit the workstation configurations of occupants both now and in the future. The Tascom panels installed at 171 Collins are a steel cementitious composite, with penetrations (where required) for data and power cabling, hydraulics and air conditioning diffusers.

“The access floor plenum enables conditioned air to be delivered to the occupied zone. Through a process of natural stratification the work environment is cooled from the access floor up; in the same process decontaminating the environment as the air temp increases,” said TTAF National Contracts Manager, Gavin Lee.

“Our access floors incorporate a proprietary plenum wall system to divide up the different air conditioning zones beneath the floor. The

air leakage performance achieved on site is 0.3-0.4L/second/m<sup>2</sup>, which is extremely low and adds to the energy efficiency of the UFAD system.

“The common-located air diffuser panels can be moved to match revised workstations and work areas as required. Each panel is 600mmx600mm, and weighs only 15kg, making them a single lift to move using a panel lifter, of which we supplied for the use by building occupants.”

TTAF's installation was incorporated into the tenancy fitout requirements of the BHP tenancy on levels 12-18, and the base building fitout for levels 2-11. Their access floor panels can be finished with a range of differing floor finishes. For 171 Collins, the finishes included carpet finishes for the base building fitout, and anti-static floor tiles for the tenancy communications room. For the BHP tenancy, the panels have been retrofitted to accept stone, tile & rubber finishes as well as tenancy specific carpet where specified.

At 171 Collins, the access floor system has enabled all the services to run under the floor, including ductwork, data cabling, power and hydraulics.

“In conjunction with the builder, we had to coordinate the installation sequence of the access floor around other subcontractors equipment including mechanical, electrical and hydraulic services, who all needed to install their systems and cables under the floor,” said Gavin.

“The logistics of the project were very tight. All loading had to occur through Flinders Lane, and we had over 1,500 tonne of materials and equipment we needed to bring into that building.”

The modular nature of the TTAF components allow TTAF to work closely with architects and specifiers to minimise waste. The relationship they have with the project also continues beyond installation if required, so further access floor tiles can be supplied to meet future needs.

TTAF's products have impeccable environmental credentials. The company's Tascom™ Access Floor System holds Ecospecifiers 3rd party Green Tag Certification, and is a member of the Green Building Council of Australia. The company's Stewardship Agreement means TTAF retain responsibility for the products throughout their lifecycle. The access floor tiles can be recovered at the end of

their use, re-tested and certified, and redeployed. For Grocon's Pixel Building, TTAF supplied access floor tiles which were 100% recycled directly from another project.

TTAF's proprietary products are designed, manufactured and installed using in-house skills and expertise. All the products are tested for compliance by an Australian Third Party Certified NATA Agency. The tiles all meet ISO 9001 for Quality, ISO 14001 Environmental Management, and AS/NZ standards AS 4154 and AS 4155, and are systematically tested in the company's own Villawood facility. This is the only test lab in Australia specifically designed to test access floors, using NATA-calibrated equipment.

TTAF began Australian operations over 20 years ago as Tasman Access Floors, and was last year acquired by Tate Access Floors North America. Tate is a Kingspan company, and the world's largest access floor manufacturer. This gives TTAF solid commercial backing, and further access to global expertise in access floors.

Recent Data Centre projects including the ASX's Gore Hill Data Centre, Next DC sites around Australia & Digital Realty in Melbourne form a significant share of TTAF's business, and the company is now introducing new technologies in the data centre market including Tate's innovative DirectAire and SmartAire products which improve efficiency in the data centre.

Other major projects include the JPM Tower Sydney 29,000m<sup>2</sup>; Brookfield Place in Perth 70,000m<sup>2</sup>; Deakin University Burwood Highway Frontage 17,000m<sup>2</sup>; the Global Change Institute at University of Queensland 3,000m<sup>2</sup>; RMIT Swanston Street Design Hub 8,000m<sup>2</sup>; 717 Bourke Street Melbourne 28,000m<sup>2</sup>; the CNBP Building in Canberra 38,000m<sup>2</sup>; HMAS Harmon in Canberra and FCAD- One McNab Ave Footscray 18,000m<sup>2</sup>.

