

# Hardwood Flooring Contractor Hiring Guide & Checklist

Plumb Bob  
Press



Tim Carter

# Hardwood Flooring Contractor Hiring Guide & Checklist

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Hardwood flooring is beautiful if done right. Beautiful hardwood installations are no accident. Professionals know the tricks. Your mission is to find one. Use this Contractor Hiring Guide & Checklist to do just that.

Click on the titles to read these columns, contained right here in this document. At the end of each section, there is a link to more information available at the AsktheBuilder's web site.

But first, here are links to four exclusive Contractor Hiring Guide & Checklist videos that will help you with Finding a Pro, Contracts, Payments and Change Orders.



[Finding a Pro](#) is not always done on the Internet or using the phone book. Tim explains a better method.



After the bids are in and the contractor selected, what should be in the [contract](#)? Tim outlines eight items that must be in your contract.



[Payments](#) are important. When do you make them and how much? Tim explains three important concerns regarding your payments.



[Change Orders](#) can cost more than just additional money. They can delay the whole project. Discover what to do ahead of time.

## Hardwood Flooring

[Hardwood Floor Installation](#) - Hardwood flooring is a fantastic natural material that can add warmth and beauty to your home. Hardwood floors can last for generations with proper care. A hardwood floor looks great in any room, even kitchens, family rooms and hallways. Hardwood floor installation is not as easy as it might seem. To get professional results, you need the right tools and experience.

[Getting a New Hardwood Floor Level](#) - Hardwood floor installation can be slowed by an uneven subfloor. Before installing hardwood floors, use a straight edge to find the humps and dips in the subfloor. Then, using a floor leveling compound or asphalt shingles, shim the dips so the floor is level.

[Wood Floors that Bounce and Squeak](#) - If the hardwood floors in your home squeak, it could be a simple fix like driving coarse-threaded screws through the subfloor into the floor joists. However, it could also be a problem with the actual floor support system. While it may meet building code requirements, these are simply minimal standards for a builder.

[Underlayment for Floors](#) - Underlayments are crucial to the success of the flooring on top of it. Many finished flooring materials require a super-smooth surface underneath them. Without smooth and



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solid subflooring, the finished flooring can fail or look very bad in a short amount of time. The new gypsum fiber panel is a good underlayment.

[Flooring](#) - Additional columns on hardwood flooring, floor squeaks, and even videos on eliminating floor squeaks can be found on the AsktheBuilder website. Click on the link to the left and discover what else is available.

## House Plans & Planning

[Home Plans](#) - House plans with detailed interior and exterior elevations and exact specifications will help make your dream home become reality. Be specific with house floor plans, and make your plans reflect exactly what you want down to the smallest detail. Avoid problems by drawing up precise home plans before your new home construction begins.

[Building a New Home - Get Organized](#) - Building a new home requires hundreds of choices. Get organized by keeping all of your choices and plans for your new home building project in a binder so no decisions fall through the cracks. Blueprints and specifications along with this binder will keep track of the entire project. Select amenities for your new home at the start so that workmen can plan openings and utility adaptations to stay on schedule.

[Detailed Plans and Specifications Minimize Mistakes](#) - Detailed blueprints, plans and specifications will help you avoid being sued by a contractor. Keeping a detailed account of work each day, along with photos, will arm you with data should a problem with your contractor arise.

[Home Remodeling](#) - Remodeling and new home construction share a lot of common items. But they differ in one major area - remodeling is done in the house where you are living. Daily routines are altered. Certain areas of your house may be unavailable during remodeling. No kitchen or bathroom will be a real problem. Read these tips to help minimize your interruptions.

[House Plans](#) - Additional columns covering house plans can be found online in the House Plans section of Askthebuilder.com.

## Payments

[Contract Payments](#) - Detailed contracts noting exact contractor and homeowner specifications and listing payment schedules help avoid payment disputes.

[Payment Suggestions](#) - Before payment or work begins, establish detailed contracts, building plans, payment dates, affidavits and helpful construction reports.

[When to Pay for Remodeling Plans](#) - Never pay all of the money due for remodeling plans before the plans are complete. Once you give cash in advance for incomplete work, you lose all of your leverage. Up-front payment has left tens of thousands of people disappointed when the person never finished the job after being paid.

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[Payments](#) - Read other online columns regarding making payments during construction at the AsktheBuilder.com website.

The columns shown above are only a sampling of the columns available to help you. Check the [AsktheBuilder](http://AsktheBuilder.com) website for more information on this and all aspects of Home Improvement.

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Homeowner: \_\_\_\_\_ Contractor: \_\_\_\_\_  
Address: \_\_\_\_\_ Address: \_\_\_\_\_  
City/State/Zip: \_\_\_\_\_ City/State/Zip: \_\_\_\_\_  
Phone: \_\_\_\_\_ Phone: \_\_\_\_\_  
Email: \_\_\_\_\_ Email: \_\_\_\_\_

Contractor's License Number # (where applicable): \_\_\_\_\_

Project Location (Jobsite Address): \_\_\_\_\_

Date Bid Submitted: \_\_\_\_\_ Date of Plans & Specifications: \_\_\_\_\_

## CHECKLIST

What type and species of wood flooring do you intend to install?

\_\_\_\_\_

What is the thickness of the material? \_\_\_\_\_ inch

If this job entails repair work, will the new wood match the existing wood flooring both in species and grain pattern? ☐ Yes ☐ No

Do you intend to shim the flooring in the event that the sub-floor is uneven? ☐ Yes ☐ No

What type of shimming material will you use?

☐ Asphalt shingles ☐ Wood shims ☐ Other: \_\_\_\_\_

Many hardwood flooring squeaks can be traced back to loose subflooring. Do you intend to screw down the sub-floor in areas where anticipated foot traffic will pass over after the flooring? ☐ Yes ☐ No

Do you intend to install 15 pound felt paper between the hardwood flooring and the wood subfloor? ☐ Yes ☐ No

If the hardwood is being installed in a kitchen, do you intend to install it continuously beneath all cabinets? ☐ Yes ☐ No

Will the hardwood flooring be sealed/coated under all appliances? ☐ Yes ☐ No

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If the answer is "No" to the above question, how will this flooring be protected from water leaks?

\_\_\_\_\_

If this is a new or remodeling installation, will the material be unbundled and allowed to acclimate at the jobsite for a minimum of 48 hours before installation?

☐ Yes ☐ No

Is the flooring material prefinished?

☐ Yes ☐ No

If the material is unfinished, does your quotation include sanding, staining / sealing, and finishing?

☐ Yes ☐ No

If you intend to sand the new flooring, what measures do you intend to employ to minimize and / or eliminate the spread of dust throughout the entire house?

\_\_\_\_\_

How many coats of finish will you apply?

☐ Two  
☐ Three  
☐ Four  
☐ \_\_\_\_\_

Will you buff and vacuum the floor between coats?

☐ Yes ☐ No

What type of finish will you apply?

☐ Wax ☐ High gloss urethane ☐ Satin urethane ☐ Blended urethane

How should the floor finish be protected after it is installed?

\_\_\_\_\_

\_\_\_\_\_

If applicable, do the stain and finishing products meet local air quality standards with respect to hydrocarbon emissions?

☐ Yes ☐ No

How often should the floor finish be screened and recoated with urethane to minimize and/or eliminate future refinishing episodes?

\_\_\_\_\_ months

Will you install the new flooring in accordance with the manufacturer's specifications and those recommended by the National Wood Flooring Association?

☐ Yes ☐ No

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Seasonal fluctuations in outdoor humidity can cause movement in the wood flooring. What do you recommend should be done to minimize this movement?

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Will you provide written floor cleaning and care instructions as soon as you are completed with the job? ☐ Yes ☐ No

Will you obtain a building permit? ☐ Yes ☐ No

Some hardwood companies use sub-contractors (Subs) to install their products. Subs sometimes are not adequately covered with proper liability and Workman's Compensation insurance. They often get paid a fixed sum of money which drives them to work faster. Subs are often not as responsive when a problem happens at a later date. Employees of the hardwood company are often a better way to go. Who will perform the work on my house?

