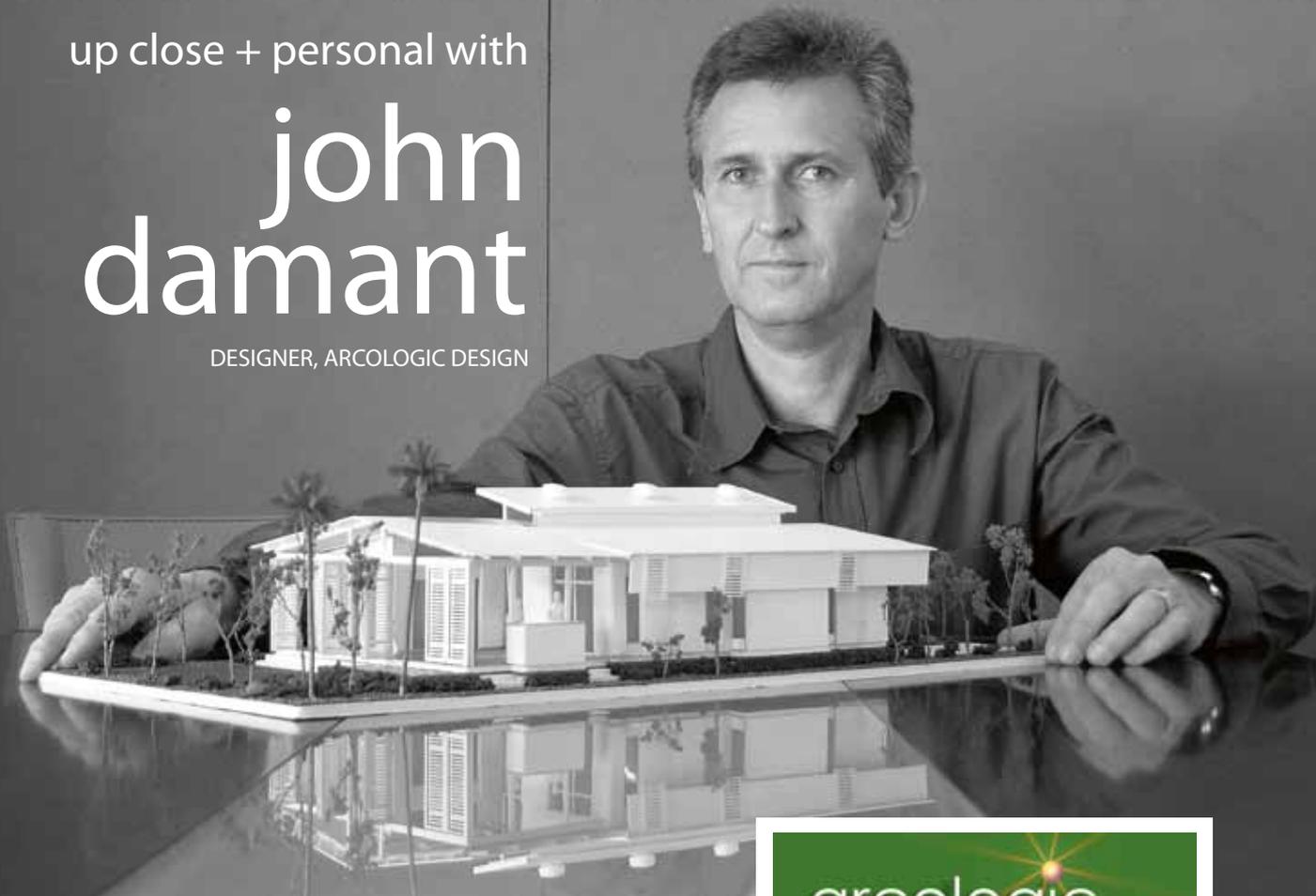


up close + personal with

# john damant

DESIGNER, ARCOLOGIC DESIGN

PROFILE



// interviewed by rhonda malkin

## How long have you been operating your business in Australia?

I migrated to Australia with my family in May 2000 and pretty well started practising on my own straight away having run my own architectural firm in South-Africa for 10 years. There was a bit of a learning curve in adapting to the local way of doing things and I did work in both the commercial and residential fields. About three years ago I came to realise there were limited pathways for the general public to own a sustainable home that would be both distinctive and cost-effective without reverting to custom design, which can be expensive. This was after I had tasted success with two design competitions for sustainable housing – Landcorp's REAL Challenge for Regional Environmental Affordable Living (finalist) and Cedarwood Properties and the City of Wanneroo's 'Ecovision' competition for two sustainable homes in Tapping (winner). These homes have just been awarded the 2012 HIA Greensmart National award in the townhouse/villa category.

To address what I thought was a gap in the market, and also my passion, I rebranded my practice as Arcologic eco-logical homes specialising in sustainable residential design, specifically to look at ways in which more people could get access to well designed, cost effective, sustainable homes. The name is derived from the word arcology, which is a combination of the words architecture and ecology.

