

# Remodeling Tools and Installation Tips

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# Remodeling Tools and Installation Tips

## **Five Power Tools You Cannot Live Without**

There are a lot of things that either needs to be repaired, or put together when you're a homeowner. If you're a new homeowner, and have just gotten out of apartment style living, you might want to take this list with you to the hardware store. From remodeling jobs to putting together furniture you can use these 5 power tools to get your stuff together. Don't forget too that you'll need a few extra tools for other jobs around the house.

Five power tools that you can't live without is a short list, but the work that they can do is a lot. Take a gander at the tools, and how they help you with tasks around the house.

### **Cordless Screwdriver**

A cordless screwdriver will help you for all of those small tasks that don't need a lot of heavy power to do it. For example you'll be able to use it for screwing furniture together, pre-drilling holes for hanging heavy objects on walls, or even to drill holes for picture frame hanging. One added benefit is that most have a reversible switch, which lets you back out the screw if you need to.

### **Cordless Drill**

You'll need a cordless drill especially if you've got a larger number of holes to drill for a project, and it's handy too for not having to change out your screws between the screwdriver and cordless drill. They are great for making pivot holes for screws. The typical size of bit for home use is a 3/8 in. Anything larger is considered commercial size grade.

### **Corded Drill**

A corded drill is necessary when you've got a large number of holes to drill. The cordless drill just doesn't have the power to drill through some material as a corded drill does. Its limitation is the length of the cord, but extensions can be added safely to it.

### **Power Circular Saw**

Power circular saws are much easier on the hands than a hand saw, and they cut much more efficiently too. Break out the power circular saw when you want to cut large 2x4s, or any sheets of lumber such as particle board. Usually this power tool can cut a depth of up to 3 in. thick board without having to cut twice. It's a must have for any major home remodeling job.

### **Jig Saw**

The jig saw will help you out of tough tight cuts. Intricate work like cutting around cabinet edges or anywhere a close fitting cut is necessary.

As you can see these power tools are the tools that you'll need to get just about any job done around the house. Don't think that those will be the only tools you'll need for living in your house. Here is a quick list of other necessities.

### **Caulking Gun**

A caulking gun is used for a variety of projects around the house. If you want to put up a shower wall you'll need the gun for adhesive. Other uses are for caulking around window frames and filler for holes.

### **Damaged Screw Remover**

A very valuable tool for removing screws in which the head has been damaged from a bad bit, or from an overzealous drill. It can be a safety issue too. Damaged screws can have rough edges and deep cuts can result.

### **Damaged Nut Remover**

A typical application of this neat little tool is for example removing a rusted bolt when replacing a toilet. It's good too for bicycle repair.

### **Wrenches**

Different size wrenches are always good to have around the house.

### **Magnet**

Long handled magnets on a stick are good for remodeling uses. Nails, nuts, bolts are easy to loose track of, and at times in very inconvenient places such as between floorboards or behind appliances. Make sure to get one. It might save you from an extra trip to replace hardware that's lost.

### **Circuit Tester**

Inexpensive circuit tester kits are useful for testing to see if wires are useful for any electrical need that you have.

Home ownership is a joy, but it's more joyful when you've got the correct tools to upgrade or fix any problem that you might have. Be prepared and get the 5 power tools, and pick up the other extras while you're at it. You'll breathe a sigh of relief when something comes around that you need to have your power tools for.

## **Hammer It Home: Different Types of Hammers and What Jobs They Perform**

Although the hammer is one of the simplest tools, consisting of a handle and a head, there is nonetheless a great variety of sizes, styles, and functionalities. For basic home repairs, which

ones should you have handy? Read on to find out!

### **Knock these off the list**

In general, there are some tools that fall into the hammer category that are only used for more specialized tasks. These include: mallets and mauls, which are woodworking tools; ball-peen hammers, used for metalwork; and more heavy duty options such as the roofers hammer or sledgehammer. Assuming you are just looking for something that drives nails and occasionally breaks things apart, we'll disregard the options below and discuss the more common varieties.

### **What's it made of?**

Hammer heads, which have the striking surface, are typically made of metal.

The handle allows a good grip, extends the arc of your swing thereby increasing speed and velocity of the strike, and, in modern times, serves as a shock absorber. The most common and inexpensive handles are made of wood, just as they have been since the hammer was first invented. Although wood handles have okay shock absorption, keep in mind that they will probably need to be replaced at some point. Another problem unique to wooden handles is that over-striking and hitting the handle against the piece you're working on will cause a wooden handle more damage than it would to a metal or fiberglass one.

Also around for hundreds of years, metal hammer handles are extremely durable and resist damage from over-striking. The weakness of a metal hammer is its lack of shock absorption. To combat this, most metal hammers also have a well-cushioned grip.

Finally, the new kid on the block in hammer handle materials is fiberglass. Fiberglass handles have the best of both worlds; they absorb shock as well as or better than a wooden handle (with the addition of a rubbery grip), and they are nearly as rigid or durable as metal handles. Fiberglass hammers can also be used by electricians.

### **Weigh your options**

The most popular hammer weights are between 455 and 680g (16 to 24 oz). The state hammer weight consists of the weight of the head only; not the handle. A 12-oz hammer is known as a tack hammer and can be used for driving small nails, brads, and tacks. While 20 oz hammers drive larger nails efficiently, the middle size of 16 oz hammers is the most popular and versatile.

### **Choose a head, any head**

Most general work hammers have a flat striking face on one end and a peen on the other, with the balance in the head. Peens vary in design; the most common hammer is the claw hammer, in which the peen is shaped like a two-prong, curved fork. This claw design is most useful for pulling nails. Similarly, a rip hammer has a two-prong, straight fork. The rip hammer is designed to pry apart two joined pieces of wood.

## **The Deciding Factor**

Although the purpose of the hammer is the most important factor in your decision, you should also consider how an individual hammer feels to you. When you have narrowed down your choices based on weight, type of materials, and style, pick up your finalists and swing them. If possible and safe, hit something with it. Consider how the hammer feels in your hand, whether the shock level is acceptable, and if you have a good grip and a good amount of swinging power for the project at hand.

## **Handle your hammer like a pro**

Now that you've bought your hammer, learn what to do with it! A few basic hammer use pointers are addressed below.

To make a job easier and avoid damage to either your tools or the project, always choose the appropriate hammer for each individual job.

If you notice a hammer slipping off nails, use medium sand paper to roughen the face.

Never use the side of a hammer head to make contact, because the metal at this point is not hardened like the striking face and could incur damage.

Check on a regular basis to ensure the steel wedges holding the hammer handle in the hammer head are tight. Wood can shrink in dry conditions. If a wood handle does become loose, submerge the head in water overnight. This will rehydrate the wood, causing it to expand and tighten up again.

A piece of scrap wood inserted between the work piece and hammer will prevent damage to the work piece when crafting delicate projects.

Another way to prevent damage to the work piece is to use a nail punch to sink nails into the timber.

