

# VISION

ISSUE 52

## GRAVITY & LIGHT

Selected houses by FGR Architects, Melbourne

**Viridian**  
we ♥ glass

# GRAVITY & LIGHT

The architect Feras Raffoul is a man on a mission to distil ideas and client ambitions into a single unified strand. Raffoul observes how the occupation of architecture can be like inhabiting sculpture.

So, how to create joyful spaces and celebrate space and light without incurring prohibitive environmental penalties? Clever design strategies such as site orientation, roof projections for shade and an armoury of performance construction materials make a fine start.

Raffoul's designs, whether from ground up, or as extensions to period homes, have their crisp resolution. The shrinkage or expansion of volumes for purpose and use of Viridian performance glass handsomely dissolves time and space. As with all enduring architecture, luxury, simplicity and tranquillity all flow into the other.



WATCH ARCHITECT  
FERAS RAFFOUL  
IN CONVERSATION



MITCHELL ST RESIDENCE  
NORTHCOTE

Residential design is architecture's heartland. It's a place where there is no escaping the need to deliver high calibre work to demanding budgets and high expectations. All the while with clients peering over the designer's shoulder to ensure their dream is fully realised. It's an ongoing challenge facing residential architects unable to pile one floor plate solution on top of the other high into the sky.

No, the home demands a watch-maker's attention in its making to be in perfect time with its owners needs.

At its best, architecture tunes in with nature. It's why glass can provide such a seamless transition between the built and natural. High-end performance glass such as Viridian's further blends the physical boundaries that more typically isolate.

Rather than forced in preconceived ways, Raffoul's residential designs are illuminating with their interior transparency as well as glimpsed and grand views. Sprinkled throughout the suburbs, often amongst cookie-cutter period and contemporary homes, such work is full of invention and surprise. Mass and slenderness, shadow and light transmute to remarkable effect.



**PROJECT**  
Mitchell St Residence,  
Northcote, Melbourne

**ARCHITECT**  
FGR Architects

**ENGINEER**  
Structural Works

**BUILDER**  
Mannfield Group

**WINDOW SUPPLIER**  
N/A (Frameless)

**GLASS SUPPLIER**  
Viridian

**PRINCIPAL GLAZING**  
Ground Floor: Viridian SuperClear™  
First Floor: Viridian SolTech™

**TEXT, IMAGES & FILM**  
Peter & Jenny Hyatt



They are designs with an unmistakable signature. Raffoul stretches and teases a myriad of shapes playing glass and concrete off one another with sculptural élan. He takes sketched ideas, refines and resolves these with robust delicacy and planar elegance.

While Raffoul's residential designs are clearly upmarket, the principles of space utilisation, occupant circulation and organisational clarity are possible on most budgets. It's an approach that elevates ordinary shelter to lighten the visual and physical forces in uplifting ways. His regard for the best modernist traditions sees materials utilised to full effect – concrete for privacy and thermal massing, glass for a crystal cave effect of spatial and visual connections.

One key difference between the plain old act of building and considered design is the ratio of glazing to plaster, brick and timber. Poor design tends to drive the eye towards fittings and finishes whereas seriously good design rewards inward, outward, upward and beyond.

**We want the architecture to present itself but also take a backwards step for the inhabitants.**

FERAS RAFFOUL, ARCHITECT



**Vision's Peter Hyatt met with Feras Raffoul to discuss his design philosophy, practice and approach to three recent residential projects:**

**VISION Do you discover your design solutions by drawing and sketching, or via your computer?**

**FERAS RAFFOUL** All the conceptual schematic design and initial works that come through the office are from pen to paper. Ideas work from there. I'll sit with the staff and work through that in a 3D format on computer to conceptually understand it's massing, siting and so forth.

**Are clients surprised to view the relatively old-fashioned hand drawn rather than dynamism of the computer screen?**

Clients are often initially surprised, so it's a matter of walking them through the sketch design. Not all clients can understand scale but once they view it as a 3D model then they're like "oh, okay, now I understand what it is". We are definitely looking towards the pure design.

**So the clarity of the idea is central?**

That is important. Absolutely. It's fairly difficult to achieve because it's a matter of restraint as an architect trying not to include too many ideas when it only just needs X amount.