☐ Own employees ☐ Sub-contractor ☐ Combination

If subcontractors work on the job, please attach a copy of their current Workman's Compensation and General Liability insurance documentation. ☐ Attached

Will you remove all debris from the jobsite? ☐ Yes ☐ No

Will you leave extra material behind for future repair needs? ☐ Yes ☐ No

What is the length of your **(installer's)** warranty? \_\_\_\_\_ year(s)

Does it cover all labor and material? ☐ Yes ☐ No

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## OPTIONAL ADDITIONAL NOTES

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## JOB COST BREAKDOWN

<b>Materials</b>	
Permit	
Demolition and Debris Removal	
All Necessary Materials	
<b>Labor</b>	
Total Labor	
Insurance	
Workman's Compensation	
Unemployment Tax	
<b>Overhead</b>	
<b>Profit</b>	
<b>TOTAL JOB COST:</b>	

## PAYMENT SCHEDULE

Excessive advance or periodic payments before or during the work is completed often put a homeowner at risk. The homeowner basically become a lender. This is especially true if the job does not require any special or custom ordered materials at the beginning of the job. A fair payment schedule is one that allows the homeowner to pay only for labor and material that has been completed in a satisfactory manner. Periodic payments can occur every 3 - 4 days for small jobs or each week or month for large jobs. On large jobs, the amount of money paid out at any given time should not exceed the total sum of the items listed in the above cost breakdown plus a proportionate amount of contractors overhead and profit for completed in-place work. A homeowner should not have to pay full price for work that is unsatisfactory or incomplete.

Do you agree with this philosophy? ☐ Yes ☐ No

If "Yes", please complete the Payment Schedule on the next page.



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## PAYMENT SCHEDULE

First Payment: \_\_\_\_\_% of Total Job Cost.

To be paid when the following work is complete:

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Second Payment: \_\_\_\_\_% of Total Job Cost.

To be paid when the following work is complete:

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Final Payment: \_\_\_\_\_% of Total Job Cost.

To be paid when all work is complete and satisfactory and all debris is removed from jobsite.

## INSURANCE DOCUMENTATION

Contractor's Workman's Compensation Risk number or Private Policy number and Carrier number:

\_\_\_\_\_  
(PLEASE ATTACH A COPY OF YOUR CURRENT STATE CERTIFICATE OR PRIVATE CARRIER CERTIFICATE)

Contractor's Liability Insurance Company and Policy number:

\_\_\_\_\_  
(PLEASE ATTACH A COPY OF CERTIFICATE OF INSURANCE)

ANTICIPATED STARTING DATE: \_\_\_\_\_

PROJECTED COMPLETION DATE: \_\_\_\_\_

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## REFERENCES (List only jobs of similar scope and nature)

Job completed approximately 4 years ago:

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Phone Number: \_\_\_\_\_

Job completed approximately 2 years ago:

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Phone Number: \_\_\_\_\_

Job completed within the past 60 days:

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Phone Number: \_\_\_\_\_

**Bidding Contractor's Signature:** \_\_\_\_\_

**Date:** \_\_\_\_\_

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## OPTIONAL COMMENTS

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### End of Checklist

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## CONTRACTOR HIRING GUIDE & CHECKLIST HELPFUL HINTS

Thanks for purchasing one or more of my Contractor Hiring Guide & Checklist products. I am quite sure you will be pleased with how they help you find a professional - or more importantly - allow you to quickly spot a scoundrel!

You will run into some resistance from contractors when they see the Contractor Hiring Guide & Checklist(s). Some will reject it entirely. That is OK. Be patient and continue to call contractors until you find one who accepts the Contractor Hiring Guide & Checklist at face value - a document that protects both you and the contractor.

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## USE TIPS

1. Insist that all questions be answered. Incomplete answers can lead to incomplete jobs.
2. Test the contractor's phone number on several occasions. Do you get a machine, voice mail or a human? Humans solve problems, not machines. Note response times. If it takes days to get a return call, this could spell trouble if you start a job with this type of person.
3. The cost breakdown is so important. It allows you to compare quotations quite easily. You can see why one quote is low and another is high. On larger projects, a blank space in the breakdown tells you an item has been forgotten!
4. Insurance coverage is mandatory. You want real copies with current dates to show that you will be covered if someone gets injured on your job. Remember that sub-contractors must have their own separate insurance coverage!
5. Start - Stop Dates will help you determine if the contractor is serious about your job. Ask about who will be working on your job and when they intend to show up. Ask about delays - what causes them and how long might they last.
6. References are critical. The key is to find ones from the different time periods. Ask the people different questions. The most recent reference can provide you with interesting data. For example, did the workers arrive when promised? If there was a delay, what was the problem? How long was the delay? Was the jobsite kept clean? Did anybody play loud music? What would the referral do differently if allowed to start the job over from the beginning?
7. Ask the referral from two years ago about warranty claims. Was repair work necessary? Were their severe problems? Was the contractor responsive? Were the defects fixed correctly the first time or were repeated attempts necessary?
8. The oldest referral has good information too. Ask how well the work has held up. Ask what they would do differently? Would they hire the contractor again, OR have they since found a different contractor who does better work? You might be surprised by their answers!

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9. Contract Documents - Give serious consideration to attaching/referencing the Checklist as a part - or addendum - to your contract that you and the contractor sign. It can be used as a fact sheet/specifications describing what was promised by the contractor. Since I am not an attorney, I can't give legal advice. You may wish to consult with an attorney to see if your state law permits these kinds of attachments or addendums. I believe that virtually every state permits you to do this.

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## HOW TO REALLY FIND A PRO

Finding a reliable, competent and skilled builder or remodeling contractor that can do all of the work will take some time but it is by no means impossible. If you understand some of the basic principles by which these people work, the task is not as mystical as it may seem. Quality contractors are proud of their work. They want it to be perfect or nearly so and they do not want any call-back or warranty problems. To achieve trouble free results, they know that high quality materials are an integral part of each project. Real professionals know that problems are public relations nightmares and drain profits.

Knowing this, you start your search for contractors by visiting the businesses that supply quality materials to these individuals. You might be surprised to find out that these businesses are often places that you have never heard of. In your instance, open the Yellow Pages and look under the heading Flooring Supplies. Many of the listings under this heading will be businesses that cater primarily to contractors and not consumers like you. Visit two or three of these places if possible. Try to do this in the middle of the morning or the mid-afternoon. Never go early in the morning, at lunch or the end of the business day. These are busy times when contractors are picking up supplies.

Once there, ask to speak with the manager or possibly the owner. Briefly describe your job to this person. Ask for a customer who has been buying for 15 or more years, one that routinely buys the highest quality materials, and who pays his monthly bill on time. If the business manager obliges you, you will have a list of high quality candidates. The final question to ask, if possible, would be names of contractors that this person would use to work on his or her own home.

If the manager will not release names, then go to Plan B. Do a stakeout of the business in the early morning and get business cards from the contractors who are buying supplies. Look for ones who are driving well kept vehicles that project a look of professionalism. You will still need to do more detective work, but your chances of hiring a pro are quite good.

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Thanks again for your purchase. Don't hesitate to email me if I can help you in any way. Simply go to my website - [AsktheBuilder.com](http://AsktheBuilder.com) - and look for the [Ask Tim](#) icon on the home page.

[Click here for other Contractor Hiring Guide & Checklists](#) available from AsktheBuilder.com.

Best regards!

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## HOME PLANS

Home plans are the core documents that communicate what the home owner wants and what the builder needs to build. Without great house plans, a new home construction project can quickly become a sea of confusion, frustration and arguments. Many people think that house plans are just pretty pictures and floor plans, but believe me, they serve a far more important purpose.

Can you remember the last time you were involved in a dispute over anything? Chances are you prevailed if you had some form of tangible written evidence, photograph or object that proved your statements were true. But all too often people argue about spoken words that frequently turn into broken promises, simple misunderstandings, or worse yet - deception. This misery takes place everyday in the residential building arena. Homeowners get into heated disputes with builders and remodelers about any number of issues.

The sad fact is a vast majority of new home construction disputes can be settled quickly and efficiently with crisp plans and specifications that are developed long before the first spade of soil is turned at the jobsite. There are many reasons why good plans and specifications never get developed. Often the customer is unwilling to pay for the time and effort to produce the documents. Another common reason is the homeowner looks at a set of blueprints and thinks they are sufficient. Without ever seeing a first-class set of prints I can see why they might feel a deficient set will make do. After all, if they are good enough for the building department then they must be good enough for all involved.

Perhaps a few examples of dispute issues might convince you that you need top drawer plans and specifications for your new home. Imagine if you will a discussion between you and your builder about crown molding. You say you want it in all downstairs rooms. The builder agrees and draws one simple squiggly line on the plans in the cross section and adds "Crown Molding" with an arrow pointing to the line.

