

Plumbing System

Your plumbing system is comprised of several different components, including pipes, shut-off valves, sinks, toilets, showers, tubs, and fixtures. All require periodic inspections and routine cleaning and maintenance.

Shut-Off Valves

We recommend that you become familiar with the system as soon as you move in. To prepare yourself for a potential plumbing emergency, you should locate the following shut-offs in your home:

- The main water shut-off at your house and at the water meter
- The gas service meter shut-off
- The hot and cold water shut-offs beneath each sink and behind the toilets
- The water shut-off for the water heater

In any emergency, your first step should be to turn off the water. Main shut-off valves are usually located where pipes enter the house. If you suspect a leak within the walls of your home, immediately turn the main shut-off valve to the OFF position and call GHO Homes Corporation customer service department or a plumber. A leak between the walls can severely damage the walls and the flooring. All fixtures except tubs and showers have separate shut-off valves. Know how to use these shut-off valves in case of leaks or other problems. In the event of a hot water leak, the valve on top of the water heater should be turned off. This will stop the flow of hot water in your home and will prevent possible damage to your home and its contents. Make sure you know where all water shut-off valves are located and that the hot and cold shut-off valves are marked.



Caution: Immediately shut-off the water at the appropriate location when leaks are discovered. Remedy all water leaks from any source immediately, as they can allow mold growth and cause structural damage. These conditions are often not covered under GHO Homes Corporation's warranty or typical homeowners insurance policies.

Important Information

- **Water Barrier.** Maintain a water barrier between your home and the sewer line. (Occasionally run water in sinks or showers that are used infrequently to fill the drain trap.)

Recommended Maintenance Tasks	Frequency
Inspect for leaks around toilets, sinks, showers, tubs and the water heater. Listen for running water to help locate unseen leaks.	Monthly
Test the shut-off valves and replace valves as needed.	Annually

Effects of Deferred Maintenance

Failure to maintain the plumbing system can damage your home, costing you both time and money.

SHOWERS, TUBS, AND SURROUNDS

Shower and tub surrounds are designed to provide clean, bright, durable and watertight bathing areas. The variety of finishes and fixtures incorporated in these assemblies need specific care and maintenance to maintain their finish and watertight condition.

Walls and surfaces adjoining tubs and shower pans are typically ceramic tile or molded fiberglass units designed as one or two-piece assemblies, including the tub or shower pan.

Maintenance of the sealant at corners, junctures, and around fixture piping or enclosures is critical to the overall watertightness of the bathing area. Maintain sealant with mildew-resistant silicone sealant that is designated for bathroom use. Take care to avoid sealing joints or openings that are intended to be free to “weep” or drain (such as at the bottom of the shower valve plate or shower door sills and rims designed to drain back into the shower.) Take note of what was or was not sealed as part of the original construction. Refer to the “Caulking” section of this chapter for more information on caulking and sealants.



Tub with Fiberglass Surround

Important Information

- **Keep Water Confined.** Take care to confine water and wet items to the surfaces designed for wet use. Take care when using your tub and shower to prevent water from escaping the shower or tub enclosure.
- **Clean Regularly.** Avoid soap accumulation on walls and enclosure glass.

- **Keep the Tub and Shower Ledges Clear.** Avoid an excessive accumulation of bathing accessories and shampoo bottles on tub and shower ledges; these can contribute to water and soap accumulation.
- **Close the Shower Curtain or Door.** Keep the shower enclosure door or curtain closed until water is sufficiently drained.
- **Do Not Let Water Stand.** Mop up any excess water that might accumulate where exiting the shower; standing water can cause staining and/or damage to flooring.

Cleaning Tips

Use non-abrasive bathroom cleaners for fiberglass tubs, shower pans, one-piece enclosures, and fixtures. Use a neutral pH tile cleaner for ceramic tile areas.



Caution: When cleaning, note any dampness or staining that might be evident on the floors or walls adjoining the shower or tub, and make repairs as needed. Use another bathing area, if possible, until repairs are made. Failure to remedy leaking may result in mold growth and damage to finishes and framing.

