CARING FOR YOUR HOME

Your home has been constructed with quality materials and the labor of experienced craftsmen. Prior to using any material, it must meet our specifications for quality and durability. All work is done under our supervision to attain the best possible results.

It may surprise you to know that over 2,000 component parts are required in the construction of your home. A home is one of the last "hand built products" left in the world.

Although quality materials and workmanship have been used in your home, **this does not mean that it will be free from care and maintenance**. A home, like an automobile, requires care and attention. General homeowner maintenance is essential to providing a quality home for a lifetime. We are very proud of the product and the lasting neighborhoods we build; we strive to create long lasting value. This cannot be achieved unless you, as the homeowner, properly and routinely maintain your home and all of its components.

Periodic maintenance is necessary because of a number of factors, such as normal wear and tear, climatic condition, the inherent characteristics of various materials used in your home (such as wood) and normal service required by the mechanical systems. Over time, natural variations in temperature and humidity also impact your home.

Many times a minor adjustment or repair done immediately by you saves a more serious, time consuming, and sometimes costly repair later. **Note also that negligence of routine maintenance can void applicable limited warranty coverage on all or part of your home**.

We recognize that it is impossible to anticipate and describe every attention that may be needed for good home care; however, we have covered many important details. In addition, be certain to read the limited warranty literature that follows. It supplements details discussed under "Caring for Your Home".

Review the literature provided by the manufacturers of consumer products included with your home. Although much of the information may be familiar to you, some points may be significantly different from homes you have had in the past. The information contained in that material is not repeated here. Activate specific manufacturer warranties by completing and mailing the registration cards included with their materials. In some cases, manufacturer warranties may extend beyond the first year; it is in your best interests to be apprised of such coverages.

By caring for your new home attentively, you insure your enjoyment of it for years. The attention provided by each homeowner contributes significantly to the overall desirability of the community.

1. CARING FOR YOUR HOME

Air Conditioning

Since the air conditioning system is combined with the heating system, the maintenance suggested for your furnace should be followed. In addition, the manufacturer's Owners Manual specifies maintenance for the "condenser" unit. This should be reviewed and followed.

Air conditioning can add much to the comfort of your home, but if used improperly or inefficiently, it can result in wasted energy and frustration. These hints and suggestions are provided to help you maximize your air conditioning system.

"Whole-House System" To fully and efficiently utilize your air conditioning system, you must understand that it is a total, whole-house system. The air conditioner unit is the mechanism in your home which produces cooler air. The air conditioning system involves everything inside your home including, for example, drapes and windows.

Closed System

Your home air conditioning is a closed system, which means that the interior is continually recycled and cooled until the desired air temperature is reached. Warm outside air disrupts the system and makes cooling impossible. Therefore, you must keep all windows closed. The heat from the sun shining through the windows with the open drapes is intense enough to overcome the cooling effect of the air conditioning unit. Drapes must be closed on these windows.

Time

Time is of paramount importance in your expectations of an air conditioning system. Unlike a light bulb which reacts instantly when you turn on a switch, the air conditioning unit only begins a process when you set the thermostat.

For example, if you come home at 5:30 P.M. on a day when the temperature has reached 90 degrees, and then set your thermostat to 75 degrees, the air conditioning unit will begin cooling, but will take much longer to reach the desired temperature. During the whole day the sun has been heating not only the air in the house, but the walls, the carpet, and the furniture. At 5:30 P.M. the air conditioning unit starts cooling the air, but the walls, carpet, and furniture release heat and nullify this cooling. By the time the air conditioning unit has cooled the walls, carpet, and furniture, you may well have lost patience.

Evening Cooling

If evening cooling is the primary goal, you should set the air conditioning thermostat at a moderate temperature in the morning while the house is cooler, allowing the unit to maintain the cooler temperatures through the day.
The temperature setting may then be lowered slightly when you arrive home, with better results. **Setting the thermostat at 60 degrees will**

NOT cool the home any faster and can result in the unit "freezing up" and not performing at all. Extended use under these conditions can damage the unit.

Adjust Vents

You will find it advantageous to adjust the cooling vents to maximize air flow to occupied parts of the home. (Likewise, when the seasons change, it will probably be necessary to readjust them for comfortable heating.)

Humidifier

If a humidifier is installed on the furnace system, it should be turned off when using air conditioning. Otherwise, the additional moisture can cause a "freeze up" of the cooling system.

