

Home Buyers Orientation

Tips on caring for your new home...



Congratulations on your new home and welcome to the Bill Beazley Homes family! We are delighted to have you as a valued homeowner and want to ensure you have all the information you need to maintain and protect your investment. This comprehensive warranty manual is designed to provide you with the knowledge and resources necessary to keep your home in top condition for years to come.



TABLE OF CONTENTS

| | |
|--|----|
| Our Warranty Service Procedures | 04 |
| Building Material Expansion and Contraction | 05 |
| Electrical | 05 |
| Air Conditioning | 06 |
| Heating System | 07 |
| Gas Shut Offs | 07 |
| Caulking | 07 |
| Plumbing | 08 |
| Sewer Stoppage | 08 |
| Floor Coverings | 09 |
| Waterproof Click | 09 |
| Engineered Hardwood | 09 |
| Luxury Vinyl Tile (LVT) | 10 |
| Stain Removal | 11 |
| Carpet | 12 |
| Paint and Staining | 13 |
| Door Locks | 13 |
| Cabinets | 13 |
| RTF -Rigid Thermo Foil | 13 |
| How to clean Thermo Foil Parts | 14 |
| Heat and RTF | 14 |
| Granite Countertops | 14 |
| Quartz Countertops | 14 |
| Concrete | 16 |
| Roof | 16 |
| How long will your shingles last? | 16 |
| Wind Damage | 16 |
| Garage and Overhead Door | 16 |
| Septic Tanks | 16 |
| How Do Septic Tanks Work? | 17 |
| Septic System Maintenance | 17 |
| How Do You Maintain Your System? | 17 |
| Where is Your System located? | 18 |
| Taking Care of Your Septic System | 18 |
| Best Practices for Maintaining Your Septic System | 18 |
| Things to AVOID for Maintaining Your Septic System | 19 |





TABLE OF CONTENTS

| | |
|---|----|
| Cleaning Fiberglass Fixtures..... | 20 |
| Stubborn Stains | 20 |
| Heavy Soap Scum Buildup | 20 |
| Hard Water or Mineral Deposits | 20 |
| Tough Stains Such as Tar, Adhesives, Oil Paints, etc. | 20 |
| Plumbing Maintenance... .. | 20 |
| Bathroom Clogs | 21 |
| Kitchen Clogs..... | 21 |
| The Plunger... A Plumber's Best Friend | 21 |
| DO NOT DUMP IT DOWN THE DRAIN | 21 |
| Window Sweating..... | 22 |
| What | 22 |
| Where | 22 |
| Why | 22 |
| How Can You Get Rid of Excessive Moisture | 23 |
| How Much Humidity is the Right Amount? | 23 |
| What Else Can You Do... .. | 24 |
| Is There Any Condensation That's Temporary? | 25 |
| ...Between the Pieces of Glass in an Insulating Window? | 25 |
| Lawn Maintenance | 26 |
| Drainage and Landscaping | 26 |
| Lawn Watering Schedule for All Grasses | 26 |
| Lawn Care Warranty Information | 27 |
| Fertilizer/Weed Control Schedule | 27 |

For a complete description of warranty coverages in the first through tenth years,
refer to the StrucSure Home Warranty Information Booklet.





OUR WARRANTY SERVICE PROCEDURES

Our ultimate goal is to build a home free of defects that our homeowners will love for years to come. We know that mistakes may be made and we will correct those covered by our warranty.

The Warranty Procedures to be followed are as outlined below:

For **EMERGENCY** service, call our Warranty Department at 706-826-2777. (Please review what we consider an emergency before calling.) If you have an emergency after hours or on the weekend, you will need to call the appropriate trade contractors directly.

We have designated two specific time frames during your warranty period to submit lists to our Warranty department. (Emergency situations are excluded from this procedure.)

30 Day List - These are the warrantable items that are noticed after you've moved in but were not apparent during your pre-closing homeowner orientation.

11 Month List - These are additional warrantable items that you discover which you believe are not homeowner maintenance items, but rather items we should repair.

We ask that you describe the problem in detail so that we send the appropriate person to make the repair. A picture is worth a thousand words!

Either our office or one of our trade contractors will call you for an appointment once we have received your request. Work is performed Monday through Friday between 8:30 AM and 5:00 PM. Please make arrangements to be home at the scheduled appointment time.

Your Warranty Manager may send you a list of contractors and phone numbers for your warrantable items. You may elect to call the contractors directly to schedule the work to be done.

BUILDING MATERIAL EXPANSION AND CONTRACTION

Most building materials will expand and contract subject to changes in temperature and humidity. All materials do not expand and contract at the same rate and the result may be small cracks in the drywall and paint and small separations between materials. This is very normal in a new home, even in the highest quality of construction. Shrinkage of the wood and sheetrock items in your home is inevitable, and this will be most noticeable during the first year following completion of the construction. However, generally all that is needed is a small cosmetic repair, sometimes involving only minor caulking. Keep in mind, though, even properly installed caulk will eventually require replacement by the homeowner.

ELECTRICAL

The master control panel that contains the electrical breakers for your home includes a “Main” shut off that controls all the power to your home. In addition to the “Main” breaker switch, individual breakers have three positions: ON, OFF, and TRIPPED.

If you lose power to a specific portion of your home, check the individual circuit breakers in the control panel. If any breaker is in the TRIPPED position, first flip it to the “OFF” position and then it can be turned “ON.” Switching the breaker from the “TRIPPED” position directly to the “ON” position will not restore electrical power.

If you experience a total loss of electrical power to your home:

Check the “Main” breaker in the master control panel discussed above.

Next, check with your local utility company to see if the problem is with the source of electrical power supplied to your home.

If a wall outlet is not working, first check to see if it is controlled by a wall switch. Also, check to be sure that the light bulb or appliance being used is working.

