

Extend Yourself By Haidi Bernhardt¹

As housing prices increase the prospect of upgrading to a larger home is an expensive enterprise. When the space squeeze tightens to an unacceptable level, a viable alternative to relocation can be found in extending the existing premises.

Extending may not only prove less costly than buying another larger home, it relieves the stress of moving for the entire family. Of course, a multitude of factors are involved in making the ultimate decision as to whether to extend or escape, such as the magnitude of the changes required and availability of matching building materials to name just a few.

One issue that many property owners fail to consider is how their potential extension may cope with future flood events.

Believe it or not, floods cause more damage in Australia than any other natural hazard; even in the suburbs. The recent preoccupation with drought has focused our minds increasingly on how to conserve water and the very real danger of flooding in the region has become neglected.

In fact, more than 100,000 properties in Melbourne alone are flood prone and there are thousands of others in regional Victoria. Many events around Victoria have proven that flooding need not occur only in homes near creeks and canals.

Homes built on sloping ground will more than likely have flow paths that are not obvious until a severe storm hits.

It's advisable to check with your Local Council both before and during the planning stage to make sure the intended extensions comply with building and other regulations. They will also know if your land is subject to flooding and tell you how best to deal with this when drawing up the plans.

Spending a few minutes getting the flood facts early in the process will definitely save money and also spare you any future inconvenience.

¹ In mid-2000, Haidi Bernhardt was engaged as a journalist under the Natural Disaster Mitigation Program to prepare a series of news articles. The aim of the news articles is to provide some awareness and education about flooding issues.

Once the decision to extend has been made, careful attention must be paid to where and how to build in order to minimise the potential impact of floods.

Up or out?

When it comes to extending your home, the choices are rather limited to building another storey or sprawling outwards.

Adding another storey not only adds value to your home, it increases the chance of a good view and the amount of incoming light.

It is also less disruptive to the rest of the property and won't impede overland flow paths. Overland flow paths are basically the way in which excess water is carried away from properties towards public run-off facilities such as gutters, drains and easements. By blocking flow paths in a deluge, serious repercussions can result in terms of stormwater back-up and damage.

If your existing house is prone to flood, building up is also a great way of ensuring your more valuable possessions can be saved from floodwater damage.

Contracting an engineer to establish the structural possibility of an upward extension is compulsory as some older or package homes may not be able to withstand the weight.

If an outward extension is more suitable, the most important question you need to ask yourself is "Where does the water go when it rains?"

Disturbing delicate inclines and subtle gullies with an extension can result in water flowing into your home or that of your neighbours. It is worth noting that redirecting water flows onto a neighbouring property is an offence, so paying attention to overland flows before digging foundations can save you money in more ways than you think.

Your regional floodplain management authority (Catchment Management Authorities or Melbourne Water) or Council may also specify minimum floor levels in your area to reduce the risk of floodwaters entering your house.

The proof is in the flooding

Even if your new floor level is above the council's specified flood level it doesn't mean that an extreme event won't put water through your house.

There are many simple and inexpensive ways of reducing the damage that floods inflict both above and below floor level.

Flood-proof buildings are designed and constructed with appropriate water-resistant materials to minimise damage if inundated.

For flood depths of below two feet, think about installing a waterproof veneer to the exterior walls. Veneers generally consist of a layer of brick backed by a waterproof membrane and should be fitted by a licensed contractor.

For depths exceeding two feet the pressure on waterproofed walls can become too great, so if flooding of this magnitude is possible, consult a licensed civil or structural engineer before going ahead.

Certain types of materials are better able to withstand inundation than others. For example, plasterboard and chipboard are commonly used for internal wall linings and cupboard fittings in many homes. Both materials, however, react badly to inundation and must be replaced once they get wet. In contrast, double brick construction can withstand flooding and may only require a hose and scrub down when the water subsides.

Likewise think about concrete rather than particle board flooring and cover it with tiles or slate rather than carpet so that the post-flood clean up is quick and relatively inexpensive.

If insulating, use a moisture resistant type such as sprayed foam insulation. Fibreglass insulation never dries so it must be replaced after it gets wet but it is less expensive. Your budget will dictate what choice is the more acceptable for you but remember that flood insurance is difficult to obtain and a few hundred dollars spent now could save you thousands in the event of a flood.