



PROJECT

Newtown Residence, Sydney

ARCHITECT

Sam Crawford Architects

PROJECT ARCHITECTS

Sam Crawford, Hernan Alvarez,
Leanne Borg and Lionel Teh

ENGINEER

Kevin Mongey, Simpson Design Associates

GLAZIER

Axolotl Group

PRINCIPAL GLASS PROVIDERS

Viridian

Bent and Curved Glass Pty Ltd (floor glazing)

BUILDER

Tricon

PRINCIPAL GLAZING

Walls and doors use Viridian DécorSatin™, an acid etched glass hung on a rack system.

Black colour painted Viridian Seraphic glass was set into a stainless steel frame to create a family memo board in the kitchen, and frosted glass was cantilevered from the bathroom walls to achieve 'floating' shower partitions.

Bent and Curved Glass Pty Ltd custom toughened glass was used in the patio glass and internal glass floor.

Patio glass floor - two bottom layers of 15mm clear toughened glass and one top layer of 6mm clear toughened glass, with a 1.52mm clear PVB interlayer between each. The top surface was finished with an all over antislip frost seraphic frit or paint. This was screen printed then fired onto the glass surface during the toughening process.

Internal glass floor to the landing/bridge outside the bathroom - two bottom layers of clear toughened flat glass and one top layer, with a 1.52mm clear PVB layer between each. An additional Solutia "Arctic Snow" white interlayer was incorporated between the two top layers.



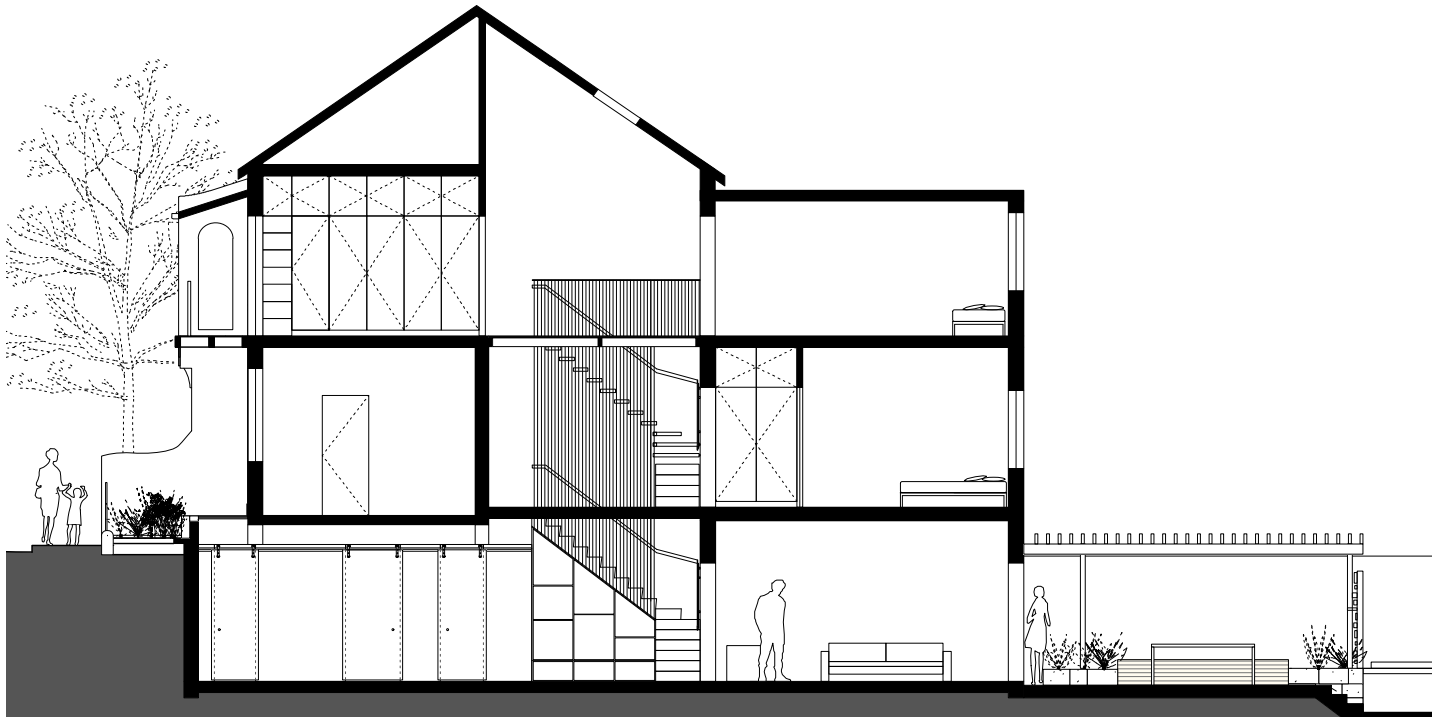
Light Box

Text - Peter Hyatt
Photography - Brett Boardman

Sam Crawford is winner of Viridian's 2010 Vision Award for Best Residential Interiors use of glass

Many good judges believe residential design represents the heart and soul of architecture. There isn't much disagreement that it is the most demanding building type to design. Clients' money and emotions, one precarious, the other fragile, are always bound up in their house.

