K TO THE FUTURE Plane Tree House, Adelaide BA

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MAGIC BOX Alexandria Court House, Sydney

firidian

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BACK TO THE FUTURE

Plane Tree House, Adelaide

Not content with scoping the city below and starry nights, this Adelaide hills house celebrates a courtyard garden and specimen Plane Tree. Walled glazing and a concrete wing embrace the Zen-like garden.



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CLICK TO VISIT THE COURTYARD HOUSE



MAGIC BOX

Alexandria Courtyard House, Sydney

This inner-city terrace has been transformed from asthmatic box to a free-breathing and free-flowing series of courtyards. With barely more than a few door folds, the entire ground level opens into a single, grand volume engaged with the street like few others.







ENERGY















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Modern architecture's golden age peaked in the mid 20th century, high above the sprawl, smog and celluloid of Los Angeles. It produced the cocktail set Case Study Houses that became talismans for architects the world over. Slabs of stone and glass cantilevered from the precipice trapping sunlight and views with shimmering results.

With audacity and a rare lightness, these dream houses put architecture within the reach of a whole post-war generation. Their design elegance and optimism pointed to a streamlined, carefree world.





A courtyard villa of clever penetrations and glazing to usher daylight throughout.

Many architects dreamt of that time and place," says Marco Spinelli of Adelaide's ArchitectsInk. "It promised some pretty alluring visions." As if to realise and perpetuate the dream, Spinelli's vision on the flanks of Adelaide's Mount Osmond parallels some of LA's most famous houses.

The Plane Tree House is as much a love-song to the work of the great moderns — Pierre Koenig, Richard Neutra and Craig Elwood among others. While the view is spellbinding, Spinelli says the courtyard is the project's true heart and influenced by the Japanese master Tadao Ando.

Marco Spinelli spoke with Vision's Peter Hyatt about a house that spears into Adelaide's stratosphere:

This is a celebrity house.

It is. We even had a few celebrities queuing to buy it too. The first open inspection attracted more than 300 people. The following one on a Monday, saw more than 200 people and many were turned away because there was no room for parking.

How mindful of history were you with this project?

Many of our designs are inspired by the whole Case Study housing era with their discovery of floating roofs, fantastic detailing and proportions. A Japanese influence is also undeniable.

And the celebration of outlook?

Surprisingly to some, it wasn't all about the view. We responded to that Plane tree. We worked very hard to ensure that it survived. The layout really responds to this single tree.



The lateral thought of the courtyard garden takes the house from being a one hit wonder to the fully rounded design.



Those mid-Century modernists, suffered from the availability of quite inferior materials by today's standards. This house is something they could only have dreamed about.

You're right. They reduced the thickness of everything and introduced industrial methods and materials for those houses. We tried here to hide how the house was constructed. We tell our clients minimalism and simplicity is hard to achieve because we have to hide the way it all comes together.

Residential design is often regarded as unprofitable and a disproportionate headache for the effort. Is it worth it for the architect?

I always tell people our office does commercial and residential. Commercial basically pays for the residential. Residential is by far the most personally rewarding, but financially, I understand why many architectural offices refuse it.

