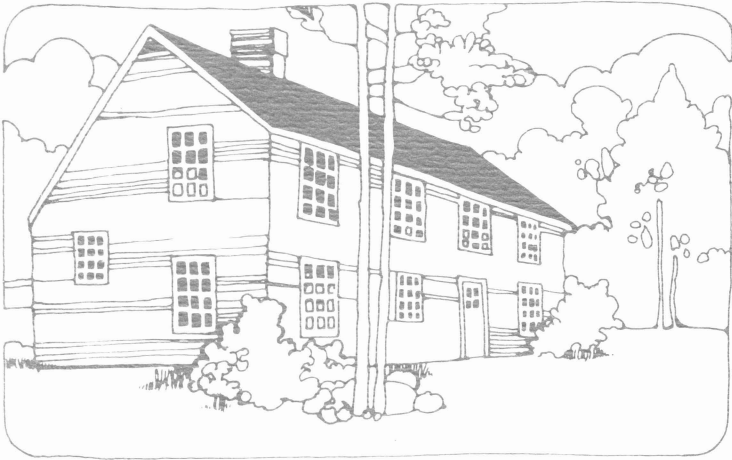


# Remodel Rationally



## Home Remodeling

# REMODEL RATIONALLY

Sue Young\*

One of the primary reasons for remodeling a house is to create space to meet the needs of the family. Space may be provided by converting existing space from its present use to another use or by adding on to the structure. It is less expensive to convert existing space because the foundation, walls and roof are already there. The cost is more when a room is added on than it would have been had it been built as part of the original structure.

Regardless of which route you take, the knowledge and skills required for new construction are needed in a remodeling project. Also, the ability to integrate the new with the old is required.

## *Plan Ahead*

Planning reduces many rigors of a remodeling project. It is a good idea to take a picture of the house and sketch in changes planned. It is also helpful to refer to the original plan if it is available. Determine the location of buried sewer, water and gas lines to avoid building over lines which may require work in the future. Make sure the work is permitted by local zoning. Requirements for set back as well as minimum space to be left clear on all sides of the house to the property line must be adhered to.

Should the project call for the services of a building contractor or architect, you can utilize better the services of these professionals if you express exactly what you want and what you can afford.

## *Convert the Garage*

The garage is often the first place people think of converting. It is usually adjacent to the kitchen and is an ideal location for a large family room or a bedroom and bathroom. It is likely that the walls and ceiling will have no insulation and insulation will need to be added. Also, the walls and floor will need to be finished.

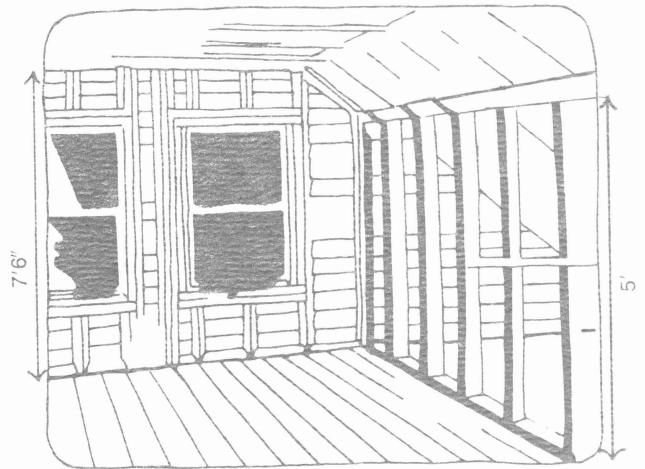
The way the floor is to be finished is determined by whether the ceiling and floor of the garage are at the same elevation as the house's ceiling and floor. When the ceilings are at the same elevation but the garage floor is lower than the house's floor it is desirable to install framing to place the garage floor at the same level as the house. The foundation walls or ledgers nailed to the wall studs may be used to support

the frame. Insulation and a moisture barrier should be placed between the framing and the concrete flooring.

When the garage ceiling is lower than that of the house, new flooring must be laid on the concrete slab if 8-foot ceilings are desired. In this case, a moisture-proof insulation, such as polystyrene or polyurethane rigid board, may be applied to the foundation on the outside of the house to the depth of the footing.

## *Finish the Attic*

The attic may be finished to form an additional room if there is a relatively steep roof slope. Head room requirements are a minimum ceiling height of 7 feet 6 inches over at least half of the room and a minimum of 5 feet at the lowest edge of the room.