Your home's electrical system also contains Ground Fault Interrupters (GFI). Depending on the wiring of your home you may have GFI receptacles, GFI breakers, or both. Installation of these GFI are a safeguard against excessive moisture and heavy appliance use. Faulty appliances, especially hair dryers, are a common cause of tripped GFI. GFI receptacles have a RESET button directly on the receptacle. Keep in mind, GFI receptacles are not always found in the same room as where you are experiencing the power outage. If power is lost, once you find the receptacle, simply press the RESET button. GFI breakers are reset in your electrical panel in the garage. To reset you will need to turn off the breaker, and then turn it back on.



AIR CONDITIONING

Air Conditioning can add much to the comfort of your home, but if used improperly, it can result in wasted energy and improper cooling. To help you maximize your air conditioning system, we offer the following suggestions.

Your air conditioner is a closed system, which means that the interior air is continually recycled and cooled until the desired air temperature is reached. Closing your drapes to keep out direct sunlight and keeping doors and windows shut will help your air conditioning system.

If you come home at 5:30 PM on a day when the temperature has reached 90° F inside the home and set the thermostat to 75° F, the air conditioning unit will begin cooling, but it will take a long time to reach the desired temperature. At 5:30 PM, the air conditioning unit will start cooling the air, but the walls, carpet and furniture release heat and nullify cooling. It may be hours before the air conditioning unit has cooled the walls, carpet and furniture.

If no one is home during the day, setting the air conditioner to a moderate temperature before leaving will allow the unit to maintain the cooler temperature throughout the day and is therefore better prepared to meet the desired temperature you set once you return home.

Be sure to adjust the cooling vents to maximize air flow to occupied parts of the home.

Air conditioning condensation lines should be kept clear at all times.

You should operate unit once a month in off-season. A clogged condensation line is a homeowner maintenance issue and is not generally considered a warranty item.

If your air conditioner does not operate properly even after you have followed the above guidelines and the manufacturer's warranty booklet, contact your Warranty Manager. Remember that you will be responsible for paying for the service call unless the issue is due to a covered warranty.

HEATING SYSTEM

Good maintenance of your furnace can save energy dollars and prolong the life of your furnace. Carefully read the manufacturer's Warranty Booklet and remember to change the filters monthly.

If you find yourself with no heat, the following may identify the cause:

- Thermostat temperature settings and switches.
- The ON/OFF switch in the furnace room has been switched.
- The fuse has blown (if your furnace has one).
- ON/OFF switch on the furnace (check the manufacturer's warranty booklet for location).
- Breaker on the electrical panel has been tripped.
- Safety switch for the fan cover has been switched.
- Pilot light is out.

These are normal homeowner maintenance items and you can also review the Manufacturer's Warranty Booklet for help. If your heating contractor makes a service call to turn on a switch, replace a fuse, or reset a breaker, you will be obligated to pay a service charge.

If none of these are the problem, contact your Warranty Manager.

GAS SHUT OFFS

There is a shut off on the gas line at or near its connection to each item that operates on gas. If you suspect a leak, leave the home and call the gas company immediately for emergency service.

CAULKING

Caulking should be routinely inspected and maintained. This is especially critical in your bathrooms. Cracked tile grout should be immediately repaired with a good quality tube and tile caulk.

Two types of caulk are:

1. **Silicone Caulk** - Caulking that contains silicone will not accept paint, but works best where water is present.
2. **Latex Caulk** - Latex caulking is appropriate for an area that requires painting.



PLUMBING

Observing the following guidelines should minimize any plumbing issues:

Many plumbing clogs are caused by improper garbage disposal use. Always use plenty of water when running the disposal. Allow the water to run 10 to 15 seconds after shutting off the disposal.

Provided your home is heated at a normal level, pipes should not freeze. Heat should be set at 65° F at the least when you're away during the winter months. If temperatures are below normal, you should open cupboards to allow heat to the pipes and let faucets drip to keep pipes from freezing.

Outside faucets must be shut off during freezing weather and the hose should be removed. In the event of a leak or broken pipe, shut off water to that fixture as soon as possible and call a plumber. Each sink and commode has a shut off for its water supply or use the main water shut off if necessary.

If your water supply stops completely, first check the water shut off at the meter. Next, call the county water department to confirm the service has not been shut down in your area. If these are not a problem, please contact your Warranty Manager.

Worn washers and seals in faucets are not warranty items and they are the responsibility of the homeowner to inspect and maintain.

SEWER STOPPAGE

All of your sewer and drain lines should operate freely and should have been inspected by the local building authorities. If a sewer or drain line becomes clogged, repair is required. Should an emergency problem develop with your sewer or drain lines and you have determined that the clog is not the result of a blockage caused by improper disposal or other homeowner maintenance problem, contact your Warranty Manager immediately. Preventative maintenance is the best safeguard against clogged drains or sewer lines. Clogs are generally caused by the improper disposal of waste materials. It is very important to follow the manufacturer's guidelines regarding the use of garbage disposals and not to flush excessive amounts of waste when using your bathroom toilets. The use of a plunger can facilitate the clearing of minor clogs, and if you use a chemical agent, be sure to follow the manufacturer's instructions carefully to avoid personal injury.

If a service call is required and it is determined that the issue is not an item covered under the warranty, you will be responsible for the plumber's charges.

FLOOR COVERINGS

Our most commonly used types of flooring are: Waterproof Click, Engineered Hardwood, Luxury Vinyl Tile, and Carpet.

WATERPROOF CLICK

For the most part, waterproof click flooring maintenance and upkeep is as direct a process as its installation. On a regular and routine basis, one should:

- Sweep and dust floors to remove dirt and potential scratching elements.
- Lightly mop as needed with water or a cleaner that won't leave a residue.
- Clean up any and all spills immediately.
- Prevent extensive sun exposure.
- Use mats at room entries to prevent loose soil from scratching flooring.