**We introduce glass to reveal certain spaces and viewpoints within the architecture.**

FERAS RAFFOUL, ARCHITECT





**Do you have architectural heroes or influences that speak in your work?**

Two architects we look towards would be Tadao Ando, who creates beautiful Japanese architecture. His presentation is delightful. We also look towards Oscar Niemeyer and how he played volume and space, and the fluidity of his lines. His clarity was so intentional and he sent that message so well.

**Many of your residential designs are large, but could hardly be considered “loud”.**

No. Our work doesn't present in a loud way. We want the architecture to present itself but also take a backwards step for the inhabitants.

**What is it about your work that provides the biggest challenge and greatest reward?**

The greatest reward is seeing the completed product. That is by far the greatest reward. It's no different to an artist preparing a sculpture. This is just a life-size, large sculpture that's inhabited by the occupants themselves. Seeing the end product is always the most beautiful part... and rewarding. Returning years on, and seeing how a house has aged and behaved once the greenery grows and also how the family has lived and grown through the period is always a relief. That is maybe more enjoyable, seeing how it's transcended over how it was at the very start.

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FERAS RAFFOUL, ARCHITECT





One of the beautiful things  
about most of our work is the  
way it balances and contrasts.

FERAS RAFFOUL, ARCHITECT



**And the biggest challenge?**

Trying to ensure we actually get the brief and the client's expectations all in one. Our style of work is minimal and our approach one of simplicity with glass and concrete. Clients expect one thing at the start and then see the finished product and so the challenge is to deliver what they really want.

**So there's a strong sense of relief when it works?**

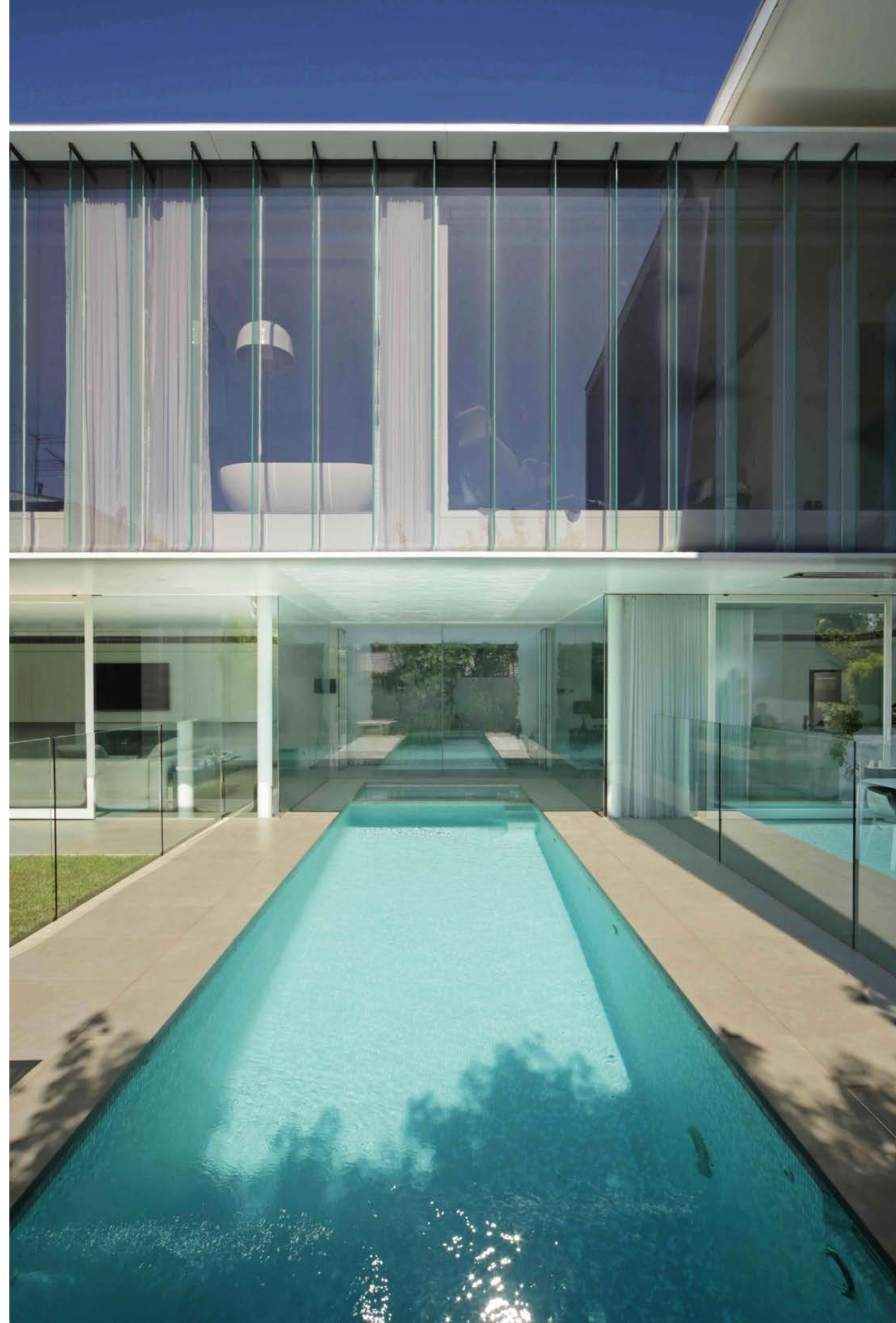
The relief is delivering over and above what they wanted. Once they occupy a space, then they're like "oh, well, didn't expect this", or "we really love it". You really have to get them enthused about it on the way through.

