

## Selecting materials and suppliers

BY LYNDA WILSON

*Each issue, Lynda will provide us with an update on the trials and tribulations of the building process of her home.*

Now that the plans are finalised (or are they?), the selection of materials and suppliers is the next big task to be tackled. Broadly, we have decided on a steel roof, a combination of timber and steel wall cladding externally, timber flooring in the bedroom area, and tiled flooring on a suspended slab in the living area. We just have to decide which products to choose (did I say just...).

For us, the main criteria to consider are: local, Australian made, Australian owned, sustainable, long life, low maintenance, recyclable, recycled, healthy, and within our budget.

It should be easy! But there are so many little things that crop up to throw a spanner in the works, thus making each decision so much more complicated. We accept that compromises will need to be made, but hopefully not too often and too severely.

Let's look at the choice of windows as an example. Our personal preference is for timber framing, so that eliminated the need to even consider the suitability of aluminium or uPVC windows, which would have each had their own issues. With a total of 17 windows and five external doors, this will be a significant percentage of the overall cost. So how do we apply our criteria and what compromises do we make?

### Local

Although there are a number of local suppliers, that does not mean the windows are actually made locally – many are just distributors for national companies. So far I have found two local joineries that manufacture windows: one only builds the frames and I would have to source the glazing units myself, adding to an already complex process; the other seems reluctant to use Australian hardwoods, which is our first choice, but has otherwise come across as being a possible option.

### Australian made

Should local not work out, then Australian made is the next option.

Even though they were not a serious contender, I visited the local showroom of a well-known national window company, just so that I was covering all the bases. The salesman I spoke to was very helpful and provided me with a lot of useful advice. The windows are made using Western red cedar, with no other timber choices, and require varnishing. They almost looked plastic, which does not sit well with the earthier beach feel I am hoping to achieve.

Each year at the Seymour Alternative Farming Expo, Paarhammer has had their stall located close to ours. I have often wandered over to have a look, and have

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*Timber-framed windows are the preferred choice, with a mixture of bi-fold doors, fixed and casement windows, and louvres for added cross ventilation where needed.*

been impressed by the look and finish of their windows and doors. An additional benefit is that they offer Australian and Forest Stewardship Council (FSC) certified timbers as an option, and have recently been awarded FSC Chain of Custody certification. However, I am not sure that I can justify the 'environmental' expense of having them transported all the way from Victoria.

### Australian owned

Should all other options fail, the company we deal with (for this and other choices) would have to at least be Australian owned.

Once you start digging a little deeper, this local, Australian made, Australian owned hierarchy gets a little complex. Even if the product is made locally, the materials may be imported – for example: FSC certified malas from Papua New Guinea, Malaysia, Indonesia and the Philippines; window hardware



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from Europe; imported glazing units and even glass. So now you can begin to see what I mean about 'spanners'...

### Sustainable

This is where the selection of the timber becomes more important. Even if you choose native Australian hardwoods, you still need to consider whether it is 'good wood' - some old growth native forests are still being logged. Some 'native' species may actually be coming

from overseas, for example FSC certified ironbark from plantations in Brazil and South Africa. All Australian cypress (*Cupressus lusitanica*, *C. macrocarpa*) comes from plantations or farm woodlots and shelterbelts.

### Long life, low maintenance

Being essentially lazy souls (who are more than happy to admit it), we have accepted the fact that material selection should be heavily weighted towards those that require minimal upkeep, but will still have a long life. This may ultimately mean a compromise on some of our other criteria, but I am not going to fool myself that I will be 'happy' to varnish, paint or otherwise maintain something every few years.

### Recyclable, recycled

Timber is fully recyclable and biodegradable. Glass is recyclable as a commercially valuable product, generally into fibreglass insulation or powdered for use as a filler.

In the case of the windows and doors, there will probably not be any recycled content.

