Attic Conversions

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As the prices of houses increase, more and more people are looking at renovating, adding on to their existing homes or creating conversions.Â Today we are looking at attic conversions.Â The following is an extract from Architect, Amanda Katz's book, Extend Your Home, on Attic Conversions.

If the roof of your house is pitched (not flat) you have what is known as an attic or loft. If the pitch is high enough and you can stand comfortably in the roof space, you could use this valuable area for additional rooms and for accessing views of your surroundings through roof windows.

Creating a usable attic space not only provides a special type of habitable space, it can enhance and alter the external character of the home as the roof is a visible aesthetic factor. Whether your home is part of a terrace, detached or semidetached, you need to consider the effect of attic windows on neighbouring buildings. You may even need to obtain special permission from the conservation unit of your local authority to install the windows if your home is of particular architectural or historic merit.

CHECKLIST FOR ATTIC CONVERSIONS

â€¢ Do you need to alter the existing roof structure extensively to create usable space in which you can stand and walk?

â€¢ Does the existing space lend itself easily to complying with local authority regulations for heights for habitable rooms and party walls between neighbours for fire safety?

â€¢ Is there existing ground-floor-level space that can be used for a staircase to the attic?

â€¢ Can the existing structure carry the additional weight of an attic conversion?

â€¢ Can building take place out of the rainy season? At some point the roof will need to be opened to install windows. This could mean that your home is at the mercy of the
elements for some time.

If these points are carefully considered, you have the opportunity to create a very comfortable space inside your roof,which could have special alcove-type windows and sloped ceilings which give interesting shape and character to the rooms. One could create a balcony at roof level and enjoy the views without raising the height of your home. Some attic conversions require the existing roof space to be raised to achieve the regulation headroom height. Raising the existing roof space often means that the timber roof structure needs to be altered and separated from the original ceiling structure which usually makes up a roof truss.

ELEMENTS OF AN ATTIC CONVERSION

Access stairs

Stairs take up more space than you may realise â€“ particularly if you want them to be comfortable to walk up and down. Generally, a comfortable step is a height of not more than 200 mm, a length (tread) of not less than 260 mm, with the width of the stair being not less than 1 m. One alternative is a ladder-type access; another is an extendible loft ladder which can be pushed up and pulled down as required and does not disturb the space below when it is not in use.

Heights in habitable attic rooms

The National Building Regulations recommend a minimum height for habitable attic rooms of 2,4 m over a minimum area of 6 m2. If the space does not meet this requirement, there are various solutions, such as lowering the ceiling of the rooms below to create the required height or raising the roof slightly.

Windows

The inclusion of windows in the attic conversion is critical if adequate light and ventilation are to be created. Attic insulation is very important as this space originally formed the only insulating barrier between the roof and the rooms below, and it can get very hot inside. The type of window you decide to use affects the style and use of the attic space. The simplest and most economical windows to install are rooflights which follow the angle of the roof line. These can be fixed or opened.

Floors

Besides structural considerations, you also need to be aware of sound transference from attic floors to the rooms below. The support system was originally designed to carry only a ceiling and will need to be strengthened. As the floors are usually made of timber, you will have to consider noise, the creaking of loose boards, etc.

This problem can be solved by using larger sized boarding rather than strip timber floors, and using carpets with thick underlays which absorb sound.

Walls and ceilings

It is usual to fix a plasterboard layer to the existing timber roof-support system to create walls and ceilings. Insulation is needed behind these layers. It is wise to choose a thick plasterboard for the walls so that pictures, built-in furniture or bathroom accessories can be hung on them. Walls and ceilings can also be made of timber which, though more expensive, is aesthetically pleasing.

Insulation

To keep the attic space warm and to conserve heat in winter, and to maintain a cool space in summer, it is essential to insulate the walls and the ceiling. To help control moisture formation, the space between the finished inside room and the outside roofing should be ventilated and a vapour barrier installed. Moisture inside this space can lead to the deterioration of the roof structure. In summer the attic space becomes hot and it is sometimes necessary to provide extractor fans.

Positioning dormer windows on opposite sides of the room will allow for cross ventilation and keep the space cool.

Existing services

If you plan to add a bathroom in your attic conversion, try to locate it above an existing bathroom so that you can use the same sewer drainage/vent pipe. Hot- and cold-water supplies will also be easy to extend.

This is just a brief summary of the highlights of Attic Conversion from the book, Extend Your Home, by Architect, Amanda Katz - for a full copy, please visit Amanda's website.

The pictures in this article are of an attic conversion completed on a Victorian House in Cape Town.Â They are subject to copyright and are reproduced here with the kind permission of Amanda Katz.