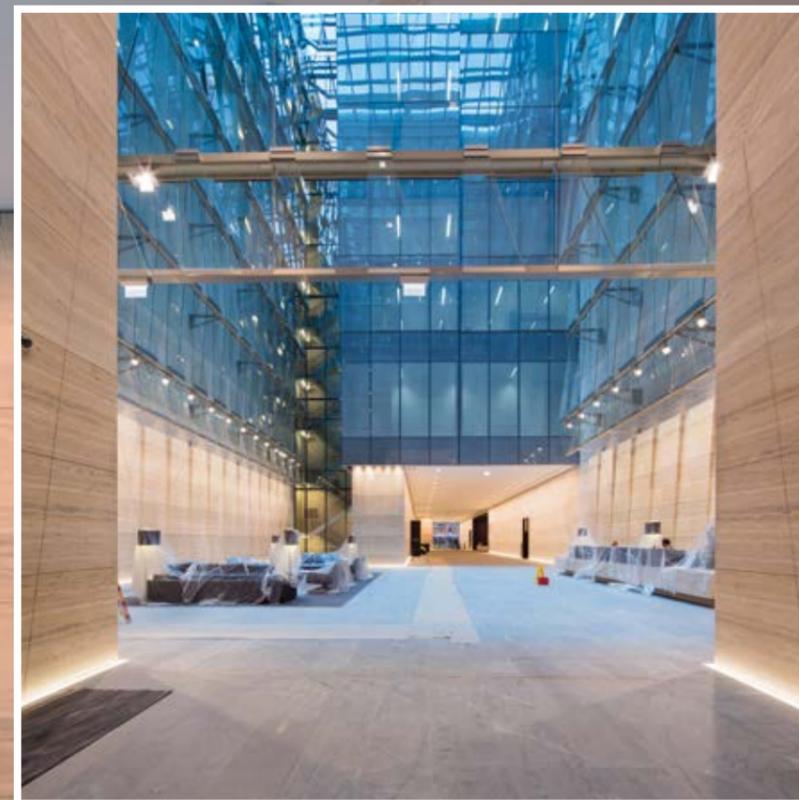
“Tate globally has an innovative product team in research and development. Tate is constantly looking at how we can support the market with more energy efficient techniques in both the data centre and general office environments,” said Gavin.

**For more information contact Tate Access Floors Pty Ltd, T/A Tate Tasman Access Floors, phone 02 9728 4111, email: info@tateaccessfloors.com.au, website: www.tateaccessfloors.com.au**



Below Berlin Baby Wall Basins as specified by Bates Smart Architects in Melbourne.

Below Yuanda Australia were responsible for the impressive atrium façade of 171 Collins Street.



**True class is not only a matter of stunning architectural statements, it percolates through into even the smallest and most basic details, such as the fixtures and fittings in the amenities.** Studio Bagno understand this, with a range of bathroomware and accessories that are stunning in design, impeccable in quality and timeless in their appeal.

At 171 Collins Street, Bates Smart Architects specified 75 of the company's Berlin Baby hand basins. These sleekly contoured semi-recessed basins are manufactured for Studio Bagno by Valdama in Italy.

"The Berlin Baby was developed by us for the Australian market," said Studio Bagno General Manager Kieran Melrose. "They are an upmarket product with a quality finish, and are well suited to a wide range of residential and commercial projects. By dealing with manufacturers from Europe, we can offer a world-class selection of products to Australian projects that have been produced to extremely high standards in scrupulously clean and energy-efficient factories. We looked around the world for our tapware manufacturer, for example, and are now sourcing products by Fima in Italy, from a factory that runs on 100% solar power."

As designers and suppliers, Studio Bagno offer both in-house designed products, such as the Berlin Baby, products designed by other leading designers like Nic Design, and can provide bespoke designed and manufactured items on request. Their style repertoire includes modern, minimalistic looks for toilets and handbasins; sophisticated free-standing baths; and an opulent Devon and Devon range manufactured in Florence, Italy.

Studio Bagno's products have been in demand for projects across the construction sectors where the design strives to deliver quality in every finer detail.

Other projects recently completed include Dominion Apartments in Darlinghurst (SJB Interiors), Star City Casino High Rollers areas (DBI Interiors), Virgin Platinum Lounges & Tier One Lounges (TZG Architects), Rydges Hotel in Canberra (Woodhead), Kingston Island - Lakefront (Cox Architecture), 101 Collins St in Melbourne (Bates Smart Architects), Guilfoyle Apartments in South Melbourne (SJB Interiors), and Burswood Casino in Perth (Blainey North).

Studio Bagno's services are generally called on at the design stage when they collaborate with the architect the vision and aesthetic goals for the project. The company also supplies to developers, plumbers and interior designers and the general public through a national network of commercial and retail distributors.