## **Ten Critical Tools You Need to Stock Your Toolbox**

Every time I hang a picture or measure a window, I carefully place my toolbox back in its place: an inconvenient corner in the back of the closet, next to the ironing board, underneath the winter coats, and behind a cabinet. Because I can't actually see in the closet, the next time I go to take out my toolbox, I have to squat down and reach blindly past the ironing board, beneath the coats, and around the cabinet to lug it out. When am I going to learn that I use my toolbox on an almost daily basis?

A well-stocked, and easily accessible, toolbox can make anyone's life a little, be she a homeowner, renter, or college student. The ten most basic tools listed below will put you in the right direction on the path toward complete tool sufficiency.

## **Toolbox**

Not one to overlook the obvious, I would like to point out that the toolbox itself is an essential element of a well-equipped toolbox. My first toolbox was actually a plastic tackle box with a removable tray. It worked like a charm, holding my claw hammer, Phillips head screwdriver and a random assortment of nails and screws. Now I've graduated to a fancy toolkit made of molded plastic where all the various tools and accessories snap into a particular place. If, like me, there are certain tools you use once a decade, the molded plastic option at least gives you a clue of whether the missing tool is long and skinny or short and square.

## **Home Repair Manual**

Although technically not a tool, a good home-repair manual can open doors, literally! Peruse the selection in your local bookstore or check out some online reviews of the most popular ones. All repair manuals will have the same basic information, so base your decision on the wording that makes the most sense to you and the pictures that you find the most helpful.

## **Hammer**

Most often used for driving nails and breaking things apart, the hammer typically consists of a handle and a head. The most essential hammer to have in your toolbox is the claw hammer, which is useful in both driving in and removing nails. Other implements in the hammer category include: framing hammer, upholstery hammer, ball-peen hammer, rubber mallet, wooden mallet, and sledgehammer.

## **Screwdrivers**

Screwdrivers tighten or loosen screws by applying torque. The typical hand-held screwdriver has a head that engages the screw, a shaft, and a handle. Screwdrivers vary in both size and head shape, and are identified by the screw heads they are used to tighten or loosen. The most basic screwdrivers are the slotted and Phillips, every toolbox should have a couple of each in varying sizes. Additional screwdrivers include: Pozidriv, Robertson, crosspoint, Torx, and Hex.

## **Pliers**

Pliers are used to increase gripping ability and leverage. However, within this category, pliers can perform slightly different functions. Cutting pliers sever or pinch off materials. Gripping pliers, as described above, are pretty self-explanatory and include flat nose pliers, round nose pliers, and needle nose pliers. Gripping pliers are the most common variety, and are a tool no toolbox is complete without. Finally, crimping pliers are used in electrical work to crimp electrical terminals and connectors.

## **Tape Measure**

Although tape measures can be made of cloth, ribbon, or metal, most toolbox tape measures consist of a stiff metallic ribbon, housed in a plastic case, which is self-retracting but can also be locked into place. Twenty-five feet is a good, all-purpose length.

## **Saw**

A saw is used for cutting, the type of material to be cut varies with the saw. A saw consists of a serrated blade, handle, and can be powered by hand, steam, water, or electricity. For your basic toolbox, a relatively small hand saw may be all that is required for minor projects around the home. In addition to the hand saw, back saws have a thinner blade that is reinforced by a steel or brass back. Frame saws stiffen the blade by placing it in a frame. For example, a hacksaw is a frame saw.

## **Putty Knife**

A putty knife has a flat, flexible blade. Rather than being used for cutting, a putty knife is useful for, you guessed it! Scraping and applying putty. Not too much to describe about this simple tool, but I can tell you that it's handy in many different situations, and one of the most inexpensive tools on the list. Why not get it?

## **Wrenches**

A wrench is used to create additional leverage in turning nuts, bolts, or other stubborn items. The most basic wrench is an open-end wrench, which is a solid piece of metal with a U-shaped opening at one end that grips the sides of a nut or bolt. More advanced wrenches include: a box-end wrench, which features an enclosed opening and is typically used with nuts or bolts that are hexagonal in shape; an adjustable end wrench or Crescent wrench (so called after the original patent holder's brand name, Crescent Tool and Horseshoe Company); a socket wrench, and the Hex key or Allen wrench.

## **Awl**

An awl is a woodworking tool, very useful for starting holes before drilling. Quite simply, the scratch awl is a steel spike with a sharpened tip at one end and a handle on the other. In actual woodworking, a scratch awl is used for scribing a line to be followed by a hand saw or chisel.

## **You Got It Nailed: Five Types of Nails and What They Are Used For**

If you've ever gotten confused over nails in your hardware department store then you're not alone. Nails are used in a variety of materials for projects such as masonry and wood, which are two of the most common materials. There are long and short nails, brass nails and galvanized and different types of nail heads. They can all be used for something around the house, or remodeling a whole room in your house. To find out more about nails read about the 5 most common types of nails, and what they're used for.

There are 5 different nails that are useful around the house. Take a peek at a few of them from the list below.

## **Common Nails**

The common nail is used a lot with wood that doesn't require finish work. Places to use the nails are on 2x4s and other boards surfaces such as particle board and regular wood panels. It has a flat head and comes in different lengths. Usually the nail head is left showing. Use in all of your remodeling efforts around you home or garage.

### **Casing Nails**

The casing nails are for all of your finer work needs when dealing with wood. Cabinets and molding trim work is perfect for these types of nails. So if want some new shelves or new kitchen cabinets then make sure you have these on hand. You don't want your detailed work to be ruined by unsightly nail heads.

### **Finishing Nails**

The finishing nails are another nail type, but they can be used interchangeably with casing nails for the fine work at home. The rounded nails heads can be counter sunk or not.

### **Common Brads**

Are rated on length only. They are good for very light, and can be used like the casing nails for trim work. The nails are of lighter weight, and are shorter than the common finishing nails.

### **Box Nails**

Box nails are like a common nail but the head on them is much larger. The shank of the nail is much larger, and is used primarily for framing and decking. If you need extreme holding power then this is the nail for you to have.

Not only will you need to use these types of nails, but there might be instances where another type of fastener will come in handy. When you're a homeowner you just never know what might break, or what you might like to do! Here's another list of different nail types.

### **Galvanized Nails**

Use these nails when you want to build a dog house, frame or build a wooden sandbox for the kids. They are coated with a solution that is highly resistant to rust. The shank makes them very tough to bend.

### **Paneling Nails**

The paneling nail is colored to match the type of paneling that you want to put up.

### **Masonry Nails**

If you've got a basement and you need to mount something on the wall then the masonry nails are the nails to use.

## **Aluminum Nails**

Aluminum nails are a very soft nail and are to be used only for certain things such as mounting lights for a pool. They're not very strong, but don't rust.

## **Pointless Nails**

The pointless nail is if you're very particular about not splitting any of the wood you're working on. It's good for molding trim work or some corner pieces for baseboards.

There will be other types of holding and latching devices that you'll need around the house too. Decorative screws, bolts, tack nails, and other types of will be necessary at some point in your home maintenance and remodeling needs. Take some time and build up your supply. Remember to always use safety precautions when nailing and cutting materials.