A few things to keep in mind while caring for your waterproof click flooring include:

- Avoid using detergents, abrasive cleaners, or Mop & Glo products.
- Be aware that rubber mats may discolor the flooring.
- Furniture and heavy objects should be moved with proper moving agents (e.g., moving pads).

ENGINEERED HARDWOOD

Wood floors will respond noticeably to changes in humidity. A humidifier will help control the humidity, but will not completely eliminate this reaction. Wood floors will exhibit the following traits:

When new, small splinters of wood appear.

Dimples or scratches can be caused by moving furniture, dropping heavy or sharp objects, etc.

Some shrinkage or warping can be expected, especially around heat vents or any heat-producing appliances.

Warping will occur if the floor becomes repeatedly wet or is thoroughly soaked even one time. Never wet mop a hardwood floor. Excessive water causes wood to expand, possibly damaging the floor.

A dulling of the finish in heavy traffic areas is likely. A white, filmy appearance is caused by moisture.

Daily care of hardwood floors and preventative maintenance is the primary goal. For example:

Never use a wet mop to clean any hardwood or laminate floor. Use a terry cloth with a cleaner recommended by the manufacture or your retailer.

Never wax or use oil based products on a pre-finished floor, as it may leave a residue on the floor. These days most hardwood flooring comes pre-finished and never needs waxing. That is part of the attraction to hardwood flooring.

LUXURY VINYL TILE (LVT)

Although LVT floors are durable, all floor coverings require some care to look their best and many problems can be prevented before they occur. The type and frequency of traffic on your floor will determine the frequency and type of maintenance needed. Even the color will also have some bearing on how much care may be necessary. For example, solid color floors will visually show scuffs, scratches, dirt and general wear to a greater degree than multi-colored floors. And, of course, white or light colors will visually show staining to a greater degree than darker colors. For this reason, solid color and white floors should receive special attention in regard to preventative maintenance and the amount of care provided.

Here are the proper steps for protecting and maintaining your LVT floor:

In order to prevent indentations and scratches, provide glass, plastic, felt or other non-staining cups with flat under surfaces not less than 2" in width for the legs of heavy furniture or appliances. Equip swivel-type office chairs and other rolling furniture with broad surface non-staining casters at least 2" in diameter. Remove small diameter buttons from the legs of straight chairs and replace with metal glides that have bearing surfaces no less than 1" in diameter.

Protect your floor against burns. Burns from the glowing end of cigarettes, matches, or other extremely hot items can damage LVT floors.

Do not flood floor or subject to frequent standing water. Problems associated with excessive moisture can affect the job site and should be addressed. LVT plank and tile should not be used as a Moisture Reduction System.

Protect your floor from tracked-in dirt and grit particles by using walk-off mats at all outside entrances. Take time to remove any imbedded grit particles from shoe soles before entering the room. Avoid the use of rubber-backed mats, as certain rubber compounds can permanently stain vinyl. Avoid tracking-in tar or asphalt from driveways, as this can also discolor vinyl. Do not use vinegar, one-step cleaner/polishes, or oil soaps on LVT products.

All LVT floors have a good resistance to stains and are not affected by most common household spills. However, any spill should be cleaned up immediately. The longer the spilled materials are left on the floor, the greater the risk of permanently staining the floor.



HOME BUYER'S ORIENTATION

Do not expose LVT floors to direct sunlight for prolonged periods. The use of drapes or blinds is recommended during peak sunlight hours. Prolonged exposure to direct sunlight can result in discoloration and excessive temperatures might cause tile/plank expansion or delamination.

Regular adherence to an effective maintenance program should include:

Thorough dirt and grit regulation, prompt removal of spills and stains, and taking measures to protect the floor's surface from heavy furniture, appliances, and other such items (as detailed above).

The most effective part of any floor maintenance program is the simplest: sweep, dust mop or vacuum LVT flooring DAILY, or more frequently if needed.

Initial maintenance upon completion of the installation:

Sweep or vacuum without using the "beater bar" to thoroughly remove dust and debris.

Use damp terry cloth with neutral cleaner following instructions on the bottle. Remove any scuffs and excessive soil with careful scrubbing.

Certain types of rubber heel marks may be removed by rubbing with a cloth dampened with mineral spirits.

Stain Removal

To remove stubborn spots or stains from LVT floors, always begin with mild cleaners, such as a neutral cleaner. If this fails to remove the spot or stain, then use mineral spirits. Do not use harsh solvents, such as lacquer thinner or straight acetone, as these can permanently soften and damage the vinyl surface.

For extreme staining (paints, permanent markers, dyes) try applying fingernail polish remover containing acetone (not straight acetone) applied to a soft cloth and rubbing the affected area. Subsequent to this cleaning procedure for stubborn spots and stains, clean the affected area with fresh, clear water to remove any residue.

Any damage resulting from use of pure solvents is **NOT** covered by your Warranty. Always test stronger cleaning agents on sample pieces or in unnoticeable areas first.

CARPET

No carpet is completely stain proof. Following these simple procedures will help extend the life of your floor.

Vacuum your carpet at least once a week, giving special attention to the high traffic areas and stairs. Vacuuming should remove loose dirt and fibers. Make certain your vacuum cleaner has a strong suction by checking to see that nothing is blocking the brushes, tubes, or hoses, and the belts are still operating. Adjust the vacuum for proper height of the carpet pile.

If the vacuum pulls a tuft (sprout) above the surface, do not pull the tuft out, but snip it with scissors to the length of the other tufts.

Vacuuming will not remove greasy dirt, spots and spills from your carpet. If your carpet and/or rugs remain dull and dirty after you vacuum them, especially in high traffic areas, it is time for a thorough cleaning.

If you stain your carpet, treat it as soon as possible. First, blot out as much of the liquid spill as possible. Then, apply a carpet spot cleaner recommended by the manufacture or your retailer. **Blot** out with a clean white cloth. **DO NOT RUB!** Continue blotting until the stain is removed. For food stains, first, pick up as much as possible, then follow the same directions as above.