Inner city terraces usually come with a lot of baggage and restrictions that can hamper an architect's style even further. Sam Crawford's refurbishment of a Newtown terrace in inner Sydney may appear mild at first glance, but is wild at heart in the way it invents light and space throughout the body of the structure.



Drawing supplied – Sam Crawford Architects

Modern houses often showcase glass and terraces regularly plug on a glass box to brighten and contrast the old. What is most impressive about Crawford's work is the care he takes to usher in daylight. He manages to make it spill and cascade through the whole three storeys – from top to the very bottom.

This isn't simply a process of punching holes and getting daylight in, a task though that is, it needs to ensure the result is habitable and practical.

Using a monochrome palette of concrete, steel and high performance glass, there is a boldly tactile sense of luxury; of materials that are literally rock solid, or luminous.

Sam Crawford speaks with Vision editor Peter Hyatt about his work on a 19th century villa that shapes as a 21st century.

Was the bigger challenge technical or creative?

We aimed to address the technical issues and hopefully that has led to the creative solution. We excavated to expand the lower ground floor living area. The previous owner was an engineer who was rather enthusiastic with his use of concrete and brick footings. During the excavation we discovered an additional 400mm in width so that extra space was a real bonus. On such a narrow allotment even small measurements can really make quite a difference.

How important is it to have a committed, talented team?

That was a great thing, because we were working with people who were committed to doing the best job. The carpenters and glaziers to name just two really delivered and responded to the bespoke nature of the challenge.

Tell me about the glass. That can make some people nervous when it's used as flooring.

That's true, until they realise how strong it is. There can also be a fear that glass is slippery, but no more so than many other surfaces. Unless you throw a bucket of water across it, slipping is most unlikely. It simply isn't the case.

In section the house resembles a layer cake. On a project like this, slenderness is such a critical aspect and glass is critical to that achievement. With such a tight site you simply can't afford to be lazy with resolution.

Definitely. That luminosity of the glass and the sense of space that it creates is very important. Even with the extra 400mm in width the terrace is still relatively narrow so glass was critical to that sense of punching above its weight.

This isn't simply a process of punching holes and getting daylight in, a task though that is, it needs to ensure the result is habitable and practical.



You mentioned luminosity. Is that the quality you wanted?

It is. It's about a soft, even play of light rather than the single light burst.

Reading that whole horizontal section complexity of the house you have a lot of issues to consider - temperature, light control and privacy.

The glass floor was vital in being able to bring daylight down from the uppermost level down through to the music room. We could have used a mesh for instance, but it wouldn't have provided the same light quality.

Obviously there's a big ask for ingenuity in these situations and the problem with ingenuity in these situations is that it can prove very expensive. Is that the case here?

The clients were very committed to the result. They realised it was going to be more expensive up front to achieve glass walls for instance, but they felt it was worthwhile to achieve that effect. They also wanted a high quality of natural light and reduced reliance on artificial light.

Obviously there's a clients voice at work here. What was that saying to you?

They really wanted a result that was unique and also a clear expression of how it was constructed and assembled. For instance

they really wanted to see the steel frame at work. We chose a raw black oiled steel frame. The method of construction, particularly the welding, is made evident. They really appreciate that. Similarly the workings of the sliding glass doors are elegantly expressed. The function of each element is clear.

What about your own signature? Where's you calling card in this?

Well I think that I share the clients' preference for celebrating the distinction between old and new. The new work is obviously very different to the old and that is revealed in the layering each. The difference isn't fudged or concealed.

The definition of comfort is interesting. For some, it is defined by luxury fabrics, plush carpets and heavily upholstered lounge suites, yet it can also be walking barefoot on a glass or stone floor on a warm day. It's really a mindset.

It is and that is the comfort I was thinking of; of a rawness that isn't overly precious. Luxury can also be that reassurance of rock-solid quality and workmanship of materials. The glass and stone definitely bring that.

Is the main task here optimising space and maximising light. Is there anything else that's really guiding you here?