**When they're expecting almost the miracle it can be easy for clients to feel deflated or disappointed.**

It is. We're pre-empting what they may need. And that's not so easy because you've just met them. You try to get to know them the best way you can. You try to understand their lifestyle. And moving from that, you're trying to pre-empt what they may need in a good way. So that, to me, might be the biggest challenge/fear in what we do. And when we get it right, it's quite rewarding.

There is an 'aesthetic' to the building that sees it sit on a very gentle frameless glass ground floor allowing the upper level to just float above.

FERAS RAFFOUL, ARCHITECT





THE LAMBERT TOORAK

**What appeals about the core materials you use, concrete and glass especially? They're so different, but by contrast and juxtaposing the other are entirely complimentary.**

It's such a fundamental difference that can also be poetic. They work together so well. Where we use concrete, we deliberately use a form of material/structure for solid massing and as non see-through. We introduce glass to reveal certain spaces and viewpoints within the architecture. They're equally important. How they're used beside one another is vital. Eighty per cent of our buildings feature concrete and glass. They're the two materials that count for what we do, and it's vitally important how they come together.

**Glass provides such an active surface, it's almost as if it's the jewellery that goes onto the house to glimmer and glisten and bring the exterior alive with reflections and nuanced views from inside and outside in.**

It's a good way to put it. It is jewellery on a building. One thing glass does remarkably well is how it behaves to reflect at night and be transparent during the day. Its reflective qualities with ambient lighting are quite stunning.

Mass and slenderness,  
shadow and light transmuted  
to remarkable effect.

VISION

**PROJECT**

The Lambert, Toorak, Melbourne

**ARCHITECT**

FGR Architects

**CLIENT**

Symmonds Prestige

**ENGINEER**

Structural Works

**BUILDER**

SFO Constructions

**WINDOW SUPPLIER**

Instal Aluminium & Glass

**GLASS SUPPLIER**

Viridian

**PRINCIPAL GLAZING**

Double Glazed Unit  
using Viridian SolTech™

**TEXT, IMAGES & FILM**

Peter & Jenny Hyatt



**How do you decide on the type of glass and the 'look' if you like, that is most suitable?**

The glass we select usually has a tint. Most of our buildings will have a slight reflective element for depth. That glass does carry a bit of body with that slight tint so considering glass as the jewellery on a building is a good way to put it.

**When you design, are you approaching it from the outside in, or the inside out?**

Designing outside in or inside out varies on different sites. It really does. Some projects may come together with the plan form. Some projects come together in elevation and then invert themselves back into plan.

**How do you typically deal with site constraints and opportunities?**

Typically it provides privacy from the street-front but really reverses that beyond. When you walk to the front of this property, and even if you stand at the front foot platform, you'll notice that you don't see any of the internal areas. The idea was to give the clients full front protection and full open enjoyment at the back. One of the main features is to capture the greenery surrounding this property.

