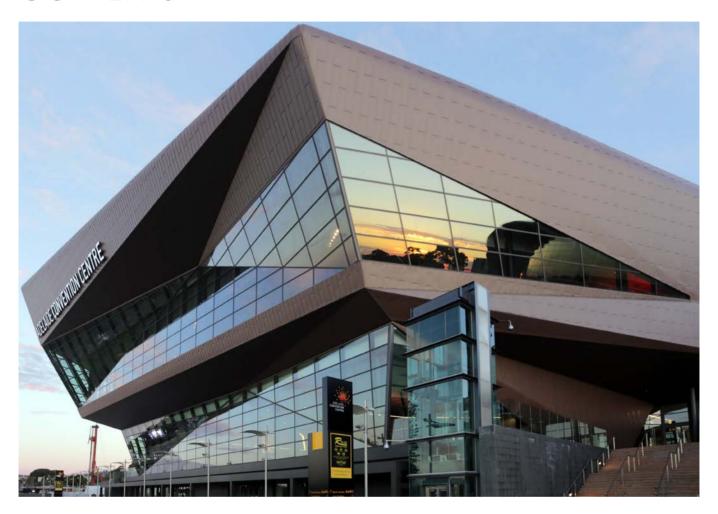


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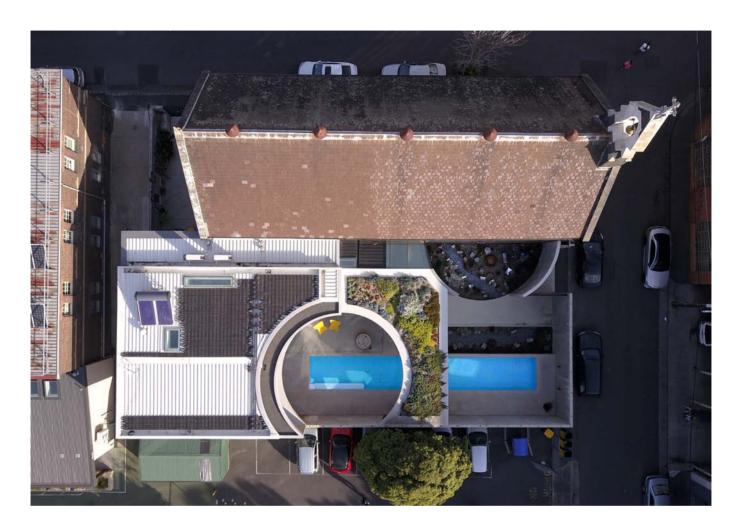
### CIVIC STAR

Adelaide Convention Centre

Convention centres are rarely un-conventional. Adelaide's newly expanded Centre, overlooking the River Torrens, is one of the rule-breakers and game-changers. Squeezed onto a tight, problematic site, the design negotiated weighty engineering issues, straddling a busy rail line and underground car-park. The result might have been ponderous in other hands, but this Woods Bagot design creates a lightweight structure and heavyweight contender.

Cleverness and functionality intersect throughout – from railway turntables adapted to rotate vast seating drums, to the riverfront facade with its jewel-like veil of Viridian performance glazing. A third piece in the suite of three convention spaces, this latest on the eastern edge of the group, promises to keep Adelaide in demand as a convention capital.