Wear eye protection to keep any materials from accidentally being poked into the lens of the eye. A good idea to learn more about nails and other fasteners is to get some home repair books, and look at a few examples of how the nails are used in projects for the home. Experience and a little knowledge will go a long way to knowing your nails.

## **Importance of Wood Biscuits in Woodworking**

There's a saying in woodworking that you should probably hear: "Good woodworking projects use glue. Great woodworking projects use a little more." That "little more" means wood biscuits. Wood biscuits are small oval shaped discs that are inserted with the use of a biscuit joiner. Historically, of course, biscuits did not exist in the woodworking processes. Simple wooden pegs were used. These pegs were the precursor to wood biscuits.

Wood biscuits join two pieces of wood together. Something a bit more than glue is often required for most wood working projects. The projects often require panels of twelve inches or more to be joined without the overwhelming presence of seams. Glue is both fine and necessary, but excellent woodworking projects simply cannot survive on glue alone.

Biscuits are both simple, and quick to use. A biscuit joiner, the tool that helps you insert a biscuit, cuts the hole in the opposite edges of the project you are working with. You then cover your wood biscuit in glue and insert it in the slot. Clamp the two boards together, and you are on your way to finishing one of the best woodworking projects you have ever made.

Biscuits are both strong and durable. They can act as joiners where glue simply will not hold. Most biscuits are comprised of compressed wood components. This usually means something like beech shavings, but the actual composition can vary from company to company. Once the glue joins with the biscuit in the slot you have made with your biscuit joiner, the biscuit is allowed to expand to fill the slot. This has the effect of tightening the joint, allowing you to work with it and smooth it more than you ever thought possible.

Most biscuits are slightly less than one fourteenth of an inch thick, though it is possible to purchase them in varying thicknesses from different wood biscuit making companies. There are three common wood biscuit sizes. Size number zero is five eighths of an inch wide and one and three quarter inches long. Size number ten is three quarters of an inch wide and two and one eighths of an inch long. Size number twenty is one inch wide and two and three eighths of an inch long. As with the thickness of wood biscuits, some manufacturers make different biscuit sizes. If you are looking for a specific size, it might be good to check around from company to company.

The best biscuit size to use is the best size that suits your purpose. You should try to use the largest sized biscuit for your project. This will increase the stability of your woodworking project. While you can use a wood biscuit on any joint project, there are a few common joints where they are used. Anytime you are manufacturing an edge to edge joint, like in dining room tables, end tables, or coffee tables, biscuits can be very helpful.

Any time you are creating a miter joint, like with a picture frame, biscuits can add stability to the project. When you need to use butt joinery or end to end joints, biscuits offer you the strength you need. In places where corner joints are necessary, like drawers, biscuits are not only helpful, they're traditional. In the case of T joints, like you might use when you create a bookshelf, a biscuit can offer you that little bit of extra stability you have been searching for.

When you get ready to start using wood biscuits as a joinery tool, there are a few things to remember. First, biscuit storage is a bit touchy. You should always store wood biscuits in a clean, dry, airtight container. The nature of wood biscuits makes them very susceptible to moisture. Moisture can cause them to swell, which makes them useless for woodworking purposes. Second, be sure to check and recheck the way your joints fit together before you start your project. Dry fitting your components is not just a good idea; it is a necessity in the world of wood biscuits.

Wood biscuits are typically sold in bulk at hardware stores and other hardware retailers. With the popularity of Internet shopping, you can even buy them at most online woodworking specialty shops in various sizes.

## **Molding Magic: Ten Different Uses of Wood Molding**

There are several great reasons, and at least ten great uses, for wood molding in the home. Wood molding can increase the price point of your home. Because any type of wood molding makes your home a unique and individual home, when you go to resell your home, consumers will place more value on property that looks different from others. Real estate professionals can tell you that good wood moldings are something potential buyers not only notice, it is something they will close a sale over.

Wood molding can also be used to demonstrate your sense of decorating. Your home should be your source of comfort providing the soothing thoughts you need at the end of each day. It should also offer you the power to get moving each morning. Wood molding can help you create the look you've always wanted. It comes in so many styles that you can become your

own person of creativity when designing your wood moldings.

You can become the artist of your home and create your masterpiece through simple moldings. With so many designs to choose from, wood molding can give you the option of creating the look for your home you have always wanted. Moreover, wood molding can reduce the cost of finishing out your wall. It is far cheaper to finish the wall with wood molding than with any other product on the market today.

One excellent use for wood molding is as door trim. There are a number of different door trim styles in wood molding, and any of them would make an excellent choice for the room you are attempting to finish. In many homes, the molding simply meets with mitered corners. However, for a slightly more decorative look, simple wood blocks can be installed in the corners.

Another use for wood molding is as a baseboard. Baseboards need to be durable. The whole point of a baseboard is wall protection, and you simply cannot get the protection you need with synthetic materials. Wood molding will provide the durability and beauty your baseboards need to have. With wood molding, clean up is a snap should someone's stray shoe catch the baseboard.

A third use for wood molding is as window casing. Because windows, like doors, need some type of framing to cover the seams in the walls, wood molding is a classic choice. Like with the door trim, window casing corners are typically mitered, but wood molding offers more decorative choices to spice up your window environment.

An additional use for wood molding is as a chair rail. When people sit in your dining room and leave the table, the backs of their chairs probably touch the wall. While this is not always a problem for homeowners, in homes where the dining room is used frequently, or children are present, this constant contact with the wall can become very damaging. Wood molding cannot only cover current damage, it can also prevent the damage from occurring again. The strength of the material will prevent problems like scratches and dents from occurring in your dining room area.

A fifth use for wood molding is as crown molding. Crown molding tops the walls next to the ceiling. It is thought that this type of molding makes the transition from the wall to the ceiling a bit smoother and easier. Wood is a perfect choice for this area because with so many options, you can create the distinct look you love.

Another use for wood moldings is as a handrail on your stairways. Handrails provide both security and beauty to your stairs. It can be difficult to go down the stairs without stumbling in the middle of the night to answer a late night doorbell. Having a handrail in place makes this easier and safer. Having a wood handrail in place makes this trip a little smoother. The durability and look of a wood molding handrail will do much to increase your confidence when Grandma leans so heavily on the rail just to get up the stairs to your guest bedroom.

A seventh use for wood moldings is as a base shoe. Base shoes trim flooring materials and conceal differences between the floor and the baseboard. Wood is a great choice here, because it tends to offer the best compatibility between the floor and the wall.

An eighth use for wood moldings is as a fireplace mantle. Wood stands up best to the heat of the area surrounding your fireplace, and Santa would rather look at nothing less than the beauty of wood as he is filling your stocking each Christmas Eve.

A ninth use for wood moldings in your home is as a plinth block. Plinth blocks are placed where the baseboard meets the casing. They add durability and beauty to your moldings.

A final use for wood moldings in your home is as a wainscoting cap. If you decide on a panel option like wainscoting, you need a durable cap to smooth the transition back to the plaster wall. Wood moldings can do this in style.