Use floor mats or runners in high traffic areas. Remember to remove and vacuum underneath regularly.

Have your carpet professionally cleaned every 12 to 18 months to maintain carpet manufacturer's warranty. There are many effective cleaning systems available. Consult your carpet retailer for advice on choosing the best carpet care method for your carpet and rugs. Make certain that the cleaning system you choose will not void your warranty. If in doubt, call the manufacturer's 800 number to be sure.

For a complete list of best practices, refer to the carpet manufacturer's care guidelines.

PAINT AND STAINING

Follow these guidelines for painting and staining in your home:

Paint touch-ups after your pre-closing walkthrough are the homeowner's responsibility.

Do not wash interior walls.

Check the surface of your home's exterior annually. If you can repair paint or stain before there is much wearing away of the original finish, you will save on the cost of extensive surface preparation.

Separation of wood trim from the adjacent material is a normal result of shrinkage which can require caulking and touch-up painting as a repair; this is a homeowner maintenance responsibility.

DOOR LOCKS

Lubricate door locks with graphite or other waterproof lubricant. Avoid oil, as it will gum up. Tighten locks as needed.

CABINETS

Quality wood cabinet finishes that have been made to last can, like good clothes, very quickly get a "used" appearance. Keeping up maintenance and good practices with these fixtures and their materials can help retain quality and prolong their life and appeal.

Moisture is the worst enemy of all wooden furniture so all spilled liquids should be wiped away at once. Cabinets should be protected against heat, and also against wet or colored objects.

Cabinet surfaces should be cleaned with a very mild, soapy solution. The cloth should be soft and dampened with the soap solution. The surface should then be wiped down with a dry cloth to remove excess moisture. Other cleaning compounds exist but may contain alkaline agents which will adversely affect the surface. Household polishes can be used on an infrequent basis; products containing silicone are moisture and dirt resistant, but may hinder lacquering.

Rigid Thermo Foil (RTF)

Our RTF doors are guaranteed for a period of three years against color change within normal interior kitchen environments and by avoiding direct sunlight. We also guarantee our RTF doors against de-lamination for a period of three years under normal conditions. We do not recommend the use of RTF products in any area where temperatures will exceed 150° F. Parts that are damaged due to excessive heat may not fall under this warranty (see Heat Advisory in RTF Care below). We guarantee our RTF doors against warpage of more than 1/8" for doors less than 20" in width and 40" or less in height. Doors larger than this are not covered under this portion of our guarantee.



How to Clean Thermo Foil Parts:

RTF doors should be cleaned with water and either a soap-based or alcohol based cleaning agent. Denatured alcohol is an especially good RTF cleaning agent. Do Not Use lacquer thinner or any other product containing acetone as these will damage the surface of RTF, and avoid the usage of any abrasive rubbing material. For routine cleaning of 3D laminated surfaces, use a mixture of warm water (99%) and a mild, nonabrasive dish washing detergent (1%). Using a clean cotton or microfiber cloth saturated with this mixture, wipe in a vertical direction while applying light pressure. To disinfect 3D laminated surfaces, a solution of water (90%) and bleach (10%) is recommended. **DO NOT USE** abrasive detergents, vinegar based detergents, furniture polish, ammonia, lacquer thinner, or any other product containing acetone, as these will damage the surface of the 3D laminant. Also, avoid abrasive brushes or scrubbing pads, as they will scratch the surface. Any damage that is caused by abrasive cleaning agents or processes is not covered under the warranty.

Heat and RTF:

Because of the effect hot air can have on RTF products, you must allow adequate room or install a non-RTF filler between RTF doors/drawers and any stove or oven. We also advise homeowners to open all doors and fronts near the oven when operating the self-cleaning mode. This should allow excess heat to vent away from the doors and drawers, reducing the change of damage. Obvious heat related damage may void the warranty.

GRANITE COUNTERTOPS

A natural stone material, granite is a very strong, durable, and appealing. Granite has often been a choice for countertops because of all of these as well as its ease of maintenance, but it still does require some daily maintenance such as:

- Wiping down counters with a **neutral** cleaner. Avoid harsh detergents as well as dish detergent.

- Clean up spills and moisture as soon as possible with a wet cloth.

- For simple prevention of premature damage, use cutting boards, pot holders, trivets, and coasters.

Sealing granite and natural stone with penetrating sealers (also called “impregnators”) protects the structure of a natural stone. They protect the stone from within. When sealing natural stone or granite with this type of sealer, it is applied directly to the face of the stone with a soft cloth. It's simple to do and does not require a stone specialist. This type of sealer is recommended for sealing granite.

The sealer will penetrate below the stone's surface without leaving a coating or film on top. The stone below the surface will be protected, however, there is no surface protection. This means calcareous natural stones such as marble, onyx, limestone, and travertine can still etch or dull if acidic products such as orange juice or coke are left on your stone.

Sealing granite countertops is not difficult and you can do it yourself. To seal granite countertops, follow these steps. Apply the sealer to your countertop using a clean white rag or brush. Let the sealer absorb into the stone for approximately 3 to 4 minutes. When the sealer is almost dry, apply a little more sealer on your granite and then rub it in with a dry, clean rag. Repeat on the next section of stone until your entire granite countertop is sealed. Wait at least two hours before a second application. The wait time depends on your specific brand of sealer. It's best to work in a small area of about 4 to 5 square feet. If your granite needs to be sealed, at least 2 coats of sealer is recommended.

NOT ALL GRANITE NEEDS TO BE SEALED: Before sealing, place several drops of water on the surface of the stone and see how long it takes for the water to completely disappear. If the water absorbs into the stone in under 3-4 minutes, it may need sealing.

To help provide surface protection, a natural vegetable soap cleaner or a cleaner made specifically for natural stone can be used. These cleaners build up a thin film layer between periodic deep cleanings. Natural vegetable soaps and stone cleaners remove dirt and debris from the stone's surface the same as detergent soap does. They are just milder.