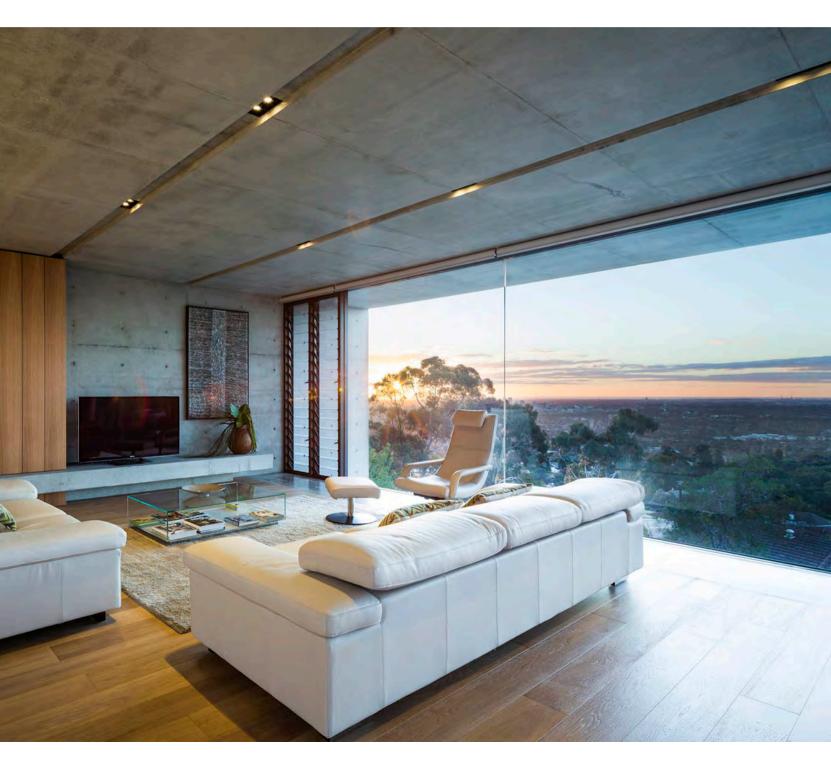
What was the real opportunity-and test?

The opportunity was to experiment with materials – concrete and glass. We design, with certain rules: "In this design, one of the rules was that the external east and west walls were to be of solid concrete. Everything in between is lightweight. It's lightweight materials, timber cladding or walls of glass." That was a rule we carried through all the way while stepping down the site.

Any issues reaching a 6-star energy rating?

To achieve the concrete finish inside and out took a lot of effort. We had to sandwich insulation within the 6-inch concrete wall and of course, that obviously influenced the choice of glass. We chose Viridian ComfortPlus[™]. Being a predominantly glass-house, it had to deliver that energy rating and function beautifully.







There are these sizable concrete slabs taken to a whole other level with glass. It's a combination that produces some cave and a lot of tree-house.

That's true, especially when you descend to the lower level, there is that play of all the glass, this void experience where you feel cozy, but remain exposed to the view. The trick for that tree-house effect was doing without a balcony. Everyone's initial reflex is for a balcony. With the outdoor living area there's no outdoor furniture to block, or obstruct views.

It's a house that incorporates a series of 'layers' to deal with the afternoon heat and glare. Some of those Case Study houses weren't always effective at that.

Many of those houses struggled to deal with the elements. With this house there are three forms of shading. One is the concrete overhang of the upper level with a north orientation. Below we've used adjustable, retractable, external louvres. That allowed huge glass areas upstairs and downstairs, without a balcony in-between to help shade the THE TRICK FOR THAT TREE-HOUSE EFFECT WAS DOING WITHOUT A BALCONY. EVERYONE'S INITIAL REFLEX IS FOR A BALCONY.

Marco Spinelli, Architect

lower level. The Plane Tree dominates the courtyard, so in summer it has a shade canopy, in winter, the house benefits from full sun.

Despite its origins, the house is unconventional by neighbourhood standards and devoid of ornament.

You're right, there aren't any frills and finials. Many people say: "Oh I love the house. I want you to design me one, but I don't want the concrete walls." My reply is this: "Well why don't you want concrete walls?" "Oh, because it's concrete." I say: "Do you think you would have the same experience of the house if it was a rendered wall?" They stop at that and then they start thinking, because it's all those materials and how they're detailed that brings this all together.

Is there a fear or trepidation about such an ambitious level of glazing?

Glass isn't any more expensive than standard walls, but there is expense in the spanning steel structure that allows such glazing. We try and create as much flexibility with glass. We call them glass walls, sliding glass walls. They're not your everyday access doors but when opened up for say a party, they are unclipped and those 3m x 2.4m glass walls slide away. For every-day use there are smaller access panels of around 2.4m x 1m. A glass such as ComfortPlus[™] means a drastic reduction in the use of artificial light.



A distilled material palette of concrete and glass emphasizes the wider vista and organic qualities of place.



In many ways concrete is monumental and yet glass effectively subtracts the impression of mass with light-filled volumes. And it's not just a hard blast of light needing sunglasses upon entry but a soft, reflected and ambient light.