You can use wood moldings almost anywhere in your home to add durability and value. When you think moldings, think wood.

### **Five Guidelines in Purchasing a Central Air Conditioning Unit**

Summer is fast approaching and your air conditioner just does not work the way it used too. It barely cools, if it does anything at all. You have tried cleaning it. You have tried flushing it. You have tried everything including kick it and hit it with a mallet. The service man wants to charge you an arm and a leg, and probably a few other body parts to repair it. You are left with only one other choice.

Spend all that money to repair a central air conditioning unit that is 20 years old, or spend about the same amount to buy a new, updated central air conditioning unit. If you are going to spend the money, why not get something under warranty that, theoretically, it should last 20 more years? Seems like an easy decision to me.

When purchasing a new central air conditioning unit there are five guidelines to keep in mind that will keep you on track and make sure you do not waste your hard earned money. These guidelines are just what they say they are: guidelines. They are not laws or rules you need to follow, but they are suggestions that are meant to guide you towards buying the right central air conditioner for you and your home.

#### **What type of air condition do you need?**

There are many brands of central air conditioning units available to purchase from any hardware or appliance store. Some sales associates will try to sell you a window air conditioning unit. Do not let that sales associate talk you into wasting your money. These window air conditioners are a waste of money. They usually only cool one room and they suck a lot of power so you will be spending a lot more money each month on the utility bill. Remember that if you have multiple rooms or a house, you want a central air unit. Do not let the sales associate trick you into anything else.

#### **Installation of my central air condition unit:**

One more detail to consider is installation. Most people do not want to crawl under, over,

around, and through the walls of their house to install a new air conditioner. That is why most places that sell these units also install them for you. Some places install these free of charge with the purchase of a new unit. Even if they don't do it free, you should get someone to professionally install your new unit. It will save you time, headaches, and sweat if you do. If they do not offer installation, you may want to look elsewhere to purchase your unit. It is much easier and cost efficient to get this all done in one step.

### **Temperature Settings:**

Most new units come with a new thermostat. You should make sure this thermostat can create the ideal temperature that suits you and your family. If you are comfortable in a room that is 60–65, then make sure the unit will cool to that temperature. You also need to make sure you can increase and decrease the temperature in 1–2 degree increments just in case you are not comfortable.

### **Filters:**

There are many filters out there today. The ones that are permanent are the best value. You simply take them out, hose them down, and stick them back in. They save you a lot of money every year, not to mention you don't have to keep track of what size you need. Just remember to clean them once a month. Also, make sure your unit supports these filters.

### **Energy Saver:**

You should also look to see if your new unit has a sleep setting or an energy saving setting. This allows the unit to run when you are sleeping or not home and not run up your bill. It will keep the house a little warmer when you are not home, and then cool it before you come home. This saves hundreds of dollars a year.

Keeping these in mind, finding the perfect unit will be a snap and could turn out to be a fun shopping experience. Just ask the sales associate for more details if you need help. They can be most helpful if these guidelines still have you guessing.

## **Furnace Fall-Out: Three Things to Check Before Calling an Expert**

Before you start losing it and screaming at your furnace in the dead cold or the heat of the summer time, stop and take a deep breath. Your furnace might not be working because of a few simple issues that can be fixed quickly. Sometimes the simplest thing is right before your eyes, and when you're agitated you can miss them. Take a few moments and read about 3 common things that can go wrong, and more importantly what you can do to keep your furnace working.

Here are 3 tips to use before you call your service repairman.

### **Check your Setting**

People have actually called a service technician and they've found out that the only problem was that their temperature setting on their thermostat control was not turned to the proper setting for heating or cooling their home. That's not only embarrassing, but a very expensive call for something so simple. Be sure and check.

If your service switch isn't on, or any of the other switches aren't on, the furnace won't run. The service switch is located near or on the furnace. Look at the main breaker box in your house too. If it's been tripped it won't come on either. Sometimes all that's need is to replace the service switch if it's gone bad.

### **Outside Disconnect Switch**

Go outside and look around the unit. You'll find a switch that you can flip to turn the outside fan on. Again check your main breaker box inside the house to see if that control has been changed to the off position. Replace outside service switch if needed, as a service technician can easily replace it.

If all of these things are in working order then it'll be time to call your local service company for a complete inspection of your furnace unit. Don't attempt to try to diagnose any serious issues. Not only could you hurt yourself or others, you could void the warranty on your furnace. You'll be completely responsible for the cost at that point. Be wise and call.

Before a major problem develops there are ways to lengthen the life of your furnace.

### **Filters**

Regularly change your filters on your furnace. It's recommended by professional HVAC heating, venting and air conditioning service technicians to change them on monthly bases. If you're furnace type can be fitted for a washable filter, then you'll save some money by using them. You can save some money too by buying your standard filters in bulk.

Most hardware supply stores or home improvement stores will either have them in stock as bulk, or they can special order them for you too. When thinking about changing your filters don't forget to include any time that there is a high volume of foot traffic. Holidays and times when doors will be fanned open such as in the summer time, might require you change the filter more. Pet dander will cause more clog for your furnace too.

### **Vacuum and Wipe Down**

Another way to lengthen the life of your furnace is to clean it. Grab a shop vacuum that's works well and clean the furnace. Make sure you vacuum is in good working order, the last thing you'll need is it to be leaking more debris back into the furnace.

### **Replace Insulation**

If your furnace has insulation around or inside the door be sure to examine it for brittleness or huge pieces of it missing. It can further clog up your furnace by being pulled into it when the fan kicks on. It won't take long for it to burn up a motor.

## **Inspect Wiring**

Go outside and look at the wiring that connects your outside cooling and heating fan to see if there are frayed wires or loosening wires from it to the house. Clean away debris from around the fan and if possible wash off the unit with a mild detergent. Pull out any leaves or garbage out of the grill of the fan, so it can run with maximum efficiency.

## **Clean Vents Inside and Out**

Go and take the time to clean out your floor vents. Also look outside and check your duct work to make sure that it hasn't fallen or become tangled. Naturally you run the unit harder because you're not staying cool or warm in the winter, if there is anything clogging or obstructing the air flow. This will shorten the life of your furnace.

## **Furnace Inspection**

Make sure to schedule a yearly inspection on your furnace.

## **Hot Water Heater Hook-Ups Made Easy**

Hooking up a hot water heater is one of the most common home repair jobs there is. However if you don't know what you are doing, or don't know the first thing about hot water heaters, well then you could be in hot water, quite literally. But installing a hot water heater can actually be a rather easy thing to learn. You just have to make sure you read all the directions before you start so you don't get in over your head before you even start. The last thing you want to do is realize you can't do this and then be stuck without any hot water!

The first thing you have to do is the most obvious. You have to disconnect and remove your old hot water heater. Doing this is pretty easy. You just have to be careful. Remember it is full of hot water still. So, first turn off your gas or electricity that is connected to that water heater. You will then need to drain the water from the old unit. There should be a drain valve located on it. On a gas heater, separate the vent pipe from the draft hood. The hood should lift off after you remove the sheet metal screw that holds it. After checking that the pilot light is out, disconnect the gas line at the heater and cap it.