Compressor Level

It is important to maintain the A/C compressor in a level position. (See "Grading & Drainage" for information about settling.)

APPLIANCES

All appliances are warranted by their manufacturers, in accordance with the terms and conditions of the written warranties supplied by the manufacturers. The manufacturer's literature is collected during the Homeowner Orientation and should be read and retained for reference.

Additional information about appliance operation can also be found under the "Electrical" and "Plumbing" categories in this section of the manual.

Manufacturer

If a problem arises with an appliance, call the customer service number listed in the manufacturer's warranty. When reporting warranty items to the appliance manufacturer, be prepared to supply the following:

1. The date of purchase (closing or move-in date, whichever occurred first)
2. The serial and model numbers (found on a metal plate on the side or bottom of each appliance)
3. A description of the problem.

For your convenience, a chart is provided at the end of this section for recording the appliance serial and model numbers as well as manufacturer customer service phone numbers.

ATTIC ACCESS

The attic space is not intended for storage. Access is provided for purposes of maintaining mechanical equipment that may traverse the attic space. When performing any needed tasks in the attic, caution should be used not to step off wood members onto the drywall. This can result in personal injury and/or damage to the ceiling below.

BRICK

After several years, face brick may require "tuck-pointing" (repairing the mortar between the bricks). Otherwise, no regular maintenance is required.

CABINETS

Products such as Liquid Gold and Lemon Oil and Scratch Cover are recommended for caring for cabinets. **Avoid washing cabinets with water, as it will damage the luster of the finish.**

Hinges

If hinges catch, or drawer glides become sluggish, a small amount of lubricant will improve their action.

Color, Style

Your color selection sheets are your record of the brand, style, and color of cabinets in your home.

CAULKING

Time and weather will shrink caulking and dry it out so that it no longer provides a good seal against moisture and air infiltration. As a matter of routine maintenance, it is wise to check the caulking and make repairs as needed. Caulking compounds and dispenser guns are available at hardware stores.

Homeowner Maintenance

Re-caulking failed caulk joints is the homeowner's responsibility.

Silicone Caulk

Caulking that contains silicone will not accept paint, but will work best where water is present (for example, where tub meets tile or a sink meets a countertop).

Latex Caulk

Latex caulking is appropriate for an area that requires painting (along the stair "stringer" or where a counter top backsplash meets the wall).

Colored Caulk

Colored caulking is available where larger selections are provided.

Separations

Tile around bathtubs or countertops may appear to be pulling up after a time. This is caused by normal shrinkage of grout or caulk. If this occurs, the best remedy is to purchase "tub caulk" or premixed grout from a hardware store. Follow directions on the container. <u>This maintenance is important to protect the underlying surface from water damage.</u>

Sealing grout is a Homeowner option and responsibility. (See also, FLOOR COVERING)

CERAMIC TILE

Cleaning

The ceramic tile installed on walls or countertops in your home may be washed with any nonabrasive soap or detergent; abrasive cleaners will dull the finish.

CONCRETE

All concrete in your home has been installed in accordance with the recommendations of the consulting engineer.

Foundation

The foundation of your home has been designed and installed in accordance with the recommendations of our consulting soil engineer. The walls of the foundation are cast-in-place concrete with steel reinforcement rods.

Even though the foundation has been designed by an engineer and constructed in accordance with engineering requirements, cracks can still develop in the wall. Unless there is water seepage coming through such a crack, it is most likely a surface crack and will not be detrimental to the structural integrity of your home. If a crack develops in the foundation wall that allows water to come through, follow the procedures for submitting a warranty claim.

Flatwork

To properly care for your exterior concrete, always be aware of areas where water is collecting and fill these in. Do not allow downspouts to drain directly onto concrete or drain in such a way that the water will get under the concrete. **Seal any cracks in control joints or surface areas immediately with a flexible gray colored sealant.**

Cracks

Although we use accepted construction procedures for the installation of concrete flatwork, this does not guarantee there will be no cracking. In Colorado, some cracking in concrete occurs in almost all homes. **The warranty does not cover most concrete cracks**. Where cracking is covered by the warranty, the repair provided is sealing with concrete caulk. **Concrete is not replaced due to cracking**.

By maintaining good drainage away from your home, you are protecting both your home's foundation and exterior flatwork. Maintenance of drainage away from all concrete slabs will minimize cracking and other forms of movement. Cracks in slabs should be sealed with a waterproof concrete caulk to prevent moisture from penetrating to the soil beneath.