Months later while walking through the house as the finish work is being completed you see a small and simplistic paint-grade crown molding that is barely noticeable up in several rooms. You grumble and wonder why the carpenter didn't install the two piece stained oak crown molding you "thought" you mentioned to the builder.

As you walk into the bathrooms upstairs you shake your head and wonder who in the world put the toilet paper holder on the opposite wall from the toilet. It is barely reachable. Fortunately the carpenter who installed it walks in and you ask about the placement of this fixture. He simply states that is where he always put them. Need I go on?

The failure to develop good specifications and plans can also lead to cost overruns and a limited product selection for your finishes. A great set of plans includes numerous interior elevations that show you in two dimensions what a wall will look like when it is finished. These elevations can be as detailed so as to show exact locations of electrical outlets, switches and yes, toilet paper holders. New computer software allows architects and designers to show these in three dimensions as well.



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Knowing what you are going to see before it happens can often prevent costly change orders. Many people are unable to visualize what something might look like looking at a simple floor plan. Elevations help solve this problem.

Plans and specifications that do not include the actual selections of all fixtures, cabinets, tops etc. can cause you problems if you try to decide what you want during construction. A builder may ask you to go to the tile store 6 weeks before he needs the tile. But once there you fall in love with a special order tile that take 10 weeks to get. Who will pay for the time delay should you decide to order the special tile?

There are hundreds of scenarios that can be described. But one thing is for sure: Detailed plans with clear and precise specifications that outline each and everything you want will save you if push comes to shove. Time and again when I consult in the forensic construction expert work I perform I find that a great set of plans that were ignored by a builder or sub leads to their capitulation if the dispute is headed for a courtroom.

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## BUILDING A NEW HOME - GET ORGANIZED

**DEAR TIM:** My husband and I are getting ready to build a new home. I am astonished at all of the details that need to be addressed. Each time we have a meeting with our builder all sorts of decisions need to be made. I am afraid that lots of information is going to fall through the cracks before the final walk through. What is a good way to keep track of all of this information? Julie J., Stillwater, MN

**DEAR JULIE:** Many people decide not to build a new home for this very reason! They are overwhelmed with the decision and product selection process and simply don't know where to start. Many people are afraid of making the wrong decision. The key is to approach the task in an orderly manner and start making product selections and decisions long before ground is broken.

The building and remodeling playing field is actually a minefield. Making decisions out of order or selecting a product without checking for conflicts with other products can trigger an explosion of extra costs and delays. Once upon a time a client of mine picked two elegant wall light fixtures that hung on each side of a bathroom medicine cabinet. Once they were installed I quickly discovered they prevented the medicine cabinet from opening. Because the homeowner had fallen in love with the fixtures, the problem was solved by relocating the electrical boxes. It was a costly mistake that I paid for.

You can avoid nightmares like mine with a simple job organizational binder. This is a nifty tool that works alongside your blueprints and any written specifications. I have found that the binder works best when it contains a section for each room of the house as well as a separate section for the exterior. Typical things you would find in each section would be photographs or illustrations of fixtures, installation instructions for appliances, fixtures or products, technical information showing supply pipe sizes, wire sizes, and the proper rough-in locations of these utilities.

Each section of the binder should also have a room finish schedule. This is a table that communicates to the builder and his subcontractors exactly what you want on every wall, floor ceiling, trim, door surface in each room. If the data in these schedules is accurate it is entirely possible for the workers to finish the job with little or no verbal communication.

You will need more than one binder for the job. At the very minimum you need three: one for you, one for the builder and one that is safely stowed in a lockbox at the job site. The subcontractors need the job site binder to refer to as they work each day. Use clear plastic pocket protectors to keep the individual pieces of paper safe from wet job site conditions.

Creating a complete organizational binder means that you need to make product selections before construction begins. This may seem unusual but you might as well resign yourself to it. There are numerous advantages. Pressure decisions are eliminated. Because it is early in the process, you have time to get items that might have to be special ordered. Waiting until the last minute to make selections often eliminates certain items because the job may have to grind to a halt for weeks or months.

Carpenters, plumbers and electricians need to know what they are installing three or four months from now so they get openings, pipes and wires in the correct spots. Every time I have tried to use

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ESP because I was trying to guess what a customer would want, I guessed wrong. Providing your builder with the correct information simply takes the guesswork out of the process.

If you really want your job to run smoothly you and your builder need to look at all of your selections and insure that there are no conflicts. Imagine your dismay when you discover that the electrical outlet for your night stand is behind your bed. Similar frustration happens when a central vacuum outlet becomes hidden behind a door that is always open. Pesky mistakes like this can be avoided with a little thought and attention to detail.

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## DETAILED PLANS AND SPECIFICATIONS MINIMIZE MISTAKES

**DEAR TIM:** Recently, I received a summons to appear in civil court. The contractor who walked off my job is suing me for the remainder of the unpaid money stated in the contract. Because he avoided repeated calls and letters, I hired other workers to finish the job. What do you think is the best evidence I can produce to prove to the court system that I was a victim? In my opinion he deserves no money. Sue D., Sedona, AZ

**DEAR SUE:** Let me begin by telling you that I am not an attorney and can offer no legal advice. I can tell you, based upon my many years of being involved in differences of opinion with homeowners, what has saved me from having to work for free. The items that eventually become supporting evidence can be a thorn in one's side as the job progresses, but they are worth their weight in gold if a dispute arises at a later date. Hopefully you have many of the following things.

Perhaps the most powerful weapon a homeowner can possess when the going gets rough is an excellent set of plans and specifications. All too often standard plans have far too little detail. Too much is left to interpretation. For example, if the plans say you are to get crown molding does this mean a small thin piece of molding or a large combination crown molding? Detailed plans and specifications make these issues black and white not various shades of gray.

Almost every job requires multiple face to face meetings where many issues are discussed. It can be hard to take notes during these meetings, but this written record of the discussions can help jog the memory of a participant when the wrong light fixtures or floor tile are delivered or installed. These notes become iron clad if you write a letter summarizing the key points and send a copy to all who participated in the meeting. To make the notes armor plated, consider including a sentence stating that if a participant disagrees with anything in the letter they must respond in writing in a timely manner.

Photograph or video tape the progression of the job. Be sure to use a camera that can burn the date onto the image. Take many photographs, including close up photos, of things that will be hidden at a later date. Photos of structural connections where things are nailed or bolted together are often critical. Try to photograph concrete forms just before the concrete is poured. Imagine how difficult it is to guess the thickness of a concrete slab without doing destructive testing or using an expensive diagnostic device. A 35 cent photograph may come to your rescue.

A detailed diary of the events that happened each day can be very helpful. Long delays or periods of time when no one showed up to work are cast in stone with written daily notes kept in a journal. It is very hard to reconstruct events if they are taken from memories that are six or nine months old. Write down who showed up and what was accomplished. Photographs can be added to the diary that show daily progress.

In certain instances, weather data may help support your arguments. If you are not a trained meteorologist, data that you keep may not be considered accurate or true. Fortunately you can obtain vast amounts of weather data at little or no cost from your local National Weather Service office. They keep hourly logs of temperature, humidity, precipitation etc. On more than one occasion this precise data has won a court case for me.

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Almost all jobs have changes as the work progresses. These change orders must always be in writing. In addition to the description of what is changing and the cost of the change, each change order must contain a section that states how much extra time the change will add or detract from the job. You can see the value of this added feature when it is used in conjunction with the start and completion dates that are contained in the original contract.

Finally, if all communications break down, then all contact with the contractor must be in writing. All letters must be sent certified mail with a signed receipt request. You want to be able to prove that you tried your best to keep the lines of communication open at all times.

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## CONTRACT PAYMENTS

**DEAR TIM:** You and other people constantly write about how homeowners need to protect themselves from contractors who take their money and perform shoddy work or no work and disappear. What about homeowners who don't pay for work? I have had several customers who nit pick a job to death and withhold tens of thousands of dollars until several small items are completed. I have bills to pay just like everyone else. What is a fair way to solve money problems between homeowners and contractors? Robin S., Kansas City, MO

**DEAR ROBIN:** Touche! Years ago, I was in a similar situation. I am convinced that hundreds and thousands of homeowners torment contractors for all sorts of reasons. Some of them are legitimate while others are based on past bitter experiences, lack of goodwill, and distrust of contractors as a whole. Unfortunately, there is a small group of very bad homeowners who simply wish to cheat contractors out of money just as there are deceitful contractors who abscond with hard earned homeowner dollars.

