



20/20 Plumbing & Heating, Inc. would like to congratulate you on your new home. We will provide to our homeowners a customer service department based on prompt, courteous service and quality workmanship. Our service and dedication is what you will come to know and expect. If we can be of service to you in your new home, please do not hesitate to give us a call at **(702) 945-2020**.

The following information will explain the plumbing components, maintenance schedule (see last two pages) and warranty coverage for the plumbing systems and fixtures in your new home.

Our Service Department

When requesting service, please give your name, street address and phone number. Our service department hours are 7:00 a.m. to 5:00 p.m. If you need emergency service after hours or on weekends, please call the number above to be referred to an emergency number. Only true emergencies will be repaired after normal hours. (We cannot accept collect calls.)

Non-Warranty Customer Service

We will continue to service your home after the one-year-warranty period for a nominal hourly fee. Our plumbers do not work on commission so you will not get any over-sell or scare tactics. We know the products used in your home and are most qualified to perform their maintenance.

Keep in mind that every product with moving parts requires occasional maintenance. The primary enemy of working plumbing parts is dirt or other foreign material in the water system. We cannot control the quality or purity of your water, nor can the builder of your home.

Your Warranty Coverage

20/20 Plumbing & Heating, Inc. warrants to the original purchaser of this home that all of the water/waste, gas systems and fixtures are to be free of defect for **ONE YEAR** from your **Close of Escrow** date. Damaged or normal homeowner maintenance items are excluded from this warranty.

All faucets, tubs, sinks, lavs, toilets and toilet seats need to be inspected by the homeowner within the first **TWO WEEKS** of occupancy and damaged or defective items must be called in to our Customer Service Department within those **TWO WEEKS**. All fixtures in question are subject to inspection by a manufacturer's representative. After that period, damaged or scratched

items will be available for replacement through 20/20 Plumbing & Heating, Inc. at a reasonable charge for material and labor.

The warranty will not apply under the following conditions:

1. When the plumbing equipment or any part thereof has been subjected to accident, alteration, abuse, misuse or tampering.
2. Any stoppages or overflow caused by misuse of fixtures.
3. Dripping faucets after a period of six (6) weeks caused by debris in the line.
4. Any stoppages after 30 days of occupancy caused by anything other than construction debris.
5. Toilet seats after a period of two (2) weeks.

Aerators and Showerheads

The aerators (screens on the end of your faucets) and showerheads installed in your home are the water conservation type. This means they are restricted to allow fewer gallons per minute of flow than the previous type. It also means it will take a little longer for hot water to reach your plumbing fixtures because fewer gallons per minute of water are flowing through your faucets.

Fixtures

Your builder has selected the fixtures installed in your home. The type, size, finish and features were carefully researched by the builder and precisely specified to us by contract for our installation. Based on the specifications we have received from your builder, 20/20 Plumbing & Heating, Inc. has installed only new and first quality products.

Finishes

Occasionally, a product may have a factory blemish or unseen defect. We ask that you closely inspect each faucet, sink, lav, tub, shower, toilet, toilet seat, etc. **WITHIN THE FIRST TWO WEEKS OF YOUR OCCUPANCY** for possible visual flaws. After the first two weeks, we will continue to respond on factory defects but will have to charge for scratched or abused fixtures or toilet seats.

The manufacturers recommend that nothing stronger than soap and water be used on faucets. Abrasives should never be used on tubs, sinks and lavs. Remember, that the more abrasive the cleaner, the shorter time the gloss on the fixture will last.

The Waste System

Your house waste system is most likely made of ABS/PVC plastic waste and vent piping. Cast iron waste and vent material may be used if you have a three-story condo or if the builder of your home has directed the installation of cast iron for parts of your waste system for sound control. The sound control issue is a decision that is made by the builder, not by the plumber.

ABS/PVC plastic piping may occasionally develop a ticking noise. This is not a defect. Plastic piping is subject to expansion and contraction with heat or cold. Your waste system is strapped to the framing securely during the construction to prohibit movement and maintain fall. All

homes go through a compression process when the heavy roofing materials are applied and the lumber dries and shrinks. This can sometimes tighten the strapping and a tick can be heard; usually when hot water is ran from a shower or tub upstairs. This is not a defect or anything to be alarmed about. It is also not a drip. ABS/PVC plastic is very strong and almost impossible to break.