With townhouses, you're reliant on a source of light that comes from maybe two points – in this case east and west. How we detailed and presented with glass of large sizes was very important for that outcome.

FERAS RAFFOUL, ARCHITECT





Our style of work is minimal and our approach one of simplicity with glass and concrete.

FERAS RAFFOUL, ARCHITECT



**Despite the angular geometry of your designs they retain a strongly organic flow.**

We use larger sheets of concrete at the front of most houses and that changes with glazing to allow the best views and light throughout. Secondly, we're trying to ensure we see through to reveal a sculptural form.

**Do you ever test Viridian's technical support people with the demands you make for your glass sections?**


Absolutely. We consult Viridian on almost all of our projects. We try to push our glass sheet sizes as much as we can. You will see with our work that we embrace large sheets of glass. By conversing with Viridian we then understand what's the maximum size and thickness, type and colour and how that can conform to sheet size. Viridian is great in that way.

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BLOOMFIELD HOUSE  
ASCOT VALE

**Typically what sort of grid or modular size do you design your glazing around?**

If we can't obtain the sheet size we need it may not give us our modular breakup for the structural grid where we set up our column location, sliding doors and so forth. So we have to manage that because if we can go to the maximum, it doesn't always mean it's the most cost effective way. And it needs to be managed with the frames they're sitting in.

**Neighbourhood context is always an interesting one for the architect. Does it make sense in this age to replicate the neighbours, or do your own thing?**

The notion of adhering to the neighbourhood streetscape that's been there for many years is one notion of looking at things. Sometimes these streetscapes are lovely, when there's a consistent flow. Having the ability to produce architecture the way we have represents the change in times. And what may eventuate later in years to come. One of the beautiful things about most of our work is the way it balances and contrasts. On this project it positions itself next to a red clinker brick home with a pitch roof, but we're a flat roof, concrete structure with large sheets of glass. So almost all those items are opposite to what the adjoining properties are. I feel that that's glorifying the street, and the times we're about to go through.

**PROJECT**

Bloomfield House, Ascot Vale, Melbourne

**ARCHITECT**

FGR Architects

**ENGINEER**

D&A Consulting Group

**BUILDER**

ID Property

**WINDOW SUPPLIER**

Direct Aluminium Windows & Doors

**GLASS SUPPLIER**

Viridian

**PRINCIPAL GLAZING**

Viridian EnergyTech™

**TEXT, IMAGES & FILM**

Peter & Jenny Hyatt





Raffoul's regard for the best modernist traditions sees materials utilised to full effect – concrete for privacy and thermal massing, glass for a crystal cave effect of spatial and visual connections.

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**What sort of glass do you most commonly select?**  
Low E glass or double-glazed Low E. Double-glazed Low E has both benefits – double-glazing with the air pocket and also the outer sheet is also an energy efficient glass. So it offers twice the benefits.

**It's interesting to reflect that Mies van der Rohe's astonishing Barcelona Pavilion (1929) is now 90 years young and continues to provide a baseline for so many exceptional houses and commercial projects. It really became the exemplar for the environmental luxury possible with slender steel, plate glass and stone. Here you are still honouring his pioneering work.**  
Yes absolutely. And look, works like that are inspirational to us in the execution of details, the consideration of joints throughout, between the floor material to the glazing and to the roof surface.





**One quality of a good architecture is to resist dogma and style. Isn't it true that all good architecture springs from fluidity, flexibility and adaptability?**

We draw inspiration from others, but we also want to create what we believe in. One thing that sets these houses up well is that often clients come to us wanting a certain type of design with fairly exposed concrete and glass. You want clients who see beauty in that simplicity.

**We have technologies and mechanisms with virtual reality to build that in the third, fourth and fifth dimensions. Does that change your experience or influence your thinking when designing a building?**

We intend on using the volume in the form of the architecture as you transcend through the building, and your experiences change through the different phases of the building. So glazing plays a big part. Again, it's almost 80% of the architecture compilation. So, glazing on the Orrong Road townhouses for instance project is maybe as powerful, if not more powerful, than here, and it's influence due to that. With townhouses, you're reliant on a source of light that comes from maybe two points – in this case east and west. How we detailed and presented with glass of large sizes was very important for that outcome. You notice that through the front elevation with the glass panel breakup in combination with the polished stainless steel and black metal as highlight treatments.