Insulation, vapor barriers and ventilation are important in reducing heating and cooling utility consumption. The insulation already on the attic floor may be covered with flooring consisting of plywood, an underlayment of hardboard and tile or carpeting. New insulation should be placed between the walls and the attic rafters.

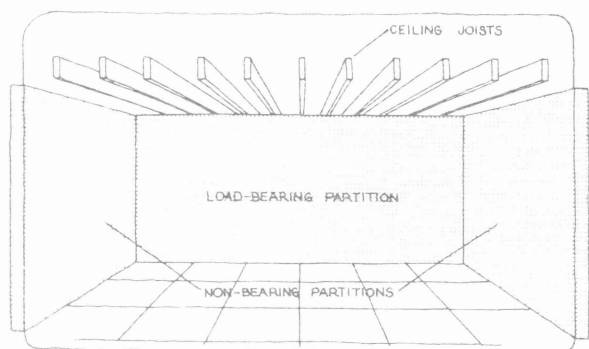
A stairway requires a space 3 feet wide and at least 11 feet long. Spiral stairs can be installed in a space as small as 4 feet in diameter, but cannot accommodate furniture.

## *Add On*

When adding on to a house, walls that need to be moved or eliminated are often one of the first considerations. It is most important to identify load-bearing

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from nonload-bearing walls. A structural or load-bearing wall cannot be moved unless it is replaced at the ceiling by a support beam. A nonload-bearing wall generally will run parallel to the longest outside wall of the house and at right angles to the floor and ceiling joists. An interior wall that runs parallel to the joists is generally a nonload-bearing wall.



In a rectangular house with a gabled roof, the long exterior walls support the roof and the interior load-bearing walls run parallel to them and support the ceiling. Remodeling costs are lower when these walls are left alone. The shorter exterior walls at the ends of a house, together with the interior partitions parallel to them, are usually nonload-bearing, and can be altered or removed with less expense. The most economical expansion is adding on to one or the other gabled ends, extending the length of the house.

All four exterior walls of a house with a hip roof are load-bearing. Any interior wall parallel to the long exterior wall is load-bearing, while walls parallel to the two short outside walls are not. Adding a wing to any side of a house with a hip roof, will require some reframing to the existing house.

A wall that contains pipes or ducts may be so expensive that it should be left alone. Electric wires can be rerouted at a small expense.

### *Consider Exterior Appearance*

When a garage or carport is enclosed or a new room added, the exterior appearance of the house is altered. When integrating new and old, exterior appearance depends upon unity being maintained. New roofing, windows, doors and finishes should conform with the old as nearly as possible. It may be easier to disguise an addition by making a slight elevation change so that new and old materials are not butted together.

### **Roofing**

Matching roof shingles and exterior wall materials on a new addition is usually impossible — getting the closest possible match is probably the best you can do. If the roofing is badly worn, perhaps the entire roof can be replaced.

### **Siding**

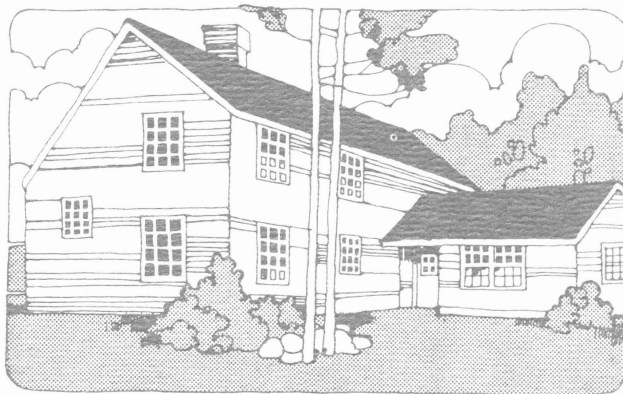
It is usually best to use no more than two different siding materials on exterior walls. Good brick walls are a major asset to a house. Bricks of an unattractive color or texture, can be painted.

Clapboard siding is the most common form of outer face for the walls of wood frame houses. The characteristics of wood clapboard have not been successfully produced in any other material. The primary advantage of the two most popular synthetic imitations, aluminum and vinyl, is low maintenance.

Vinyl is more expensive than aluminum, but the color is usually an integral part of the material and cannot be removed by scratching and chipping. Vinyl also is resistant to denting. Aluminum siding should have sound insulation behind it to deaden possible noise caused by rain or hail and should be electrically grounded. It is important that the space behind these sidings be properly ventilated as the materials do not breathe and tend to retain moisture.