Additional countertop maintenance and best practices include:

Always using a cutting board when cutting, chopping, etc. Protect the counter from hot pans and avoid abrasive cleaner that will damage the luster of the surface.

Backsplashes and countertops will need to be caulked from time to time. This is the homeowner's responsibility.

QUARTZ COUNTERTOPS

Quartz is an engineered material and one that is highly durable and very resistant, but that requires specific care to maintain it.

The best, standard cleaning for quartz countertops is done with warm water and mild soap.

When cleaning, avoid using steel wool pads as this and any other coarse scouring pads may scratch and dull the surface's top finish.

Soft nylon brushes are acceptable in use for the toughest, organic stains.

Always be sure to use trivets, pot holders, and coasters and never place hot pots and pans directly onto the countertop.

Quartz is also a non-porous material and does not need to be sealed.

CONCRETE

Our warranty does not cover most concrete. Concrete is not replaced because of cracking.

By maintaining good drainage away from your home, you are protecting both your home's foundation and the basement floor slab if you have one. Sweep your garage: don't hose it out.

ROOF

After severe storms, a visual inspection of the roof for damage is called for; notify your homeowner's insurance if you have noted any storm damage.

Maintain the gutters and downspouts so that they are free of debris and will drain quickly.

How long will your shingles last?

It is natural for your roof to age. The process begins as soon as your shingles are installed and exposed to the harsh elements of nature. The length of time your shingles will continue to perform their intended purpose of shedding water will depend on many factors including weather, snow, intensity of ultra-violet radiation from the sun, pollution, and debris from nearby trees. Because no two buildings experience these other aging factors in the same way, it is difficult to accurately predict the length of time your shingles will last.

Wind Damage

Shingles that are installed in cool seasons may not seal until weather conditions are adequate to allow the seal down strip to activate and may be vulnerable to blow-offs and wind damage that would not be covered under the manufacturer's warranty.

GARAGE AND OVERHEAD DOOR

On a yearly basis, light gauge oil should be applied to track, roller, hinges, pulleys, and springs. Also, check to see if nuts and bolts are tight.

SEPTIC TANKS

Content provided by: South Carolina Department of Health and Environmental Control

DID YOU KNOW?

"...that a properly designed and installed septic system can be the safest, most economical way to treat your wastewater as long as it is properly maintained? If you are like most homeowners, you probably never give much thought to what happens to the waste that goes down your drain. But if you own a car and understand how important it is to do preventative maintenance (like changing your oil), then you can understand how maintaining your septic system can save you money and headaches "down the road." This section will help you learn how to use and maintain your septic system properly."

How Do Septic Tanks Work?

A septic tank system uses natural processes to treat and dispose of the wastewater generated in your home. It typically consists of a septic tank and a drain field, or soil absorption field. The septic tank provides the first step in treatment. As wastewater flows into the tank, the heavier solids settle to the bottom to form a sludge layer, and the lighter solids, greases, and oils float to the top to form a scum layer. The liquid wastewater (effluent) from the tank flows into gravel-filled trenches in the drain field where it is distributed via perforated pipes and then treated by the natural soil system.

The septic tank provides some biological treatment of the sludge and scum layers that accumulate there. The majority of treatment occurs in the drain field where the effluent enters the soil and is treated as it percolates to the groundwater. The soil acts as a biological and physical filter to remove harmful substances, including disease-causing bacteria and viruses, toxins and other undesirable wastewater constituents remaining in the effluent.

Baffles or outlet tees located in the tank are designed to prevent the sludge and scum from flowing into the drain field. If the tank is not pumped regularly to remove the accumulated solids, the tank will fill with sludge and the solids will be washed out into the drain field. There, they will quickly clog the soil and eventually cause the septic system to fail.

SEPTIC SYSTEM MAINTENANCE

There are three important health reasons for maintaining your septic system:

The first reason is the health of your pocketbook. Poor maintenance results in failed systems requiring repairs or even system replacement. Repairs or replacement costs can cost thousands, whereas a periodic inspection and pumping costs about \$150-\$250.

The second reason is the health of your family, your community, and the environment. Untreated sewage water contains various contaminants and dangerous concentrations of some minerals. Failed septic systems can allow untreated sewage to seep into wells, groundwater, and surface water bodies where people may get their drinking water.

The third reason is the health of your economy. Contamination of water bodies by failed septic systems pollutes water supplies, closes shellfish beds and recreational areas, and creates offensive odors. Quality of life, recreational opportunities, and tourism decline, and with them the area's property values and economic vitality.

How do You Maintain Your System?

Proper care of your system requires day-to-day management as well as periodic maintenance. It also requires that you know where your system is. The more you know about how your system operates and how it should be maintained, the better able you will be to protect your family's health and protect your environment.

Where is Your System Located?

In order to maintain your system, the tank must be accessible for pumping and the drain field should be protected. Locating your system is not always easy. If you do not already have one, contact your county public health department for a copy of your **septic system permit**, which will indicate the approximate location of the system and the size of the tank. The completed permit (also called **Certificate of Final Approval**) will have a diagram of the actual system installation and include other information about your system. Keep your permit for future reference and to pass on to the next homeowner.

Make a sketch locating your septic tank and drain field (the trenches) in relation to surrounding reference points. Begin by sketching your house, driveway, water well, and other landscape features such as trees or fences. A good starting point for finding the exact location of the tank is to look in the crawlspace to see the direction in which the house sewer pipe enters the soil. Gently push a thin (3/8- to 1/2- inch diameter) steel rod into the soil about 5-10 feet away from the house to feel for the tank. Of course, you should first call local utility companies to make sure there are not any underground utilities (such as buried electrical cables) in the area.

When you have your septic tank pumped, measure and record the distance from the house to the access port on the tank. You may want to have the access manhole raised to just below ground level and marked clearly with a stake, rock or bird-bath. This will help you find it again.

