

10 TIPS FOR ENERGY EFFICIENT CONSTRUCTION

1 Make sure you have passive solar gain as part of the design

Spend as much time as possible on your house design. Depending on your block orientation, the optimum passive solar design will bring in plenty of natural light and warm your house for free.

2 Allow for an 'air lock' in the house design

An air lock is basically a small, enclosed room, between your front door (or back door) and the rest of the house. For the cost of an extra door, you can stop all that precious heat from escaping the house, and not worry about the front door being open.

3 Seal every possible gap / hole in your house during construction

Can you feel drafts in your house? That's the result of gaps and cracks in the building. It's not only uncomfortable, but also expensive to have a 'leaky' house. Sealing these holes during construction is a quick and cheap solution.

4 Get the most & best insulation money can buy

Don't skimp on insulation. R4.0 batts in the ceiling and an average R2.0 in the walls are right for Victorian conditions. Make sure that your house frame and roof design allow for this amount of insulation to be installed properly.

5 Avoid 'gaps' in the insulation 'blanket'

Your blanket on the bed won't have any holes, and neither should the insulation in the ceiling and walls. If 5% of the area is uninsulated, the insulation R-value will drop by 50%. Proper installation is half the job and makes all the difference.

6 Avoid the use of recessed halogen down lights in the ceiling

Halogen down lights can get really hot. You cannot insulate on top of these lights and must provide enough clearance around them. If you do like the look of them, consider the low energy LED down lights. Also be aware of the six star energy efficiency requirements for lighting!

7 Introduce thermal mass on the North side of your home

A passive solar design allows for natural sunlight to enter the house. During the winter this could translate into free energy. Introducing thermal mass on the North side allows for this energy to be stored and later released in the evening hours.

8 If possible, double-glaze the whole house

Single glazing only stops rain and wind, but temperature (and energy) will pass straight through. Only double-glazing will slow down this energy loss, and as an added bonus, makes your home more comfortable and less noisy.

9 Shade North & West facing windows in the summer

Keeping the summer sun off the windows is the best way to make your home cooler and more comfortable. Well-designed eaves as part of your plan will offer the most economical way of shading. Other options include external blinds or pergolas. Inside blinds are just for privacy and don't stop heat from coming in.

10 Install the most efficient heating / cooling system you can find

Last but definitely not least is your heating or cooling system. Take action on all the previous nine steps, and you will require very little to keep your home comfortable. Go for small and efficient and remember to check the energy star rating before you buy. Remember that heating and cooling will have a big impact on your energy bills for many, many years!