When I perform autopsies on these problems, I typically discover a common flaw. The contract between the parties is very vague about the payment terms and conditions. In some instances, wording allows contractors to get too much money in advance. In other instances, homeowners advance money to contractors in a spirit of good faith. Unless these homeowners are working with a contractor who has the highest level of professionalism and honor, the advancement of money before certain things are complete can be a recipe for disaster. The incentive to continue to work at the highest level of efficiency and quality has been removed once the money has been paid.

Contractors routinely present contracts to homeowners that contain loopholes. Imagine language that states, "Payment is due upon completion of work." Well, if I were a homeowner, I could feel justified in holding back the monies if the job were not completely finished. Imagine the nightmare of a job where \$100.00 worth of exterior work can't be completed until the spring thaw yet \$80,000.00 or more is due upon the total completion of the job. If both parties agree to the terms of a contract, then I maintain that they should abide by what the contract states.

There are countless ways to solve payment problems. Several have worked well for me no matter how large or how small a job might be. One element missing in almost every contract I have seen is a tiebreaker clause. It is wise for the parties to agree up front on an independent inspector who is willing to give a ruling as to the quality and completeness of work. In the event of a dispute between the parties, the inspector issues a written ruling that goes one way or the other.

I have found that it is very effective to state that progress payments are made on given dates for the work that is in place and completed to the satisfaction of the homeowner and/or independent inspector. A job cost breakdown that assigns a fair and real number to each aspect of a job is invaluable for this to happen in a fair way for both parties.

The homeowner has a given amount of time to make the payment after the bill is produced. Since the homeowner knows when monies are due, all inspections would have to be scheduled in advance. This allows the homeowner to feel confident the work is satisfactory as he writes the check to meet the deadline. The contract could contain language allowing the contractor to pull off the job if the

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money is not paid on time. No contractor really wants to do this for any number of reasons, but it limits the amount of financial exposure to a fixed sum of money. It also gives the contractor some leverage as very few homeowners want their job to be at a standstill.

Set standards in the contract, if possible and reasonable, with respect to work meeting the building code or more importantly set forth manufacturers' specifications. A benchmark of quality must also be established or you may never meet certain homeowner's expectations. The independent inspector may come into play in this event as well.

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## PAYMENT SUGGESTIONS

**DEAR TIM:** My house was severely damaged by a natural disaster. My husband and I hired a contractor who was referred by a friend and whose state license is in good standing. We visited other smaller jobs to review his work. We signed a contract with him to perform \$250,000 in repairs. He has taken all of our money and only 1/3 of the work is complete, much of it against code. What should we have done to avoid this nightmare? J.C.

**DEAR J. C.:** After reviewing all of the details of your story, I can see that this person was a con artist from the start. All of the facts that you have presented indicate that this individual was not capable of performing a job of your scope. Furthermore, it appears that he had every intention of stealing your money. He has no honor and makes life miserable for all honest, stable, and trustworthy contractors.

Some state laws permit contractors to ask for and accept deposit money the day the contract is signed. In many cases, deposit money forwarded by a homeowner to a contractor is nothing more than a loan. You put yourself and your money at great risk if you advance money to a contractor for no good reason. Some contractors use deposit money to pay the bills of other jobs currently in progress. This business practice is often referred to as under-capitalization. In other words, their financial gas tank is running near empty.

Contractors deserve advance money in certain instances. For example, they may have to order custom non-returnable objects such as kitchen cabinets or custom windows or doors. A build/design firm may want the cost of the design work and the building permit covered as these items can only be used on your job. Design and planning costs can be negotiated during the bidding process. Costs for custom materials can be verified by asking for copies of the quotes from suppliers. Honest contractors generally will not hesitate to provide you with these numbers.

I also noticed that you allowed the contractor to begin work without finished, detailed plans that were approved by your local building department. This was a critical error on your part. It is vitally important to have finished plans and specifications BEFORE the contract is signed. The plans should be an integral part of the contract documents. An investment of \$250 or so with a attorney to review your contract would have been very prudent. The contract could have contained language telling the contractor that all work must be performed in accordance to the plans and specifications.

Payments of additional monies as the work progresses must be tied to specific progress points. You can agree to pay weekly or monthly for work that is complete and satisfactory. To aid you in determining what is a fair price to pay at each of these times, a detailed cost breakdown of the job costs is required. Had you obtained this breakdown of costs on your job, the money to pay for the yet unfinished work would still be in your possession.

I suggest that you contact your local building department as well. Often these agencies provide written progress reports during construction. These reports tell you whether or not the work is being completed in accordance with the building code laws. Make the contractor submit these reports, if they are available, at each request for payment.

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In addition, be sure you receive notarized affidavits from each person who has worked on your property or material supplier who has delivered materials. If your contractor has not yet paid these people, your nightmare is just beginning.

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## WHEN TO PAY FOR REMODELING PLANS

**DEAR TIM:** My husband and I are remodeling our home to accommodate for our new arrival. We've been working with an architect who is not fully licensed at this time. This individual has been drawing up plans for our new project. The plans are not yet signed and sealed as he wants to send them to a licensed architect to have this done. But he wants us to pay the full amount of the plans prior to getting them signed and sealed. We're not sure if we should pay for the plans until everything is finalized. Please let me know if we should pay for them up-front or if we should wait until the plans are completely done. Julie S., Orlando, FL

**DEAR JULIE:** Congratulations on the expanding family! The answer is very simple if you ask me. I feel you should never pay in full for something until such time as you are completely satisfied. The fact that the unlicensed architect-to-be asked for the money before the job is complete is very troubling to me.

There are all sorts of reasons you should not pay in full until the job is complete. The money in your account is the only leverage you possess. The instant you hand over all of the money for the plans, you then rely on integrity, hope and good will to get what you want. This individual may have all of these qualities and more, but I do know he does not yet possess good business sense.

I can produce countless examples in the real world where you do not pay for things in advance in-full before you get them. There are many things where you do put down a deposit and possibly make timed payments as the work progresses, but to pay in full before delivery is a recipe for disaster.

Here is a true story that just happened to the son of a close friend. This young man wants to become a commercial pilot. He signed up for flying lessons and all the necessary ground school training to get the commercial license. The cost was staggering - somewhere above \$15,000. My friend co-signed a loan for his son with a bank, took the funds and paid the flight school for the flying lessons and schooling. They did this in advance to get a slightly reduced price. A month ago the flight school went bankrupt and the son only had 10 percent of his training complete.

The son and father still owe the money to the bank and they have virtually nothing to show for it. A similar thing could happen to you. This unlicensed architect may have made an enormous amount of mistakes in your plans. It could take many hours of redrawing to correct them. Once he has the money, he may be reluctant to make the changes in a timely manner. One thing we know for sure is that his incentive to do so will be greatly reduced. In fact, he will find that the additional work will create a large mental obstacle as he feels he is not getting any money to correct his mistakes should they exist.

At this point in time, you have enormous leverage. The plans he has been working on are of no value to anyone but you and your husband. No other homeowner would have interest in them as they are house-specific remodeling plans.

You simply tell this person that you are more than willing to write a check for 90 percent of the total due once the plans are signed and sealed by a real licensed architect. You then tell the architect-to-be that the remaining 10 percent of the money will be paid as soon as the building permit



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is issued. Keep in mind that the building department may request minor changes in the plans before a permit is issued. You still want to have some financial leverage in the event this happens.

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## HOME REMODELING

### 25 Things You Must Know If You're Remodeling

Remodeling is as different from building a new home as night from day. When you visit your new home construction site, you can look around and then go home. You don't have to deal with the workers and the mess.

Remodeling is the exact opposite. Your normal routine is rocked to its core. Strangers, whom you have never seen, invade your home. The excitement of the job starting soon wears off and becomes a dull headache.

If the remodeling job is a major one, such as kitchen remodeling, or bathroom remodeling or even a room addition, the impact on your life will be significant. Many people are not prepared for the disruption, dust, and missed deadlines.

To make a remodel job go smoothly, it requires enormous amounts of planning. Be sure to convey your bathroom remodeling ideas or basement remodeling concerns or whatever room you are doing to your contractor at the beginning of the remodeling projects. The remodeling contractor is responsible for this, but you must make sure he or she has covered all of the bases. In my opinion, you can only do this if you have a clear understanding of all of the things that can go wrong during the remodeling process. With this knowledge, you can already have a strategy in place to eliminate problems before they happen.