Taking Care of Your Septic System

Committing a little attention to the care of your system can help to avoid the nightmare of a failing system. Assuming that your septic system was properly located, designed, and installed according to state codes, you are now in the driver's seat for the care of your system. By following the recommendations below, you can help your system work properly for years to come.

Best Practices for Maintaining Your Septic System

Conserve water to reduce the amount of wastewater that must be treated and disposed of by your system. Doing laundry over several days will put less stress on your system.

Repair any leaking faucets or toilets. To detect toilet leaks, add several drops of food dye to the toilet tank and see if dye ends up in the bowl.

Divert downspouts and other surface water away from your drain field. Excessive water keeps the soil from adequately cleansing the wastewater.

Have your septic tank inspected yearly and pumped regularly by a licensed septic tank contractor.

*See the chart below for suggested pumping frequencies.

Pump System Regularly – Suggested Pumping Frequency (Years)

| Tank Size (Gallons) | Number of People Using the System | | | | |
|---------------------|-----------------------------------|---|---|---|---|
| | 1 | 2 | 4 | 6 | 8 |
| 1000 | 12 | 6 | 3 | 2 | 1 |
| 1250 | 16 | 8 | 3 | 2 | 1 |
| 1550 | 19 | 9 | 4 | 3 | 2 |

Keep your septic tank cover accessible for inspections and pumpings. Install risers with lids if necessary. Call your county public health department or a licensed septic tank contractor whenever you experience problems with your system, or if there are any signs of system failure.

Keep a detailed record of repairs, pumpings, inspections, and other maintenance activities. Pass these on to the next homeowner.

Things to AVOID for Maintaining Your Septic System

Don't drive over your drain field or compact the soil in any way.

Don't dig in your drain field or build anything over it, and don't cover it with a hard surface such as concrete or asphalt.

Don't plant anything over or near the drain-field except grass. Roots from nearby trees and shrubs may clog and damage the drain lines.

Don't use a garbage disposal, or at least limit its usage. Disposals increase solids loadings to your tank by about 50 percent, so you have to pump your tank more often than normally suggested.

Don't use your toilet as a trash can or poison your system and the groundwater by pouring harmful chemicals and cleansers down the drain. Harsh chemicals can kill the bacteria that help purify your wastewater.

DO NOT FLUSH coffee grinds, disposable diapers, sanitary napkins, cigarette butts, fats, grease, oils, paints, paint thinners, photographic solutions, dental floss, kitty litter, feminine hygiene products, condoms, paper towels, varnishes, waste oils, or pesticides.

Don't install a separate pipe to carry wash waters to a side ditch or the woods. This graywater contains germs that can spread disease.

Don't waste money on septic tank additives. The bacteria needed to treat wastewater is naturally present in sewage. Additives can re-suspend solids, causing your drain field to clog. Additives do not eliminate the need for routine pumping of your tank.

Don't allow backwash from home water softeners to enter the septic system.

Never enter a septic tank - toxic gases from the tank can kill. If your system develops problems, get advice from your county public health department or a licensed septic tank contractor.

CLEANING FIBERGLASS FIXTURES

When cleaning fiberglass sinks and tubs, use non-abrasive cleaners and applicators such as:

- Hand dishwashing liquids or liquid laundry detergents, all-purpose cleaners or bathroom cleaners (such as 409, Dow Bathroom cleaner, etc.), or mild to moderate alkali solutions mixed in warm water (such as baking soda or trisodium phosphate).
- Generally mix together at a ratio of 1 tablespoon of solution (e.g., Spic & Span Solution) per 1 gallon of warm water.
- Apply cleaners with a sponge or non-abrasive applicator made of nylon, polyester, or polyethylene. Rub gently.
- Always rinse thoroughly to remove all cleaner.

Stubborn Stains:

Rub one of the cleaners recommended by the manufacturer for regular cleaning on stained area; leave on about an hour; rinse.

Heavy Soap Scum Buildup:

Occasionally use a mild abrasive, such as “Bon Ami” or “Bar Keepers Friend” or “Soft Scrub”; do not use them for regular cleaning.

Hard Water or Mineral Deposits:

Occasionally remove with products specifically designed to remove such deposits that state on the label they are safe for fiberglass; these are usually mild acids such as “Lime-Away” which contains some phosphoric acid but is safe for consumer use; rubber gloves should be worn when applying, and label instructions followed exactly.

Tough Stains Such as Tar, Adhesives, Oil Paints, etc.:

Moisten a clean cloth with a solvent such as acetone (nail-polish remover) or paint thinner and rub stained area lightly until stain disappears; use minimum amount needed. Do not let solvent go down drain or touch any plastic items. Wipe off with clean cloth dampened in water. Be very careful using solvent; do not use around heat or flame, do not smoke, keep container capped, and have plenty of ventilation.

Plumbing Maintenance Helps Protect Against Inconvenient and Costly Breakdowns

A little prevention costs a whole lot less than a major repair. Regular attention can prevent most breakdowns with water heaters, toilets, and faucets.

As with your home's heating and cooling systems, your plumbing system will cost you less and serve you longer when it is cleaned and checked on a regular basis. Most progressive service companies offer annual packages to serve this need at a reasonable cost.

Bathroom Clogs

The main cause of stoppages in tubs and showers is often hair. Physical removal of the hair is best the best fix. The regular use of a safe, enzyme-based drain cleaner product can help prevent slow drains and stoppages.

Kitchen Clogs

The most often clogged drain is the kitchen sink. Kitchen sink stoppages are usually caused by liquid fats, emulsified by warm soapy dishwater, and then carried through the drainpipes. As the water cools, it proceeds down the drain and leaves the fatty deposits along the piping. A film of grease forms on the pipe wall and so on. Coffee grounds and eggs shells are a few of the things that add to this accumulation layer until the pipe becomes impassible.

