

Introduction

Purpose of the Book

This book and its counterpart, *Interior Home Improvement Costs*, are designed to take some of the mystery out of remodeling projects—by giving you an idea of what they'll cost and what's involved in doing the work.

What You'll Find The Model Projects

The bulk of the book is made up of 68 model projects with estimates. Each contains a list of materials, along with an estimate of professional labor-hours and total costs. Each project also includes:

- “What’s Involved”—the tasks and skills needed to complete the job.
- “Materials & Tools”—guidance on selecting materials, and the tools you’ll need.
- “What to Watch Out For”—helpful hints on tricky parts of the work and how to avoid potential problems.
- “Level of Difficulty”—how much skill and experience are required.

These overviews will help you decide which parts of the job you want to take on, if any, and which are better left to a contractor.

All of the project cost estimates include a list of the materials required in a standard renovation. Factored into the “Contractor’s Fee, Including Materials” is an estimate of the overhead and profit a contractor is likely to add to the total cost—for time spent visiting your home, planning and estimating the job, and a percentage of the costs of doing business.

Working with Design & Building Professionals

Following these introductory pages is guidance for working with builders, architects, and landscape designers/contractors, along with questions you may need to ask your local building department before you get started.

Detailed Costs

Following the 68 model projects are costs for individual construction items—from foundations, to roofing and siding materials, to windows and doors, and much more. These costs can be used to modify any of the model projects, or to develop your own individual estimate from scratch.

Adjusting Project Costs to Your Location

Following the Detailed Costs, you’ll find factors for over 900 cities and towns, organized alphabetically and by zip code. Multiply the total cost of any model project by the factor given for your location to get the most accurate cost estimate for your project.

Safety & Shopping List

At the end of the book, you’ll find important safety precautions that should be followed throughout any construction project. The last section, just before the index, is a shopping list that you can use to help make sure you’ve thought of all the materials and tools you’ll need, and to compare prices from different retailers.

New in This Edition

All of the project materials and costs have been updated, and we’ve also added eight completely new projects, including an outdoor living area with appliances, a three-car garage, and landscape projects such as lighting, stone walls, fountains, and in-ground sprinkler systems. We’ve also added icons to quickly identify projects that strongly feature three special attributes:

- Best Return on Investment—improvements that attract buyers when you sell your home.



- “Green Building”—healthier, more comfortable surroundings, and/or lower utility and water bills.



- Curb Appeal—improvements to your home’s appearance from the street that enhance its value.



Do it Yourself, or Hire a Contractor?

There’s no question that doing your own work can save money and give you the satisfaction that comes from creating something of value—but not everyone can or should undertake every task. Honestly assess your skills and fitness for the tasks before tackling any

home improvement project. Also ask yourself if you really want to do the work. If you're doing it just to save money and don't enjoy it, you may not give it your best effort.

Do You Have the Skills?

Throughout the model projects, we refer to three levels of do-it-yourselfer:

- **Beginner:** a first-time remodeler who has tools and equipment for small repairs and projects.
- **Intermediate:** a do-it-yourselfer with moderate building skills, experience, and a reasonable collection of tools for various kinds of work.
- **Expert:** a skilled remodeler with extensive building experience and tools.

Most remodeling projects require accurate layout and precise measuring, cutting, and assembly of materials. Complex preparations, and particularly work involving structural elements, should be handled by qualified tradespeople and experts. When in doubt, call a contractor, and consult an architect or engineer, as needed. The long-term benefits of professional workmanship outweigh a reasonable initial expense.

Electrical, plumbing, structural, and foundation work must meet local building code requirements and are best performed by licensed professionals. Some proposed changes may require a permit and plans approved or certified by an engineer or architect.

How Long Will It Take?

This is a major consideration, especially for disruptive projects, like a room addition or large dormer that involves opening up your living space. Think about whether you really have the time to focus on the project to get it done quickly. If it will take a total of eight days, and you have only weekends free, it will be a month before it's complete. Hiring a contractor may be worth it when compared with weeks of major

inconvenience. Try to plan your work for the daytime hours.

Doing it yourself means saving money, but don't try to also save time by rushing to get the project done. Many do-it-yourselfers have broken windows, scratched finishes, and damaged other materials with improper handling, storage, or installation.