No that's really it. That's how I work and

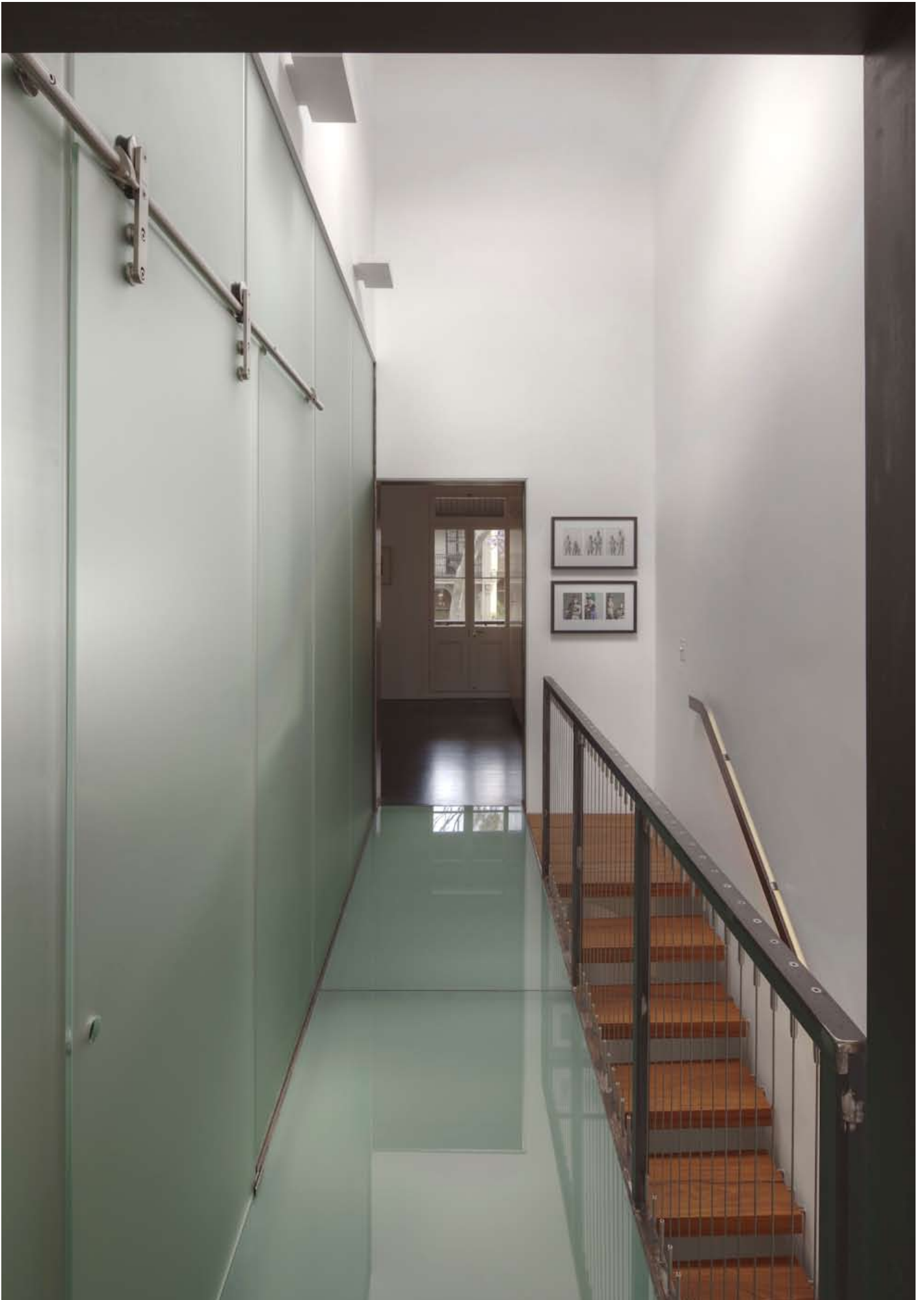
think about architecture. I tend not to complicate it by thinking in terms of art or theory. I think that poetic architecture often derives from very practical problems and how you resolve them. I don't feel the need to for a theoretical overlay to bring the work to life. And yet I admire the work of those architects that do.

Your finishes are beautifully detailed and we can see that for instance in the glass ceiling over the kitchen.

I guess it really is a peaceful light that comes through into that area. It just glows. There's no shadows associated with light and that is a major part of how people respond to that space.

How did glass contribute to the basic structural premise?

Glass allowed the conceptual idea for the project to be played out. A single sculptural staircase weaves together the three levels, from a heavy concrete base at the lower ground floor to a luminous platform of steel and glass at the upper level. Wet areas and utility spaces are sheathed in glass to transmit light and maximise the sense of space we wanted in a slender terrace. Glass replaces the original tiled front porch and sheds light into a previously dark basement level kitchen and dining room reducing the need for artificial light.





How energy responsive is the project?

In this century more than any preceding it, we need to understand the potential of resources already expended in the buildings we occupy. The reworking of this Victorian terrace provided an opportunity to explore this potential. The project is part retreat, part replacement. Functional parts are reworked, dysfunctional parts and thoughtless alterations replaced. The whole is retained, enhanced and given another life.

What glass products are used?

Three sheets of clear glass were laminated together with clear PVB and a 15% seraphic frost non slip surface in all over pattern for the patio glass floor. The internal glass floor is also made up of three sheets with a soft white PVB layer between laminations. Walls and doors are acid etched glass hung on a rack system. Black colour backed glass was set into a stainless steel frame to create a family memo board in the kitchen, and clear glass was cantilevered from the bathroom walls to achieve 'floating' shower partitions.