### Asbestos and Lead

Harmful basic chemical elements lurk like hidden time bombs in many existing homes. Two of the most prominent are asbestos and lead. Asbestos was commonly used in insulation pads that sat on top of furnaces and was used in wrapping materials around forced-air heating and cooling ducts.

Asbestos was also used in floor tiles, roofing, piping, adhesives, etc. In other words, it can be found just about everywhere. You need to make sure you identify potential trouble areas in your home and make sure your contractor deals with the danger in an approved manner during the asbestos removal.

Lead is a very serious hazard that can be found in many homes built prior to 1978. If your remodeling job involves scraping, sanding or removing anything that might contain lead paint, you better make sure all precautions are taken so your home does not become listed as a Superfund site. Lead poisoning is a possibility if not handled properly.

### Bid Breakdowns

When you are soliciting bids from different contractors for your upcoming remodeling project, it is imperative that they submit detailed itemized bids. You need to know how much money is allocated for the labor and material for each part of the job.

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This information will be used by you to why the low bidder is low and why the high bidder is high. If there is an enormous amount of disparity between contractors when you compare the cost of the same task, this is an area that needs further discussion. For example, if you are getting a new roof put on and painting done and you have specified the exact shingle you want, then the actual itemized number for the shingles should be within \$50 or so of one another as both contractors should have calculated the same number of shingles.

The breakdown will also be an invaluable tool when you need to make payments. When a payment is requested, it becomes your job to view the work that is complete and ensure it is satisfactory. Refer to the initial bid breakdown and make sure to only pay for that amount of work along with a pro rata portion of contractor overhead and profit.

## Customizing Touches

One of the most fulfilling things, I experienced as a remodeling contractor, was doing extra special things for customers. Creating special nooks or crannies, delightful custom window seats, maybe it was a special set of steps leading from a deck to a patio.

If you start to gather photographs from magazines and even the Internet that depict things you especially like, an experienced carpenter, painter or other trades person might be able to create it for you with very little extra work.

But you need to communicate these wants and desires in the planning stages. Photographs are an ideal tool for communicating what you want. My wife did this exact thing with me as she saw a gorgeous wood picket fence in a magazine. Without any plans and just working from the photo, I created a nearly exact copy. It doesn't cost one dime to ask for a price or express an idea.

## Debris Removal

It is surprising to many people how much debris and garbage are created during a moderate to large remodeling job. The problem on a remodeling job is that you don't want it scattered or piled in the yard or left inside if at all possible. Any trash that is combustible represents a serious fire hazard as it is commonly stacked so there is lots of air around it. A spark from a plumber's torch, a carelessly discard cigarette, etc. can create an inferno that can cause serious damage.

To make matters worse, when debris is being created, often the structure is being altered. Some structures can lose much of it's fire stop characteristics, especially if drywall and plaster have been removed. Open walls and ceilings provide a pathway for rapid fire spread.

Include in your contract that all debris will be cleaned up each day and placed in a metal container that is placed safely away from your home. Request that the work area be broom clean each day and vacuumed at the end of each work week.

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## Duration of Job

The last thing you want is your house torn up for an extended period of time. If you have seen your friends', relatives', co-workers' and neighbors' homes go through a remodeling job of any size, you know it can take a while. Anything that delays the job causes the pain threshold to rise exponentially.

Using your past experience and observations of other people's projects, you might be able to get a feel for the length of time a job should take. If a contractor says they can do a small room addition from start to finish in 10 days, ask him what magician will show up. You may be surprised as he may have the addition pre-built at a modular home factory!

It is possible to compress time schedules, but your job during the bidding process, is to request a detailed time line of what tasks are going to happen each day or each week. Compare the schedules that each contractor provides to see if each one has accounted for each task. If a contractor refuses to produce a schedule, it might be a sign of disorganization.

## Dust Control

Even small remodeling jobs create dust. Large-scale demolition can create dust storms within homes. When you are interviewing contractors, during the bidding process, have detailed discussions about dust.

Take notes during these discussions. If the contractor says something that doesn't sound right, ask for clarification. When you talk with past customers of each contractor, ask specific questions about how well dust was controlled.

Some dust is inevitable, unless the contractor sets up a negative pressurization environment where the work is taking place. This setup costs extra money and is widely used by the mold abatement companies if you or someone in your family is sensitive to dust.

Keep in mind that homes equipped with recirculating forced air systems must be turned off during periods of dust creation. The return air aspect of the system can inadvertently pull dust into the system and broadcast it throughout the home.

## Extra Telephone

It seems as if everyone has a cellular telephone today. But it is entirely possible for a battery to die or a cell phone to be forgotten at home or become damaged at the jobsite.

The last thing you want is a contractor or one of his subcontractors using your phone. One or two phone calls is not bad, but day-after-day use of your home phone can become very annoying.

It gets worse, some contractors give out your telephone number because they might expect a return call. You then become an unpaid secretary or a receptionist for the branch office of your contractor.

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The solution is simple. Place language that your contractor must install a temporary land telephone line or at the very least buy a temporary cell phone that is kept at the jobsite for all subcontractors and employees to use. We have more options now than ever with respect to communication.

## Fumes

Many parts of the remodeling process can and do create fumes. The assembly of PVC plumbing pipes creates very noticeable fumes. Soldering copper tubing creates fumes as well, Drying paint liberates vapors into the air that contain a brew of different chemicals.

Urethanes, adhesives, etc. all create fumes that can invade your home during time periods where windows must be closed. These accumulated fumes can cause discomfort and actually sickness to people who might be acutely sensitive to some of these very peculiar chemical vapors.

Temporary space heaters used for all sorts of heating and drying purposes can create deadly carbon monoxide. Fumes can enter your home quite by accident and cause a problem. A heater placed innocently next to an air intake might cause massive amounts of carbon monoxide to be inject into your interior air. It is extremely important to discuss fumes with the bidding contractors and what they plan to do to minimize them in your home as they work.

## HVAC Sizing

If your remodeling project involves adding additional space, there is a strong possibility you will have to upgrade or modify your existing heating and cooling system. Your existing furnace and air conditioner might be at the limit now with respect to the amount of heating and cooling BTU's they can handle.

It is extremely important that you discuss this possibility with the remodeling contractors during the bidding process. Talk with them about heat gain and heat loss calculations. If the contractor or sales person squints or tilts their head when you mention those words, you might be talking with the wrong person.

Once you have awarded the job to a contractor, it is imperative that the heating and cooling contractor come out and gather the necessary data to perform the needed calculations. These tell them whether or not your existing heating and cooling equipment will work.

## Insurance Certificates

Unfortunately, we live in a society that seems to be over-populated with attorneys. These people need to feed their families and some of them seem to love to work on accident claim cases. You need to make sure you are never named as a party to one of these lawsuits.

You can do this by taking about insurance certificates with the bidding contractors. It is not always enough for a remodeling contractor to show you he has coverage for his employees. What is important is that each and every person who shows up to work at your home is indeed covered.



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Although it is a lot of work, you must insist upon doing it. You must make it very clear to the bidding contractors that they must supply you with current workman's compensation and general liability insurance certificates for all subcontractors who plan to work on your job. These documents need to be produced the day the contract is signed.

## Matching Materials

Clothing, automotive, etc. styles change on a constant basis. The same is true for products used to build your home. Your existing home may have very unusual interior and exterior woodwork or plaster. If your remodeling contractor is a professional, he or she will know how to get exact matches on many of the materials used in your job.

There are many woodworking mills that can easily create identical profiles for door and window casing as well as crown molding and baseboards. It will cost more than buying stock trim, but the long-term value you add to your home by doing this will be well worth it.

With lots of extra effort, it is sometimes possible to get very close matches on brick and even ceramic tile. If you are trying to match brick, always go for the color match first and then the texture match. From the street, you rarely can detect texture but readily notice differences in color.

## Pavement Problems

Do you have a gorgeous driveways, sidewalks and patios right now? If so, it would behoove you to take very good photographs to prove it. Remodeling activity almost always causes damage to existing paving materials around a house.

Dumpster deliveries, concrete trucks, lumber trucks, etc. can not only crack and break apart paving, but they can spill seas of motor or hydraulic oil on pristine concrete or blacktop.

It is imperative that you and the bidding contractors talk about how your paved surfaces will be impacted by the remodel job. Document what each contractor says and decide who has the best plan to protect your current investment. The last thing you need is an argument that a crack or an oil stain was already there. This is the reason for the photos you took prior to the remodeling project.