Follow the instructions for tools, materials, appliances, and fixtures. If the paint can says to let the first coat dry for eight hours before applying the second coat, wait eight hours. Sometimes we're in such a hurry to enjoy the fruits of our labor, that we eliminate steps, such as the recommended sanding, final coat, or buffing. Overcome the urge. The work may take longer, but it will last and look better.

Timing

If your work will require shutting off water, gas, or electric service, make sure it's done at a time when you can get emergency repairs or professional assistance. Don't choose a holiday weekend or a Sunday afternoon. Also remember that most specialty stores, like plumbing and electrical, may be closed on Saturday afternoons and Sundays.

Check your local trash pickup or dump rules and schedule. Find out in advance what materials are accepted, and when.

Other Things to Consider

Storing Materials

Plan how you'll transport the materials, which ones will need delivery (and when), and where you'll store them. Is your vehicle large enough to haul the materials and equipment you need? Are gates, doorways, and windows large enough to accommodate large items or equipment?

Tools & Equipment

Assess your collection and make a list of what you need. If you're looking for bargains, make sure the product is complete and of acceptable quality, and that it can be serviced. Keep in mind that the better the quality or grade of tools and materials, the easier they tend to be to work with.

Neighborhood Relations

A big remodeling project can be a strain on homeowners—with endless decisions to be made, disruption, dust, and strangers in your house—but it can also affect your neighbors. To preserve a good relationship, let them know of your plans and what they can expect. Tell them what day the work will begin, how long you expect the project to take, and who they can get in touch with if a problem comes up when you're not available.

Talk to your contractor in advance to find out if the neighbors' property will be affected in any way, so you can explain it to them beforehand and ask their permission. Also let neighbors know if and when big trucks will be on the street. (Talk to your contractor about keeping trucks on your side of the street, and about avoiding noise outside of regular business hours.) Have materials placed in your yard or driveway, to prevent dirt and debris from going into the street.

Try to keep your yard respectable looking, and keep an eye on your next-door neighbors' yards to make sure any stray items, such as stripped-off roofing materials, don't land there. Have dumpsters removed as soon as they're no longer needed. You might even ask your neighbors if they'd like to dispose of anything if you have room left before it's hauled away. When it's all over, be sure to thank your neighbors for putting up with the inconveniences. Invite them in for a look at the remodeled space.

Documenting Your Project

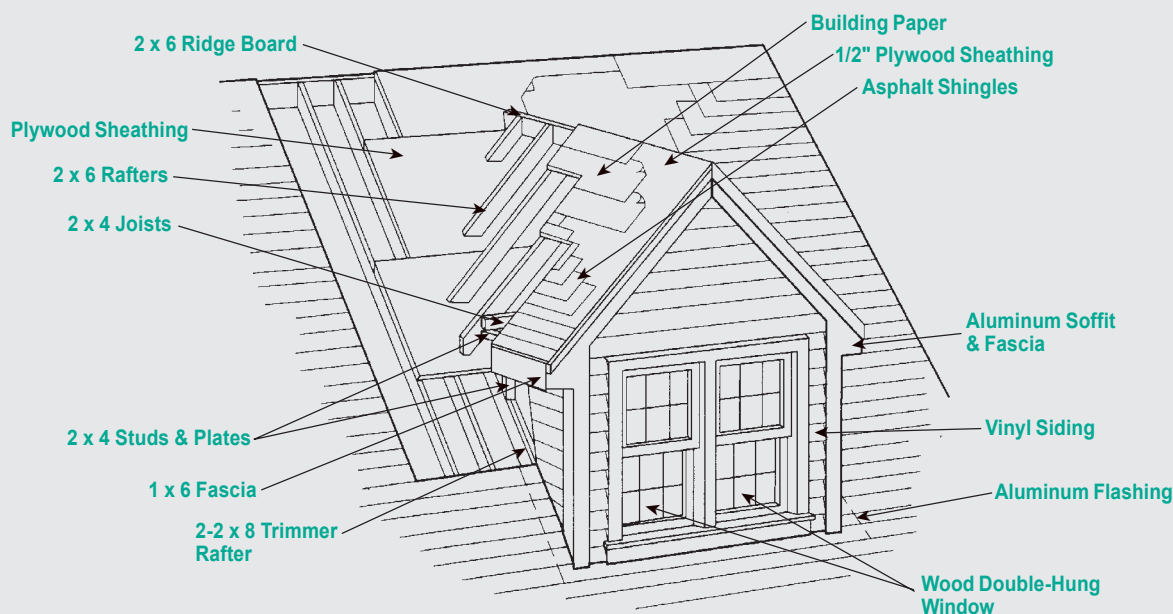
Keep a journal, and track the costs and time involved. Photograph the steps along the way, especially for major, time-consuming projects. This documentation may be useful for future home improvements or for resale.