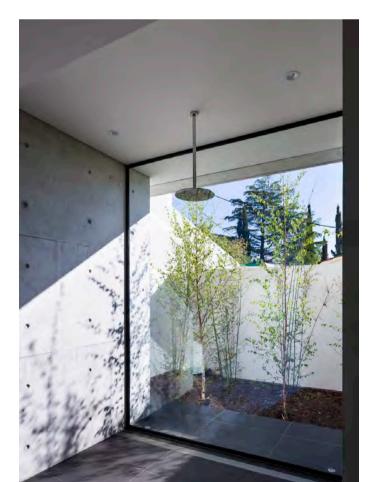
Because the Plane tree dictated the design as much as the vista out, the light entering from the east, through the tree, is just lovely. Being north facing, we had beautiful control of the sunlight hitting the floor. There's also a two-storey skylight. From above you can see the frameless skylight that brings light two levels down and most rooms have multiple light sources.

Does glass bring anything else unexpected to the project that you didn't envisage in the early renders?

We have butt-joints rather than actual mullions, especially in the main living room. It's almost as if the glass isn't there. We've used Viridian's ComfortPlus[™] for many years and it has never let us down. I think there is definitely a reassurance in working with a material palette you trust and understand.

Did you have any concerns about the environmental pressures on the design?

Concrete is low maintenance and long-lasting. Despite being energy intensive to produce, it has great thermal mass properties. We used insulation within the concrete envelope for the north-facing envelope. With so much glass, there's no artificial lighting required during the day. Cross ventilation rather than air-conditioning is another advantage. The more sliding glass walls, the more options exist for cross ventilation. Floor to ceiling glass heightens the experience of sky and trees.



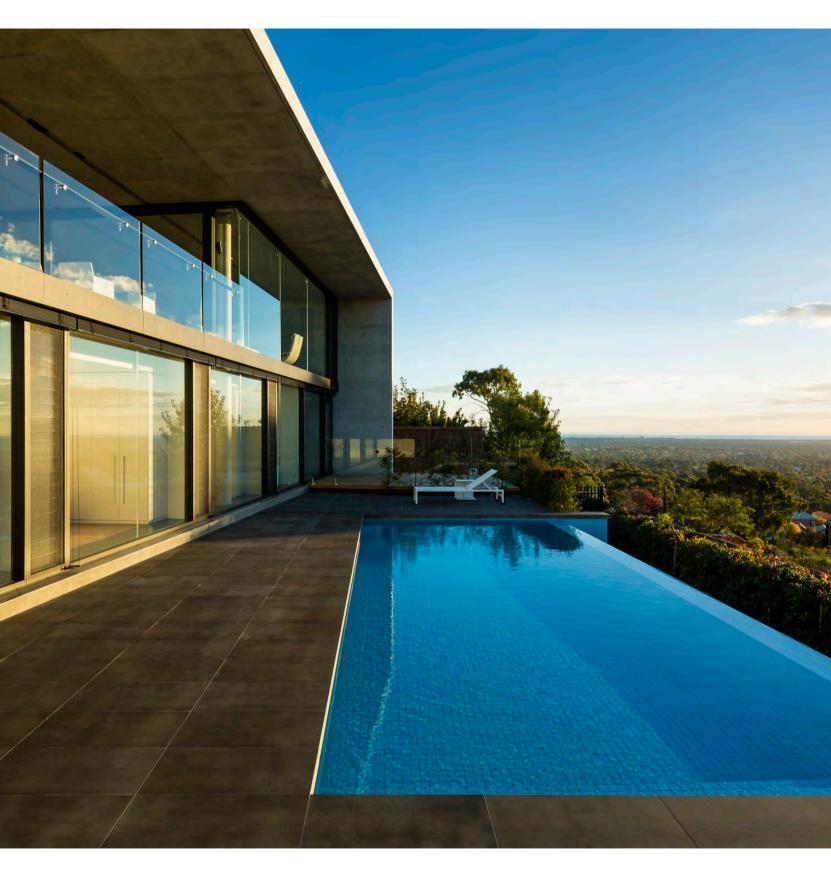


OUR CLIENTS WANT MORE CONTEMPORARY GLASS, THEY WANT THAT CONNECTION TO THE OUTDOORS,

Marco Spinelli, Architect









Are the tracking mechanisms top-hung?