## What are your experiences in the building industry in particular in relation to sustainability and environmentally friendly practices?

When I first arrived in Australia in 2000 these subjects were not high on the radar of most building professionals or designers. When I became one of the early energy assessors using Firstrate software, many in the industry could not see the need or desirability of such

measures, or were simply unaware of them. Now that the six star legislation has been introduced everyone is very much aware of the issue although not all are embracing it willingly. There is still a perception amongst many builders that building sustainably is always more expensive and requires such measures as double glazing or installing photovoltaic panels. In our designs we are proving that we can achieve eight and nine star energy rated homes purely through intelligent design and getting the orientation right. Unfortunately there is also now the perception that all new houses will be sustainable because they have to comply with six star legislation. Energy efficiency is only one aspect of 'green building' and should not be given overriding priority to all others. We base our designs on what I call 10 eco-logical essentials for sustainable houses, which includes things such as universal access, healthy home principles, and reducing our carbon footprint.

On the positive side, there are now many professionals and builders in the industry who are embracing sustainable design and construction, and we are fortunate to work closely with some of these leaders in what is undoubtedly the future of housing design.

## What changes have you seen towards building environmentally friendly homes?

There is awareness now of the need and desirability to move in this direction, but I am still surprised by how few genuinely know all the parameters of designing or building in an environmentally friendly manner. But those who do are producing some incredible work as can be seen from the increase in the number and quality of submissions in such initiatives as the HIA Greensmart awards. Our job will not be complete until there is no more sustainable design categories in award programs as all homes will be assumed to be designed this way. But that unfortunately is still a way off.

**Is there a lot of demand for homes that offer sustainable features and if so do you think that demand will grow?**

I can only talk from the perspective of people who approach my practice, but I am finding the awareness and demand for sustainable features growing exponentially. The pleasing thing is that the public is now aware of terms such as solar passive and thermal mass, which have largely been ignored since the last energy crisis in the 1970s. There is also a growing awareness of alternative building materials, but it can be a double-edged sword as there is also a lot of 'greenwash' about as well.

There is also the danger of a misunderstanding of where priorities in spending should lie in creating a sustainable home, and I always emphasise the design first and foremost. A badly designed home with the incorrect orientation will never be sustainable even if you throw huge amounts of capital at it in terms of active systems like solar panels.

Apart from the awareness generated by the media, there is also a desire by the public to reduce utility bills, and people being fed up with homes that are too hot in summer and freezing in winter.

**What are some of the best sustainability practices or materials currently available on the market?**

In terms of sustainability practices, I think the most important thing is undoubtedly to get the design right first, without that you will always be facing an uphill battle. A case in point is placing standard project home designs on inappropriate blocks. In our designs we always ensure the specific home type is appropriate to both its lot orientation and locality. A standard Perth home may be disastrous down south or up north.

In terms of materials, there are so many newcomers on the market that you really have to do your research. I take a horses-for-courses approach in weighing up all the factors like energy performance, ease of construction, speed, local skills and so on. As a result we have built homes traditionally using insulated brickwork and gone lightweight where appropriate, or used rammed earth, insulated concrete formwork, it depends on a number of factors.

Internally I am fond of polished concrete floors where thermal mass is required as it performs brilliantly and does not require the addition of adhesives or tiles, which all have an embodied energy, cost and labour component. We are also using cork floors, which are making a resurgence and are made from renewable sources, are softer to stand on than tile, are low allergen and now available in a huge selection of colours and formats.

**How will the demand for sustainable home affect the industry in the future?**

I think there will have to be a radical rethink of the way we are currently designing and building homes as the demand for sustainable homes increases. The public will soon realise that these homes hold their value better and significantly reduce running costs, apart from being much more enjoyable to inhabit. If (when) mandatory disclosure comes in as it has in the Australian Capital Territory, houses that perform poorly from an energy perspective are going to be that much harder to sell, while sustainably designed homes will attract a premium. Builders and designers who have not embraced this future will fall behind and possibly disappear.

**How can the building industry adapt or change to increase the number of homes being built sustainably?**

I think education of personnel will be key, but specifically training designers to understand what a sustainable home should be and that it's more than just facing it north. There will also have to be a shift in the way project home designs are seen as a product that can be put on any block, anywhere.

**What is your company's point of difference in terms of sustainable home construction?**

Our belief that design is the most important aspect of being sustainable means that we are committed to stay as a design company but to ensure we can offer the full package we are associated with leading eco-builders that we can entrust to deliver quality in a sustainable way.

We also have strategic alliances with several experts in various sustainable fields for energy rating, as well as energy-use consultants, water conservation and grey water specialists. We try to simplify the 'green process' for our clients by being able to show them the benefits and costs of these systems up front so they are able to choose with confidence.

Apart from custom designs, we also offer series designs of pre-designed, costed and energy rated homes for various situations like small lot living and regional living that make our houses more accessible to more people. In this way we are operating in the area between project homes and one-off architect designs, catering to a market that wants a distinctive, sustainable and cost-effective home without costing the earth.

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