22

### THE RETURN OF RADIANCE

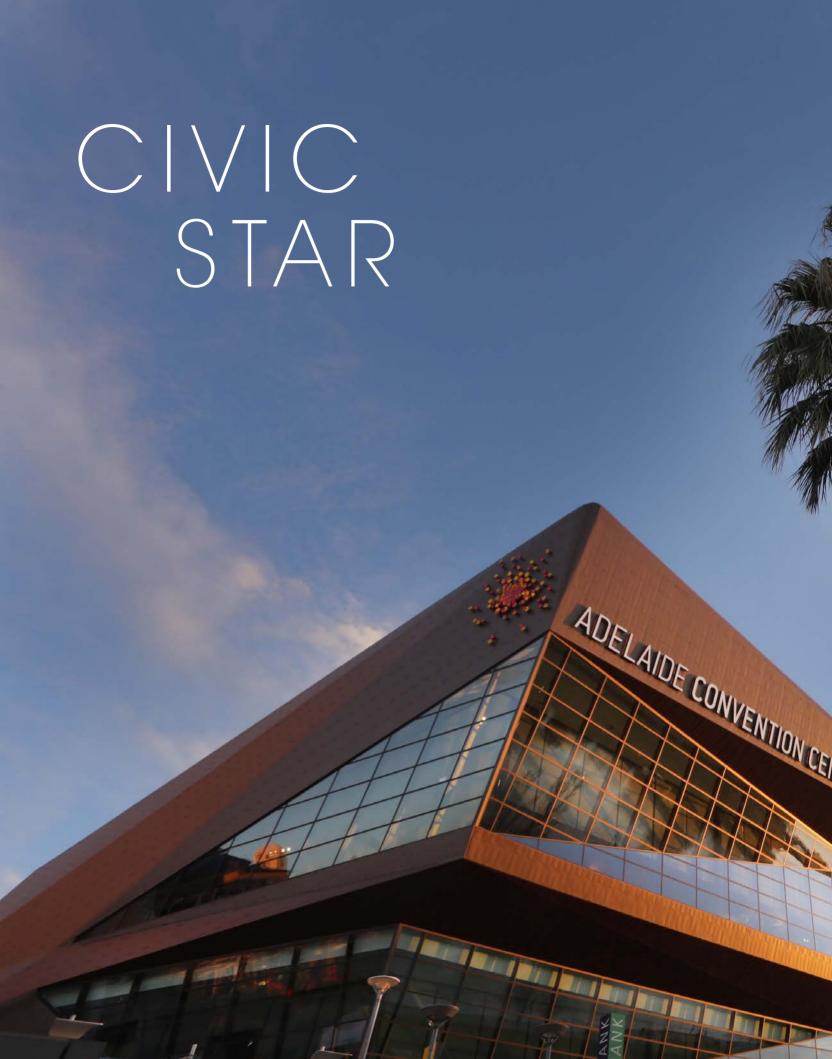
Collingwood Residence, Victoria

This conversion of a modest, inner-city church in Melbourne's Collingwood produces a stellar surprise. The suburb's revival retains its dense grit and grain of housing, light industry and retail. The discovery of a church for sale a few years ago in a narrow, one-way street was an opportunity for owner/architect Ilana Kister to imagine a family home and incorporate a former place of worship.

Kister's private oasis is timeless and yet unmistakably of its time. Contrasting the 1870s heritage church, her architecture is urban renewal presented with verve and panache. Central to the achievement is Viridian's EnergyTech™ performance glazing as 'invisible' element to rescue the old and energise the new. High perimeter walls conceal an inner-sanctum that upon entry reveals a magical contrast of stone, glass, greenery and water. A concrete canopy performs as floating garden, shade device and sculptural element. This slender concrete arc generates its very own centrifugal design force allowing glazing to provide a fluent interplay of light, shade and space.













Convention Centres are among the big markers of civic pride and standing. Without the capacity to host events grand and small – in real style – cities lose out on untold income and information sharing. With such fierce global competition for the lucrative convention/tourism dollar, it's an all out battle to be highly visible and desirable. And in the age of information access, comparisons and user experiences, endorse the better and brave.

Visibility isn't simply about project size or prominence, but relationship to place. Project architect Simon Tothill of Woods Bagot Adelaide describes the firm's \$397 million baby as "transformative". He argues the end game of convention centres is no longer the mega sized variety to "shock and awe" but that they need to engage on a deeper personal and public level.

Sited alongside the Centre's curvaceous 2001 Central Building designed in association with SOM, the new East Building completes a flurry of recent and ongoing riverbank development, including a new health and bio-medical precinct, the festival plaza upgrade, Adelaide Oval re-development and footbridge.

Woods Bagot's River Torrens gesture is animated with reflections of water and sky, while scooping deep sunlight and providing wide vistas.

#### PROJECT

Adelaide Convention Centre – East Building

### ARCHITECT

Woods Bagot

### PRINCIPAL GLAZING

Viridian Custom Double Glazed Unit with 13.52mm Low Iron, Low-E Laminate and 6mm Low Iron

### TEXT, IMAGES & FILM

Peter & Jenny Hyatt

Simon Tothill discusses the Adelaide Convention Centre East Building and the trials and triumphs of a project that celebrates its site and sublime setting:

VISION How important is this site to your design?
SIMON TOTHILL This site is brilliant. It is right in the hallmark of Adelaide, the buildings around it are champions of the creative spirit of Adelaide. Ours is right in the middle of all of those. It's also a public and civic building. It has brilliant views out, but also has brilliant views towards it. We needed to create a building with a great feel from the inside that would also appeal to its neighbours.

How relevant is appearing genuinely visitor friendly? The shaping of this building was a very long, crafting exercise of getting to know the site and also producing a building of the right scale. When you walk around it, it has to feel comfortable as you approach and that you're not going towards a great monolith. A lot of convention and exhibition buildings have shock and awe as their main design criteria. This is an Adelaide convention centre and it has that sense of scale we're trying to achieve.