Be aware that large loaded delivery trucks can weigh as much as 20 times what your car weighs. It is no wonder thin concrete slabs crack and blacktop driveways crumble when a truck backs up onto it. Read the delivery tickets that are signed by the workers and most have damage waivers that relieve the truck companies of responsibility if a person allows them to drive onto your paved surfaces.

## Payment Schedules

This is one of the most important parts of your remodeling job. The money you possess is the only leverage you have to ensure your job gets completed and done to a level of quality you have agreed upon in your contract.

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All too often, people advance large sums of money to the contractor when the contract is signed. The only time this is necessary is when your job requires special order materials to be ordered before the job starts. Examples of this might be semi-custom or custom cabinets, a custom front door, custom garage doors, etc. Any materials that are commodity items that can be purchased at supply house do not qualify.

Keep in mind that your contractor should have open accounts at all suppliers. If he does, why would he need advance money? He doesn't pay workers in advance, nor does he pay for supplies in advance.

You must always retain a sufficient amount of money to complete the project no matter what stage it is in. When you do pay for completed work, the contractor must supply you with notarized affidavits from all who have work on the job as well as all companies that have supplied material. Never issue a payment without having these documents. Get your payment calculator out and be sure the total amount you pay each time needs to match the amounts on all of the affidavits.

## Plans - Triple Check Accuracy

As with new construction, the plans, blueprints, and written specifications are the primary tool that communicates to the remodeling contractor, suppliers and all subcontractors what is going to happen at your home. The ideal set of house plans would be ones that are so complete and so detailed that no one ever has to ask you a question. It is possible to do this as I have been blessed to work on such a job.

But this goal is very hard to reach. It requires you to think through the simplest things, such as the exact place where a toilet paper holder might go. You need to make all product selections, even paint and stain, before the job is even bid.

Is there a value to all of this? Absolutely, yes. If your plans are this complete, the bids you receive should be highly competitive. Dishonest contractors can't play the famous bait and switch game with absurdly low allowances for things when plans and specifications are complete and accurate.

## Plumbing Disruptions

Many remodeling jobs involve plumbing. What may seem to be a very simple task of just turning off your main water valve and turning it back on can wreak havoc in an older home. When water lines refill from the rapidly incoming water, it can dislodge pieces of sediment from the sides of the older pipes. This sediment can clog faucet aerators, toilet fill valves and faucet valve cartridges.

It is very important that you discuss all plumbing jobs with your contractor before work begins. If water needs to be shut off to solder pipes, what happens if a small fire starts? If drain lines need to be cut into to install a new branch drain line, how long will the toilets in the house be inoperative? These simple questions need solid answers.

Avoid major plumbing changes on Fridays. If leaks develop after workers go home, will you be able to get instant repair service over the weekend? If you must have work done on a Friday, have a

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contingency plan in place. Make arrangements such that you can easily contact the plumber or the remodeling contractor in the event of plumbing problems.

## Porta-Potty

Bathrooms are private places. The last thing you need is a bunch of strangers with dirty clothes and muddy boots walking onto the clean throw rugs in your bathrooms or powder rooms.

Major remodeling jobs that will see many people at your home for weeks on end need a temporary toilet facility. Many of these are quite discreet and they allow you to maintain control of a very important part of your home. This is an important issue and you should not budge on it.

Make it very clear to the bidding contractors that a temporary toilet must be on the jobsite and that it must be serviced once or twice a week.

## Pre-Order Materials

Any type of delay on a remodeling job creates havoc and stress. You can minimize delays by making sure the exact materials you need are at the jobsite long before they are needed.

This concept may seem simplistic, but it is often overlooked. If you have a safe and secure place to store products that are not readily available, why not buy them in advance and have them on hand?

Examples of this would be specialty faucets, hardware, light fixtures, ceramic tile, special-order windows and doors, and any other material that is not ordinarily in stock. It is also very important to inspect these items to make sure there are no defects and that they are exactly what you ordered. It is not uncommon for the wrong product to be shipped.

## Protecting Finishes

Imagine how many trips up and down your stairs a remodeling contractor and his subcontractors might make as they remodel a second-floor bathroom. Without protection, the stairs, carpeting, handrails, walls, etc. can easily be damaged or scuffed.

I suggest having a very frank and open discussion with your contractor about what steps will be taken to protect all existing surfaces both inside and outside of your home. Take very good notes and write down in the contract any promises the contractor makes with respect to what he or she intends to do.

The marketplace is crammed with many surface-protection products that help contractors keep dirt and dust away from things that are important to you.

But keep in mind it doesn't stop with existing materials. Many a new tub has been scratched by a drywall or ceramic tile subcontractor. Finish carpenters can scratch new hardwood floors with tools when they come back to install toe stripping. Discuss all of these issues with your contractor so things that are in excellent shape stay that way.

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## Scheduling

One of the top complaints of homeowners who have gone through a major remodeling job are delays caused by scheduling snafues. Large construction projects employ special people who are experts at coordinating the arrival of both materials and workers so that the job continues from start to finish with no disruption.

Small remodeling contractors can create simple charts that do the same thing. The trick is to correctly identify the realistic amount of time it takes to do a particular task and then place it in the right position on the schedule.

The next task is to determine which jobs can occur on the job at the same time. It is often possible for a plumber to be working inside a room addition while a bricklayer or siding contractor is applying the outer skin to the job.

Request a written schedule from your contractor in the bidding phase. See if any of the contractors you are talking with can produce one they are currently using on an existing job. If they can't, you better talk with past customers to see if the jobs they did progressed with little or no interruptions.

## Selecting the Real Professional

I often think this is the Holy Grail of both new home building and remodeling. Every homeowner wants the best contractor, who is both professional and honest. These people do exist. They can often be found in just about every city and county in the nation.

If you hope you have the right contractor for the job, you may already be in trouble. You can't ever base decisions on hope. You start the process of finding the professional by conducting a thorough and in-depth interview. This may seem unusual, but it is a common practice in the business world.

You can ask very interesting questions and get some fascinating information. For example, ask a contractor the names of the last three books he has read. Ask if he attends remodeling conventions. If not, ask why. Ask them if they volunteer time. If so, where? Do they coach children's teams? When asked to produce an ID, does the contractor show you a driver's license or some other card? Never forget that it is your home and it represents an enormous investment. You must be sure you and your contractor are a close, if not perfect, fit.

## Temporary Kitchens and Baths

If you have never kneeled down to wash dishes in a bathtub, you are not missing a thing. It is miserable and it is humiliating. It is also unnecessary.

If your kitchen is going to be torn up for several weeks, ask the bidding contractors how they intend to provide you and your family with temporary sinks, cooking appliances and refrigeration. Creative and professional remodeling contractors can often throw together a temporary kitchen that can roll into and out of the kitchen in progress each day.

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Bathrooms are even more critical. It is not uncommon for a professional remodeling contractor to build a temporary shower in some location while the primary bathroom is being remodeled. Sinks and toilets are a must. There must always be functioning sanitary plumbing fixtures for you at all times. Excuses are reasons for failure. Do not tolerate them.

## Trees and Landscaping

The landscaping around your home may be priceless. How many years has it taken a particular tree to reach its current height? You may have tens of thousands of dollars invested in expensive flower, bushes, shade plants, etc. The last thing you need is permanent and irreversible damage to your trees and vegetation caused by an unknowledgeable contractor, subcontractor, excavator or delivery truck driver.

The best way to ensure you preserve all of your plants is to arrange a consult with a certified arborist long before your project begins. Get written instructions from this person as to what needs to be done to make sure all trees and plants will survive the remodeling ordeal.

Make these written instructions part of the bidding documents and part of your contract. Be sure the contractor you choose has sufficient general liability insurance to cover damages and that the policy specifically covers damage to trees and landscaping.

## Valuables

This is an uncomfortable subject, but one that must be discussed. There is no doubt in my mind that your home contains valuables. They may be cash, jewelry, guns, art or stamp collections or even musical instruments.

Remember that your remodeling job will bring with it people you have never met, and employees who work for those people who may have never been properly screened. Never tempt these people by leaving valuable objects in plain view.

If you have things of great monetary or sentimental value in your home, it may behoove you to move them to another safe location during the remodeling process. Accidents can happen. Fires can start. Worse yet, loose talk at a drinking establishment might tip off criminals who learn about all of the wonderful and tantalizing things within the confines of your four walls. Eliminate this problem from the start by eliminating the source of temptation.