Your home may have a sewer backwater valve on it. The valve would be located in a vault and usually is in the garage slab. The vault will look like a water meter box. The backwater valve is required by code on unlevel projects where the sewer manhole in the street upstream from your house is higher than your lowest plumbing fixture. The backwater valve is a form of check valve that only allows waste to flow towards the street. If there is a stoppage in the sewer main in the street and if the backup reached your home, the backwater valve would automatically close to prevent sewage from entering your home. This would be an extremely rare situation.

The valve requires little maintenance. There is a flapper that occasionally may have paper or other waste material attach itself, which may be a source of flow restriction. To service the backwater valve, the lid and the flapper must be removed. Never attempt to run a drain snake from the rear or side cleanout to the street without removing the flapper first. The snake will be able to pass through the backwater valve, but the flapper will not allow retrieval of the snake. The lid of the backwater valve twists off and the flapper lifts straight up. If the code requires your backwater valve to be cast iron instead of ABS plastic, then you will need a socket wrench to remove the top.

Drainage or Waste Line Stoppages

All drainage or waste line stoppages (such as toilets, sinks, tubs, showers, washing machine waste and garbage disposals) will be covered for a period of **ONE MONTH AFTER YOU MOVE IN**. This allows ample time for a stoppage due to construction debris to occur. Stoppages are usually a result of what is put down a drain. We cannot control what you might put down a drain. Any toilet stoppage that is in the bowl of the toilet and not in the waste line is called a soft stoppage. Too much paper or other material being flushed down toilets can cause soft stoppages. Soft stoppages are chargeable at \$95.00 an hour for us to clear. See waste system section for more information.

THE FOLLOWING ITEMS SHOULD NOT BE PUT DOWN YOUR DRAINS:

- Tampons or sanitary pads
- Bar soap
- Paper towels
- Cat litter
- Grease
- Baby Wipes & Disposable wipes

Bowl Cleaners

Bowl cleaners that are placed in the toilet tanks may cause the rubber or neoprene flappers and washers to break down, warp or fall apart. They also will clog port holes on the toilet bowl which may cause your toilet to leak or run. If chemicals have been added to the toilet tank, it will void the warranty on these parts which will result in a charge to repair or replace.

Sinks

The plumbing located in cabinets under sinks is designed and installed so that it may be disassembled. When you move into your new home, the plumbing is assembled tightly without leaks. Repeated contact with the plumbing from placing and removing items under the sink can cause the plumbing to loosen up and create leaks. Leaks created in this manner are not covered under warranty and any damages resulting from these leaks will be the responsibility of the homeowner. Another important responsibility of the homeowner is to check the caulking around the sink and re-caulk if necessary.

Faucets and Toilets

Dripping faucets and toilets will be serviced for **THE FIRST SIX WEEKS AFTER OCCUPANCY**. Products with moving parts have homeowner maintenance responsibility. A defective product will show up with a drip immediately. Washers and faucet cartridges are very susceptible to sand, dirt or other foreign particles that may cause them to leak. Be especially careful if you or one of your subcontractors cut into your PVC water service line for landscaping or other reasons. Whenever that line is cut into, particles of PVC burr and dirt are introduced into your water system. These may cause your water pressure regulator to malfunction, your faucet to leak or your toilets to run due to dirt in the ball cock. After the first six weeks, we must charge these repairs as homeowner maintenance items.

If your house has pressure balancing shower or tub/shower valves, it is important that those valves be used at least once a month. There are moving parts called balancing spools that may corrode if they sit in water without moving for months at a time. This will cause your valve to work improperly. See the water system section for more information about pressure balancing valves.