### **Windows and Doors**

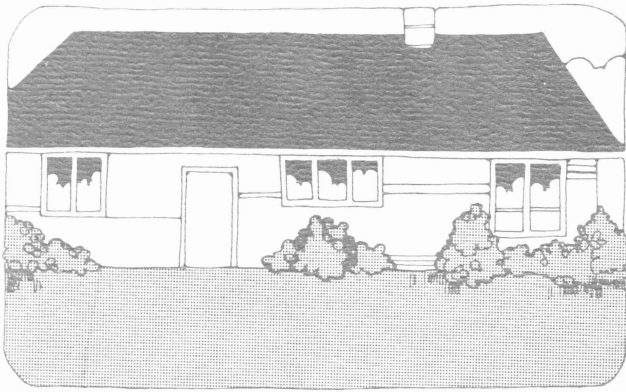
Windows and their sills, lintels, trim, moldings and glass establish the basic character of most homes. Great care should be taken that remodeling does not detract from this character. As a rule, all windows should be of the same type.



Traditional architecture uses primarily double and single hung casement windows. Contemporary houses may use these, plus siding, awning and hopper styles in combination with thick glass. Most architects agree that the picture window flanked by two colonial windows, in an attempt to be both traditional and modern, often is neither.

Wood windows are the choice of many homeowners, if not prohibited by price. They are attractive, have superior insulating properties and, if vinyl-covered, have all the maintenance-free aspects of aluminum windows. If aluminum windows are used, an anodized white or brown permanent finish is preferable to the natural aluminum color.

New windows and doors should line up with the top and bottom of the old windows. If the new windows are smaller, they should line up with either the top or the bottom of the old windows.



Properly placed and sized windows will cut the cost of heating and cooling. Generally in Texas, cooling of the home is more critical than is heating; thus, windows facing the west should be at a minimum. Windows with high sills are excellent for west exposure. The south side of the house is the favored place for window placement. The sun in the winter rises from the southeast and sets in the southwest, permitting the warmth of the winter sun to enter the house. During the summer as the sun rises and moves at a higher angle from the northeast to northwest, the south windows have less exposure to summer heat. The south breeze may be utilized to cool the house when there is a south-north ventilation. As far as window placement to the east, some people enjoy the morning sun; others wish to avoid it. To reduce winter wind entering the house, avoid windows facing the north. Window areas should not be more than 8 percent of the floor space in the house to reduce heat transmission and infiltration.

Windows should also be studied from the interior as well as the exterior. Plan for privacy, balance, security and ease of cleaning. Windows can be placed so that they provide more wall space and are easier to drape. Windows with high sills provide easy furniture arrangement and permit light to enter the room while maintaining privacy.

While exterior shutters often are merely decorative, they can provide security to the home if properly installed.

### Paint

New paint is often required in a remodeling project. Exterior paint is needed for protection from the weather and for appearance. But, too frequent painting produces a thick film that is more sensitive to the weather and likely to crack.

Before painting, clean the old surface well. Apply a water-repellent preservative to joists, end edges of

lumber and window sills and trim. A primer should be applied before the oil, alkyd or latex paint is applied.

### Color

When selecting color for the exterior of the house, give thought to how the dominant color will relate to that of other parts of the house, especially the roof. White or off-white is the most popular choice. Natural muted colors such as blue-gray, beige and terracotta go well with white trim and usually relate to other colors in the environment. Pastel colors are used mainly in sunny climates or where there is a strong tradition for their use.

While strong colors such as barn red or dark green may be interesting, their effect upon both the house and the street should be studied. A light color makes the house appear larger, while a dark color makes it look smaller.

When a roof is visible, the tiles, slates or shingles will be part of the color scheme and should relate to the rest of the house. White or light-colored roofs reflect heat. This is desirable in Texas, but in many areas light colored roofs show mildew and discoloration easily. Dark roofs maintain their appearance longer but have the disadvantage of absorbing heat.

The moving parts of the window are usually painted white to contrast with the dark effect of the glass areas from the outside. The frame is usually painted white also, unless the window is very large and the contrast with a dark surrounding wall is too great. In that case a dark color may be used as a kind of a buffer between the white moving sash and the dark color of the wall.

If a bright color is desired, the ideal place is the front door. A semi-gloss paint is preferable; a high-gloss paint reflects too much light and distracts from the effect of the color.

Your remodeling project will be successful if it enhances the appearance of the house and provides the space you need, with the benefits being greater than the expenditure.

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