Cracking in the concrete flatwork is often caused by extreme cold. During the summer, moisture finds its way under the concrete along the edges, or through cracks in the surface. In winter, this moisture forms frost that can lift the concrete, increasing or causing more cracking.

Expansion Joints

Expansion joints have been used to help control expansion; however, concrete is also susceptible to shrinking, particularly where the humidity is very low as it is in Colorado. If the concrete shrinks, moisture can penetrate under the concrete and lift the expansion joint. If this occurs, you should fill the gap created with a gray silicone sealant which can be purchased at most hardware stores as soon as possible.

Ice, Snow, & Chemicals

Snow and ice must be removed from concrete slabs as promptly as possible after snow storms. Protect concrete from abuse by chemical agents such as pet urine, fertilizers, radiator overflow, repeated hosings, or de-icing agents, such as road salt that can drip from vehicles. All of these items can cause spalling of concrete, which is not warranted by Berkeley Homes. Repeated hosing of the garage slab can cause spalling and settling and is, therefore, not recommended.

A concrete sealer, available at paint stores, will help you keep an unpainted concrete floor clean. Do not use soap on unpainted concrete. Plain water or hot water and washing soda, or if necessary, a scouring powder should be used.

Sweeping/Cleaning

Do not wash patios, porches, drives, etc... with cold water from an outside faucet when temperatures are extremely high and the hot sun has been shining on the concrete. The abrupt change in temperature can damage the surface bond of the concrete. Sweeping is the much preferred method of keeping exterior concrete clean. If washing is necessary, do this when temperatures are moderate.

Cleaning of the garage floor by hosing can cause settling, spalling, and increase soil movement by allowing water to penetrate any existing cracks. Sweeping is the recommended method for keeping the garage clean.

Heavy Vehicles

Do not permit heavy vehicles such as moving vans, or concrete trucks to drive on your new concrete work. This concrete is not intended to bear the weight of this type of vehicle.

CONDENSATION

Condensation on interior surfaces of the windows and frames is the result of high humidity within the home and low outside temperatures, and/or inadequate ventilation. These conditions are significantly influenced by a family lifestyle. If your home includes a humidifier, closely observe manufacturer's directions, especially during periods of cooler temperatures.

COUNTERTOPS

Heat

Always use a cutting board when cutting, chopping, etc... Protect the counter from extremely hot pans: if you cannot put you hand on it, do not put it on the counter. Do not use countertops as ironing boards.

Cleaners

Avoid abrasive cleaners that will damage the luster of the surface.

Mats

Rubber drain mats can trap moisture beneath them causing the laminated plastic to warp and blister. Dry the surface as needed.

Seams Seams in plastic laminates need to be protected from water as much as possible. Do not allow water to pool on the seam or leave a wet cloth on the seam area. **Water damage to counter top seams is not warranted**

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Wax Wax in not necessary, but can be used to make counters gleam.

Caulking Due to our dry climate, the caulking around the edge of your countertops and between the countertops and the sink may shrink, leaving a slight gap. Refer to "Caulking" for maintenance hints for this condition.

DAMP-PROOFING & FOUNDATION DRAIN SYSTEMS

Your foundation walls have been coated on the exterior with a sprayed-on asphalt damp-proofing material. While every effort has been made to eliminate any seepage, during times of excessive moisture, some dampness may be noticed. Over time, natural compaction of soils in the backfill areas will usually eliminate this. Careful maintenance of positive drainage will also protect your basement from this condition. If you wish, you can apply a coat of "Thoro-Seal" or a similar product. Follow manufacturer directions carefully.

Foundation Drain Your home is equipped with one of two different types of foundation drain systems. These systems are designed to help reduce the amount of ground water that seeps under the foundation walls.

Interior Drain This drain is installed around the inside of the foundation and empties into a sump pit. It is the homeowner's responsibility to monitor the pit.

Exterior Drain This drain is installed around the perimeter of the foundation and empties into a sump pit in the crawl space. It is the homeowner's responsibility to monitor the pit and install or maintain the pump if necessary.

DOORS / LOCKS The doors installed in your home are of the highest quality, but they are wood products and subject to the natural characteristics of wood such as shrinkage and warpage.

Warping In the event a door warps slightly, keep it latched as much as possible and it often will return to normal.

Sticking The most common cause of a sticking door is the natural expansion of lumber due to changes in humidity. When sticking is due to swelling during a damp season, do not plane the door unless it continues to stick after the weather changes. Use sandpaper to smooth the door. Be certain to repaint the area of the door where it was sanded to seal

against moisture.