On this particular project they're top-hung. We use tophung most of the time, especially with the large pieces of glass because of their weight, they glide that much more easily. Those top hung mechanisms also minimise the need for raised floor tracks that contribute to a seamless insideoutside transition.

This generosity of glazing is uncommon.

You know we're talking about Adelaide. People here typically love older villas where the windows are not large but interestingly no-one wants to match existing windows in the additions to those villas. Our clients want more contemporary glass. They want that connection to the outdoors. Those with young children want to be able to keep an eye on them, or to just bring the garden inside.

How would you summarize the house in one sentence?

In two sentences... It brings to life that dream of great mid-century modernists—with contemporary materials. It brings to life that great modernist dream in the Adelaide hills. Every time we visit the house we get a rush.

PROJECT Plane Tree House, Adelaide

architect ArchitectsInk

PROJECT ARCHITECT Marco Spinelli

engineer P4 Design

builder Krivic Built WINDOW INSTALLER/GLAZIER York Glass

GLASS SUPPLIER Viridian

PRINCIPAL GLAZING Viridian ComfortPlus™

sıze 440sqm

MAGIC BOX

This inner-city terrace has been transformed from asthmatic box to a free breathing and free-flowing series of courtyards. With barely more than a few door folds, the entire ground level opens into a single, grand volume engaged with the street like few others.

Folded away, or flexed shut into a chrysalis clear skin, the glazing within architect Mattthew Pullinger's own house is central to the design. Already subjected to a special level of scrutiny, it has already passed with flying colours.





ENERGY



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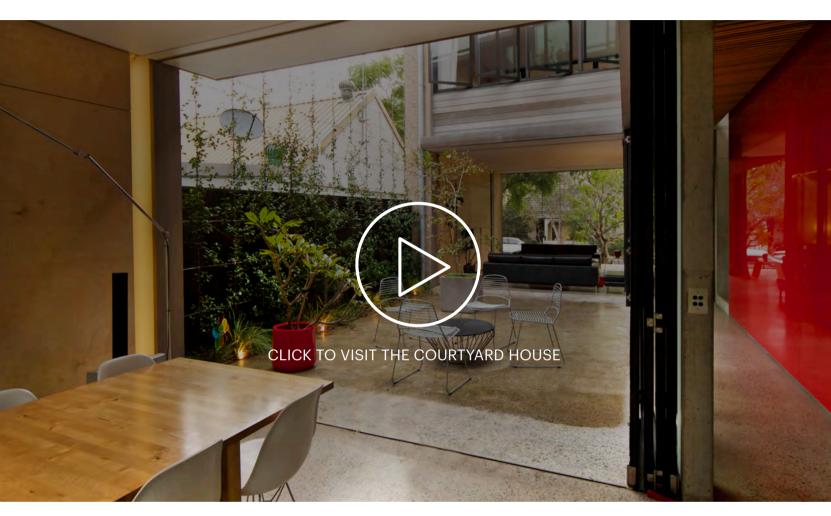
STORM

SECURITY









PROJECT Alexandria Courtyard House, Sydney ARCHITECT Matthew Pullinger

PRINCIPAL GLAZING Viridian ComfortPlus™ Clear

TEXT & IMAGES Peter & Jenny Hyatt

PULLINGER'S DESIGN UTILISES EVERY POSSIBLE PART OF THE MODEST ALLOTMENT, NOT SIMPLY FOR PRIVATE GAIN, BUT PUBLIC BENEFIT THROUGH A RARE LEVEL OF STREETSCAPE ENGAGEMENT AND GENEROSITY.

Peter Hyatt

Of the terrace houses that abound in Sydney, most are now weighing in with a real estate value barely short of gold. Despite the traditional limitations and time-capsule foibles, terraces given a makeover don't necessarily become better by becoming modern.

Matthew Pullinger recalls the fear-factor when designing this home for his young family. As a Principal at Hassell, it's one thing to recommend design strategies to informed clients, but to set in stone, glass and steel work for loved ones, applies another pressure.