Your house has water conservation toilets, showerheads and lav aerators. Your toilets flush with 1.6 gallons of water as opposed to the five gallon flush type that were available many years ago. You will notice that there is not as much water sitting in the bowl as there may have been in the toilets in your previous home. This is a characteristic of the water saver toilet and is not a defect. You may also notice that the flush is not as complete or as positive as you have been accustomed to in the past. That again is not a defect. You may have an adjustment period getting used to the water saving toilets which **WE ARE BOUND BY CODE TO INSTALL**. Your showerheads have a 1.5 gallon per minute restrictor in them. That may be why you might feel less pressure at the showerheads, however; we cannot remove the flow restrictors for you. Your lav aerators are also restricted. With the water flow reduced to 1.5 gallons per minute, it will take longer for the hot water to reach many fixtures because the cooled water stored in the hot water lines must be purged. This is a side effect of code requirements.

Garbage Disposal

If warranty work is required, **please contact our Service Department at (702) 945-2020** to schedule an appointment for service on your garbage disposal. This garbage disposal is warranted for you from the manufacturer for a period of one (1) full year and covers all defective

material or workmanship. Please have your model and serial numbers ready for the service representative before you call. The numbers will be located on the body of the disposal.

Your garbage disposal probably has a wrench attached to the side of it. This wrench is to be used if the disposal becomes jammed. Insert it into the slot in the bottom of the disposal and turn it in both directions. Whatever jammed the disposal should dislodge and may be removed through the mouth of the disposal. The disposal is not designed to be batch fed. By that we mean that you should not load the disposal with all that it will hold and then turn it on. This will clog your drainpipes and will not be covered by your warranty. Feed the material to be disposed of through slowly with the cold water running.

Automatic Clothes Washer

Use only new water supply hoses when connecting clothes washer and be sure to secure the drain hose so it will not flip out of the drain hole.

Kitchen Faucets

Your home may have a pullout spray type of kitchen faucet. Be careful not to spray back at the faucet. This allows water to go down into the hole that the hose is coming out of. This will look like a leak but will actually be a user error. Check the caulking monthly and re-caulk if necessary.

Icemakers

Your home is piped with water to the icemaker location in a recessed box with a ¼ inch angle stop. There is also a valve under the kitchen sink that is outside of the drywall. It has a copper pipe coming through the drywall, turning down to the valve and then returning to the wall. This valve controls the water to the recessed box. The reason for the piping and the valve under the kitchen sink is so that you have the water to the refrigerator connected to a reverse osmosis system or water filtration system if you happen to have one installed at a later date. It will allow you to change filters for the refrigerator water without pulling the refrigerator away from the wall and possibly damaging flooring. If you choose not to add an after market water filter/reverse osmosis unit, it is important to be sure that the valve is in the open position; otherwise the water to the recessed box will be turned off.

Water Heater

Your water heater instructions are on the water heater itself. They should be self-explanatory. If you will be away from home for an extended period (more than two days), turn your water heater to the pilot setting. If you do not have a pilot setting, turn water heater to the lowest available setting. Failure to do this will result in pressure buildup known as thermal expansion and may cause leaks or damage to your water system, faucets, toilets or washing machine hose. Optional thermal expansion protection products are available. If you own a Tankless water heater, please note that the heater must be serviced once a year.

Water Heater Vent Noise

You may notice a ticking noise as your water heater goes through a heating cycle. The piping used to vent your water heater through the roof is called Type B gas vent pipe. This piping is double walled. The exterior wall is sheet metal and the interior wall is aluminum. The two different metals expand and contract at different rates and temperatures. When this expansion occurs, it will cause a ticking noise. The architect determines the location of your water heater, which limits the walls we may choose from to run the vent piping through. We apologize for this but the only approved venting material is this double wall pipe and the only place we can install it is in a wall adjacent to the top of the water heater. There is nothing wrong with your water heater or the vent pipe. It will make noise. Your previous home may not have had the water heater located where the vent went through the bedroom wall or the old transite (asbestos) vent piping which is no longer approved may have been used.

We hope this helps explain the reason for the noise even though there is little that can be done to eliminate it.

Bathtubs

Your bathtubs will need to be re-caulked periodically between the tub and tile, trim plate, tub spout and showerhead flange. If you notice the grout cracking or falling out, it is time to re-caulk. Failure to do so will result in a leak that is not covered by warranty. Re-caulking will always be necessary after an earthquake, which in most instances shakes the grout loose from the tub.