Before planing a door due to sticking, there are two other steps to try:

1. Apply either a paste wax, light coat of paraffin, or candle wax to the sticking surface
2. Tighten the screws that hold the door jamb or door frame.

Hinges — A squeaky door hinge can be remedied by removing the hinge pin and rubbing a lead pencil or graphite lubricant on it. Do not use oil as it can gum up.

Failure to Latch — If a door will not latch due to minor settling, you can correct this by making a new opening in the door for the latch (re-mortising) and raising or lowering the plate accordingly.

Bi-fold Doors — Interior bi-folds will sometimes stick or warp due to weather conditions. Applying a wax such as paraffin to the tracks of a bi-fold door can minimize this inconvenience.

Slamming — Slamming doors can damage both doors and jambs, and can even cause cracking in walls. Teach children not to hang on the doorknob and swing back and forth. This can work hardware loose and cause the door to sag.

Trim — Putty or filler can be used to fill any minor separations that may develop at mitered joints in door trim. Follow with painting.

Locks — Lubricate door locks with graphite or other waterproof lubricant. Avoid oil as it will gum up.

Berkeley Homes recommends that all exterior locks be re-keyed after customer has closed.

Keys — Keep a duplicate "privacy lock" key where children cannot reach it in the event a youngster locks himself/herself in a room. Some types of privacy locks can be opened with a small screw driver or similarly shaped device.

Exterior Finish — To insure longer life for your exterior doors, it is recommended that you refinish them annually.

Weather Strip — Weather stripping and/or any threshold supplied with exterior doors will occasionally require adjustment.

DRYWALL — Slight cracking, nail "pops" and/or seams may become visible in walls and ceilings. These occurrences are caused by the shrinkage of the wood and normal deflection of rafters to which the drywall is attached.

Repairs

Most drywall repairs can be easily made. This work is best done when the room is to be redecorated. To correct a nail pop, reset the nail with a hammer and punch. Cover it with "spackle", available at paint stores; apply two or three thin coats of spackle. When dry, sand the surface with fine grain sandpaper before painting. Indentations caused by sharp objects can be filled with spackle in the same manner.

ELECTRICAL

Control Panel: The master control panel that contains the electrical breakers for your home includes a "main" shut off that control all the electrical power to the home. In addition, individual breakers control the separate circuits. Be certain you are familiar with the location of the master control panel.

Each breaker is marked to help you identify which breaker is connected to which major appliance, outlets, or other service. Should a failure occur in any part of your home, always check the breakers in the main panel box.

Breakers

Circuit breakers have three positions: on, off, and tripped. When a circuit breaker trips, it must first be turned "off" before it can be turned "on". Switching the breaker directly from "tripped" to "on" will not restore service.

Switched outlets

Switched outlets are installed upside down so that they are easily recognized. Only one half is operated by the switch.

Outlets

If a wall outlet is not working, check first to see if it is one that is controlled by a wall switch. Next check the breaker. Many homeowners have experienced the embarrassment and expense of calling the electrician out only to have a bulb replaced or a switch turned on!

Breaker Tripping

Breakers will often trip due to overloading the circuit by plugging too many appliances into it, a worn cord or defective item, or operating an appliance with too high a voltage requirement. The starting of an electric motor can also trip a breaker. If any circuit trips repeatedly, unplug all items connected to it and reset. If it trips when nothing is connected to it, you need an electrician and the problem should be reported. If the circuit remains on, one of the items you unplugged is defective and requires repair or replacement.

GFI

GFI (Ground Fault Interrupter) receptacles have a built-in element which senses fluctuations in power, quite simply, the GFI is an indoor circuit breaker. Installation of these receptacles is required by building codes in bathrooms, kitchen, outside, and garage (areas where an individual can come into contact with water while holding an electric appliance or tool). Heavy appliance such as freezers or power tools will trip the GFI breaker. **Do not plug a refrigerator or food freezer**

into a GFI controlled outlet; the likelihood of the contents being ruined is very high; such damage is NOT covered by the limited warranty.

Each GFI receptacle has a test and reset button. Once each month, the test button should be pressed. This will trip the circuit. To return service, press the reset button. If a GFI breaker trips during normal use, it may be an indication of a faulty appliance and some investigation is in order**. An important point to remember is that one GFI breaker can control up to four or five outlets.**

Unused Outlets

If there are small children in the home, install safety plugs to cover unused baseboard outlets. This also minimizes air infiltration that can sometimes occur with these outlets. Teach children never to touch electrical outlets, sockets, or fixtures.