Next remove the water heater from the water pipes. Be careful when doing this because the pipes may still have hot water in them. This water is hot enough to burn you if you are not careful. You may need some pipe wrenches to get some of them off, but there should not be many connected so this step should not take too much time or effort. You may now take out the old hot water heater and throw it away. Many local and state laws have certain restrictions on the disposal of these, so check with the local authorities on the disposal requirements.

Now that you have the old unit out, it is time to install the new unit. Move your new hot water heater to its new home by using a dolly. You don't want to "walk" it or drag it. There are delicate parts inside that can be damaged if it is jolted or subjected to too much shock. Position your new heater so that the pipes will easily reach it. If you are using gas, you want to

be especially careful that the gas pipe can reach easily to avoid any potentially dangerous gas leaks.

Next connect the hot and cold water. This is usually a simple process of connecting the new water heater to the same connections as the old water heater. Then you connect the third pipe to the main water line that distributes the water to the rest of the house. Refer to the user manual if there are no connections, or if you are confused as to which pipe goes where. This is the most common mistake made in installing a hot water heater. If you turn on the water and your cold water turns hot, and your hot water never heats up, go and switch the pipes.

Next you need to locate the relief valve on your newly connected hot water heater. The temperature and pressure relief valve is a very important part of your hot water system. The relief system releases excess heat and pressure automatically so that your hot water heater does not explode. It is a very important and a valuable safety feature that comes standard on all hot water heaters.

The last step in connecting your new hot water heater is connecting it to the power. You have to connect it either to the gas line or the electricity for it to heat the water. Refer to the instruction manual on how to do this.

If you follow the directions there is no reason that you cannot successfully connect your new hot water heater. It is a fairly easy job. It just takes a little time and patience and anyone can do it. It is simply a matter of reconnecting to the new hot water heater, everything that you disconnected from the old one.

## **How to Diagnose a Smoky Fireplace**

It's cold and you want to use your fireplace, but you've been having problems in the past with it smoking. You can correct your smoky fireplace issue with a few easy steps. Take a gander at these fireplace tips to correct any issues of a smoky one.

This list of tips should help you correct any problem with a fireplace that fills your house up with black silt smoke. Not only does it need to be done because you can't use your fireplace, but smoke from a fireplace ruins walls, carpets and drapes. This type of smoke is almost impossible to get out of any fabric including your clothes. Besides it not healthy to breathe in the smoke and it's especially true with anyone suffering from allergies of any kind.

### **Stoke up the Fireplace Chimney**

Be sure to open your damper. It's usually found in front of the fireplace and it's a simple switch to pull back. Next warm the chimney air by burning newspaper or any other type of safe material in the fireplace. The goal is to get the air warmer in the chimney so it'll push the cold air out and away. Colder air pushes the warmer air down and smoky air can occur.

## **Use Seasoned Wood**

Don't burn green timber in your fireplace. Large fireplace logs tend to cause more smoke because it takes them a while to get hot enough to burn off residue. Small logs are the best choice.

Open Windows. Sometimes there's not enough draft in a room to catch the fireplace to light. It's not as big of a problem if you happen to live in an older house. Older homes were not built as energy efficient as newer models are, there's not much of a draft to circulate for the use of a fireplace. So open one or two windows to help your fireplace start burning.

## **Purchase Fireplace Bricks**

Even though you're using a grate at times it doesn't provide enough air circulation under the wood for it to catch. Smoke is the result that billows into your house. You can buy extra fireplace bricks to build up your grate to a higher level. This will help stop smoking by creating enough draft under the grate.

## **Scale Down the Fireplace Opening**

Extra large fireplaces have more of a problem heating an area. This is usually because the chimney is much smaller than the open hearth part. The trick is to balance the size with the chimney. Certain fireplace stores carry reducers that can be installed. Also look for a shield to catch any smoke that may circulate into the room

## **Turn Down the Furnace**

Smoky air can be created when there's not enough air in the house. For example when it heats the air in the chimney the fan returns it to the house in the form of smoke when your furnace is on. So turn down the furnace to a level that's acceptable for the other rooms, or if you can bear it turn it off.

## **Clean out Pipes or Raise Them**

Sometimes the pipes outside can get clogged from debris or even bird nests. At other times pipes are not long enough and need to be replaced. Cutting back high growing trees and branches will help cut down on smoke in the fireplace too because the air is not stopped from circulating, and pushed back into the house as smoke.

## **Hire a Professional Cleaning Crew**

Smoke from wood can give off a substance known as creosote. This is a natural by product of burning wood in your fireplace. Have your fireplace checked once a year and cleaned. Fireplace maintenance is a safety issue too.

Your fireplace should be something for you to enjoy and not fret over. However fireplaces are like other things around the house that need care and attention. Remember just because it doesn't run off electricity doesn't mean that it can be ignored. It sits patiently for autumn to

roll around and to provide you with warmth. In the mean time make sure your ready to go by inspecting it and having it cleaned. In the autumn and winter months you can sit back and enjoy the warmth of the fire and a smoke free house too.

## **Ten Easy Tips for Installing a Ceiling Fan**

You may be a "do it yourself" (DIY) expert, having installed countless ceiling fans in numerous homes, both yours and those of various family and friends. However, even though you have the basics down, every DIYer knows: there's always another trick out there to make the process a little easier. So although the following is not an exact step-by-step guide to installing a ceiling fan, this should give you a few hints to make the process a breeze!

When buying, remember that not all fans were created alike. In addition to price and style, some other factors to consider when buying your fan are:

**Motor:** more inexpensive fans often have an outer covering of thin metal, which increases the likelihood of rattles, clicks, hums, or buzzes during operation. Since many fans are installed in bedrooms, this can become an important consideration

**Blades:** Blade pitch can determine how effectively air is moved, an optimum pitch is 14 degrees. Also ensure that blades are balanced to avoid wobble.

**Lighting:** As in any other lighting situation, keep in mind lighting that is appropriate to the room's size and function.

**Room size:** Not surprisingly, fans and rooms both vary in size. Make sure they vary accordingly in your house! Fans usually come in seven sizes, ranging from 32" to 56" blade spans. Come to the store armed with room measurements and speak with a lighting representative.

**Mounting:** For best results, fan blades need to be a minimum of seven feet above the floor, and have 12" clearance below the ceiling. For lower ceilings, choose a close or low-ceiling mount fan. With higher ceilings, you can purchase a standard or angled mount with an extension down rod.

**Bonus!** For maximum effect, purchase a reversible fan that helps cool you in the summer and pushes warm air down from the ceiling in the winter to keep you comfortable year round.

Make a list and check it twice. At the most basic level, you'll need the ceiling fan/light kit, screwdrivers, wire strippers, a circuit tester, pliers, and step ladder. If you need to replace the ceiling box, you'll also need a new ceiling box, a hammer, and a drywall saw. Run through the installation process in your mind before actually picking up a tool to ensure that you have all the necessary components. Nothing is more frustrating than being stuck on a step ladder, holding up the ceiling fan, and realizing the tool you need is tucked away in the toolbox in the basement!