We recommend that you pour excess grease into a tin can, not down the sink drain. When using a garbage disposal, always let sufficient cold water run to carry the particles down and into the main line to prevent buildup in the smaller waste lines.

The Plunger... A Plumber's Best Friend

In the event of a total stoppage, you should have a plunger (with a large rubber suction cup and a wooden handle). Cup it tightly over the drain and plunge it vigorously, several times. It is best to try to use the suction cycle rather than the pressure cycle of the plunger. To do this, you should push in slowly, make sure the plunger is sealed to the drain, and then pull quickly on the plunger. This tends to loosen rather than pack down the stoppage. If it is a double drain sink, make sure you seal the other drain so water will not splash out into the other bowl or on you. Drain piping can also be cleaned by removing the J-bend on the trap below the fixture.

DO NOT DUMP IT DOWN THE DRAIN

In order to keep these systems working, it is important to treat them right. To do this, you must be careful about what is put down the drain. The following things should not be put down household drains since these items may cause the plumbing system to stop working.

Hazardous household chemicals such as: paints, varnishes, pesticides, motor oil, and other automotive fluids, cooling oils, and grease.

Large bulky items such as: sanitary napkins, tampons, diapers, baby wipes or other hygiene wipes, paper towels, kitty litter.

For more information please visit:
<http://www.allabouthome.com/tips/plumbing/kitchendrainclogs.html>

WINDOW SWEATING

Condensation - What, Where, Why, & How?

What

The water that forms on the outside of a glass of ice water as it “sweats” is condensation. The mist or fog that may form on the inside of windows is also condensation.

Where does all the moisture come from?

- In the kitchen, moisture is generated by cooking food, using the sink and/or running the dishwasher.
- In the bathroom, from showers, hot tubs and spas.
- Washers and indoor-vented dryers contribute as well.
- Basements and crawl spaces can channel dampness from the ground into your home.
- Even breathing and perspiration adds moisture to indoor air.

Collectively, a family of four can easily generate up to 18 gallons of water a week in the form of humidity inside your home.

Where

Condensation is often first evident on windows, however, the windows themselves are not often the cause of the condensation. Because windows tend to have the lowest temperature of any of the surfaces in the home, when warm, moist, indoor air meets the cooler glass pane, water droplets may develop. For this reason, condensation usually occurs during the winter when the air indoors is warmer and more moist due to heating. When condensation forms on double pane windows, or windows with storm windows, this is a signal to the homeowner that there is too much moisture inside the home. This excess moisture may also form condensation in walls and ceilings where it may not be visible. Among other problems, this can cause damp spots on walls and ceilings, causing blistering and peeling paint, and promoting mold and mildew growth.

Why

Today's energy-efficient homes are built more airtight than ever. But in addition to sealing in warmth and air conditioning, they also tend to hold in too much moisture-laden air. If your home contains excessive moisture and its cold outside, you may start to witness what is called condensation building up. When warm, moist air contacts a cooler surface then the moisture in the warm air (which may not be visible) condenses into liquid and is then visible as water droplets on the cooler surface. This process is what is called condensation and the major cause of it is excessive moisture in the air.

Occasional beads of moisture on the glass of your windows usually isn't a problem. For example, it's likely your bathroom mirror and windows will steam up after a hot shower. But in such cases, the moisture clears in a matter of minutes. However, if your windows are "sweating" at other times - or stay that way for any length of time - you probably do have a problem.

Although the glass itself may not be affected, dripping condensation and excess moisture can not only damage your windows but potentially your entire home.

- Wood frames and sash can warp and become difficult to operate.
- Paint can peel and other finishes become mottled or stained.
- Insulation can become damp, damaging ceilings and walls.
- Exterior siding and finishes can become blistered and warped.
- Interior surfaces can become breeding grounds for mold and mildew.

How Can You Get Rid of Excessive Moisture?

To lower your home's humidity levels, you need to increase ventilation and decrease the sources of moisture.

- Make sure you have good ventilation in high-humidity areas: bathrooms, the kitchen, laundry areas and in the basement. Vent gas burners and clothes dryers to the outdoors. Ventilate attic and crawl spaces and the rest of the home for short periods by opening windows.
- If you already have adequate exhaust fans and dehumidifiers in these areas, try running them for longer periods of time.
- Take shorter showers and install water-restricting faucets; you'll lower the humidity and your energy bills as well.
- Keep pots and pans covered to hold moisture in. Use your microwave instead of boiling on the stove. Slow-cooking crock pots are energy-efficient and moisture-efficient, too.
- Check and reroute drainage away from your home to minimize the moisture in and around your basement and foundation.

Remember, the best way to control condensation is to reduce the moisture in the air indoors. Windows do not cause condensation. The dead air space between panes in a double pane insulating glass window will help make the temperature of the inside glass closer to the temperature of the room. But, because air is not as good an insulator as other materials, some temperature difference will always exist between the inside glass and the room itself. The goal is to make that temperature difference as small as possible and double pane insulating glass windows will help accomplish this goal. Finally keep in mind that the higher the humidity inside the home, the more difficult it will be to control "Window Sweating."

How Much Humidity is the Right Amount?

You've probably heard that your home will feel warmer in winter if the humidity is higher. That's true, and why many people use humidifiers to counteract dry, static-filled air during the heating season.

In older homes excess moisture usually isn't a problem because the structure "breathes" through unsealed cracks and gaps in their construction, creating a regular exchange of outdoor and indoor air. That's why it is often a struggle to keep enough moisture inside older homes.

With today's modern construction techniques, homes are much tighter and energy-efficient. As a result, newer homes don't usually need a way to add moisture - they're more likely to have trouble getting rid of it.

So how much humidity is enough to keep us comfortable without dampening our surroundings? Refer to the following chart for temperature and humidity levels that are generally considered comfortable.