Buzzing & Dimming

Fluorescent fixtures use transformer action to operate. This action sometimes causes a buzzing. If the buzzing is excessive, the cause is most likely low voltage. Similarly, lights dimming when the dishwasher, the disposal, or the furnace operates is another indication of this condition. This is the result of increased load on the utility lines. This is not an unusual condition in newly developed areas. The utility company can check the voltage on lines in your area if you call to report this condition. Voltage can be increased by the utility company if needed.

Ground

Your electrical system is a three-wire grounded system. Never remove the bare wire, which connects to the box or device.

Underground Cables

In areas with underground utilities, before digging or moving large amounts of soil, check the location of buried service leads. In most cases, wires run in a straight line from the service panel to the nearest public utility pad. Care should be taken to keep soil around the foundation from settling to protect this service; avoid large amounts of water at this point as well.

Modifications

Do not tamper with or add to your electrical system. For any modification that is needed, contact the electrician listed on your "Emergency Phone Numbers" sticker referred to at the end of the Homeowner Orientation section of this handbook or another licensed electrician.

EXPANSION &CONTRACTION

All building materials are subject to expansion and contraction caused by changes in temperature and humidity. Dissimilar materials expand or contract at different rates. This results in separation between materials, particularly dissimilar ones. The effects can be seen in small

cracks in drywall and in paint, especially where moldings meet drywall, at mitered corners, where tile grout meets tub or sink, etc... This can be alarming to an uninformed homeowner, but, in fact, it is very normal. Shrinkage of the wood members of your home is inevitable. This will occur in your home. It will be most noticeable during the first year, but may continue beyond that time. In most cases, paint and caulking is all that is needed to conceal this minor evidence of a very natural phenomenon. **Properly installed caulking will shrink and must be maintained by the homeowner.**

FIREPLACE

Berkeley Homes installs gas fireplaces in your home. Your fireplace is checked during the Homeowner Orientation to confirm it is operational. Be aware of a delay between turning the switch on and flame ignition. The flames should ignite gently and silently. Read and follow all manufacturer directions.

If you notice any deviation in this and any gas smell, shut the switch off immediately and report it to us. Your gas provider will also check any unusual gas smells free of charge, but will not provide any repairs.

FLOOR COVERING

Refer to manufacturer's recommendations for additional information on the care of all floor covering products.

Carpet

Vacuuming high traffic areas daily will not only keep them clean, but will help to maintain the upright position of the nap. Spills should be wiped up and stains spot cleaned immediately. Carpet cleaning should be performed at regular intervals; for most lifestyles, annually is appropriate.

Resilient Flooring

Your new home may have been equipped with resilient floors in areas such as the kitchen and bathrooms due to their convenient maintenance requirements and resistance to wear.

Although resilient floors are designed for minimum care, they do vary in maintenance needs. All resilient floors require some regular application of a good floor finish. This assures you of retaining a high gloss. **However, no cleaning or finishing agents should be used on the new floor until the adhesive has set thoroughly**. This takes about two weeks.

No Wax

Much of the vinyl flooring installed is advertised to require "no waxing". "No-wax" vinyl is coated with a clear, tough coating which provides both a shiny appearance and a wearing surface. Even this surface will scuff or mark. Follow the manufacturer's specific recommendations for care and cleaning of all your hard surface floors.

Limited Water

Wipe up spills and vacuum crumbs instead of washing resilient floors frequently with water. Mopping or washing with water should be

	limited; excessive amounts of water on resilient floors can penetrate seams and get under edges causing the material to lift and curl.
Scrubbing & Buffing	Frequent scrubbing or electric buffing is harder on floors that regular foot traffic. Use acrylic finishes often if you scrub or buff.
Moving Appliances	Use extreme caution when moving appliances across resilient floor covering. Tears and wrinkles can result. Coasters should be installed on furniture legs to prevent permanent damage.
Raised Nail Heads	Raised nail heads are the result of movements of the floor joist caused by natural shrinkage and deflection. Special nails have been used and the underlayment has been glued to help minimize this movement. If a nail head becomes visible through resilient flooring, place a block of wood over it and hit the wood with a hammer to reset the nail.
Shrinkage	Flooring of any type will shrink and seams may actually separate slightly due to this shrinkage.
Seam Lifting	Seams can lift or curl if excessive moisture is allowed on the floor. A special caulking can be used at tub or floor joints to seal seams at those locations. Precautionary measures should be taken to avoid getting water on the floor from baths and showers.
Ridges	The joints of sub-floor (sheets 4' x 8') have been sanded and filled to minimize the possibility of ridges showing through resilient floor coverings. Some ridging is unavoidable, however, and there is no recommended maintenance attention for this condition.