And Finally...

There's no greater satisfaction than accomplishing a major project ourselves, but if we all could do it ourselves, the professionals would be out of business. Recognize your

limitations; plan your project well, and evaluate its impact on your family's comfort; read the safety section at the back of the book; seek expert advice; and most importantly, enjoy the experience.

7' Gable Dormer



Both this and the smaller gable dormer are fairly major projects—in terms of the work and skill involved, but also the return on investment. You'll gain new living space, enhanced curb appeal, and a good chance of added resale value. The key dormer elements are style, size, and location. A dormer is a prominent feature, so proper planning and workmanship are essential. If you're planning to install two or three gable dormers, take time to carefully plan their location on the roof in relation to one another, as this is crucial to the appearance of your house.

Materials & Tools

The dormer's support system and framed walls require 2 x 4s and 2 x 6s. You'll also need siding, roofing materials, insulation, a window, and exterior and interior paint. Other interior items include gypsum wallboard and finishing supplies, and possibly trim for around the window. These are all standard building materials that you can purchase from one retailer.

Consolidating this order might give you a price advantage, in addition to free local delivery. Do compare between different home centers or lumberyards for the best price.

The roofing, siding, and trim materials should match the products already in place on your house. Also, trim and structural features, such as the width of the fascia and the proportions of the soffit, should be duplicated as closely as possible. Your cost for both labor and materials could change from what is shown in this project estimate if you require different materials to match your particular installation. The most important decision in the selection of finish materials is the choice of a window, the design and size of which should approximate or complement, if not match, the other windows in the house. (*See the previous 4' dormer project for more on materials.*) Standard hand and power tools are used in this project, including those for carpentry, wallboard installation, and painting.

What's Involved

The first major procedure in this project is the layout and cutting of the opening in the roof to receive the new structure. Whenever possible, the longitudinal cuts for the roof opening should be made next to existing rafters. The width of the dormer, therefore, may have to be adjusted to fit the rafter spacing on a given roof. The roofs of most houses have rafters spaced at 16" on center, but in some homes they may be spaced at 20", 24", or even larger intervals. In the latter case, plan on increasing the cost of this operation, as additional rafters and supports may have to be placed to convert the roof structure to safe standards.

While the roof is open, check the condition of the other rafters and sheathing. If either of these components is questionable, have an inspection done by a professional. Any problems should be corrected before you proceed with the new installation. Placing a new dormer on a weak or deteriorated roof surface is a waste of time and money and can

cause serious structural problems later on.

Once the opening has been made, new support materials have to be placed, even on newer roofs. The most important of these supports are the trimmer rafters, which double the existing rafters next to the opening and span the entire length from the ridge to the wall plate. The ends of the cut rafters must be capped with doubled headers. In both cases, the lumber should match the dimensions of the existing rafter material.

The walls, ceiling, and roof of the dormer are framed and covered after the opening has been fully prepared. Because of the number of angle cuts and the individual fitting required for many of the framing members, this procedure is time consuming. If you're qualified to do the work yourself, allow extra time to double-check the measurements and angles as you work. Remember, too, that the cutting will usually have to be done in an area remote from the dormer site, on the ground or a suitable surface inside the opening, so you'll use up more time going up and down a ladder or climbing in and out of the opening as the cuts are made. Plywood sheathing is placed on the dormer walls and roof after the framing has been completed. Be sure to scribe the angled side pieces accurately, as a tight fit is desirable.