Recommended Maintenance Tasks	Frequency
Clean chrome bathroom fixtures with warm water and a mild detergent. Avoid scouring pads, abrasive cleansers, and anything that might scratch the chrome finish. Dry completely after cleaning.	Regularly, with routine cleaning
Clean and monitor the condition of tub and shower surfaces as part of your regular housecleaning.	Weekly and as needed
Inspect shower door seals and adjust if necessary to keep water from leaking out of the enclosure.	Monthly
Thoroughly clean ceramic tile surfaces and grout with tile cleaner and a brush. Check the condition of sealant and grout; repair as needed.	As needed (Typically monthly to quarterly)
Reseal joints at wall, tub, and receptor junctures as described above. Fill any grout joints that may have developed gaps.	Every 1–2 years and as needed

Effects of Deferred Maintenance

Failure to maintain your tub and showers may result in costly damage to adjacent finishes, deterioration of structural framing, and mold growth.

SINKS AND FIXTURES

Your home may have one or more types of sinks installed throughout the kitchen and bath areas. Be sure to maintain these surfaces according to the manufacturer's recommendations for your particular sinks. Some general maintenance recommendations are listed in the table below.



Stainless Steel Kitchen Sink



Note: To prolong the life of the faucet fixtures, do not use excessive force when turning off the faucet.

Quick Tip: Resolving Common Issues

Leaking Faucet

A leaking faucet can waste water as well as be annoying. Call a plumber to make the repairs, or, if you can, make the repair yourself. Visit a local hardware store or home improvement center for parts and helpful advice. Shut off the water below the sink, remove the faucet stem, and replace the washer with the appropriate part. Reinstall the faucet stem and turn the water back on.

Chipped Porcelain Sinks

For chipped porcelain, a bottle of liquid porcelain from your local hardware store is a simple, inexpensive remedy. Follow the product directions carefully. To fill a deep chip, a second coat may be necessary.

Slow Drainage

Bathtub, shower, and sink drains can become clogged by grease, hair, lint, or soap. We recommend that you call a plumber if you are experiencing slow drainage in your bathtub, shower, or sink drains.

Aerator Blockage

If you experience restricted flow in a faucet, it is likely that the problem is a blocked aerator. Unscrew the aerator, remove the screen and rinse away the gritty sediment that is causing the blockage, then replace the aerator screen.



Remove the Aerator Screen to Repair Blockages

Clogged Traps

Clogged drain traps can be easily cleared with a plunger or similar device. We do not recommend the use of harsh chemicals to unclog stopped up drains, as they may be harmful to the environment.



Drain Trap in a Bathroom Sink



Note: If you are selecting/replacing any sink faucets, look for faucets that have low-flow or ultra-low-flow fixtures, to save water.

Recommended Maintenance Tasks	Frequency
Clean sinks and fixtures regularly, as part of your routine cleaning schedule.	Regularly

Effects of Deferred Maintenance

Deferred maintenance will detract from the appearance and cleanliness of your sinks.

STANDARD TANK WATER HEATER

The water heater provides hot water for your home. Periodically drain the tank to add to its useful life. Be sure to read the manufacturer's instructions for your water heater to ensure you follow the safest, most economical use.



Water Heater

Important Information

- **Proper Water Heater Settings.** To ignite your water heater's pilot light, refer to the instructions on the heater or call your utility company. If the heater has a thermostat indicator, set it at 120 degrees, per the manufacturer's recommendation. Experience will give you the feel of the gauge so you can get your water hot enough for general use yet not so hot that you are wasting energy. Overheating water speeds the build-up of lime deposits and shortens the life of the water heater. If on vacation for long periods of time, place the water heater setting on "vacation" or low.
- **Draining the Tank.** Part of regular maintenance is draining the water heater tank to remove mineral deposits before they can solidify. To drain your water heater, turn off the water; turn the pilot control knob to the *Off* position; open the plug or faucet at the bottom of the heater; drain off the water through a garden hose or into a bucket. **Caution:** The water may be very hot.
- **Inspect Strapping.** Ensure that your heater remains securely strapped to the wall.

Quick Tip: Noisy Pipes

If you hear noises in the pipes when hot water is running, the temperature may be set too high, which may cause steam in the pipes. Remedy by lowering the temperature setting.



Warning: If you smell gas, immediately leave the house and use your cell phone or go to a neighbor's telephone and call the gas supplier or fire department.



Caution: In the event of a leak, shut off both valves at the top of the heater and drain the tank to prevent damage to the house.

Recommended Maintenance Tasks	Frequency
Drain the water heater tank.	Annually
Professionally inspect and service the water heater.	Every 5 years or per manufacturer's recommendations

Effects of Deferred Maintenance

A shortened water heater life will result from deferred maintenance. The expected life of your water heater is usually imprinted on it. It is recommended that the water heater be replaced on or before it has reached its life expectancy. A leaking water heater may result in damage to your home and property.

