



Energy

PROJECT

Condon Residence

LOCATION

Balmoral, Brisbane

HOUSE DIMENSIONS

525 sqm

ALLOTMENT

435 sqm

BUILDING DESIGNER

Jonathan Harris – Harris Designs and Communications Pty Ltd

ENGINEER

Christian Walker – REC Engineering Pty Ltd

GLASS SUPPLIER

EuroGlass, Gold Coast

PRINCIPAL GLASS SUPPLIED

(ie all major glass types – window glazing, stackable doors, front and incidental doors, balustrades etc)

PRINCIPAL PERFORMANCE GLAZING

Viridian IGU

PROJECT COST

1.2 Million

Fully Connected

Text and photography – Peter Hyatt

A passion for glass can be a liberating, or problematic design starting point. Fortunately for building designer Jonathan Harris, the Condon residence in the Brisbane suburb of Balmoral was supported by intelligent and informed client input. "It could have been quite extreme," says Harris, "but there's a level of restraint that reflects a real response to the site and its opportunity to connect with the city and surrounds." Harris' design could have been wildly 'out there', but he was keen to create a house with a neighbourhood fit that also demonstrated a high level of sustainability. Clients – Peter and Jane Condon – operate the leading Gold Coast based specialist glass product suppliers Euroglass and many of the firm's products surface throughout the project.

The single sheet of glass for the front door signals the spirit of translucence and transparency evident throughout the project. An exemplary attitude to energy management is revealed with the use of Viridian's bespoke insulating glass units (IGUs) to deliver optimum insulating properties. Just a few kilometres from the CBD, it's a neighbourhood of rapidly rising property values. Despite rising over three levels, the owners have resisted the temptation to install the blockbuster and maximise values at the expense of neighbourhood amenity.



Vision editor Peter Hyatt visits a house that fragments the modernist box into a series of easily accessible, highly habitable zones. Glass balustrades, balconies, stackable doors and kitchen windows all contribute to a house of exceptional flexibility. He speaks with the designer/builder Jonathon Harris.

What are the most challenging and rewarding aspects of residential design?

There are always constraints and the site posed the biggest challenge. It was tight, it's on an incline, there was an existing dwelling to be demolished and we had to work around the existing swimming pool – tightening the footprint even further. The clients also wanted to keep the house as high as possible to maintain the city views back to the west. There is a lot of stepping of the house internally to keep living rooms functioning and maintaining views. We had to balance all that with the Brisbane City Council's small allotment code and to keep all of the parties happy.

With residential design how much of it is prototype and how much is stereotype?

Peter and Jane had a number of firm ideas about what they wanted. The design is essentially a response to that. They wanted flexibility to open-up and close-off certain

areas. The balconies on the north and west elevations really reflect that open plan idea. Stackable glazing utilizes their product and is consistent with our approach to maximise the very best the site has to offer. It's certainly a house specifically tuned to its site. It's not a design that could be readily transferred to some other site. In fact it wouldn't work on 99 per cent of house sites because it's so specifically a response to this particular place.

What do you learn or pick up from residential projects that you carry through into larger commercial work?

I'm not sure that there is any large, single lesson. We had a hiccup with getting the height levels right to satisfy Council regulations and so there was some very careful stepping on site required. We might have a dozen client meetings where we carefully work through every aspect of the design to the point where we're all happy with it.

Do you have a design philosophy that travels with you on each project?

I try to adopt a similar approach in that I don't try and impose my will on the family or client who will live in the home. I certainly try to understand that idea of how spaces

It's certainly a house specifically tuned to its site. It's not a design that could be readily transferred to some other site.



We used Viridian's sealed units to deal with the north and west elevations that experience very high solar loads.

meet and how they want to use those spaces so that what is created facilitates rather than hinders their lifestyle. I like to work on a zone system that respects private spaces as well as the gathering or meeting spaces.

How much emphasis do you place on the style of project as a representation of the clients' personality? Do you find extroverts and introverts prefer a house that reinforces what they are?

As a rule that's true. You have to work towards the personality of those who will occupy the house. Here it was about achieving a balance of maximising the views and the climate and to that end the glazing is such an integral part of the envelope because it strengthens that relationship unobtrusively. They don't especially want to be viewed by the outside world but it's still a house with a lot of glass and does really open itself up to the outside world.

What techniques and means did you employ to maximise solar and thermal efficiencies?

Peter and Jane's background is of course in the glazing industry so they were most receptive to exploring the material's

potential. We used Viridian's sealed units to deal with the north and west elevations that experience very high solar loads. The other defence includes big projecting balconies and overhangs and performance glazing that wraps around the corners. The other consideration is the stackable glazing on the main north/west balconies. These are all about the pleasure of the space and promote that experience of relaxing and dining out as much as in. My opinion is that air-conditioning is the last resort.

What did the performance glazing permit you to achieve?

We wanted to obtain that remarkable view. There's visual connection all around and especially to the CBD to the west. There is also the swimming pool on the eastern edge of the site and so it was about bringing in all of those wanted elements and keeping out the unwanted ones such as excessive heat. We've been able to achieve that while retaining a high visibility and legibility throughout the house.



How widespread is the understanding and acceptance of insulating glass as a principal means of managing comfort levels of the internal environment?