## Weather Protection

Many remodeling jobs involve opening up your house to the weather. Extreme jobs could actually involve tearing off your entire roof or a part of it to add a second story or a large dormer. The job might be as small as adding a skylight. But Mother Nature might spoil the fun with a pop up thunderstorm or five days of non-stop rain. A snowstorm may even be thrown in for good luck.

The point is simple. You must know how your remodeling contractor is going to protect your home against all forms of weather while your home's outer defenses have been compromised by

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work-in-progress. You need to understand that giant tarps can blow away in moderate winds. Wind pressure can be enormous over large expanses of plastic or fiberglass.

Not only can rain and wind-driven rain be a problem, but extremes of heat and cold can create enormous amounts of discomfort. Discuss with your contractor, before the job starts, how air leaks will be stopped until such time as enough work is in place to minimize any loss of conditioned air from your home.

## Work Days

Within a week or two, you will grow tired of the flow of people who come to your home to perform the remodeling work. It is important for your sanity and peace of mind for the workers to maintain a strict work schedule. When you get home from work, the last thing you need is noise, dust and activity at your home. Yes, that may be part of your families ordinary activities, but you don't need additional input for the remodeling contractor.

When you are bidding the job, ask each contractor to state the normal times workers will arrive and leave each day. Ask about weekend work. If you do not want workers to be around on weekends, make it clear for the beginning.

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# Hardwood Flooring Contractor Hiring Guide & Checklist

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## HARDWOOD FLOOR INSTALLATION

**DEAR TIM:** I am thinking about installing hardwood flooring. The hardwood flooring I want to use is the traditional tongue and groove 3/4-inch thick hardwood lumber. I own many different power saws and other carpentry tools. Do you think I can achieve nearly professional results as I try to install the hardwood flooring? What tips can you share to help me get professional results at do-it-yourself prices? Bob K., St. John's, Newfoundland CA

**DEAR BOB:** Since I don't know the level of your carpentry skills, I am going to say maybe. The traditional hardwood floor installation process is not that difficult, but the many different tricks and tips are what separate professional installers from those who aspire to have their years of accumulated knowledge.

Your collection of saws and other carpentry tools will come in handy, but realize that professional hardwood flooring installers come to the job with an arsenal of assorted hand and power tools. They have special nailing machines, some pneumatically powered, that drive special barbed nails at the precise angle and depth through the tongue of each strip of hardwood flooring. You can hand nail hardwood flooring, but I am sure you will make a mistake or two, and your results will be less than professional. The special nail guns can be rented.

You may also need a router equipped with a special bit. It is not uncommon for a professional to rip a piece of hardwood flooring to make it fit against an existing piece. To make the hardwood flooring pieces interlock, a new groove has to be created on the cut edge of hardwood.

The first thing you need to do before you start the job is get the hardwood flooring into your home and let it acclimate to the indoor humidity and temperature. Although this acclimation period can be achieved in three or four days, I recommend you bring the hardwood flooring into your home for a minimum of two weeks for the best results. Put the wood into the actual room where it will be installed if at all possible. Be sure that room is at the temperature it will be at once the room is finished. The longer you let the wood acclimate, the tighter the joints will be as it is installed, and, more importantly, after the hardwood is finished. Hardwood flooring is a hygroscopic material, and it can change shape and size with changes in temperature and humidity.

The subfloor to which the hardwood flooring is attached should be clean, dust-free and securely attached to the floor joists. Now is the time to attack any pesky floor squeaks. Most floor squeaks can be traced to loose subflooring that moves up and down as it is walked upon. The movement of the wood along the nail shafts creates the squeak. Screw down the existing subfloor to the floor joists, especially in areas of the floor where you will walk. Those areas covered with furniture may not be as important, but I would suggest you screw down the entire subfloor to the joists.



A straight piece of hardwood flooring can be used as a straightedge to find low spots in the subflooring. PHOTO CREDIT: Tim Carter



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[Click here](#) to watch the video on eliminating that floor squeak.

Use a long metal straightedge to locate humps and low spots in the floor. The low spots should be filled in with floor leveling compound or better yet, asphalt shingles. If the low spots are very subtle, multiple layers of asphalt-saturated felt paper will work well. The entire subfloor should have a minimum of one layer of asphalt-saturated felt paper over it to protect the underside of the new hardwood flooring from water vapor that may try to work its way through the subfloor. The felt paper also helps keep the new hardwood floor quiet.



This air-powered nailer drives special nails through the tongue of the hardwood flooring. PHOTO CREDIT: Tim Carter

Whenever possible, the new hardwood flooring strips should be installed perpendicular to the run of the floor joists. For a creative look, you can run the new hardwood flooring diagonally across the floor joists. Running the flooring diagonally is more work, and will require slightly more material.

Be sure to install the strips of hardwood flooring in a random manner. Don't try to get fancy with respect to how the different pieces look. The bundles of hardwood flooring come mixed with all sorts of long, short and medium lengths. The more random the pieces are installed, the better the finished hardwood floor will look.

A rubber mallet is used by professionals to pound the new strips of flooring into place against the flooring already nailed to the floor. Each strip of new flooring needs to be tight along the long edge and the short edge where it butts against the piece next to it. You will notice that the tongue and groove feature of each piece of hardwood flooring not only is along the long edges, but also on the short stubby ends of each strip.

One of the most secret tips is reversing the direction of the tongues and grooves. Professional installers don't always start laying a floor on one wall and work to the far wall. They may start in the middle of the room for any number of reasons. When this happens, a special strip of wood that is the thickness of the tongue but twice as wide, is installed into the groove of the flooring.

This strip of wood allows the installer to start laying hardwood flooring going the opposite direction so the tongues of the strips are always exposed. The tongues of each strip of hardwood flooring must be exposed so you can nail the hardwood flooring to the subfloor.

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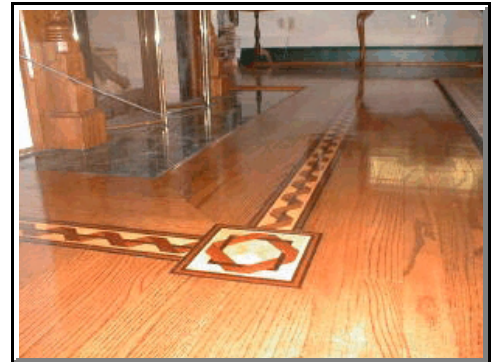
## GETTING A NEW HARDWOOD FLOOR LEVEL

**DEAR TIM:** I am getting ready to install 3/4 inch thick tongue and groove golden oak hardwood flooring. I am ready to start the job but my wood subfloor seems to have all sorts of high and low spots. I don't know where to start the job. Should I use a leveling compound to smooth the floor? Are there other tricks I can employ to make sure the finished floor is smooth as glass once finished? Gary W., Calgary, Alberta, CAN

**DEAR GARY:** This task is not as challenging as it might seem. You are very lucky that you discovered the flaw in the subflooring before you started the installation of the finished wood. All too often, I have seen professionally installed hardwood floors that have dips, humps and other inconsistencies in them. When I see these imperfections on the finished high-gloss surface, I know a rookie must have installed the actual flooring.

There are wood subfloors that are very hardwood-friendly. Wood floor systems framed with engineered wood I joists, or those made from floor trusses, often are extremely flat or in the same plane. Those wood floors framed with traditional solid-wood joists are the ones that can cause problems. Each joist may be slightly different in height and, to compound problems, each joist can have a different degree of crown. The crown in a wood floor joist refers to the amount of upward curvature that exists in the framing member as you look down the length of the top edge. If the rough carpenters and lumber suppliers are very selective about the floor joists they use, a traditional wood joist system can be as perfect as a wood I-joist or floor truss system.

To get your wood subfloor ready, the first thing to do is to make sure the wood sheathing that is on top of the joists is securely fastened. I highly recommend installing coarse-threaded screws in addition to the nails that might already be in place. Be sure to do this in high foot-traffic areas of the room. The use of screws will prevent floor squeaks that are caused by nails that are not driven completely or that work themselves loose because of lumber shrinkage. Use screws that penetrate at least one and one quarter inch into the wood joist.



My family room hardwood floor is smooth as glass. Why? The installer and I used shingles and a straightedge to make it so.

After the subflooring is screwed tightly to the joists, vacuum the floor to remove all dust and debris. Use a six-foot long straight edge and a level to find the highest spot on the floor. Although you might want the floor to end up in the same plane, it may not be a realistic goal. Your existing floor may be severely crowned. If this is the case, the hardwood floor may need a giant wedge of shims or leveling compound that extends to one or more walls in the room. This degree of correction may not be needed to get the visual goal you desire.