Hardwood Floor

Humidity	Wood floors will respond noticeably to changes in humidity level in the home especially in the winter. A humidifier will help but will not completely eliminate this reaction.
New Wood Floors	Wood floors will exhibit the following traits: When new, small splinters of wood will 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 wet repeatedly or is thoroughly soaked even one time. A dulling of the finish in heavy traffic areas is likely; a white, filmy appearance is caused by moisture (often from wet shoes or boots).
Spills	Food spills should be cleaned up in a timely manner using a very dry cloth.
Shoes	Shoe marks can be removed using a spot application of a household cleaner and a non-abrasive scrubbing pad. Keep high heels in good

repair. Heels which have lost their protective cap (thus exposing the fastening nail) will exert over 8,000 pounds of pressure per square inch on the floor. That's high enough to damage hardened concrete; it will mark your wood floor.

Mats

Use protective mats at the exterior doors to help prevent sand and grit from getting on the floor. **Gritty sand is wood flooring's worst enemy. Be aware that yellowing of the surface can result from rubber backing on area rugs or mats.**

Furniture Legs

Install proper floor protectors on furniture legs used on hardwood floors. Protectors will allow chairs to move easily over the floor without scuffing. Clean the protectors on a regular basis to remove any grit that may accumulate.

Cleaning

Vacuum regularly. When the household carpets are vacuumed, vacuum the hardwood floor. Sweep on a daily basis or as needed.

Follow all manufactures recommendations in regards to the care and maintenance of the prefinished hardwood installed in your home. This information was provided to you when you selected the interior colors at the design center.

Ceramic Tile

This in one of the easiest of floor coverings to care for. Simply vacuum when needed.

Cleaning

Occasionally a wet mopping with warm water may be appropriate. Do not add detergent to the water. If you feel a cleaning agent is required, use a mild solution of warm water and dishwasher crystals (they will not result in a heavy, difficult to remove later on the grout). Rinse thoroughly.

Separations

It is natural for slight separations to occur in the grout between tiles. This grout is for decorative purposes only; it does not hold the tile in place. Cracks in the grout can be filled using premixed grout which can be purchased from flooring or hardware stores. Follow package direction.

Grout Discoloration

Grout that becomes yellowed or stained can be cleaned with a fiber brush, cleanser and water.

Grout Sealer

It is highly recommended that a silicone grout sealer be applied to all floor tile grout as soon as you move in. **Reapply this sealer about once every six months**.

GARAGE OVERHEAD DOOR

Safety

Since the garage door is a large, moving object, periodic maintenance along with following the manufacturer's instruction will insure safe and reliable operation.

Do not allow anyone except the operator near the door when it is in motion. Keep hands and fingers away from all parts of the door except the handle. Do not allow children to play with, or around, the door.

For your safety, after the expiration of the one-year warranty, have any needed adjustments made by a qualified specialist. The door springs are under a considerable amount of tension and require special tools and knowledge for accurate and safe servicing. Have the door inspected after any significant impact to the door.

30 Weight Oil

Every six months, a 30 weight automobile oil or similar lubricant should be applied to all moving parts: track, rollers, hinges, pulleys, and springs. At this time interval, check to see that all hardware is tight and operating as intended without binding or scraping.

Sag

It is a normal condition of the garage door to sag somewhat due to its weight and span. This will stabilize after the panels have dried thoroughly.

Opener

If an electric door operator is installed, be sure the door is completely unlocked and the pull down rope has been removed before using the operator.

Painting

The garage door should be repainted when the home is repainted or more often if needed to maintain a satisfactory appearance.

Lock

If the lock becomes stiff, a graphite lubricant will make it work more easily. Do not use oil on a lock as it will stiffen in winter and make the lock difficult to operate.

GAS SHUT OFFS

There is a shut off on the gas line at or near its connection to each item that operates on gas. In addition, there is a main shut off at the meter. These are pointed out during the Homeowner Orientation. If you suspect a gas leak, leave the home and call the gas company immediately for emergency service.