There's quite a history of Adelaide's Arts precinct here. Adelaide has a proud tradition of punching above its weight in the creative arts. This was a difficult site, we wish that the centre had more land around it, and we wish that the centre was able to accommodate more and more, but we answered that challenge with creative design solutions and I think Adelaide does that really well. I think we're a city that recognises that we're not the biggest, but we just want to be the best.

### The architecture is really an assembly of remarkable parts – the seating flexibility for instance.

There are so many moving parts within this building. I've never see it anywhere else. We've spring-boarded off this project with projects in New Zealand, Dubai and we're looking at North America and Asia. They've never seen buildings quite like this with seating that lifts up, theatres that rotate and ceilings that move and all the adaption between meeting room to exhibition space we can create in this building. I haven't seen it anywhere else in the world. The sleeping giant of this building is the story that we'll tell over the next couple of years as people start to discover how flexible and how unique this building is. Each of the rooms has a triple bottom line. It needs to be an exhibition space, auditorium and meeting room all in one and so this centre works exceptionally hard.





"The sleeping giant of this building is the story that we'll tell over the next couple of years as people start to discover how flexible and how unique this building is."

SIMON TOTHILL, ARCHITECT





The client, Adelaide Convention Centre, was very specific in their requirements for flexibility and recognised the advantages that both the rotating drum concept and the hinged seating provided. Our challenge was to combine these together on a difficult site. The East Building is the first building in the world to combine hinged seating, operable walls and rotating drums, making the ACC truly one of the world's most flexible convention centres.

### Did the project give you sleepless nights?

The most difficult component was replacing a building that was 30 years old and sitting on top of a 30 year-old car park and Adelaide Central Railway Station. There are platforms with trains on them still running during the construction process while you're trying to build a building. We couldn't shut them down. You can't shut down the entire city's transport network. There were sleepless nights about how we were going to do it safely and how we were going to get this built on time and not disrupt everyone else's lives.

### Your billboard-scale inclined glazing is pretty much the climax of your composition.

The days of creating civic or entertainment facilities where you can't get that sense of excitement or interest about what's occurring inside are over. We have a higher expectation for knowing there's entertainment and excitement going on in our most exciting buildings, so this facade and the glazing was critical to get right, and that visibility in both directions.

"One of the great accomplishments here is an enormous glass wall that draws visitors attention to a beautiful view, something that only the latest and best high performance glazing systems can achieve."

SIMON TOTHILL, ARCHITECT







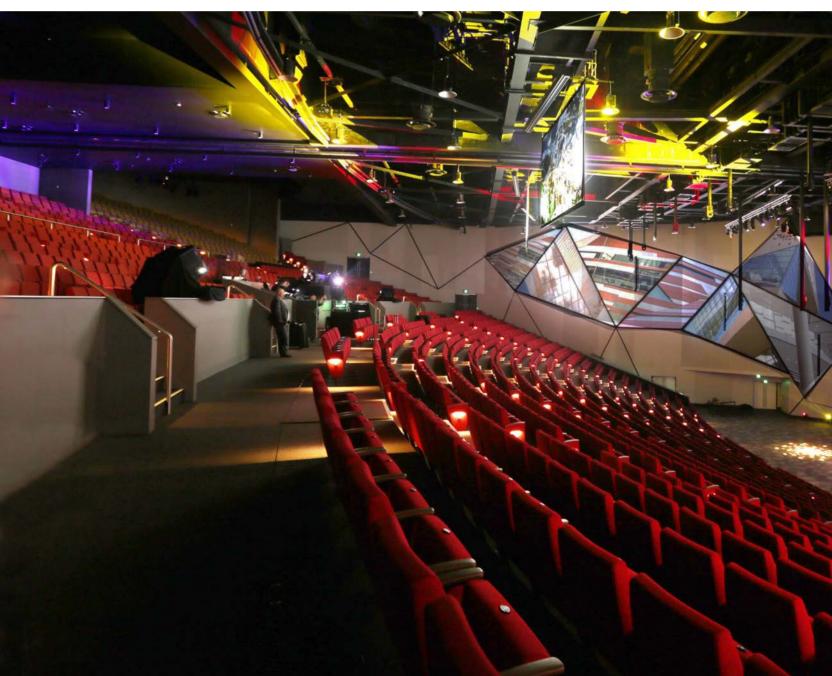
Interiors are oriented north to capture daylight and views across the River Torrens and adjacent sports precinct/parkland.