Do not overflow your bathtub. The overflow plate located a few inches below the top of your tub will not handle all of the water that your faucet can put out, nor will it handle overflow water displaced by your body. The overflow hole was designed years ago when linkage went from a trip lever to the stopper through a pipe connecting the overflow and stopper. Tub wastes have changed since then.

Deck Mounted Tub Spouts

Do not use these as grab bars. They may be a quick connect type held on with an Allen screw. They may come off in your hand or move sideways eventually causing a non-warranty leak.

The Gas System

The gas system in your home is made out of steel pipe and fittings. The gas meter is usually located on the side of the garage on a single family home or at a banked location on attached housing. The gas system operates at a very low pressure. It is approximately ½ pound per square inch.

The plumbing contractor connects the gas connectors to the water heater and your gas cooking appliances. If the forced air unit is in the attic, your heating/cooling contractor makes that connection. Your clothes dryer, fireplace log lighter and BBQ stub out all have threaded caps on them. When removing the caps, it is very important to use two wrenches. One to hold the pipe

and one to remove the cap. If you use only one wrench on the cap, you will most likely unscrew the pipe from the wall. Be sure to use pipe joint compound on the threads when connecting gas flex connectors or other pipes.

There is an optional valve that can be installed at your gas meter outlet that is called an earthquake valve. This valve is activated by a major earthquake and shuts off your gas automatically. We are not necessarily suggesting the installation of these valves. We are merely pointing out that they are available. There is obviously an advantage in having the gas system off during an earthquake that does damage to a house. The disadvantage of the automatic valve is if there is a quake strong enough to trip the valve, but not strong enough to do damage to the house, you will have to re-light the pilot lights for those appliances not having self lighting devices. That is usually just the water heater in a new home.

Condensate Drains from Air Conditioners

We install the drains that go from your forced air unit to the nearest drain outlet or to the outside. Forced air units located in the attic will have two $\frac{3}{4}$ or one inch drains. All others will have one drain. The attic units have one drain to a plumbing fixture or to the outside and the other will come out over a door or window. The drain over a door or window is an overflow drain. If you notice water coming from this drain, it means that the primary drain is clogged and service is required. We connect the drain line to the plumbing fixture. The heating contractor connects the drain line at the forced air unit. Be sure to check before pouring outside walks or patios. If you see a pipe sticking out of your wall with an elbow on it, this is a condensate drain. Do not cover it or you will not have any overflow at your forced air unit.

Balcony Drains

If you have any balconies on your home, please check to see if there is a drain in the floor of the balcony. Some are designed so that they do not need drains. If there is a drain, please pour some water down it and locate the point of discharge at ground level. These drains do not go into the sewer system. They go to the landscape area. They sometimes get clogged with construction debris or leaves.

The Water System – CPVC

IF YOU HAVE A CPVC WATER SYSTEM, YOU MUST FOLLOW THESE DIRECTIONS:

Before the premises are occupied, the hot water heater should be turned on and the system should be flushed one more time. Commencing with the fixture closest to the water heater, the hot water tap should be permitted to run until hot water is obtained. The time required to get hot water in a specific tap shall be determined and then cold water taps at the same location should be turned on for the same period of time. This procedure should be repeated for each fixture in succession toward the end of the system.

The Water System - Copper

If your water system is made of pure copper tubing, the solder we use to join the fittings to the tubing is made without any lead content at all. The piping going from the meter to the house is

made of PVC plastic. If you intend to cut into the pipe for sprinkler systems or if you shut off your main water valve either at the curb or at the house, be sure you unplug your recirculating hot water pump if you have one. Failure to do so will burn out your pump and it will not be covered by warranty.

Water pressure regulators are most likely installed on your water system. They will be located just above the main water shut-off valve at your home. They regulate the water pressure to about 60 PSI. There is a gauge on the cold water inlet of your water heater that will give you your water pressure reading. **DO NOT ADJUST YOUR WATER PRESSURE REGULATOR TO OVER 70 PSI.** Dirt or PVC pipe shavings could cause your regulator to lose calibration. The strainer on the regulator needs to be cleaned yearly. Pressure regulators should be checked annually as a maintenance item to insure against damage and failure of fixture due to high pressure.

