

## Renovations – things to consider



By Danielle King  
Green Moves Australia  
[www.greenmoves.com.au](http://www.greenmoves.com.au)

Building or renovating a home is rarely a simple task. However it's the perfect time to apply some simple strategies to make your home perform better in relation to cost efficiency and comfort

An important consideration is north and west facing windows or glass doors. This is where you can lose up to 35% of your home's internal temperature. In southern States double glazing is very effective, especially if combined with specialised coatings that are appropriate for that area. Northern States would benefit from efficient E coated glass in the appropriate situation. The more thermally efficient the glass areas and seals are, the more comfortable and energy efficient the home will be.

Large areas of glass to the North and West give you the opportunity to catch winter sun and keep your rooms warm without having to run the heating. However in summer the last thing you'll want is the sun coming in. One option is to plant deciduous trees on those sides to shade the glass in summer. Alternatively there are many types and styles of retractable blinds and awnings available. Find the one that suits your situation the best and use that. You'll be surprised at the difference it will make letting the sun in during winter, and keeping walls and windows shaded in summer. This can help reduce your heating and cooling costs by up to 40%.

If you are building new external walls, or opening up old ones insulate them to at least R2 levels. It minimises cost to do this during other building work. Retrofitting insulation is expensive. If you come across any hot water pipes during the building works, insulate them also. Uninsulated hot water pipes lose 1 degree Celsius of temperature for every 1 meter it travels.

Regarding the roof, if you haven't already insulated it, then do so to at least R3.5 levels. But mind the lights! Light fittings that minimise 'holes' in the ceiling plaster are best, for example a pendant light. If you have down-lights beware, the standard 50 Watt down-light whilst very popular, is a huge fire risk as the area surrounding the light can get up to 300 degrees Celsius. It's a common cause of house fires. There is now a legal requirement to have them covered in the ceiling. So if you must have down lights go for energy efficient ones, but choose the right ones for the area. CFL's are the cheapest but take a while to 'warm up' and some are not dimmable. LED's are a good choice in most areas, but unfortunately they cost more. However they are dimmable, use minimal electricity and probably wouldn't need to be changed for 20 years! LED's are definitely worth the extra cost if you can afford it.

Finally the painting, go for low or no VOC paints if you can. You won't have the fumes and it is more eco friendly. Happy renovating!

CFL = Compact Fluorescent Lighting  
LED = Light Emitting Diode  
VOC = Volatile Organic Compounds

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