Seating configurations of immense flexibility are most obvious in the main auditorium which can be split into various arrangements and are activated by huge rotating drums adapted using locomotive technology.









### How was your experience with Viridian?

Viridian's glass was a natural fit for the design with such a large expanse of glass facing a public foyer. It matched our desire for natural light and the right blend of visibility and reflection of the riverbank environment with outstanding thermal performance. One of the great accomplishments here is an enormous glass wall that draws visitors' attention to a beautiful view, something that only the latest and best high performance glazing systems can achieve.

Imagine if the glass was terrible? It would be a blight and wreck the entire experience of being in this wonderful space. Working with Viridian was reassuring. We knew that we would get a quality product. We knew that the promises made right at the very start of the project would appear on our building. We've got the software and technology to generate really exciting shaped buildings, but where it all comes to fruition is right at the back end, "Will the thing we've placed on this building perform in the way that we expected it to?"

"Convention and exhibition centres have generally always been about how big can you make it, how much stuff can you put into it? This centre is unique because we don't have that space, so each of the rooms works harder..."

SIMON TOTHILL, ARCHITECT









### What about clarity, transparency?

The tricky component with the facade is that the glass leans out and you look through it at an angle, so things like roller marks from the toughening process, or getting the Low E-coating right on the inside of the glass unit all became absolutely essential to the quality and consistency of the project.

### What about sourcing local products?

We tried to use as much Australian content and local production as possible. When outsourcing product from overseas, a reliable supply chain and guarantee of quality is critical to the success of the project. When it came to the glass, when it came to the technical aspects of it, we had a very specific set of criteria to deliver. It was a very tight window, we wanted a glass that was as clear as possible. We had a huge expanse so we needed performance to be exceptional. We had to build a product profile that we could deliver the building in the right way, and the Viridian product ticked all the boxes.

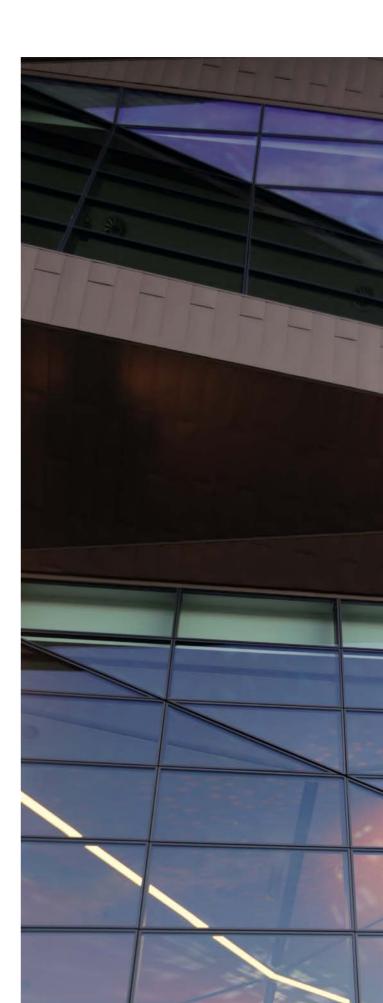
### The geometric, pleated facade really produces a faceted, light responsive result.

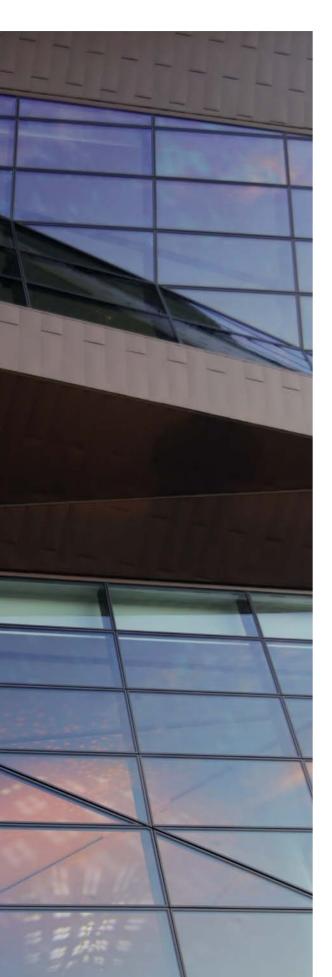
The inclined glass gave us an opportunity to control the amount of light coming in the building by carefully selecting the angle of the facade. Convention and exhibition centres have generally always been about how big can you make it, how much stuff can you put into it? This centre is unique because we don't have that space, so each of the rooms works harder.