Your hose bibs may be soldered on. In that case, do not try to remove them with a wrench. The only way to remove them is with a torch. You will also notice a device that is screwed onto the end of your hose bibs. This is a vacuum breaker to prevent back-siphonage from irrigation water to the house potable water. The vacuum breaker is a code requirement and must not be removed. This device is the source of the moaning noise you will hear when using your hose bib. There will also be some water spillage from this device when your hose is shut off with a nozzle attached. The moaning and spillage are not a defect. They are part of the normal operation of this device.

You may notice a green tint to your water during the first year. Your copper is curing or forming a green patina that is the protection it needs to give you the longest water system life. If that patina did not form, your copper would not be protected and would experience premature failures or leaks. The chemical make-up of water differs from source to source. Sometimes it takes as long as two years for the patina to completely form. Faucets that are not used very often tend to collect patina. This is especially true of secondary tub faucets because the green tint shows up well against the white background. Do not be alarmed. This will go away with time.

Your builder may have specified (by law) pressure balancing tub and shower valves. They have a special balancing spool that compensates for changes in water pressure after you have set your shower to the desired temperature. The volume may decrease but the temperature stays within three degrees of your previous setting. If you have a bathroom that is only used when guests come, it will be necessary for you to turn the valves on once a month and run them from hot to cold for a short period of time. If these valves sit for several months without use, the balancing spools may corrode and stick. Only cold water or only hot water will come out and the temperature will not be adjustable. Although most tubs and showers will be used on a regular basis, it is important to know that not using a pressure balancing valve may require premature maintenance that is not covered under warranty.

Your home may have a recirculating hot water system. This is a system that has a pump located either at your hot water heater or under a lav in your master bathroom. If your system has a pump at the water heater, you will also have a timer with that pump. It is important that you use that timer and set it for the most convenient setting for your household schedule. If your pump is located under your master lav, a timer will not be needed. This is called a demand system. All you need to do is turn on the hot water faucet above the pump and turn it back off. This will start the pump and everything will be automatic. The purpose of the recirculating hot water system is

to have hot water instantly available when you need it. It eliminates the two or three minutes wait that sometimes occurs when you turn your faucet on. This is a system that must be specified before your slab is poured.

If you do not have a recirculating hot water system and you wish to have one, it may be possible to install it. It all depends on your house layout and the availability of electrical outlets.

IMPORTANT: If you have a hot water recirculating system with the pump at the water heater, never turn off the main water valve to your house when the pump is running. It will burn out the pump and will not be covered by your warranty. This usually happens when sprinklers are installed.

Lead Content

Most sources of drinking water, including those in California, contain some amount of lead in addition to other impurities, which are regulated under Federal law. Brass plumbing fixtures such as faucets, connectors, pipes and lead solder joints can also contribute certain amounts of lead to water if the water is allowed to stand in the fixture for a period of time.

Although the amount of lead contributed by brass faucets is minimal compared to other sources of lead in drinking water, we suggest that you take the following precaution:

Always run the water for several seconds in order to clear the faucets and pipes of any standing water before use.

THE SOLDER USED IN THE COPPER WATER PIPING SYSTEM OF YOUR HOME IS LEAD FREE.

The Water System – PEX Plastic

PEX plastic water piping is cross linked polyethylene plastic. If you need to tap into the system for remodel or other reasons, use the appropriate insert fittings, expansion tools and clamping rings. Do not use ANY pesticides on or in close proximity of the PEX plastic water piping. Adverse reactions may occur with the plastic which may affect the life and service of the piping or may have adverse health side effects. Do not use poisons for rodents inside or around your house if you have a PEX water system. Rodents have a history of chewing on plastic components such as electrical wiring with plastic coatings, garden hoses and plastic water lines due to the dehydration reaction the poisons have on rodents.

