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# Home remodeling: the design

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## Quick Facts

The design phase of remodeling involves such things as consolidating ideas, making rough sketches, seeking professional consultation, checking local building codes and obtaining a suitable set of building plans.

The whole family should be involved in the project, gathering ideas and discussing desired results.

Many factors are to be taken into consideration, and a consultation with a professional builder, architect, engineer or contractor could save money and headaches.

Local building code requirements may vary concerning remodeling; zoning ordinances state where residential building is allowed.

Professional building plans can be drawn by a draftsman, building designer, architect or engineer, depending on what services are needed.

After making the decision to remodel, the next step in the process is the design. The design phase involves such things as consolidating ideas about the scope of the project, making rough sketches, seeking professional consultation as to the feasibility of the project, checking local building ordinances and codes and obtaining a suitable set of building plans.

## Organizing and Consolidating Ideas

A detailed list of improvements should be made, assigning numbers to each item in order of priority. Everything that must be done should be written down. The entire family should confer on the remodeling project, making notes as to the desired results. Ideas that are obviously not feasible should be discarded and those that seem most likely to help obtain the required goals and fit the desired way of living should be discussed in detail.

To help with remodeling designs, the whole family should start collecting ideas. There are a number of resources available that can help put the imagination to work. Pictures may be clipped from magazines. This is a valuable source for communicating ideas visually. Most professional designers, builders and architects agree that they would rather work with the person that has some idea of what is wanted rather than the person who has no feelings pro or con for a particular idea or innovation.

Another way to collect ideas is to visit a builder's or decorator's showrooms. New "model" homes offer innovative ideas on room arrangements and decoration.

Interior designers and architects are another valuable resource. Often, designers can provide ideas on how to create a desired effect at considerable savings. They are helpful because they know what the current trends are and what is available on the market today. Interior designers usually will charge a consulting fee for their service based on the size of the project.

Whatever the reason for needing space or altered space in the home, several ways are available to make more efficient use of space already being utilized, or to expand living space into other areas creating completely new rooms. Below are a few ideas about where to look for more living space:

—The attic offers an area for expansion. If this area has enough headroom, it may be just the space for a new bedroom, playroom or guest quarters. Basic considerations for attic space are access and whether it can be heated. Blocking out stairway space below the attic is essential. At least a 3- x 10-foot (.9 x 3.0 meters) rectangle for a standard stairway or a 5½-foot (1.7 m) square for an average spiral unit should be allowed.

A closet that can be cut down diagonally to make room for the typical 45-degree rise of standard stairs would be one alternative. A spiral unit can be tucked into a corner as long as it will not intrude on the privacy of the adjoining space.

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—A basement can be made into a very satisfying living space. Some projects are tougher than others, but few approach the cost of new construction. A person should make sure there are no moisture problems on the wall and floor areas. Sometimes moisture from basement areas evaporates and goes unnoticed before being covered with material that will cause it to accumulate beneath the new surface.

—An attached garage or enclosed porch can be converted to an integral part of the home. Because these areas have subfloor, walls and roof, remodeling is fairly inexpensive; however, cold floors may be a problem unless given special attention.

—By enclosing a breezeway, patio or open porch, space can be better utilized. Access could be a problem as most breezeways serve as a direct traffic pattern between the house and an outbuilding, such as a garage. Unless plans are made to continue funneling traffic through this area or a portion of the area, new access must be designed into the house.

—Existing rooms in the house also might be altered in such a fashion as to serve more than one function. For example, a dining room that is used only one hour a day or only on special occasions might be remodeled to serve as a family room, too.

## **Rough Sketches**

After considering the remodeling alternatives and ideas, the next step is to make a rough sketch of the proposed changes. All measurements of the section of the house involved, plumbing, electrical and gas lines that might be involved, as well as doors, windows, heat registers, lighting fixtures, switches and electrical outlets, should be noted on graph paper, using the scale, one square equals one foot (30.5 centimeters). Scale cutouts of furniture and appliances will help in developing room arrangements and visualizing whether they will work.

## **Initial Consultation**

With the rough sketches in hand, an architect, engineer, contractor or home builder can be contacted to arrange for an initial consultation to establish the structural soundness, design aspects and cost feasibility of the project. These professionals will be willing to review the situation for an equitable fee or in some cases free of charge.

Checks with the local building inspector should be made as plans progress since an inspector must approve the final remodeling plans. Many factors must be taken into consideration when remodeling and an initial consultation with a building professional could save money and headaches. These people are aware of code requirements and other obstacles that might stand in the way.

Professional designers can tell if the plan has closed the kitchen off from natural light, or if the deck/patio would be completely exposed to harsh prevailing winds. Perhaps adequate storage space has been neglected, or an unworkable traffic pattern devised.

## **Local Building Ordinances**

Copies of local building ordinances or codes should be obtained from the local building department. Without these, enthusiastic remodelers may find their homegrown plans do not meet the local zoning regulations, building codes and other restrictions.

Construction standards in most Colorado communities are regulated by a version of the Uniform Building Code or a similar code. These codes may specify methods, materials, and/or performance standards to assure adequate and safe concrete, masonry, structural framing, plumbing, heating and wiring, among other details.

Code requirements may vary concerning remodeling. For example, an old building's stability, ventilation (whether windows are adequate), ceiling heights and room sizes may need to be brought up to minimum standards before any expansion is allowed. If the proposed additions and alterations exceed a stated percentage of the building's total value (usually 50 percent), the existing building may be required to conform to the requirements for new buildings.

Zoning ordinances specify where adjustments for business use or rental are permissible and where only residential building is allowed. They prescribe for each area what percentage of a given size lot may be covered by a structure and the required setback, side-yard and rear-yard dimensions. A variance may be required before a given project may be built.

The deed for the house should be studied carefully to ascertain that there are no deed restrictions or protective covenants prohibiting the remodeling project.

## **Professionally Drawn Plans**

Once the building department office has given a preliminary approval to the first-draft plans, the next step—if a contractor will be employed to do the work—is to have a professional set of plans drawn.

At this point, a decision must be made whether professional design help is needed. Much depends on the individual's abilities and experience. "Design" encompasses more than just appearance, it also entails both functional and structural considerations. Structural design often can be handled by a good contractor. If the remodeler is going to perform this task, careful background research on the design should be done first.

Another factor to consider—if money is to be borrowed to finance the project—is that lending institutions are concerned about having a responsible individual design and perform the remodeling project. Institutions that make loans to amateur remodelers expect them to meet professional requirements.

If it is decided to have professional plans drawn up, a draftsman, building designer, architect or engineer can be hired. The services provided by these professionals vary and the differences between them should be understood.