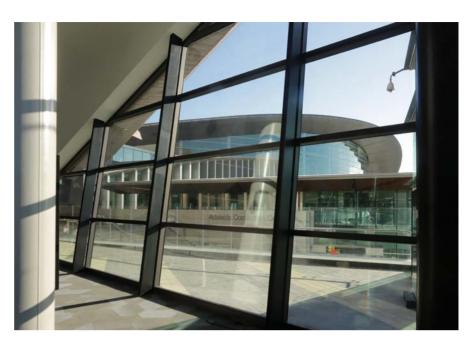
This centre works exceptionally hard to deliver value and capability to the Adelaide community. The weight of the building is a huge factor – four stories of car park have been down there for 30 years and we have some very heavy pieces of kit right at the top of the building. We have seats and seating bays that lift up and transform into a flat fall. We've got rotating drums, and they're all heavy objects, and they're a long way up off the ground so the design and the strengthening of all the structure below became paramount.

"Being in this building is absolutely like you're part of Adelaide's landscape. The light-bulb moment on this project was how we were going to get these buildings to contribute to the city fabric."

SIMON TOTHILL, ARCHITECT









Specific glazing is modelled into the design to keep the venue connected to its environs in all directions and light.

### Connecting to the river seems so obvious now, but this isn't the history of the city.

This building is actually a transformative project. For years this has been a back face of the city. All of a sudden we've got these great buildings that address this beautiful riverbank precinct and each of the buildings speak to its scale. Being in this building is absolutely like you're part of Adelaide's landscape. The light-bulb moment on this project was how we were going to get these buildings to contribute to the city fabric. This is the doorstep of Adelaide, and there is no back door to this building, this is all on show. The light-bulb moment for this project was to say: 'Well everything that we do in this project needs to show what we're most proud about the city, this precinct and what it can become. It was a really proud moment when this building opened. I grew up here and now we're delivering convention centres all over the world and so it's great seeing how this works and now we're taking this to the world.

#### PROJECT

Adelaide Convention Centre – East Building

#### CLIENT

Adelaide Convention Centre

#### ARCHITECT

Woods Bagot

#### PRINCIPAL ARCHITECTS

Thomas Masullo, Gordana Ticak, Simon Tothill, Stuart Uren

#### PROJECT ENGINEER

Aurecon, Bestec

### BUILDER

Lend Lease

### FACADE ENGINEER

Aurecon

### WINDOW SUPPLIER / INSTALLER

Capral / Reliable Glass

### **GLASS SUPPLIER**

Viridian

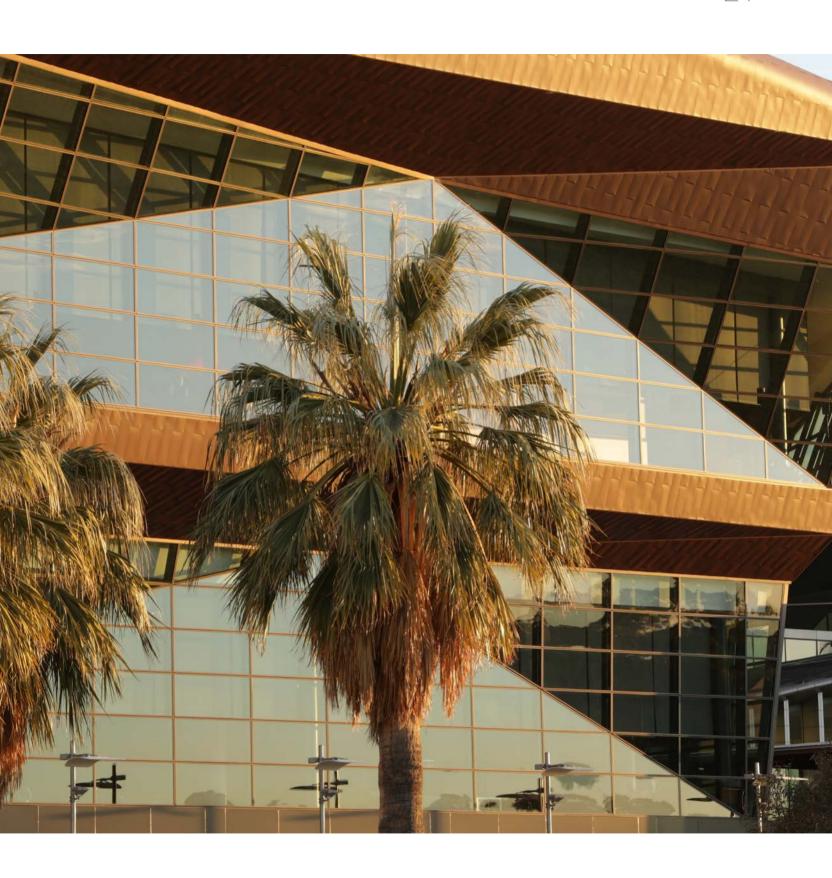
### PRINCIPAL GLAZING

Viridian Custom Double Glazed Unit with 13.52mm Low Iron, Low-E laminate and 6mm Low Iron