Service Response Time

One of our customer service representatives will contact you and schedule an appointment with you for non-emergency calls within 48 hours after receiving your service call. For service, please contact our office at (702) 945-2020. Emergency calls will be given top priority by our service department and will be taken care of in a timely manner. Emergency service is available 24 hours a day, 7 days a week. After hour emergency calls should be made to (702) 945-2020.

ONLY THE FOLLOWING CONDITIONS SHALL CONSTITUTE AN EMERGENCY:

1. Complete stoppage of entire sewer systems **within** one (1) month of occupancy.
2. Flooding which cannot be stopped by the isolation of a single fixture.

All service that is requested and is not covered under this warranty must be paid for at the time service is rendered at the rate of \$95.00 per hour plus the cost of material used.

Other Things You Should Know:

1. The valve on the top of the water heater controls all of the hot water in the house.
2. The valve outside of the house controls all of the water in the house.
3. All fixtures, except bathtubs and showers, have separate shut-off valves below the fixtures.
4. All gas appliances have separate gas shut-off valves.
5. Toilet seats are usually chipped or broken due to abuse or misuse. We cannot be responsible for seats two (2) weeks after occupancy.
6. Contractor not responsible for icemaker line past stub out.
7. Any tampering with or changes to the water piping, drainage, waste and vents, whether done by the homeowner or another plumbing contractor **will void this warranty.**

If you have any questions, please contact:

20/20 Plumbing & Heating, Inc.
4745 Copper Sage Street
Las Vegas, NV 89115
Phone (702) 945-2020
Fax (702) 945-2021

Maintenance Schedule

The following is a list of homeowner maintenance that must be performed.

As Needed

- Keep faucets and tub/shower valves stain free. Wipe with a soft, dry cloth and a non-abrasive cleaner.
- Fix dripping faucets without delay.
- Fix running toilets without delay.
- Unclog slow-running drains without delay.

Monthly

- Check auto washer hoses for leaks.
- Check refrigerator to make sure icemaker connection is not leaking.
- Run whirlpool systems on your master tub.
- Turn on every tub or shower valve and cycle it from hot to cold.
- Run water at seldom used fixtures to keep "P" traps full of water.
- Inspect any pullout hoses on kitchen faucets for wear or leakage where the hose and the spray nozzle meet.
- Inspect exposed plumbing areas such as under bathroom lavatories or kitchen sinks and below and around toilets, etc. for dampness or leaks. Repair without delay.
- Check for loose or rocking toilets and inspect the bases for possible leaks. Repair without delay.
- Clean faucet aerators.
- Check showerheads for debris.
- Check all exterior hose bibs and auto washer bibs for leaks or drips. Repair without delay.
- Check the caulking at tub/shower enclosures, around flanges on tub/shower valves, spouts, shower arms and around lavatories and sinks. Re-caulk as necessary.
- Inspect drain lines under the kitchen sink. If garbage disposal is used daily, pipes may vibrate loose.
- Inspect the 7/8" hose that goes from the air gap to the garbage disposal and make sure it is not clogged.

Semi-Annual

- Open and close main water shut-off valve.
- Check the condensate drain lines from your forced air unit and make sure they are not clogged and are draining freely.
- Inspect water heater flex connectors for leaks.
- Check timers on re-circulating hot water pumps if you have a re-circulating hot water system. Be sure these pumps are on a timer and are NOT running 24 hours a day.
- Check the temperature setting on the water heater. It should not be on the highest setting or over 130°. It should be in the NORMAL range of temperature setting.
- Check to make sure that the water pressure is 65 PSI or less.

- Check the grout lines where the tile meets the bathtub. They should not be cracked. Re-grout as needed.
- Check all angle stops by turning them on & off. This will insure that they do not freeze up or flatten gaskets.
- If your house waste system has a backwater valve, inspect it and make sure it is clear and operating correctly.

Yearly

- Make sure deck drains are free flowing and not clogged with leaves or debris.
- Clean the screen on water pressure regulators.
- Check all gas appliances for possible gas leaks and repair without delay.
- Mechanically snake sewer main lines to ensure system remains clear and clean.
- Drain and flush water heater tank per manufacturer's recommendations.