Inventory the fan as you unpack. As you take the fan out of its box, give yourself plenty of room to inventory the multitude of pieces and parts. Then lay the parts out in order of installation. This way, you'll be confident that you have all the parts before you start, and you'll be able to move smoothly from one step to the next.

Turn off the electricity! You already know this, but it's always worth mentioning. Turn off power to the light's circuit breaker or fuse. Ensure the circuit is truly "dead" by checking with a high-voltage neon tester. If you are working at night, a flashlight might be handy at this point.

Mounting the box: Always use a metal junction box, not plastic. Another item to keep in mind when mounting the box is that there's several ways to mount it, depending on whether the box is next to a joist, in-between joists, or being mounted on a beamed ceiling. If no fixture was in the room previously, find the center of the room by snapping chalk lines diagonally between opposite corners. Also, the mounting must be able to withstand vibration, as even the most balanced fans cause some level of vibration when running.

Assemble. This step varies from one manufacturer to the next. Pay close attention to the specific instruction for your fan brand and style. However, keep in mind that if there is less than a screwdriver's length between the blade and the ceiling, it might be easier to install the blades before hanging the fan. When you are finished, again check all screws for tightness.

Hang fan for wiring. Install the hanger hook or attach the ceiling plate to the fan box, whichever is appropriate for your fan model. If attaching a hanger bracket, but sure to use a lock washer, which will help prevent the fan's vibration from loosening screws in the future.

Wiring the fan. To facilitate the wiring process, swag kits can make installation easier than ever. To improve ease of use once the fan is installed, you can also wire the ceiling fan through a fan speed control. Always electrically ground the fan to both the metal box and itself, using the grounding wires (typically either green or bare copper).

Let there be light! Install the light kit and controls you have chosen. This step typically varies according to individual models. However, in general the wires are provided with plug-in connectors. Be sure to tighten everything securely. Install the globe(s) and the light bulb(s).

Troubleshooting wobbles. Fan wobbles can range in severity from a minor irritation to a seriously hazardous situation. If you notice your fan wobbling, the first step is to take off the blades and examine them. Look for bent or misshapen blades. If you don't see any obvious deformities, weigh them to determine if one is lighter or heavier than the rest. If one is underweight, affix a soft object such as an eraser to the middle on the top and see if that resolves the problem. For wobbles that are still unexplained, fan balancing kits with detailed instructions are also available.

You're finished! Pat yourself on the back and enjoy the delightful breeze from your new ceiling fan.

## **Hot Wire Mishaps: Five Things to Do BEFORE Working on Electrical Problems**

Many “do-it-yourself” (DIY) projects are trial and error. You may still laugh at your first attempted faux finish or the shelves that crashed to the floor five minutes after you triumphantly tapped the last nail in.

Electrical projects do not fall in the trial-and-error category. However, all homeowners do need to perform some basic electrical repairs. Before attempting to fix electrical problems, follow the steps below to ensure a safe and successful repair.

### **Do I have your permission?**

Depending on where you live, you may or may not need a permit from your local electrical authority to do electrical work on your own home. According to the Oregon Department of Business and Consumer Services (ODBCS), homeowners do not need a permit “to replace electrical devices or to perform the maintenance on an existing electrical installation.” However, the ODBCS states that a permit is require to:

- install or alter any permanent wiring or electrical device
- run additional wiring, put in an electrical outlet or light fixture, install a receptacle for a garage-door opener, or convert from fuse box to circuit breakers
- install or alter low-voltage systems such as security alarms or stereo or computer systems

The laws about permits vary from state to state, so be sure to check with your local office about whether you are required to have a permit or not.

### **Lights out.**

Turn off electrical power at the source, through a circuit breaker. Even if you flip a wall switch, the related appliance or socket will still be live. Although many electrical distribution panels have a diagram on them detailing which circuit is hooked up to which breaker, do not trust them.

Check for yourself that the circuit is dead by using a voltage tester. For this part of the process a helper can be quite useful, to prevent you from scurrying to and from, from the circuit breaker or fuse box to test the circuit and back again. Tape the circuit breaker into the “off” position to ensure that no helpful person tries to restore power while you’re working. Do not restore power until you have completed your work.

Although you can turn off a switch or breakers, the main wires entering an electrical distribution panel from the outside cannot be turned off. Do not touch these wires, and do not go near them with anything metal. If you believe the problem lies with the service wires, contact the power company.

### **Getting shocked puts a damper on things.**

Do not stand in water on a damp floor. This could result in a very dangerous, even life-

threatening, shock. If water is on the floor, put down a rubber mat to stand on. Ensure you yourself are not wet by wearing dry clothes. As always, if you have any doubts about the safety of the situation, call a professional.

### **Metal or rubber?**

Metal is bad. Rubber is good. Metal conducts electricity, which means that if you simultaneously touch metal and a live wire, your body conducts current from one to the other. Not pleasant or healthy.

Rubber, on the other hand, is a nonconductive material and, therefore, insulates you from electricity. Use tools with rubber- or plastic-coated handles and wear rubber-soled shoes or sneakers. Safety glasses and gloves are not a bad idea, either, when feasible.

### **Test it out.**

Once you have finished your repair work, flip the fuse or circuit breaker to return power to the area. Use a voltage tester to check and see if the appropriate amount of electricity is flowing. Conventional lights, receptacles, and appliances use 120 volts of electricity. Larger appliances such as air conditioners and electric ovens require 240 volts. Certain appliances, such as doorbells and telephones, utilize transformers that convert standard power to a lower voltage (usually between six and 12 volts) for safety.

To improve your electrical skills, many DIY stores offer clinics and workshops. Learn from the pros and ask questions so you feel more prepared the next time electrical work is needed. If you have any doubt about your abilities or the safety of the situation, leave it to the experts. Go work on repairing your faux finish or build new shelves while you're waiting for your friendly local electrician to arrive. And when he or she does come to the rescue, watch and learn.

## **Insulations Options for your Attic**

Adding insulation in your attic can drastically help reduce your heating and cooling bills each month. The attic is a perfect place for hot and cold air to leak in and out. With proper insulation, your attic can provide you with an energy efficient home. There are many options for insulating your attic.

Insulating your attic is the number one way to help improve your heating and cooling bills and help make your home more energy efficient. When properly installed, attic insulation can decrease your energy bill by about twenty percent or more per month. In addition, there are many different types of material that can be used for insulating your attic. In most cases, you do not even have to hire a professional to install. The homeowner can do most attic improvements.

When looking at the type of insulation you will want to install in your attic, think about the R-value. The R-value of insulation is the insulation's ability to resist heat flow. The higher the R-value, the more effective it will be to insulate. Insulations materials can vary in thickness. Some

insulation averages R-3 while others are as high as R-8 per inch. It is important to remember that over time, any insulation will lose some of its ability to insulate and will reduce in R-value.