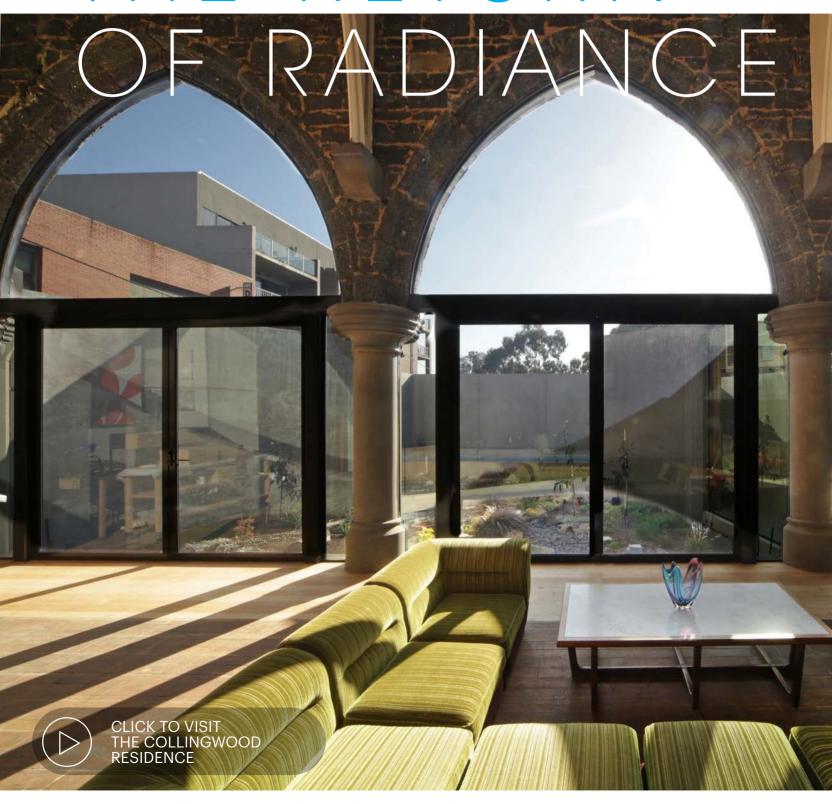
### TOTAL PROJECT COST

\$397m (East and West Buildings)





# THE RETURN





At its best, architecture is the dance of necessity and beauty. It's the tango of bold ideas, technique and bold invention. As the great Jørn Utzon noted – 'The start of architecture is an act of love.'

But it takes much more than good intentions to overcome the myriad of constraints and regulations. So much so, it's a wonder good or great buildings ever make it off the drawing board. But they do and Ilana Kister's Collingwood House is evidence of huge effort, imagination and love.

Big ideas and bold materials intersect elegantly behind the high walls of Kister's house for a family of five. A dramatic courtyard of concrete and glass reprises Sir Roy Grounds' innovative design for his '50s South Yarra Hill St. residence. Kister's reinterpretation brings muscular assurance and delicate touch.

A creamy concrete facade peels back to reveal a courtyard of intrigue. The landscaping is Japanese inspired and Zen-like with gardens that organically ebb and flow.

Minimal, high-end materials – principally concrete and glass – contribute to a distilled calm. And, as if to 'just add water', a 17-metre lap pool as part of the water-garden further contrasts the bluestone sobriety with *moderne* lifestyle.

#### PROJECT

Collingwood Residence

#### ARCHITECT

Ilana Kister

### PRINCIPAL GLAZING

Viridian EnergyTech™ Clear Double Glazed Unit

### TEXT, IMAGES & FILM

Peter & Jenny Hyatt



The result is a love-letter of possibilities. Linking old and new in thoroughly unexpected ways, Kister's brave ambitions resonate with controlled daylight informing interiors throughout. The usually problematic connection between rusticated old and gleaming new is handled poetically. A highlight of technical virtuosity is Kister's glazed link that glues old and new so convincingly – it's a masterwork.