"I was afraid of being exposed to peers as something of an imposter" he confesses. Inner-urban Alexandria is highly sought after with sky-rocketing values. Even so, Pullinger's design utilises every possible part of the modest allotment, not simply for private gain, but public benefit through a rare level of streetscape engagement and generosity.

Whatever fears he harboured as imposter-in-waiting were unfounded. Set in a streetscape of handsome Victorian terraces, this modern take replaces a cramped, tired box with a light-filled prism, capable of being fully opened to the street.

Despite its physical constraints, the result is engaging, often more public than private and courteous enough to complement, rather than rile the neighbours.



Vision's Peter Hyatt spoke with Matthew Pullinger about the potential for neighborhood generosity and the fear of designing his very own family home:

Was it tough as your own client—you had to listen and answer to yourself?

Absolutely. It was amongst the most challenging projects I've ever taken on. It represents the intersection between my professional and personal worlds. In a way, the design of the architect's own home is a milestone in any career. In the personal realm, it represents a major, one-off, special investment. You really want to do it once and do it well.

How much of this can be seen as a design confessional?

Not so much a confession, but it is very testing to be subject to the process of peer scrutiny. When it came to designing my own house, I found it very hard to be as deliberate and certain in decision-making as when working with clients. Once complete though, I felt great anxiety about opening it to peer review and scrutiny. That was a very humbling experience.

Courtyard houses are traditional around the Mediterranean and Africa, while Australian houses have more typically made the veranda its own. This really adopts the courtyard so un-typical of your Victorian-era neighbours.

View from kitchen through to street. Note stackable doors and fully retracted street-front glazing for breezes.

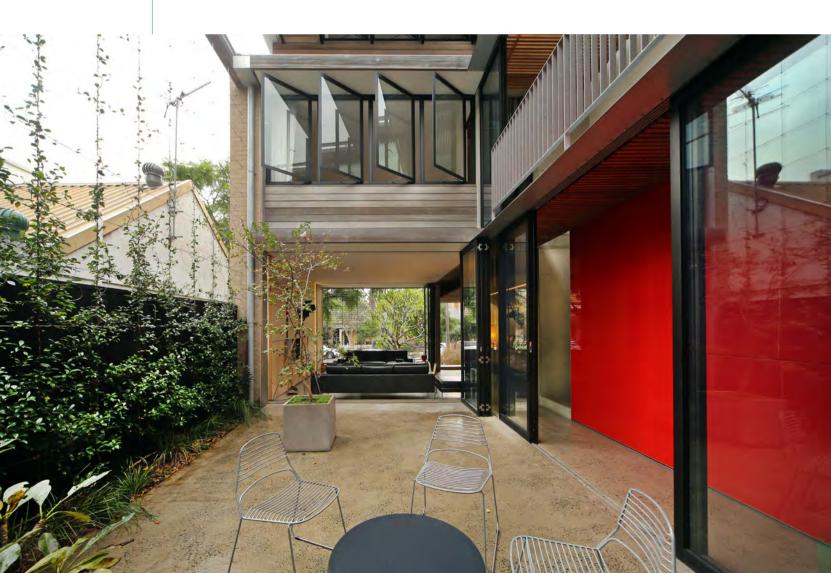
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Matthew Pullinger, Architect

It's a very successful strategy for Sydney's climate, and as well as being a courtyard house, it also happens to be a terrace house typology, that can effectively be replicated on similar blocks. The connection and engagement with the environment is where this strategy really shines. The lower level of the house opens up completely and reveals the full dimension of the site on the perfect, Sydney spring day. Essentially, we occupy the entire block of land and that was where the idea of courtyards arose.

It's a house with a more communal spirit of shared spaces than separate, private rooms.

It's a house that encourages us to share and it's deliberately modest when compared to other contemporary houses. We have tried to make do with less house, but of better quality. For instance, there are only three bedrooms in the house, while we are a family of five. And having just one family bathroom embodies the idea of sharing a home, and at this point in our lives—before the kids are old enough to move away—it brings us together as a family.



The seamless link through living areas and courtyards to "street "garden, courtesy of stackable doors





In many houses people just disappear, rarely seeing the rest of the family. This has a more communal, egalitarian quality.