Suggested Humidity Levels for Maximum Indoor Comfort*

| Indoor Air Temp. | Outdoor Air Temp. | Recommended Maximum Humidity |
|------------------|-------------------|------------------------------|
| 70°F | Below -20°F | 15% |
| 70°F | -20°F to -10°F | 20% |
| 70°F | -10°F to 0°F | 25% |
| 70°F | 0°F to 10°F | 30% |
| 70°F | 10°F to 20°F | 35% |
| 70°F | 20°F to 40°F | 40% |

* Source: University of Minnesota Engineering Experiment Station

Not sure what the humidity is inside your home? Ask an HVAC (heating, ventilating and air conditioning) contractor to measure it for you.

What Else Can You Do to Lower Excessive Indoor Moisture Levels?

The basic principle of reducing window condensation is simple. When there's too much condensation on your windows it means the humidity is too high in your home for the current condition outside. Here are some additional actions to alleviate this:

- Open your windows occasionally to vent excess moisture.
- If the condensation is on the storm window, open it periodically to vent excess moisture.
- Open drapes and blinds to allow warm interior air to circulate against the window.
- Turn off your furnace, humidifier, or other such home appliances.
- Make sure dehumidifiers are working properly and are well drained.
- Be sure that louvers in the attic or basement crawl space are open and of adequate size.
- Run ventilating fans in the kitchen and bathrooms longer and more often.
- Air out your house by opening a door or window for a few minutes after the bathroom, kitchen, or laundry has steamed up.

If moisture problems still persist, talk to an HVAC professional or your gas or electric company. They may have additional suggestions for reducing humidity, which may include venting gas-burning heaters and appliances, adding ventilation fans, or getting an outside air intake for your furnace.

Is There Any Condensation That's Temporary?

There are two causes of temporary window condensation and they normally disappear after a few weeks:

First, there is moisture that comes from new construction or remodeling. There's moisture in new wood, plaster and other building materials. When the heating season starts, this moisture gradually flows into the air of the home. After a few weeks, or at the most, a season of heating, this moisture will disappear.

Second, this same type of moisture can accumulate in a milder form at the beginning of each heating season. During the summer, your house absorbs moisture. After the first few weeks of heating, your home will "dry out" and you'll have less trouble with window condensation.

What if There's Condensation Between the Pieces of Glass in an Insulating Window?

As building experts often point out, windows should not be blamed for condensation. They merely are an indicator of too much moisture in the air.

In the unlikely event you see condensation between the panes of glass in an insulating window, contact our Warranty Department. Moisture between the glass means that the seal on your window has failed. It's a rare occurrence, but one that is covered under our warranty.



LAWN MAINTENANCE

Drainage and Landscaping

Proper drainage depends on proper grading to ensure efficient drainage of water away from the foundation of your home.

The grading has been done to facilitate water run-off. Do not fill in or change drainage as you may cause foundation problems to your home.

You are responsible for maintaining grades and swales in order to keep water away from your foundation. You are also responsible for landscaping and maintaining your yard in order to avoid soil erosion.

Lawn Watering Schedule for All Grasses

Below is the recommendation for the Rotating Sprinkler Heads

| | |
|------------------|---|
| January | None |
| February | None |
| March | Once a week for 5 minutes per spray head and 10 minutes per gear heads |
| April | Once a week for 5 minutes per spray head and 10 minutes per gear heads |
| May | Twice a week for 5 minutes per spray head and 10 minutes per gear heads |
| June | Three times a week for 5 minutes per spray head and 10 minutes per gear heads |
| July | Three times a week for 5 minutes per spray head and 10 minutes per gear heads |
| August | Three times a week for 5 minutes per spray head and 10 minutes per gear heads |
| September | Three times a week for 5 minutes per spray head and 10 minutes per gear heads |
| October | Twice a week for 5 minutes per spray head and 10 minutes per gear heads |
| November | None |
| December | None |

*Non-Revolutionary spray heads should spray the time listed below.

**There are many factors that affect sprinkler systems; these items are with a sprinkler system that has head-to-head coverage with no rain at all, so please adjust accordingly with weather and grass conditions. Some systems may have better coverage than others. This scheduling should only be considered as a helpful guide in preserving water. Always observe your lawn conditions to set your watering schedule.



HOME BUYER'S ORIENTATION

Lawn Care Warranty Information

Be careful not to block swales with any structure or a fence. Yards must be landscaped to maintain a proper slope away from the home.

New homeowners are responsible for establishing grass growth in the backyards. Overseeding the backyard with Bermuda needs to start in late May.

Certain times of year, during cold and rainy seasons, swales may remain damp. There is no warranty on trees or bushes.

Newly planted trees must be watered very heavily until established.

Fertilizer/Weed Control Schedule

BERMUDA/ZOYSIA

| | |
|-----------------------------|----------------------------------|
| January | Lime |
| Late February - Early March | 0-0-7 Pre-Emergent |
| Mid-April | 25-2-5 Pre-Emergent + Fertilizer |
| June | 28-5-12 Fertilizer + 3% Iron |
| August | 28-5-12 Fertilizer + 3% Iron |
| October | 25-2-5 Pre-Emergent + Fertilizer |

**Only applied if not overseeding.

CENTIPEDE

| | |
|-----------------------------|-----------------------------------|
| January | Lime |
| Late February - Early March | 0-0-7 Pre-Emergent |
| Mid-April | 19-3-7 Pre-Emergent + Fertilizer |
| July | 18-2-18 + 3% Iron |
| October | 5-10-20 Pre-Emergent + Fertilizer |

ST. AUGUSTINE

| | |
|-----------------------------|-----------------------------------|
| January | Lime |
| Late February - Early March | 0-0-7 Pre-Emergent |
| Mid-April | 19-3-7 Pre-Emergent + Fertilizer |
| June | 18-0-10 Talstar + Fertilizer |
| August | 10-0-10 Talstar + Fertilizer |
| October | 5-10-20 Pre-Emergent + Fertilizer |