GRADING & DRAINAGE

The final grades around your home have been inspected and approved for proper drainage of your lot and drainage certification is done by our subcontracted engineer. Inspections are made by FHA and VA and the local building authorities as well as our construction superintendent.

Positive Drainage

IT IS ESSENTIAL THAT YOU MAINTAIN THE SLOPES AROUND YOUR HOME TO PERMIT THE WATER TO DRAIN AWAY FROM THE HOME AS RAPIDLY AS POSSIBLE. FAILURE TO DO SO CAN RESULT IN MAJOR STRUCTURAL DAMAGE AND WILL VOID YOUR WARRANTY.

During construction, it is necessary to excavate an area larger than the foundation of your home. In addition, some trenching is necessary for installation of utility lines. Although the soil is replaced and re-compacted, it does not return to its original density. Some settling will occur, especially after prolonged heavy rainfall or melting of considerable amounts of snow. This can continue to occur for the first few years you are in your home, depending on the amount of precipitation that occurs and other factors.

Inspect the perimeter of your home regularly for signs of settling.

Roof Water

Do not remove the splash blocks and/or downspout extensions from under the downspouts. Keep these in place at all times, sloped so the water drains away from your home quickly.

GUTTERS & DOWNSPOUTS

Cleaning

Gutters must be checked periodically and cleared of leaves or other wind deposited debris. Materials that accumulate in gutters can slow the process of draining water from the roof, cause overflows, or clog the downspouts.

Ladders

Do not lean ladders against gutters.

Paint

Gutters and downspouts are painted to match your home. They should be repainted when you repaint your home.

Leaks

If a joint between sections of gutter drips, caulk the inside joint using a commercial gutter caulking compound available at hardware stores.

HEATING SYSTEM

The heating system installed in your home will provide you with many years of comfort if given proper care and maintenance.

Furnished Home

The heating system design was planned with a furnished home in mind. If you move in during the cooler part of the year and have not yet acquired all of your draperies and furnishings, the home may seem cooler to you than you would expect.

Thermostat

The furnace will come on automatically when the setting on the thermostat registers below the setting you have selected. Setting the thermostat to a higher temperature will not heat the home faster.

Thermostats are calibrated to within plus or minus 5 Degrees.

Manufacturer Directions Good maintenance of the furnace can save energy dollars as well as prolong the life of the furnace itself. Carefully read and follow the manufacturer's literature on use and care.

Troubleshooting **No Heat Check List**

If you find yourself with no heat, please check the following before contacting Berkeley Homes or the heating contractor.

❑ The thermostat is set appropriately.	The system switch must be on heat and the fan switch should be on "auto."
❑ The manual switch is on.	Light switch located in a metal box on or close to the furnace.
❑ Bottom cover is firmly in place.	This cover is required to engage a safety switch.
❑ Electric breaker is on.	A tripped breaker must be turned all the way off and then back on to re-set.
❑ Gas and Electric	The furnace will not operate with out gas and electric service. Check with your utility provider if these services are out.

Filter Remember to change or clean the filter monthly during the heating season (all year if you also have air conditioning.) A clogged filter can slow air flow and cause cold spots in your home. **Although it takes less than one minute to change the filter, this is one of the most frequently overlooked details of normal furnace care**. Buy filters in large quantity for the sake of convenience.

Adjust Heat Vents Experiment with the adjustable registers in your home to establish the best heat flow for your lifestyle. Generally, heat can be diminished in seldom used or interior rooms. However, this is a very individual matter and you will need to balance the system for your family's comfort.

Return Air Vents For maximum comfort and efficient energy use, place furniture and draperies to allow unobstructed air flow from registers and cold air returns.

Trial Run Have a trial run early in the fall to test the furnace. (The same applies to A/C in the spring.) If service is needed, it is much less inconvenient

to discover it prior to the heating season.

Temperature Variations

Normal temperature variations from floor to floor, or room to room (depending on the style of your home) can be as much as 10 degrees or more on extremely cold days. The furnace blower will typically cycle on and off more frequently and for shorter periods of time during severe cold spells. **Always leave bedroom doors open to allow for proper air circulation**.

Do Not Overheat

You new home should not be overheated. Overheating can cause excessive shrinkage in framing lumber and may materially damage the home. In the beginning, use as little heat as possible and increase it gradually.

Odor

It is normal for the heating system to emit an odor for a few moments when it is first turned on and after an extended period of not being used (such as after the summer months if you do not use the air conditioning.) This is caused by dust that has settled in the ducts and should pass very quickly.