We discussed at length the sorts of values—for instance sharing, generosity and openness—we wanted to instill in our kids, and the way architecture can help reinforce those values. For instance, I love sitting at the kitchen table and looking out across the courtyard and seeing my little boy doing his homework in the attic bedroom, and I can see the girls at play in their room. I feel we're all better connected by the house, even when we are separate and needing privacy of course.

No matter how planned and prepared you are, there are always unexpected issues and pleasures. What have been some of those?

I think the greatest unexpected pleasure is the amount of borrowed landscape the house enjoys. The courtyard invites in a lovely eucalypt a couple of houses down. The courtyard also invites in the sky and other vegetation from the surrounding neighborhood in a way our old house on the same site never could. We had a little front window onto the street and a little back window onto the rear yard. The fact that we've now achieved this volume, extending the courtyard space to the expansive sky and outlook has been quite extraordinary.





Left: View through kitchen to rear courtyard and library/study. A sleek, uncluttered economy of line.

THE CONNECTION AND ENGAGEMENT WITH THE ENVIRONMENT IS WHERE THIS STRATEGY REALLY SHINES. THE LOWER LEVEL OF THE HOUSE OPENS UP COMPLETELY AND REVEALS THE FULL DIMENSION OF THE SITE ON THE PERFECT, SYDNEY SPRING DAY.

Matthew Pullinger, Architect

Right: East-facing rear and upper level balcony of master bedroom screened by fully adjustable louvers, Viridian ComfortPlus[™], interior curtains and roof overhang contribute to a delicately veil for sunlight control.



Further to that, the house has really high ceilings throughout to further enhance that feeling of terrific volume. Many people probably fear such an extensive use of glass, and that open quality, maybe goes all the way back to the three little pigs and those houses of brick, timber, and straw. We've been conditioned from a pretty early age to build the fortress. This breaks the rules with a seriously playful exploration, where glass offers flexibility only possible with such a material.

Absolutely. We did really want to push the sense of what a wall is, and not to have windows in walls as such, but rather to have walls of glass, so even when the house is closed down, it's possible to experience the sense of openness and occupation of the entire block. We pushed windows all the way until they became walls.

Many households run the air conditioner and television 24/7.

Well not here, where we really are conscious of the immediate environment. There's no air conditioning and the television appears only on invitation. On hot days we ventilate the house. There are no other cooling options. That just brings the climate into sharper focus for the kids and it connects all of us with the environment in a way you don't experience in a conventional house.

How did Viridian ComfortPlus[™] help meet your design criteria?

As a Principal in a large practice, I work on commercial projects of all scales and obviously, the sustainability driver is a critical part of that, so it goes without saying this philosophy runs through every project. In the context of the house, it was not just a philosophical decision, but a personal one. Internally and externally it's a glass house and that's the big shift from its former iteration. ComfortPlus[™] allows the house to operate in the way we hoped it would. We had to demonstrate a threshold for environmental performance, and while it was a challenge with the extent of glass and the fact that a lot of that glass is oriented