Such glazing is a rarity of jeweller's detailing. This is most notable where the stone column profiles demanded precise laser cutting to accurately pattern glass to match the complex stone mouldings.

Her achievement expands in the bluestone church on the eastern end with a new, drastically expanded feature window. Kister acknowledges Viridian's fabrication skills in assembly and installation of this 5m tall window with bespoke framing. Its vaulted form is repeated along the church's north wall with arched and rectangular glazing for deep light transmission.

"Minimal, high-end materials – principally concrete and glass – contribute to a distilled calm. And, as if to 'just add water', a 17-metre lap pool as part of the water-garden further contrasts the bluestone sobriety with moderne lifestyle."







A courtyard house with an additional courtyard within appears to have its own centrifugal force as organising element. All ground level glazing opens to dissolve the boundaries of inside and out.

An immaculate transition between old and new reveals expansive north facing glazing.











### Vision's Peter Hyatt spoke with architect Ilana Kister about her grand rescue of the old and creation of the new:

VISION Are you the better architect or client?

ILANA KISTER I'm a better architect. Definitely. I prefer the role of architect to client. Clients are very difficult on architects. They're always 'nothing's perfect', nothing is ever what you think it is going to be and you just have to roll with it. As an architect you see your full vision and the amazing light and space, but you don't anticipate how beautiful it could be in every different light mode. As the client, what do you see? You see defects. You see challenges. You see variations. You see negatives. To see past all that to the positive is a challenge to the client until the last moment, and then they see it. It's a challenging process but the architect enjoys every minute.

### How intense is the process of designing with yourself as client?

The process of building and outcome is absolutely like the birth of a baby. Design is not my only obsession, but it is very difficult to turn off during the design process. You might be driving the kids to school, or making dinner and people are talking at you, but all you're doing is trying to resolve a corner junction. Every single corner matters, right? Every single detail is crucial to the whole outcome. If you don't focus on the detail and make the building the best you can, you are not going to get the finessed building that you see.

### This is a prismatic result where glazing beautifully contrasts bluestone and concrete.

Glass was critical and the reason being was that originally the church was so dark with bricked-in archways. Without opening up the archways we wouldn't have achieved such an amazing effect inside the church. To marry a heritage building with a contemporary building is almost impossible without glass. Glass is the critical element, the link connects the church and house to create this beautiful moment. Without glass, solid against solid hides the original detail.

### What about how occupants experience the space?

Glass is the material that creates the connection. The glazing links the views from the new house to the church and the courtyards, glazing creates a through and through effect. Wherever you are in the house you can see the church. Without the visual link, you could have a contemporary house without a church. There would be no point.

### A standout is the detailed glazing around the church columns in critical junction of new and old.

That's the talking point. There's a few talking points about the house but that's what everyone sees first. People are blown away. Even people who don't know anything about architecture, you look at the glazing cut around the bluestone columns and you think, how is that done, it's almost impossible. I think Viridian felt the same. The outcome is phenomenal and I was excited when they came to watch the installation. This glass detail brought the project to life and was a critical moment. Glazing is obviously so important for comfort. What's really critical is that you get enough glass in a building, because without that, there's just no way you could achieve such a beautiful environment.

### How was your experience overall working with Viridian to achieve such non-standard, prototype results?

Viridian and the glazing team excelled. What they achieved was extraordinary. It was a very difficult project in terms of working around the existing columns. Then there was the infill of the massive archways with glass which they had never done in a residential situation before. Those curved frames posed some difficulties, but the outcome is remarkable. Viridian, the glaziers, builders and I put a lot of effort into resolving the glazing details. Clearly you can see the result is amazing.





Dizzy complexity made simple with a rare, jeweller's clarity and eye whereby glass flows around complex stonework and bluestone arches.













"What's really critical is that you get enough glass in a building, because without that, there's just no way you could achieve such a beautiful environment."

ILANA KISTER, ARCHITECT



The drum-like organisational quality of the courtyard is experienced from within and most obvious from above and softened by a rooftop garden.





### And the proportions between old and the new?

I don't think it was that difficult to build a contemporary building next to a very old church. What was critical was choosing the right materials and using a sympathetic scale. The building should not overwhelm but at the same time shouldn't recede into the background. The building and exterior walls sit just beneath a datum line on the church and the new upper floor sits below the church eaves. It was purely a question of scale and a compositional challenge. The church itself has been stripped back to its core structural elements. By demolishing the apse and bricked archways, and inserting glazing instead, its formerly dark interior is flooded with light and celebrates the building's historic beauty and volume.