**One thing glass does remarkably well is how it behaves to reflect at night and be transparent during the day. Its reflective qualities with ambient lighting are quite stunning.**

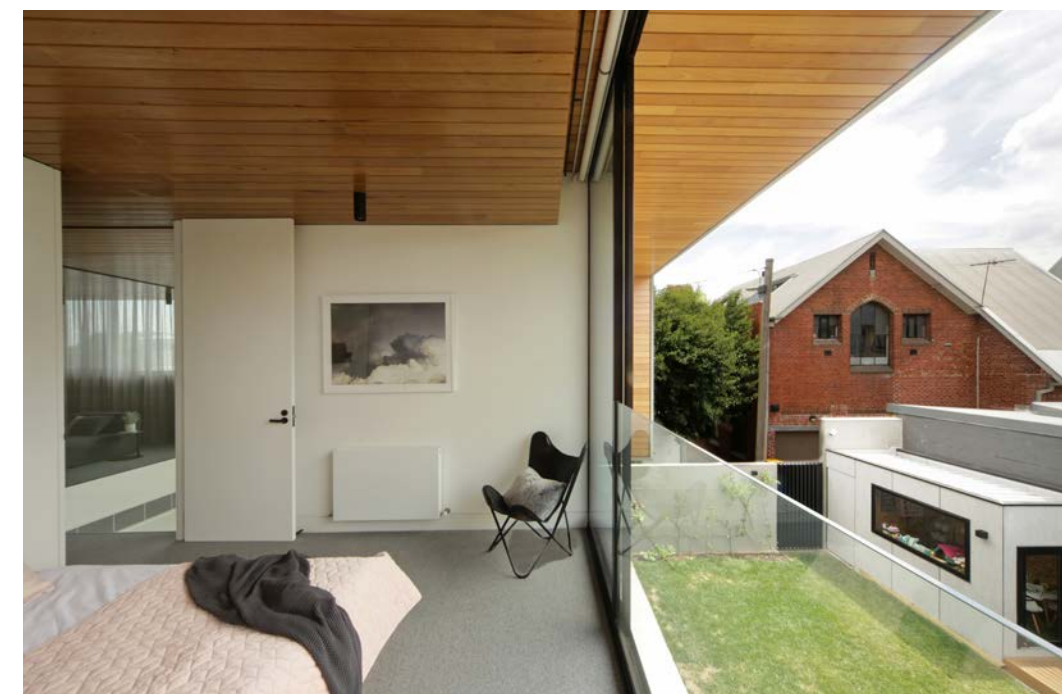
FERAS RAFFOUL, ARCHITECT





Raffoul stretches and teases a myriad of shapes playing glass and concrete off one another with sculptural elan.

VISION





**How does this reveal itself in the similarities and differences of your work?**

There's a strong link between projects but in a different form. Another project, Mitchell Street, Northcote deals with another aspect. That's a lightweight construction to an existing Edwardian home to which we added a modernist, clean, simple volume. There the horizontal volume uses external glass blades to brace and provide support. There is an 'aesthetic' to the building that sees it sit on a very gentle frameless glass ground floor allowing the upper level to just float above. Viewed from the western elevation on that facade, you see a beautiful, gentle addition of modern architecture sitting gently behind an existing Edwardian home.

**How important is material selection and the story of sustainability by sourcing glass for example locally? Does its warranty and supplier back up add benefits for you?**

It does. Yes, that's important. Dealing with suppliers locally, and having dialogue with them is important. When material lands at your doorstep, or on your construction site, would you know where it's from? That's the benefit about dealing with local people. Understanding materials that are local, and that support the local economy, to me, is also very important. We are moving in the direction where there's a blurred line, as in what's local, what's not. Do we know where it's from anymore? When we do understand that it's from here the one big benefit is that working with local suppliers to get the outcome we want is maybe the most important thing. So the intellectual property of local people is the big benefit. It's not just the supply and order, it's dialogue and working through the trouble-shooting problems.



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