### Healthy

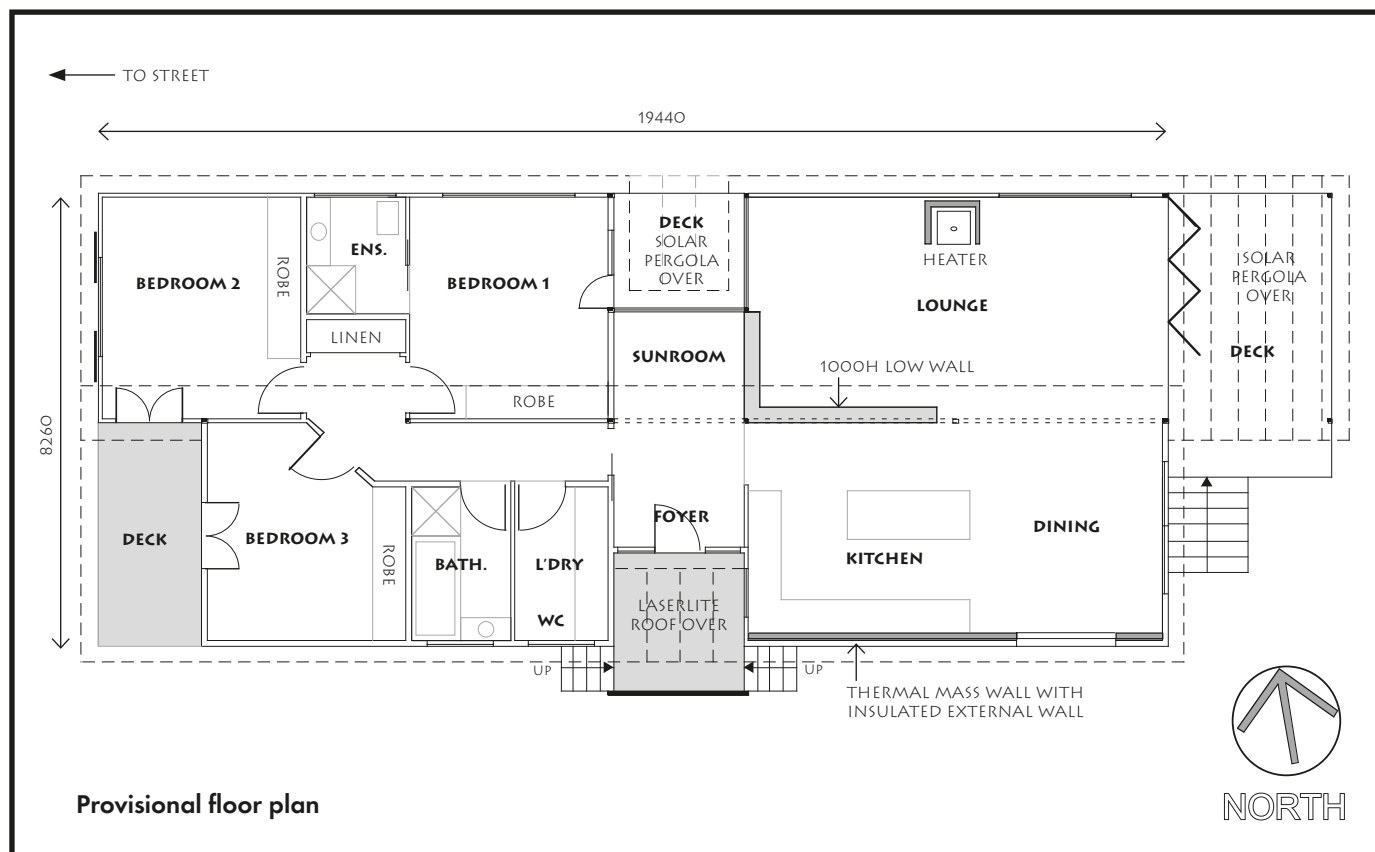
Hardwood timber frames would be one of the healthiest options, both from the indoor air quality and environmental standpoints. However, as with all timber, care should be taken during construction to ensure that timber dust particles are not inhaled.

