



Energy

PROJECT

Callignee House II

DESIGNER

Hamilton Design – Sean Hamilton &
Swale Developments – Chris Clarke

FACADE SPECIALIST

Allan Hornsby

GENERAL GLAZIER

Bomba Shop Fitters (Morwell)

PRINCIPAL GLAZING RESOURCE

Viridian

BUILDER

Swale Developments

PROJECT COST

\$450,000

PRINCIPAL GLASS PRODUCTS

6/12/6 & 10/8/10mm clear Sunergy™ (toughened)/argon/clear Evantage™ (toughened) to give a slight grey colour and reflection from the outside but retain the true blue colour from the inside with the Evantage™ Low E (U-Value 1.1). Largest pane 500kg. All glass placed by crane.

Sunergy™ 6mm louvres catch the sun providing gorgeous rainbows throughout the home.

10mm toughened glass surrounds the staircase.

10mm laminate, a 30mm (3 x 10mm) laminated pane provides a glazed wall to the pool wall in the lounge, bringing the pool right into the home.

Sunergy™ clear (slight grey tint), Evantage™ clear, turquoise glass walls internally.

PRINCIPAL GLASS SIZE

3.6m x 2.4m, 3.6m x 1.8m, 3.0m x 1.8m, 2.7 x 2.1m

BUSH CRAFT

Text – Peter Hyatt
Cover image – Chris Clarke

Victoria's Black Saturday bushfires were a devastating reminder of the dangers facing rural dwellers. Despite the challenges, many bushfire survivors remain undaunted by their experience - just wiser of the potential for circumstances to change so dramatically.

Chris and Jackie Clarke of Callignee, near Traralgon, some 150 kms east of Melbourne are among the Black Saturday survivors. Just two weeks before the fires struck, the couple moved into their brand new steel and glasshouse surrounded by the bush they love. It was a short-lived dream. Their idyll was virtually destroyed in the carnage.

Determined to resurrect the original house, Chris Clarke went into overdrive and directed his resources to the design and building of Callignee two on the existing footings of the original.



Photography – Matt Hill

Vision editor Peter Hyatt spoke with Chris Clarke about the Phoenix-like rise of his remarkable house:

What occurred must remain a tender nerve for you - even after all of this time. Do you remain apprehensive about what it represents and the possibility of a repeat at some future time?

We built the second house so that it would be even more fire resistant. The glass has proven itself, and the steel cladding inside and out has a fire-proof coating underneath. The incredible part from a glazing point of view is that it withstood such extreme temperatures.

Did you have the idea of using glass so extensively at the outset, or was it simply a response to the place?

Callignee One was virtually a straight glasshouse. Six palettes of glass arrived on a semi and trailer. It was quite a delivery for one house. When Callignee One burnt down we rebuilt on exactly the same footprint. Some of the original glass stayed in its original place. I'm not sure that any other home came through the fires in quite this way.

It's really the salvation from the bushfire that is the truly remarkable story here, but if that wasn't remarkable enough, what else really leaps out about how this has come together?

It's an amazing place for its feel because of the mass destruction that occurred. To convert that memory into something that has such a relaxing feel is special. There are also the health benefits ... the whole place is non-toxic which is why I work with so much glass, concrete and steel. The furnishings, the pool and trees really add a real resort feel to how we live.

There is some serious glass in Callignee two.

Due to the height of the building and size of the glass a crane and suction lifters were required. It has a 5 star rating with a 6.5m high glass 'south facing' wall and approximately 300m² of glass with a U-Value of 1.1. There's a real sense of dappled shade throughout the house because of the re-growth of the surrounding bush.



Photography – Chris Clark



Photography – Chris Clarke

Apart from the story of survival and resilience, what are some of the other performance features of the house?

I'm about to install 84 photo-voltaic cells on the roof and they will deliver 16 kilowatts system of power. The sustainable heat pumps service hydronic floor heating, general hot water, lap-pool and spa.

The narrow waist to the house means that there is no shortage of natural light reaching deep into the house even with the foliage that grown back since the fires.

The long stretch of the house faces north so it receives an extraordinary amount of north east/west daylight. There are fold-up windows, bi-fold doors and louvres so that when they are opened, especially in the heart of the kitchen, you're virtually outside.

You selected very high specification glazing.

We used Viridian's Sunergy™ IGUs argon filled Eantage™ so it's Low E/Argon/Low E. It has a U-Value of 1.1.

What was the rationale behind that choice?

The beauty of Sunergy™ with its higher than

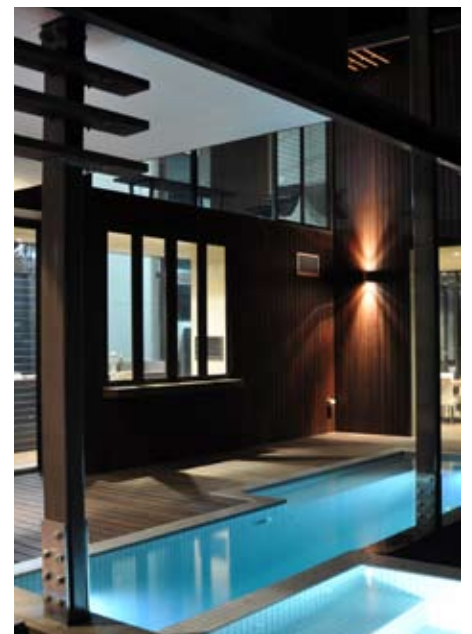
standard reflectance captures the bush. Sunergy™ also provided excellent solar performance. We used Eantage™ for the interior. We preferred clear so that when we looked outside we would see the truest colour and the blue of the sky for instance, rather than a tinted version.

Did you require technical support?

Viridian provided engineering assistance on the first house - Callignee One. They were amazing. I was in Viridian's office and they went through all of the glass specifications to ensure it would perform from an engineering point of view. And it did. The shower has a glass ceiling with two shower heads fitted to it and louvre walls for ventilation.

There's that tough resilience of the Australian bush but in the same way your house seems to embody a similar resilience and recovery.

That's true. This house really reflects that re-growth from what could have been total destruction. Before the fires black cockatoos perched outside our bedroom window. I'm waiting for them to return. Our kangaroos and echidna have just returned and there's a lot of wildlife to come.



Photography – Matt Hill