There are many reasons to consider replacing or improving attic insulation. For those who have little or no insulation, or who have very old insulation, replacing insulation has benefits. Also, you should consider insulation if you have high-energy bills or if your attic or walls have been exposed during remodeling.

Before replacing or adding insulation to your attic you should determine whether or not you have moisture problems. Problems with moisture can become worse with adding insulation. Insulation can trap moisture causing mildew and mold to grow and spread. In addition, when water and moisture collect in the attic, it can cause stains and rot. Before putting in any insulation, it is best to seal all air leaks. This not only helps moisture, but also reduces heating bills by keeping cold air from entering the home.

There are many kinds of insulation that can be added to your attic. Insulation sheets and bats are easy to install. If you have an open attic space, some insulation sheets may not be easy to install if the joists are not spaced evenly. Also, by applying a second layer of insulation blankets crosswise over the first layer can help seal cracks. This will help reduce heat loss. This can also prevent moisture problems.

Another type of insulation that is good for the attic is loose fill insulation. This is perfect for filling irregular shaped spaces. It also can have more complete coverage than bats. When installing loose fill insulation, it can be blown from a machine or hand poured and bought in a bag. If you like do-it-yourself projects, you can rent machines that will blow the insulation at rental stores. Caution should be used when using a machine to blow in insulation. The settings must be carefully set so that not too much insulation is used. If the insulation is too thick, it can cause settling and may not properly insulate the attic.

There are commonly used types of insulation that can be good options for using in attic spaces. Cellulose insulation is made from ground wood or paper. This type of insulation is often used in attics and usually has additives to prevent mold and resistance to fire. Fiberglass insulation is made of molten glass strands. This type is also fire resistant. Wood shavings used to be commonly used, but are not used much any more, especially in attics. Insulation made of wood shavings can be too heavy for the inside of attics and can promote fungal growth.

When working with insulation in your attic, extreme caution should be used. You should always protect your hands and eyes when applying insulation. Many types of insulation can irritate that eyes, nose and throat. It is always recommended to wear protective gear when using insulation in any part of your home. Adding or replacing insulation in your attic can be a good way to help lower your heating and cooling bill. Professionals can be hired to apply the insulation or many choose to do it themselves.

### **The Basics of Installing Track Lighting**

If your existing lighting looks "flat," consider installing track lighting, which can give a room a

dynamic flair by spotlighting various areas. Many options are available, including halogen track lighting, which provides bright light from small fixtures.

Track-lighting installation is a very forgiving project. You can attach the track first and install the wiring later if you have easy access to the wiring above the ceiling. Or you can install track lighting in place of an existing light fixture. In either case, the wiring attachments will be hidden by a cover plate.

Typical track-lighting installations can be completed in one day. The installation will probably cost less than \$160, but the price will be higher if you hire an electrician.

1. At the breaker box, shut off the power to any circuit you will be using.
2. Determine where you want to install your light, and drill pilot holes into the ceiling joists. Attach the track to the ceiling with wood screws. Use toggle bolts if you can't screw into the joists.
3. For installations where no previous light existed, feed the wire through the ceiling.

Note: You may want to hire a licensed electrician to wire your light.

4. Use the stud sensor to identify an area between studs in which you can place the light switch. The switch should be at least 2" away from any stud. Use a measuring tape to mark the placement of the switch so that it will be the same height as the other switches in the room.
5. Use the drywall-mounted electrical box as a template for marking the cutout for the switch.
6. Drill a pilot hole in the corner of the cutout, and use a long screwdriver to check for obstructions. Finish the cutout with a drywall saw.
7. From the attic, locate the area above the wall where you intend to mount the light switch. Use a 1 1/2" spade bit to drill into the void behind the wall. Wear a long-sleeved shirt, long pants, gloves and a dust mask to avoid irritation from fiberglass insulation.
8. Feed two pieces of electrical cable into the hole from the attic and out through the hole in the wall.
9. Strip the sheathing off the ends of both pieces of electrical cable, and strip 1" of insulation from the black and white wires.
10. Connect one electrical cable to an existing power supply such as an attic light fixture or other nearby power source. Use the circuit tester to make sure the power is off before you handle bare wires. Connect the bare copper wires with a barrel crimp, and use wire nuts to secure the remaining connections, keeping white wires with white wires and black wires with black wires.

Caution: Some switched fixtures may have confusing wiring arrangements. If you're unsure

which wires supply constant power, test the circuit, or call a licensed electrician.

11. Locate the cable for the light fixture, and attach a junction box to a nearby joist. Thread the light-fixture cable and the remaining electrical cable into the junction box, and splice them together with wire nuts and a barrel crimp. Attach a cover to the junction box.

12. Downstairs, push the other ends of electrical cable through the back of a drywall-mounted electrical box, and secure the box to the wall by tightening the wall-clamp screws.

13. Strip the sheathing and insulation from the wires. Twist the ground wires together with a 5" piece of ground wire, and secure the connection with a barrel crimp. Connect the white wires together, and secure them with a wire nut.

14. Attach the black wires to the terminals on a single-pole light switch, and attach the remaining ground wire to the green ground screw on the switch.

15. Attach the switch to the electrical box, and attach a cover plate. For multiple track lights, consider using a stack switch.

16. Insert the fixtures into the track so that the three prongs line up properly with the electrical wiring inside the track. Most fixtures simply snap into place.

Note: If you're installing track lighting over an existing fixture, remove the fixture and disconnect the wires. Then mount the track light, connect the wiring, and insert the light fixtures.

### **Right on Track: Easy Steps to Mounting Track Lights**

Your five-year-old son is going to be the next Picasso, you can already tell. You want to hang his latest masterpiece on the wall and make it the focal point of the room, but how to achieve the effect?

Track lighting, of course! Track lighting offers the opportunity to much better control the mood and emphasis of a room's lighting. With so many colors and styles, it is just as beautiful as it is functional.

If wiring through a junction box would tax your electrical skills past their limit, track lighting kits are available that simply plug in to the wall. They can't be beat for ease of installation, but they do not look as professional and unobtrusive as those that are actually mounted through the ceiling.

If you are ready for installation that is a little more challenging, follow these easy steps to mount track lighting and give Junior's work the attention it deserves!

## Materials Needed

- Drill / screwdriver
- Electrical cable and tape
- Ladder or stepstool
- Long-nose or electrician's pliers
- Neon tester / voltage meter
- Tape measure
- Toggle bolts
- Track light kit
- Wire nuts

1. Turn off the power. Turn off electrical power to appropriate junction box through the breaker box or service panel. Ensure that the circuit is dead with a neon tester or voltage meter. Once you are certain the power is off, remove the existing fixture and carefully disconnect wires, keeping exposed ends separate from each other.

2. Wire the live end. Put live end into the track and secure it by tightening the setscrew. Attach the live end to the mounting bracket.

Use pigtail leads to finish wiring the live end. "Pigtail" leads are short wires connected to terminals. Wire nuts are then used to connect the pigtail leads to the home wiring. Secure the black pigtail leads to the brass screw, the white pigtail to the silver screw, and the green (or bare) pigtail to the green grounding screw.