There is still a lot of scope for public education. It's much easier to simply buy an air-conditioner and wash your hands of any more effort. Viridian's IGUs are brilliant because they cut heat transfer in two ways: They provide a layer of sealed dry air and that forms a natural insulator and secondly it reduces the transfer of heat by radiation where the glass would normally warm up and conduct heat. A lot of effort goes towards explaining the value added qualities of materials and savings over the longer term.

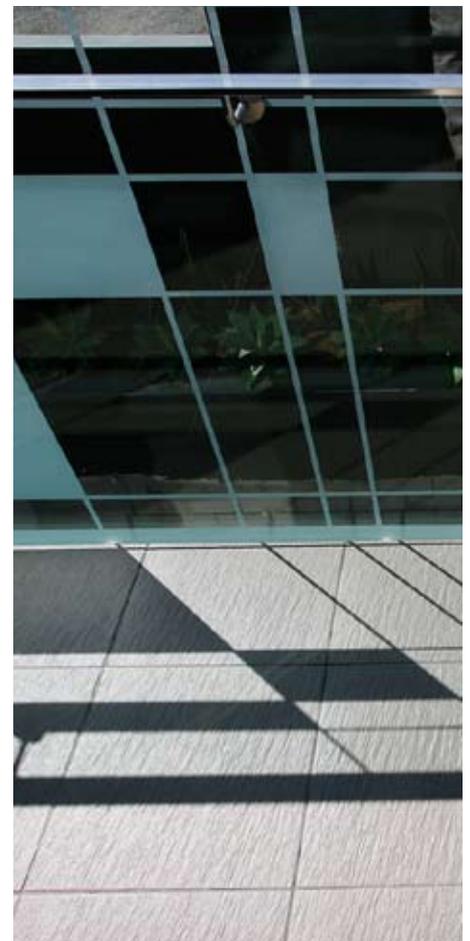
What are some of the trends and changes you've noticed in the way you treat sustainability issues compared to a decade ago?

A lot has changed. Ten years ago it wasn't a big issue. Now it has to be considered and factored into the running costs of every house. Far more people now want their houses to consider how they handle it. Most people are looking for a better solution where there is ventilation and aspect. Once you understand the possibilities and design accordingly to utilise the light and prevailing breezes it's a much more productive and

efficient relationship with home. In Brisbane it's summer basically nine months of the year. People would prefer their houses to naturally breathe than switch on an air-conditioner. That much has changed. The status of just flicking a switch has changed. There's also the understanding that the electricity-grid isn't just some endless power source.

Are you detecting a major shift in attitudes towards the longer-term investment over the cheaper 'fix'.

There are many people who now want to break-down that barrier between the inside and out. There is opportunity here for instance to utilize prevailing breezes rather than just flick switches to cool a space. To that end there is much greater interest in working with the environment. It's similar with using the most appropriate glazing. You don't have to shut out the sun or air-condition. Thoughtful planning, orientation and higher performance materials such as suitable glass really create an entirely different lifestyle. Once you gain that knowledge of what you have to do and how you achieve it I wouldn't say it's any easier. You still have to solve the problems and the problems aren't going anywhere. There's a certain demographic who believe air-conditioning should run the whole time. Certainly most of my clients have kids and







pets and they much prefer a house where they can come and go without having to close windows and doors every five minutes. They don't want a sealed box. They certainly don't want air-conditioners grinding away 300 days of the year to make their house habitable.

There was originally another building on site?

Yes there was. It was demolished, but the pool was kept and that's now being restored. It's not quite finished but once it is, the whole ground floor can be opened up and there'll be the added benefit of the effect of opening up to the cooling breezes from that part of the property.

How well do clients respond to the long-term savings over the up-front costs associated with the superior performance glazing?

It's changing. People now better understand the investment in designing-in those intrinsic qualities that help their house to function better environmentally and of course there is a retained value in a house that simply functions better.

What percentage of houses you design now incorporate high performance glass?

I would say 60 per cent. The rest is just a normal float glass. It's either a cost consideration or it's a case of the client rejecting the argument for a more sustainable solution. Some people can't be told and they'd just rather run an air-conditioner.



How did having glass fabricators as clients influence the results?

Peter and Jane were the main instigators behind the extensive use of their product – and Viridian’s sealed IGU units. They really understood the possibilities and so that made them quite unusual clients in that they were informed and welcomed that exploration of possibilities. Not all clients share the desire to achieve such a degree of resolution.

It’s a balancing act of course that can require considerable compromise. How do you do that without losing the integrity of the original design?

We had to meet council regulations and of course we had clients with very specific ideas about their needs and they come with teenagers who in their own way have very specific needs for privacy, study and socialising spaces. There is all of that pushing and pulling and need to achieve those various solutions. It’s complicated. There are those competing interests to deliver personal spaces, family spaces and vantage points that optimise its setting. It’s about maximising every square inch of the building.

When you have placated everyone do you ever feel anything is ever lost, or is it all a very positive experience?

We’ve got the house that Peter and Jane wanted. That’s the result. It’s not effortless to get there, but you can ask: Is it worth it? That’s a question for them, but my feedback is that they are very pleased. It’s an investment for a family with an interest in remaining in this house rather than quickly selling it on. It’s an investment and a commitment and I think the result speaks of that longer-term view.