### Do you consider your designs especially masculine or feminine in character?

Because architecture comes from the person, everything I build is feminine. That's evident in how I detail materials and corners for instance. The curves here certainly add to the femininity of it. It's my first project that I have ever done where a curve clearly came out of me being pregnant. I loved to watch how they built it and I think the outcome is so restrained. I think male architects design differently, particularly with the interiors. My focus is on the connection between interior and exterior because we experience the majority of buildings from the inside looking out.

## It's an unusual variety of spaces for a family – there's the courtyard and then you have this amazing 'backyard' play space inside the church.

I never really thought about how the kids would utilise these spaces. When we first moved in it was so big for them compared to where we were living. They looked for nooks and crannies that they could hide and play in. My little three year old's favourite game is to play Lego in the cloak-room. My seven year old makes a cubby house under the floating island bench. It's very interesting to see how the kids relate in different ways to those spaces. The church has been opened up to enjoy its historic beauty and volume and is sensitively connected to the new construct via a glass link. From here, the home unfolds in a series of pared-back living spaces on the ground floor with four bedrooms fanning off a central landing upstairs.





#### The feature arched window deserves comment.

The rear of the church originally had a massive arch opening. That created this focal point when you entered the church. I thought: "I can't lose that, it's so beautiful". I chose to infill it with glazing and along the bottom is a sliding door which we planned to eventually lead to a deck area and garden. With all that glazing you will look out onto green and sky, what could be more beautiful? I looked at other big archways through history and found another church that was renovated for a residential project in Victoria of similar style. I thought that worked so well, I adopted and modified it to suit this building. Obviously it ties everything together and it links the church to the house. For me, I can't think of anything worse than looking out onto a roof deck, a metal deck. You get nothing from it. Because we're in such a dense urban environment I wanted to bring in more green through the rooftop garden.

### You have referred to Roy Grounds' mid-20th century house as an important influence.

It's an extraordinary building and a classic piece of architecture. That house focuses on the courtyard being the biggest space in the house. I just ran with that and thought the new house needs to be open to the light and we achieved that with the immense amounts of glass. I need to get as much light in from the north and west as possible and have the building feel quite light compared to the solidity of the church. When I opened the church up, I was wowed by how much light entered through the arches.

### Did you ever envisage another life for the church other than as an indoor backyard?

The entire church was designed to become an office with a mezzanine, dining room and cinema underneath, and definitely a play area for the kids. At some point we decided to just leave the church as is. You want to finish everything and make everything beautiful and perfect and immaculate. We moved in and realised the house is so pristine and church a perfect juxtaposition being worn and rough and unfinished, it's actually quite beautiful. The more you live with it the more you think "well it actually doesn't really need anything done to it."







Partly visible to adjacent apartments, the elevated garden bed is comforting to occupants within and neighbours alike.

"... the new house needs to be open to the light and we achieved that with the immense amounts of glass. I need to get as much light in from the north and west as possible and have the building feel quite light compared to the solidity of the church."

II ANA KISTER, ARCHITECT





Is sustainability in this project explicit or implicit?

I hope both. They are adopted throughout: skylights and internal windows allow natural light into internal spaces, reducing the need for artificial light; heat gain is controlled through canopies, double glazing with Viridian's EnergyTech™ and blinds; the courtyard allows continuous cross ventilation; and the thermal mass of exposed ground slab, coupled with appropriate insulation, helps regulate the internal environment in all seasons. The rooftop garden provides insulation, softening the exterior aspect and attracts birdlife in this urban location.

### Vistas are one thing but the garden offers another texture and delight.

At the moment the garden is in its infancy but eventually all of the natives will become really, really dense. I wanted to create almost an indigenous garden, like a forest, within this pristine concrete environment. The roof garden was my baby. I was just so excited about it. I planted every little plant, and I put the soil in myself and I did everything. I can see it develop and grow to become this carpet of colour and it's very beautiful. There's nothing better than to wake up in the morning and look at that. I think continuing the curve, having a geometric shape just ties it all really nicely together. All the layers become integrated. It's just come together so nicely and I think when you visit such a building, curved and with this light, it feels really welcoming.

PROJECT

The Collingwood Residence

CLIENT

Ilana Kister

ARCHITECT

Ilana Kister

BUILDER

Frank Victoria

**BUILDING ENGINEER** 

Brogue Consulting Engineers

GLAZING CONTRACTOR

V&J Glass

GLAZING SUPPLIER

Viridian

PRINCIPAL GLAZING

Viridian EnergyTech™ Clear Double Glazed Unit

LANDSCAPING

Kister Architects

PROJECT COST

N/A

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