3. Lay out the track location. Decide on track location based on the existing junction box and which areas you'd like the lights to bring focus to. You can purchase fittings for Ts or angles; but double check that the fittings you want are offered by the manufacturer of your chosen track light system.

Mark mounting holes to indicate position. Ensure the track runs parallel to a wall by measuring out an equal distance from the wall to either end of the track. Remember to place tracks an appropriate distance (at least 6") from potentially flammable materials. On the marked places, drill holes for toggle bolts or screws.

4. Mount the track. Place circuit and fixture wires in junction box and install the mounting plate on the box. Snap the track into place on the junction box by following instructions provided for your specific track lighting system.

Put toggle bolts/screws through new track mounting and lift the track to the ceiling. (Recruit helpers beforehand if the track is very heavy or unwieldy.) Into the mounting holes, insert toggle wings but do not tighten. Attach any fittings (Ts or angles) and additional track sections desired, and insert end pieces at the end of the completed track.

Insert the electrical adapter into the track and twist to attach it. Install the cover over the mounting plate assembly and adapter. Place fixtures into the track and twist to secure.

Screw in appropriate bulbs as recommended by the manufacturer.

Make connections to house wiring. Twist wire connectors onto the matching colored house and pigtail wires to lock them together. Secure the mounting plate to the ceiling box with the screws provided. Tighten toggle bolts/screws.

Apply the finishing touches. Turn the power back on and test the lights. If they fail, turn off and double check the current with a neon tester or voltage meter. Also check your work for missing connections.

Once power has been restored, adjust head angle and position to shine light where you want it. For added versatility, consider purchasing a dimmer to make subtle changes in the strength of the lighting. Relax and enjoy your next dinner party when Junior's masterpiece is lavishly complimented, thanks to the superior showcasing.

### **On the Level: How to Hang a Picture Properly**

Hanging a picture may seem like the simplest of all home improvement projects. While it is quite easy, there are factors like wall type and object weight that you need to consider before hammering away. If you're a beginner or if you've hung pictures before but always done some in a hit or miss kind of manner, these tips will come in useful.

The first thing you need to do is purchase the right fasteners for your picture and your walls. The most common fasteners for hanging things are picture nails and hooks. While these are the most common type of fastener, they are not the most appropriate or effective ones to use in all cases.

If you are going to hang anything on a concrete, stucco or brick wall, then you should not try to use a regular nail. A concrete screw will securely anchor your object and will prevent you from chipping the wall's surface. If you use a nail in a concrete or stucco surface, you can end up removing chunks of the wall around the nail when hammering.

If your object is heavy, then you might want to insert a plastic anchor or molly bolt-for fastening into the hole to ensure that there is no damage to your wall. Make sure that you are using the right type of fastener for your wall surface.

Once you've figured out the type of wall surface and the most appropriate fastener to use, you will need to decide on placement.

The first thing you want to decide is how high you want to hang the object. The basic rule of thumb is to hang pictures so that the center of the picture is at eye level. Have someone hold a tape measure against the wall and then stand back and see what number is at your eye level, that's where the center of your picture should be.

Once you decide on the height on the wall, you need to measure the picture itself to determine the mounting height. You will then measure from the bottom of the picture to the highest point of the hanging wire. You can then figure out the hanging height by subtracting half of the picture's height and adding the difference of the eye-height level you measured before.

Your measuring isn't done yet though. You want to take that figure and measure that distance on the wall so you can make a mark where the bottom of the hook will hit. After you have that vertical mark, you want to measure horizontally to ensure that your picture is in the center of the space. Next you will mark where the vertical and horizontal lines cross.

Holding the faster in place, you will nail or screw the fastener into the wall. After the nail or screw is in place, you want to carefully hang the object on the wall. Make sure you are careful not to mark or scrape the wall with the frame.

Once the picture is on the hook, you should step back to see whether it is level. You can shift the picture to either the left or the right to adjust the level.

If you find (after hanging) that the picture is either too low or too high, you can adjust the wire on the back of the picture rather than making a new hole.

If you are planning on hanging multiple pictures and/or objects on one wall, then you want to plan out your measurements very carefully. Start by holding up your pictures or laying them on the floor in the pattern you want. Measure the wall space and measure each picture to ensure that you have enough space. You want to make the vertical and horizontal marks for each picture rather than just guessing. It is often easier to offset the pictures when you estimate. If you do want all of the pictures even, then you need to use a level and be really exact in your measurements. A laser level can be useful in these types of situations.

Don't be intimidated with all of these steps if this is your first time hanging a picture. Taking your time and doing all the prep work outlined above will ensure that your picture is centered, level, and really adds character to your space.

## **Real Estate and Cheap Repairs, Big Profits**

You want the most profit you can get for that property your sweat and blood can buy. Is there any way to improve your chances, without investing a lot more? Fortunately, there is.

Even a person not very skilled in carpentry, plumbing, and other traditional trades can improve the salability of a property with modest effort and a few common tools.

One of the first things a potential buyer will notice when viewing your property is the condition of those around it. Encourage your neighbors to clear away children's toys, junk cars, or other unsightly objects before buyers come looking.

Offer to mow the lawns of those to the left and right, or take their trash to the dump as an incentive. A small cash offer on successful sale will also motivate cooperation.

At the same time, show them you're getting your own house in order. Mow the lawn carefully and repair any bare spots. Trim the edges. And invest in a few dozen inexpensive flowers and plants if the season permits it. The exterior is always what is seen first and first impressions linger.

Since a home inspection will almost always be done prior to a conclusive bargain being struck, take the opportunity to make those inexpensive plumbing repairs BEFORE showing the house. Some of the more expensive ones might wait, to be used as a bargaining chip. But fix that leaky sprinkler head that sprays the sidewalk and replace that dripping bathroom faucet.

Replacing carpeting throughout an entire house, or even one room, can be expensive. But getting it cleaned costs very little, typically. And repair any small damage or try to cover it with a piece of furniture. Eventually, you'll have to show every flaw when you have a concrete deal. But it needn't be the first thing they see. Replace those old welcome mats and small entrance rugs with new ones.

New screens are low priced and can make the exterior look fresh and new. To save even more, you can remake the screens with mesh and rubber kits, provided the frames are still in good shape.

Replace any cracked or broken windows. You'll usually have to do this anyway as part of closing the deal. Of course, all the windows should be cleaned thoroughly to give that shiny new feel. Even a brand new house that's dirty will fetch a lower price.

If you have air conditioning and heating ducts, replacing defective or worn conduits can get very costly. But many parts in a house that are not seen use silvered duct tape anyway, so patch any holes carefully to give a professional look. Replace old filters to give the appliances a newer look and the air a fresher smell.

A bit of spackle and a coat of paint on those rooms that have seen accidents needn't cost a lot and doesn't take a lot of effort. Be sure the work is done carefully, though, or it can come out looking worse than before you started.

A buyer that sees that you've made efforts to keep the property up will be more inclined to offer a better price. Think of the last time you bought a car. Didn't you favor the one that was well maintained? You were probably willing to pay a little extra to get that one. They will be too.