"We can bring in products one at a time if required. Overall, we work with the client to find a design that fits the budget, has the right dimensions for the space and suits the plumbing design," said Kieran. "We are committed to ensuring that we make and supply the right products, and I believe our designs and quality are ahead of the times."

**For more information contact Studio Bagno**, Unit 4/207-229 Young Street Waterloo NSW 2017, phone 02 9698 8144, fax 02 8394 9769, website: [www.studiobagno.com.au](http://www.studiobagno.com.au)

**Achieving the spectacular atrium façade of 171 Collins Street presented Yuanda Australia with a unique engineering opportunity as they resolved the many design and fabrication challenges to deliver a fully compliant façade system.**

The end result of their innovative approach to realising the architectural vision was the fabrication and installation of 1800m<sup>2</sup> of an atrium glass screen façade system, 750m<sup>2</sup> of window wall and 300m<sup>2</sup> of internal curtain wall. This is in addition to 9500m<sup>2</sup> of weaved external tower curtain wall façade, 2000m<sup>2</sup> of external podium curtain wall façade incorporating V-groove glass, 500m<sup>2</sup> of external stair core curtain wall façade, and 1300m<sup>2</sup> of external core cladding.

The external façade on the tower is an aluminium curtain wall systems with insulating glass units comprising triple-silver low-E coated laminated outer glass with grey-tinted interlayer and high opacity white ceramic frit, and clear toughened, heat soak tested inner glass.

The extremely complex atrium façade features overhead suspended glass trapezoids with exposed edges, supported on slender aluminium beams skirting a ten-storey enclosure formed by three existing buildings. Brackets connect the beams to substrates including pre-cast concrete, slender steel columns and the walls of the existing buildings.

"The architecture demanded that the connections were concealed and that the visible brackets were profiled and uniform throughout. The engineering problems we encountered related to ensuring the structural

integrity of the system and the safe design and installation of the glass with the constraints imposed by the architectural concept, which conveyed elegance and uniformity," said Yuanda Engineer, Sam Mozsny.

"There were no precedents of similar designs to call upon and no time in the programme for visual prototyping. The design therefore required a large degree of innovation. There was an installation prototype undertaken on site prior to commencement of installation works due to the risks and challenging conditions presented inside the fully scaffolded atrium area."

During close to two years of refining the design, resolving the engineering challenges, fabrication and installation, close collaboration was maintained between the Yuanda Australia construction team, Yuanda Australia technical group and Yuanda China design team in consultation with main contractor (BMPX), architect (Bates Smart) and the façade consultant (BG&E).

Yuanda are at the forefront of engineering and fabricating complex façade systems, with other recent noteworthy projects including Brisbane's Queen Elizabeth II Courts of Law, Gold Coast University Hospital, the award-winning 111 Eagle Street, ANZ Docklands Melbourne, 700 Bourke Street and City Square Perth.

**For more information contact Yuanda Australia Pty Ltd**, Suite 3/40 Brookes Street, Bowen Hill QLD 4006, phone 07 3251 6100, fax 07 3251 6150, website [www.yuanda.com.au](http://www.yuanda.com.au)

**Below** Knauf AMF Australia's mineral fibre ceiling system achieved the module sizing, superior acoustic performance and green rating specified.

**Below** The unique textured glazing of the façade, podium and atrium of 171 Collins Street, created by BG&E Façades.



**Innovative use of green building technology played a pivotal role in Knauf AMF Australia's involvement in Melbourne's landmark commercial build: 171 Collins Street.** Manufacturer and supplier of German-made materials, Knauf AMF Australia specialises in suspended ceilings, mineral fibre and suspended grid. Selling to the Australian market for the past five years, AMF Australia is German-based Knauf's ceiling division down under, and draws on the global group's established reputation as a producer of building materials and construction systems since 1932.

The \$140m 171 Collins Street development by joint partners Charter Hall and Cbus Property, is Melbourne's first premier grade commercial building in two decades. Knauf AMF Australia's Business Development Manager Chris Goodwin and Commercial Manager Fabian Propoggia fronted the company's involvement with the exciting 6 star Green Star office building. Contracted to supply its first-rate Modular system – grid and tile – throughout the 17-storey tower, Knauf AMF Australia's mineral fibre ceiling system achieved the module sizing, superior acoustic performance and green rating specified.