### In our budget

Oh, for an open chequebook! Ideally, we would like all the windows to be double-glazed. To bring the cost down, this will mean making as many of the units as possible fixed, rather than opening, without compromising on ventilation. We may also have to be selective about which windows will definitely be double-glazed and which could be downgraded to single glazing.

The living area will be a large open plan space, with a 4m wide bi-fold door, clerestory windows and two to three other windows. Summer breezes are predominantly from the east, which is where the bi-folds are located, so that means the other window on the east wall could potentially be fixed, or only have small opening sections. The

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clerestory windows will be mostly fixed, with two small opening areas (probably louvred). Each bedroom, bathroom and the laundry will have at least one opening section.

Double-glazing will be fitted to all the windows in the open plan living area, as this is the main space that will be occupied, plus we are not great fans of curtains although we will use blinds for privacy and winter warmth. The bedrooms and bathrooms may be downgraded to single glazing if required, with the option of Low-E glass being considered. There is also a door between the living and bedroom areas, which means we can shut each area down, thereby increasing efficiency.

## And the rest...

As you can see, it is actually far from 'easy' to make selections to these criteria. And now this process needs to be applied to all the other selections we make.

Steel roof and wall cladding - where does the raw product come from, where is it made, sustainability is still a hotly debated subject but it is definitely low maintenance and long life, there are health considerations especially with rain water collection, it is fully recyclable and contains a high percentage of recycled material, and it meets our budget.

Timber wall cladding - radially sawn timber and shiplap would be our preferred choice and it ticks all the other boxes, but the main suppliers we have found so far are in Victoria (Radial Timber Sales and Golden Cypress) and will therefore require transport. An alternative local supplier needs to be

Right: Open plan living and clerestory windows will be a feature of the house.  
Below: We were inspired by timber/metal combinations such as this.



PHOTO COURTESY: PAARHAMMER

located if possible, although we may have to compromise on the 'natural edge' look.

And that is only three of the 'big ticket' items! What about all the other materials like framing, flooring, tiles, paint, cupboards... and on and on and on. ■

*While the criteria we have and the choices we make might not be the same as yours, I hope that you are finding my thought processes helpful. Please email me at [info@theownerbuilder.com.au](mailto:info@theownerbuilder.com.au) if you have any comments or suggestions.*



## • Forestry Stewardship Council

Chain of Custody certification requires operations to identify the origin of raw materials used in FSC certified products and to keep FSC certified products separate from other products throughout the production process. 03 8636 2661, [www.fscaustralia.org](http://www.fscaustralia.org)

• **Window Energy Ratings Scheme**  
WERS rated residential windows have star ratings and percentage improvements to help give an easy comparison of windows 02 9498 2768, [www.wers.net](http://www.wers.net)

## • Good Wood Guide

Aims to help you make an informed, environmentally responsible decision when buying wood and wood products. [www.goodwoodguide.org.au](http://www.goodwoodguide.org.au)

## • Australian Window Association

Members of the association have products tested to Australian Standard AS 2047: Windows in buildings - Selection and installation, so that you can be confident that products are made to withstand Australian conditions. 02 9498 2768, [www.awa.org.au](http://www.awa.org.au)

## • ecospecifier

A knowledge base of over 3500 eco-products, eco-materials, technologies and resources, the leading global source of sustainable development and life cycle assessed green product information. [www.ecospecifier.org](http://www.ecospecifier.org)

## • Terra Prima Sustainable Designs

Drafting your designs or helping to create it. 02 4967 3641, 0409 126 353

## • Paarhammer

Beautiful timbers and craftsmanship that combines aesthetics with functionality and energy efficiency. 03 5368 1999, [www.paarhammer.com.au](http://www.paarhammer.com.au)



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