I always use regular roofing shingles to fill in any dips or depressions in wood or concrete subfloors. The overall floor may not end up in the same plane, but if you have just one gentle hump that extends over 10 or 12 feet, the naked eye can rarely detect this imperfection. Dips or depressions in a subfloor are immediately identified using the six-foot long straightedge. Place it at the highest spot in

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the floor and slowly swing it around in a 360 degree circle. The low spots will be readily visible under the straightedge.

Use as many asphalt shingles as necessary to fill the low spots. They do not have to be nailed down as the many nails used to hold the flooring in place will pass through the shingles as they are driven into the wood subfloor. You can tack the shingles in place if you desire so they do not move around as you work on the floor.

The use of a floor leveling compound can achieve the same goal, however it requires a bit of skill to apply the compound evenly. Also, if you mix some leveling compounds wrong by adding too much water, there is a possibility they can break down over time and turn to powder. This will not happen with shingles, which is exactly why they are my weapon of choice when confronted with this task.

If you fail to fill the depressions under a hardwood floor, the hardwood can flex when you walk over it. Over time, this can cause squeaks as the hardwood slides up and down the nail shafts of the nails used to install the hardwood. The subfloor doesn't have to be absolutely in the same plane to prevent squeaks, but voids of 1/8 inch or more can cause problems.

Installing hardwood flooring perpendicular to the direction of the floor joists is also critical. Finished flooring that runs parallel to the joist direction will often telegraph the slightest defects in the subflooring.

Be sure to install tar paper over both wood and concrete subfloors to minimize moisture infiltration to the underside of hardwood flooring. Tar paper is an excellent vapor retarder.

Photo by: Tim Carter

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## WOOD FLOORS THAT BOUNCE AND SQUEAK

**DEAR TIM:** The wood floors in my new home are driving me crazy. When I walk across them they feel soft and bounce up and down. Some places actually squeak. The building inspector has indicated the floors do indeed meet the building code. What in the world can be done now to stiffen the floors so they feel more solid? Do I have to start over? What should have been done to prevent both problems? Dewey B., Birmingham, AL

**DEAR DEWEY:** I can absolutely understand your frustration and disappointment. Anytime we buy something new, it is perfectly normal to have high expectations with respect to the final fit and finish of a product. When it comes to a new home, one would tend to assume the floors would be solid and squeak-free. Unfortunately, your expectations, and those of tens of thousands of other homeowners, are in conflict with the building code. I wish it were not so, but it is reality.

I happen to have a high regard for the building code. It is a fantastic document in many respects. I count among many of my friends several retired and active building inspectors. But one thing I have learned in all of my years in the industry is the building code is a set of minimum standards.

A builder who works within the code is simply passing a series of tests each time an inspection is scheduled. To pass the code inspections or tests, a builder simply has to obtain a grade of 70 percent as one would in a school exam or test. In fact, the system is actually more basic: You either pass the inspection or you fail it. The contract you signed with your builder may not require him to get a better score. You can make that happen by specifying better materials and installation methods that exceed code requirements.



These are 2x12 floor joists under my own laundry room. They span approximately 16 feet and there is simply no bounce in that floor.

The building code has a detailed section dealing with wood floor design. It calls out the maximum distance floor joists can span for different sized lumber set at different spacings. What's more, it indirectly talks about the grade and species of lumber. Keep in mind that different species and grades of lumber have a wide range of strength characteristics for identically sized pieces of lumber. A 2x8 made from dense select Douglas fir-larch will perform quite differently than say an identical sized piece of #2 Ponderosa pine. The floor joists permitted by code allow safe floors to be built that are soft and spongy. But most people want solid and safe floors.

Taking the bounce out of the floors will not be easy. It can be done, but it will require significant modifications since your home is now complete. The engineering solutions to make it happen are as abundant as applause at a grade school play. You or your builder will need to consult with a structural engineer that has extensive residential experience with wood floor systems. To insure that you will be satisfied, ask the engineer for a few references. Call the homeowners and ask them if the engineer's solution produced floors that were sound and stiff.

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The secondary squeaking problem is more of a nuisance than anything. The squeaks can almost always be traced to nails driven through the subflooring into the floor joists. For any number of reasons, the nails may have withdrawn slightly or the subfloor was never fastened tightly to the joists. As you walk across the floor, your weight causes the subfloor to slide up and down the nail shafts. This slight movement produces the agonizing squeak.

If your finished flooring surface is carpeting, you can solve the problem by driving screws through the subfloor into the floor joists. To prevent the carpet fibers from pulling, you need to make a precise surgical slit in the carpet backing before you drive each screw. Squeaks in floors covered with tile, hardwood, sheet vinyl laminate, etc. are almost impossible to fix without removing the finished floor or parts of it.

These problems could have been avoided in the planning and construction phase. A seasoned architect and builder might have specified a floor joist package that would have produced the firmness you wanted. If you would have discovered the spongy feel during a walk-through just after the framing was complete, simple engineering solutions could have been enacted at a low cost. The squeaks could have been totally prevented if the builder had installed coarse-threaded screws through the subfloor into the floor joists just before the finish flooring was installed. Unfortunately, hindsight is always 20 / 20.

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## UNDERLAYMENT FOR FLOORS

**DEAR TIM:** In the very near future, I will be installing lots of new and different flooring materials in my home. Can I just remove the carpeting and install my flooring material over the existing subfloor or do I need to install an underlayment? Since I want my new floors to look as good as possible, what is the best thing to do? I am very concerned about the kitchen and bathroom areas since water seems to find its way through and under any finished flooring material. Jennifer M., Atlanta, GA

**DEAR JENNIFER:** You are very wise to think before you act with respect to all of your new flooring. It is my guess that the total cost of the new flooring will be substantial and the last thing you want is for it to fail or fail prematurely because it was installed improperly. Finished flooring, even carpeting, needs a solid foundation for it to perform well over time. All too often some builders and remodelers as well as poorly trained installers overlook the importance of floor underlayments. Most flooring failures or problems are traced to inadequate or poorly installed flooring underlayments.

For many years, wood based products have dominated the flooring underlayment industry. Plywood, oriented strand board, sawdust composites, cement board, etc. are widely available and are commonly the material used in both new home construction and remodeling jobs. The wood based underlayments can warp and swell when exposed to moisture. This can cause the finished flooring to buckle and fail even if the underlayment relaxes after it dries out.

Many consumers and tradespeople, unfortunately, assume lots of things about finished flooring such as ceramic tile, hardwood, laminate flooring, cork, sheet vinyl, vinyl tile, etc. They feel that if the sub-floor or underlayment looks and feels substantial then it is fine to proceed with the finished flooring. The truth of the matter is that it is far more complicated. Many finished flooring products have specific recommendations with respect to the type of material the finished flooring is placed upon. Even adhesive manufacturers are sensitive to the type of underlayment being used. For example, an adhesive may work well with the vinyl or ceramic tile, but who cares about that if it bonds poorly to the underlayment?

A new underlayment product has recently hit the marketplace that is very attractive to a wide bandwidth of the flooring industry. This product is a gypsum fiber panel that has many positive qualities. It is smooth, has superior water resistance, has higher impact resistance than traditional wood based products, can be cut with a utility razor knife, is made with 95 percent recycled materials and is competitively priced.

Keep in mind that many traditional wood based underlayments contain resins, adhesives, solvents or dyes that can sometimes seep through and into the finished flooring material. If this happens, your finished flooring can be ruined. The new gypsum fiber underlayment does not contain any of these problematic ingredients.

The new gypsum fiber product is available in two thicknesses: 1/4 and 3/8 inch. This variety allows you to create flush finish floor transitions when you change from one material to another. There is no reason why an angled transition threshold has to be used if you are installing finished flooring materials that are different thicknesses.

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Many flooring problems happen in houses that are built over crawl spaces. All too often an underlayment will buckle or warp because of water vapor that escapes from the soil beneath the crawl space and then permeates the subfloor and underlayment. If you have a crawl space, be sure you cover the soil with a high performance vapor barrier before you install any underlayment or finished flooring material.

It is also very important to make sure that existing wood subfloors are dry before you install an underlayment. The moisture content of a wood subfloor should not exceed 15 percent. Use a moisture meter to test for moisture content. Be sure that the fasteners used to install the underlayment are driven correctly. The top of the fastener should be flush with the top of the underlayment or slightly below the surface. Above all, make sure that you are using an approved underlayment. Get written specifications from the finished flooring manufacturer and choose a product that is on the list.

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