The ceiling system utilises a non-standard tile, which has enhanced green qualities courtesy of 'Cleanactive' technology. An additive to the tile mix, 'Cleanactive' basically cleans the air removing harmful VOC's, Knauf AMF Australia was awarded an innovation point for its use of the technology. "It passively reduces bad odours in the building, this is only the second time in Australia this technology has been used in an A-grade commercial building," Mr Goodwin said.

Achieving the design team's stringent brief was only part of the competitive tender process, the greatest challenge was proving to the tough Australian market that the relative new kid on the Aussie building block was up to the task. Mr Goodwin credits the company's own German-manufactured tiles, using AMF's state-of-the-art patented manufacturing process for securing the job. Exclusive to AMF Australia and Knauf internationally, AMF THERMATEX Acoustic gives the company the winning edge over competitors in the green build sector by providing a 100% recyclable, bio-degradable product made to stringent German standards.

Mr Goodwin describes 171 Collins Street as the company's "premier win in Melbourne." The prestigious development sits comfortably alongside Knauf AMF Australia's other significant projects: 1 Bligh Street, Sydney, Chifley Square, Sydney, 111 Eagle Street, Brisbane, and BHP Billiton's headquarters in Perth, the impressive 50-storey tower Brookfield Place. Armed with an impressive portfolio of work, Knauf AMF Australia has well and truly made an impression on the Australian commercial building landscape and is focused on aligning itself with significant projects throughout the country.

**For more information contact Knauf AMF Australia**, Suite 103 Jones Bay Wharf Lower Deck, 26-32 Pirrama Road, Pyrmont NSW 2009, phone 02 8198 9900, fax 02 8198 9911, email: Propoggia.Fabian@knaufamf.com, website: www.amfceilings.com.au **Contact Melbourne Office**, phone 0458 036174, email: Goodwin.Chris@knaufamf.com

**The luminously textured glazing of the façade, podium and atrium of 171 Collins Street gives a gleaming testament to the expertise of BG&E Façades, and represents a landmark project for the practice.** "We were fortunate to be working as part of a committed team of individuals and organisations which enabled the design process to include the construction of full sized prototypes, exploring the interactions of coatings, coloured interlayers, patterns and different lighting conditions," explained BG&E Façades Design Director, Simon Barnes.

The unique design process for the glass of the main façades involved testing the visualisation for the building with day-lighting software to simulate the appearance of a variety of coated glass products under a variety of sky conditions. Working with Architects Bates Smart and Luminova (a division of NDY), BG&E explored the interactions of colour, pattern and the texture of the ceramic frit which was to be applied to the façade, looking for a result which would achieve clear views out, while delivering the design intent.

"Requirements for the highly articulated podium glazing were for a decorative treatment in contrast to the ceramic frit application of the typical façade. Texture and reflectivity were achieved using a twin skin façade module with a CNC routed grooved glass to the external skin and a reflective coated material forming the inner skin," said Simon. "The atrium has a unique system of sloped irregular shaped glazed panels each spanning a full story height to create screens of "woven" laminated glass panels each approximately 3800mm tall. The glass edges are shaped and polished in an echo of the CNC routed glass elements on the podium, creating a network of bright glass edges weaving in elevation and section to create a unique space."

The BG&E Façades team on the project was led by Design Director, Simon Barnes, with assistance from Stefan Brey, Leo Luo and Peter Smithson, BG&E Façades Managing Director.

"We are a practice that prides itself on our understanding of the importance of the vision that Architects bring to the construction process. The achievement of this project is in delivering the Architect's vision whilst successfully managing the glass processing risks, potential secondary visual effects and enabling the resulting innovative specification to be procured within the constraints of a commercial construction project," said Simon.

As façade consultants, BG&E Façades have contributed their expertise to numerous projects nation-wide, including Royal Children's Hospital (Melbourne); Perth's Fiona Stanley Hospital; University of South Australia's New Learning Centre – Adelaide; City West Police HQ (Melbourne); Crown Mahogany Room Extension (Melbourne); and are currently engaged on the schematic design stage of 1 William Street, Brisbane. By combining in-depth understanding of the materials, suppliers and performance qualities of glazing products, careful research into possibilities and a collaborative approach to resolving the engineering and installation aspects, BG&E Façades have the ability to help turn innovative ideas into stunning outcomes.

**For more information contact BG&E Façades Melbourne Office**, phone 03 9652 3900, email: info@bgefacades.com Peter Smithson – Managing Director, Simon Barnes – Design Director