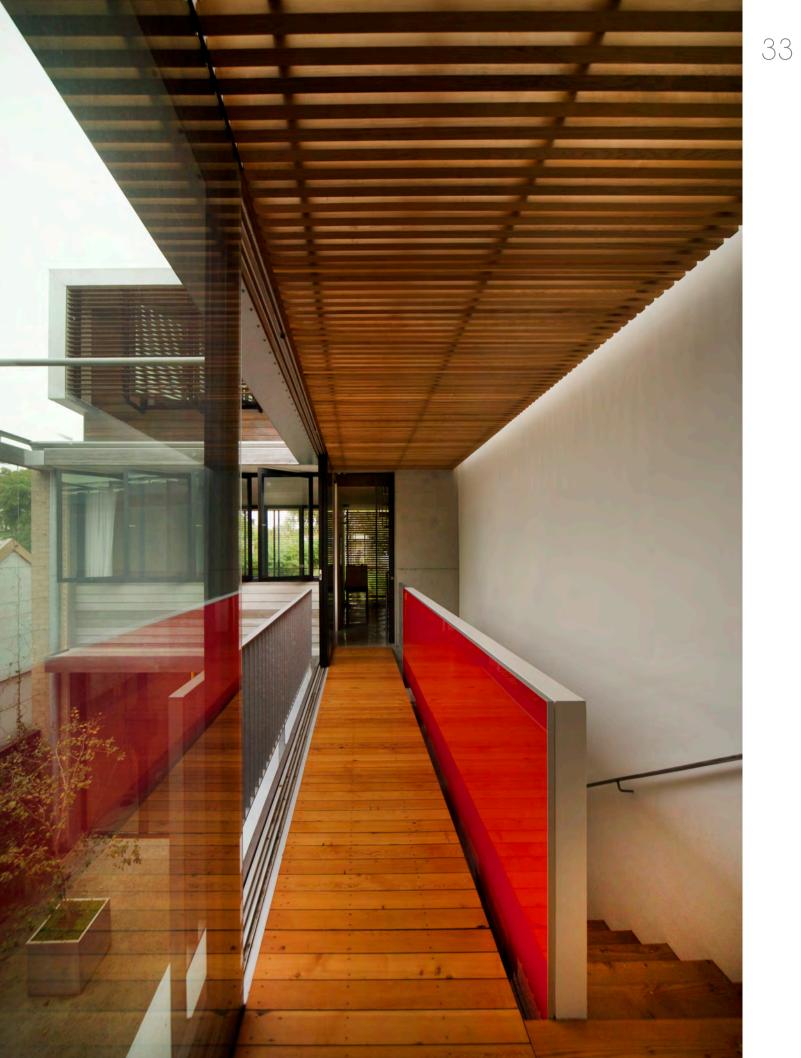
south, it became clear that the only way to achieve environmental performance was with a Low-E coated glass. It was relatively simple to find the information, to talk to Viridian, and obtain data on the fundamental performance characteristics, so the relatively technical task was straight-forward.

You have talked about engaging with the street.

That's one aspect of the house that touches on the value of generosity. When we're ready, as a family, to engage with our community and contribute to street life, we open up the house and it is amazing to see how many people stop when passing by and can see right through the house. The number of neighbours we know now, who just come in and say hello when we're enjoying the house is just great. It's amazing.

It's a house of extraordinary flexibility with the way courtyards can be opened for ventilation. You have multiple options with windows up above angled to catch breezes. You have slight variations on how the doors and window operate, almost like the sails of a yacht tuned to the day.

That's exactly the way we see it and the way it's used. Through the winter months we find ourselves opening the doors to the rear courtyard for the morning sun up to lunchtime, and that lets in the sun but keeps out the cold winds. Later in the day, that reverses. We close the back doors, open the front doors and shutters to catch the afternoon hours of sunlight at the front of the house. That's quite different to the way we tune it during the summer months where everything's open much of the time. I do sometimes imagine myself moving around a boat, trimming the sails and tuning as we go.







Pivot glazing to courtyard of both bedrooms. Right: Leafy fringe and screened front of house as springboard for community connection.



How have your three young children responded to the house?

I derive much pleasure from seeing the kids identify with the house, understand it, use it the way they do, and most of all, from how they now explain it to their friends. And the obvious pride they have in it, and the way it has become the benchmark for their conversations about the built environment wherever we go.

Has there been a single experience most revealing about the effect of your house on others?

One of the most confronting ordeals was exposing the house (and myself) to the process of peer review when we entered it into the Australian Institute of Architects awards program. Separate to this I had agreed, initially with some trepidation, to open the house for a visit by a group of about 50 graduates and emerging architects. I was worried about being the emperor standing in these new clothes, and that I was sure to be found out. The reality was they were incredibly supportive and impressed. They must have felt welcome too. They cooked breakfast and it was a great morning. I really did come away feeling buoyed by the entire experience.

PROJECT Alexandria Courtyard House, Sydney ARCHITECT Matthew Pullinger ENGINEER James Taylor and Associates

BUILDER Doug McDonald, MacBuilt Homes

WINDOW INSTALLER/GLAZIER B&W Windows and Doors

GLASS SUPPLIER Viridian

PRINCIPAL GLAZING Viridian ComfortPlus™ Clear

sıze 185 sqm internal area, 210 sqm site area

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