Level of Difficulty

This project requires considerable carpentry skill and know-how. Beginners and intermediates whose remodeling experience is limited should not tackle it. The structure itself is a challenging undertaking, and its inconvenient roof location makes it more complex. Do-it-yourselfers who undertake this project should anticipate the challenges inherent in roof work—height, limited access to the site, and the awkward position for using power and hand tools.

Two steps in the project are critical to the overall success of the installation. One is the adequate restoration of the

roof support with trimmer rafters and headers after the opening has been cut. The other is correct roofing and flashing installation to restore weathertight conditions to the roof. The roof framing and covering, particularly, may require the services of an experienced contractor. Even expert do-it-yourselfers should consult a qualified roofer before attempting this task.

Generally, experts should add 50% to the professional time for all procedures, and more for the finish roofing and flashing jobs. Intermediates should add 100% to the labor-hours for any work they're capable of doing, such as the interior wallboard installation, and hire a professional for the roofing work.

What to Watch Out For

Because of their roof location, dormers are notoriously difficult to paint and maintain. As a result, you should select finish materials that will minimize future painting, window-washing, and other maintenance chores. For example, windows with removable sashes may cost more initially, but the convenience of washing or painting them from inside the house might be worth the extra investment. In most cases, stained surfaces are easier to apply and maintain than painted ones.

See also:

4' Gable Dormer, Shed Dormers, New Window.

Gable Dormer, 7' x 10'-6"

| Description | Quantity/ Unit | Labor- Hours | Material |
|---|-------------------|-----------------|------------|
| Removal of roofing shingles, asphalt strip | 200 S.F. | 2.3 | |
| Roof cutout and demolition, sheathing to 1" thick, per 5 S.F. | 15 Ea. | 20.0 | |
| Framing, rafters, 2 x 6, 16" O.C. | 108 L.F. | 2.9 | 69.98 |
| Ridge board, 2 x 8 stock | 12 L.F. | 0.4 | 7.78 |
| Trimmer rafters, 2 x 8 x 18' long | 36 L.F. | 1.1 | 35.86 |
| Studs & plates, 2 x 4 stock | 120 L.F. | 2.1 | 48.96 |
| Sub-fascia, 2 x 6 stock | 16 L.F. | 0.4 | 10.37 |
| Headers, double, 2 x 6 stock | 24 L.F. | 1.1 | 15.55 |
| Ceiling joists, 2 x 6, 16" O.C. | 36 L.F. | 0.5 | 23.33 |
| Gable end studs, 2 x 4 stock | 10 L.F. | 0.2 | 4.08 |
| Sheathing, roof, 1/2" thick plywood, 4' x 8' sheets | 105 S.F. | 1.2 | 78.12 |
| Walls, 1/2" thick plywood, 4' x 8' sheets | 120 S.F. | 1.7 | 89.28 |
| Building paper, 15 lb. felt | 210 S.F. | 0.5 | 7.56 |
| Drip edge, aluminum, 0.016" thick, 5" girth | 28 L.F. | 0.6 | 8.40 |
| Flashing, aluminum, 0.019" thick | 62 L.F. | 3.4 | 48.36 |
| Shingles, asphalt, multi-layered, 285 lb. per square | 2 Sq. | 4.0 | 117.60 |
| Fascia, 1 x 6, rough-sawn cedar, pre-stained | 28 L.F. | 0.9 | 74.93 |
| Soffit, 3/8" rough-sawn cedar, plywood, pre-stained | 14 S.F. | 0.3 | 20.16 |
| Window, double-hung, 5' x 3', vinyl-clad, thermopane | 1 Ea. | 1.0 | 333.60 |
| Siding, cedar, beveled, rough-sawn, pre-stained | 120 S.F. | 4.0 | 433.44 |
| Gypsum wallboard, 1/2" thick, taped and finished | 240 S.F. | 4.0 | 72.00 |
| Insulation, fiberglass, 3-1/2" thick, R-11, paper-backed | 120 S.F. | 0.6 | 38.88 |
| Fiberglass, 6" thick, R-19 | 120 S.F. | 0.8 | 66.24 |
| Totals | | 54.0 | \$1,604.48 |

Contractor's Fee,
Including Materials:

\$5,021