TANKLESS WATER HEATER

Tankless water heaters heat your water as you need it, instead of continuously heating a large tank of water, resulting in energy savings. Some models heat the water by using gas to fuel the burner (with an electrical connection for the solid-state circuitry) while other models heat the water using just electrical power. Be sure to read the manufacturer's instructions for the tankless water heater installed in your home to ensure you follow the safest, most economical use.



Tankless Water Heater

Important Information

- **Disconnect Gas or Power Before Servicing the Unit.** Before performing any service on the water heater, turn off the gas, electricity, and water to the unit.
- **Flammable Materials Can be Dangerous.** Do not store any combustible materials, gasoline, or any flammable liquids and vapors near the water heater.
- **Water Heater Settings.** Refer to the manufacturer's recommendation for the proper temperature setting.
- **Remedy for Noisy Pipes.** If you hear noises in the pipes when hot water is running, the temperature may be set too high, which may cause steam in the pipes. Remedy by lowering the temperature setting.

- **Annual Professional Inspection and Service.** The manufacturer recommends having the unit checked once a year or as necessary by a licensed technician. If repairs are needed, they should be done by a licensed technician.

Recommended Maintenance Tasks	Frequency
Check the hot water heater connections for leaks or dampness, and make sure all openings for combustion and ventilation air are not blocked. Check that the exhaust vent is not blocked.	Regularly
Professionally inspect and service the water heater to include checking the venting system, burner, and heat exchanger, and also manually operate the pressure relief valve and clean the water filter.	Annually or per manufacturer's recommendations

Effects of Deferred Maintenance

A shortened water heater life will result from deferred maintenance.

TOILETS

Toilets are made of a tough vitreous material; however, they require occasional maintenance and proper cleaning.



Standard Toilet



Note: Always change wax rings when replacing the toilet or flooring. Additionally, if odors, leaks, or “rocking” is noticed, the wax ring may need replacing.

Helpful Precautions

- If your toilet blocks up, try using a plunger to discharge the waste. If not call a professional plumber.
- Do not use toilet bowl cleaners and/or disinfectants inside your tank. These may damage the interior parts.
- Do not use drain cleaners or colored tank cleaners in toilets. The harsh chemicals in these products can damage toilet seals and cause leaks.
- Do not flush bulky items down the toilet.

Quick Tip: Stopping a Running Toilet

1. Inspect the shut-off ball float or clip inside the tank. The ball float or clip is probably not being lifted high enough in the tank by the water level to shut off the valve completely.
2. Bend the float ball rod down gently or lift the clip until the float stops water at the proper level. Be sure the float is free and not rubbing on the sides of the tank or other parts.
3. Check the flap at the bottom of the tank and replace it if worn.
4. Examine the flush handle mechanism. Too tight a chain between the flush handle lever and the flap will cause a leak. Sometimes leaks result around the outlet at the base of the tank under the rubber plunger.
5. If none of these adjustments correct the trouble, consult a plumber or GHO Homes Corporation's customer service department.

Recommended Maintenance Tasks	Frequency
Regularly clean toilets using a toilet bowl cleaner and a brush or cloth.	Weekly

Effects of Deferred Maintenance

Deferred maintenance to your toilet can result in decreased toilet life, clogged toilets, unpleasant odors, higher water bills, and damage to your bathroom floor.

WATER PRESSURE REGULATOR

A water pressure regulator is installed on homes when required by the Uniform Building Code. It is usually installed where the water supply pipe enters the structure, typically in the front yard or garage. It is designed to automatically reduce the high incoming water pressure to a lower, more functional pressure. Water pressure can vary as much as 30%, increasing at nighttime and decreasing during the day.

Normal operating pressure is usually 50 to 60 psi (pounds per square inch). Pressure over 60 psi is considered excessive. Pressure that is too high may damage pipes and fixtures and also result in greater water usage. High pressure may also damage appliances such as the water heater and may cause water hammering.



Note: The Uniform Building Code requires water pressure regulators be placed at the inlet side when the mainline pressure is 80 psi or greater.

Recommended Maintenance Tasks	Frequency
Inspect for proper functioning by reading the pressure with a gauge on a faucet, downstream of the regulator. Replace regulators that cannot be adjusted using the adjustment screw.	Annually

Effects of Deferred Maintenance

Failure to provide the maintenance required may result in problems and increased repair expenses.