

# Do-it-Yourself design guide for the Home Renovator

**Ruinous amounts of time and money are squandered by many home owners on their renovations.**

**Inexperience is the reason for the worst blunders** and while it's better to have an architect assist you, the following list may help the do-it-yourself renovator avoid some of the major design errors.

## PRELIMINARIES

Before starting a design, you need to be sure the existing house is sound, in order to confidently build on to or into it. Renovations built on unsound houses come to grief.

Assess the building's inherent constructional togetherness. Access the free Do-It-Yourself Home Buyer's checklist from Archicentre Australia's website, or you could obtain a professional Property Assessment, also from Archicentre Australia.

Archicentre Australia's Renovation Feasibility Design service is designed to provide a strategy – sketches, cost advice and detailed report, based on a preliminary measure-up and your briefing. However, if you wish to do it yourself, the following stages give a good guide.

## MEASURE UP OF THE EXISTING HOME

- The renovations must use the existing structure as its referral point, so before developed drawings can be considered, a detailed measure-up (in metres and millimetres) of the relevant sections of the house is necessary.
- Each room should be measured internally, making due allowance for wall thickness. An overall external measurement will provide a useful check on the accuracy of the internal dimensions.
- If additions are planned, a site plan should be prepared showing the distance of the house from boundaries.
- The position of windows should be measured, with a note of the sill height and height at the top (called the 'head height').
- The location of switches, power points, plumbing points and fixed furniture should also be noted.
- Ceiling heights are necessary. Changes in floor levels should be recorded and the direction in which the doors swing need to be noted for adequate preparation of the developed drawings – and later working drawings.
- The roof line significantly affects design and construction, so should be sketched as accurately as possible. If possible, get into the roof space for an accurate measurement of the ridge height. Without this, difficulties may be encountered when attempting to integrate new roofs into old.
- Other items requiring fixing dimensions include eaves, chimneys, porches and floor heights above ground.
- Having assembled this data, a detailed existing conditions plan should be drawn up at a scale of 1:100 or 1:50.

At this stage, you have measured the tangible part of the building ahead of renovation. Now you must deal with the intangible – designing the renovation. Once designed, most of the proposed plan will have to be dimensioned in the same way as described above.

## THE RENOVATION PLAN – DESIGN BRIEF

First, describe in writing what you want to achieve. You may think doing this is unnecessary, however, often you will foresee difficulties at an earlier stage and it can clarify your ideas and help with the following categories:

### Space

- How much extra do you really need? Assess your needs by conferring with all likely users of the space.
- Refer to sizes of existing rooms to get a spatial comparison between what you have and what you want.
- Consider the impact of furnishings and fittings in the rooms. Quite often not enough space is allowed for such things.

### Circulation

Work out your preferred relationship between rooms, so that, for example, one room is not being constantly traversed to get to the other. Helpful considerations would be the approximate length of time spent in each room, and the function of the rooms.

### Views

Assess not only which rooms should face views, but what to build into the rooms for best effect.

**Examples:** Decide on the appropriate window sizes and heights, and whether to include decking, dormers and pergolas with sympathetic planting. Assess impact of present and likely building by neighbours.

### Energy Efficiency and Aspect

This relates to circulation. In order to decide where you will install heating and cooling, you should decide how often you will be in a certain room, how often you will enter and exit, which other rooms you are likely to be using at the same time and whether they are close together or far apart – for individual or collective thermal control.

The features you wish to incorporate also have a bearing on energy efficiency, for example, choosing between a dormer or a window. Orientations to the sun, garden, planting etc. will dictate which of these two will lose or gain you most heat and therefore which is appropriate from an energy point of view. Similarly, should you extend the eaves, or construct a pergola to counteract western sun? Or a combination of both? Also, depending on your use of the house, what source of energy may be preferable, with a subsequent choice of systems – there is an increasing range of energy systems in the 21<sup>st</sup>. Century – not simply choices between split system air conditioning, ducted heating/cooling, in slab heating or localised heating/cooling.

### Noise Control

Assess external influences such as the street and neighbours. Consider internal noises generated by people and machines. The outcome may affect your room replacement. Noise transference can be reduced by sympathetic design.

## DRAWING THE PLAN

There is usually more than one way to solve a design problem, so try to explore all the architectural possibilities you can imagine. Before becoming too settled on a floor plan, consider the roof shape; many floor plans would produce a maze of rooflines and ridges, unacceptable for an attractive or buildable house.

## COST PLANNING

Before reaching a decision on the size of the renovation and room orientation, you should estimate the approximate cost.

- Multiply the area concerned by the average building cost for your type of construction. The result may necessitate a reduced scale of renovation.
- Alternatively, a staged renovation may be appropriate.

Approximate building costs can be obtained from Archicentre Australia or a qualified Quantity Surveyor (estimator) - and will vary considerably depending on the standard of finished required and the tradesmen contracted. Cost planning is an important aspect ahead of working drawing preparation.

## EXTERIOR APPEARANCE

- Consider the impact of the renovation on the exterior. If the house has been built in a distinctive style, such as Edwardian or Modern, you should decide whether to faithfully duplicate it or otherwise consider a degree of counterpoint.
- Duplicating the old style may appear to provide a sympathetic renovation but could be more expensive and may not let in the amount of light that could be achieved with a more pragmatic approach.
- Sketch the proposed renovations from several angles so to study the proportion and be satisfied it will not be tacked on.

## Material Selection

Clever material selection can not only improve the appearance of the renovation but will minimise the cost of creating the desired effect. The maintenance aspect of the materials selected should also be considered – as there are many from which to choose – not all of them providing ongoing utility.

- To assist in material selection, visit display centres, renovator nights, home shows, talk to knowledgeable friends, visit successful renovations and refer to design magazines.

While an architect's advice can often add a little extra “magic” to the renovation (and advise what not to do), the more ideas you can assimilate, the better your chance of making up the shortfall in experience.

**If you get into difficulties with your home renovation plans and would rather have an expert do it for you, an Archicentre Australia Renovation Feasibility Design Service can be provided. This Architects Advisory Service can be contacted on 1300 13 45 13 – or visit [www.archicentreaustralia.com.au](http://www.archicentreaustralia.com.au)**