Gas Odor

If you smell gas, call gas provider.

Combustion Air

Furnaces and water heaters have combustion air vents ran to them. Never cover these or block the cold air in any way. Outside air is needed to supply the furnace with sufficient oxygen. Closing or blocking the combustion air vent will cause the furnace to draw air down the vent pipe and pull poisonous gasses back into your home.

Ductwork Noise

Some popping or pinging sounds are the natural result of ductwork heating and cooling in response to air flow as the system operates.

WATER HEATER

See "Plumbing"

INSULATION

The effectiveness of blown insulation is diminished if it is uneven. The last step in any work done in your attic (for example, the installation of a TV antenna) should be to check that the insulation lays smooth and even. (Do not step on drywall ceilings, personal injury or damage to drywall can result.)

LANDSCAPING

Backfill

The foundation of your home is constructed beginning with an excavation into the earth. When the foundation walls are complete, the area surrounding them is backfilled with earth. This area is not as compact and dense as undisturbed ground.

Water can penetrate through the backfill area to the lower areas of your foundation. This can cause potentially severe problems such as cracks

in foundation walls and floor slab movement. This can be avoided through proper installation of landscaping and good maintenance of backfill drainage. See also "Drainage" & "Foundation."

Backfill areas will settle and require prompt attention to avoid damage to the structure and possibly voiding of the warranty.

Downspout extensions should be kept in the down position so that roof run-off is channeled well away from the foundation area of the home. Routine inspection of downspouts, backfill areas, and other drainage components is an excellent maintenance habit.

First 6

NO GRASS, PLANTS OF ANY TYPE OR SPRINKLER HEADS SHOULD BE PLACED WITHIN SIX (6) FEET OF YOUR HOME.

Publication 43

Carefully study the booklet titled "A Guide To Swelling Soils For Colorado Homebuyers and Homeowners" as well as the individual soil report for your particular lot prior to installing your landscaping.

Utility Lines

Settlement will not disturb your utility lines; however, you may see a slight depression develop in the front lawn along the line of the utility trench. To correct this, roll back the sod and spread top soil underneath to level the area, then relay the sod.

Xeriscape

Berkeley Homes recommends careful consideration of landscape design and selection of planting materials to minimize the demands of your yard on water supplies. Information on Xeriscape (low water maintenance) designs is available from all reputable nurseries. This has the triple benefit of helping the environment, saving on water bills, and reducing the amount of moisture that can reach your foundation.

Additional Guidelines

In addition, the following guidelines may assist you in making landscaping choices.

Plant Selection

Plant with regard to your local climate. Consider ultimate size, shape, and growth of the species.

Planning

Locate plants and irrigation heads out of the way of pedestrian/bicycle traffic, and car bumpers.

Space groves of trees or single trees to allow for efficient mowing and growth. Prune woody plants as needed.
Group Plants with similar water, sun, and space requirements together.

Irrigation

Berkeley Homes has provided an irrigation system with your front yard landscaping, keep in mind that this system is designed for the front yard only and is not intended to accommodate future rear yard irrigation needs.

The homeowner must also make provisions for efficient irrigation; drain and service sprinkler systems on a regular basis. Conduct operational checks on a weekly basis to ensure proper performance of the system.

Sprinkler heads should be directed away from the home and kept eighteen inches from all concrete flatwork. Trickler or bubble type irrigation systems are not recommended for use adjacent to the structure.

Soil Mix Provide good soil mixes with sufficient organic material.

ALWAYS MAINTAIN A PROPER SLOPE AWAY FROM YOUR HOME TO MAINTAIN EFFICIENT DRAINAGE PER YOUR STRUCTURAL WARRANTY RECOMMENDATIONS.

Apply appropriate fertilizer, weed and pest controls, etc..., as needed for optimum growth. Investigate organic compounds for additional protection of the environment.

Bark/Rock Beds Do not allow edgings around decorative rock or bark beds to dam the free flow of water away from the home. A non-woven membrane, such as Typar or Mirafi, can be used between the soil and rock or bark to restrict weed growth while still permitting normal evaporation of ground moisture.

Additions Prior to the installation of patio additions or other permanent improvements, the soils report should be reviewed so that soil conditions are taken into consideration in the design or engineering of your addition.

City Requirements Check with your local building department prior to designing and installing any landscaping for any specific regulations you may be required to follow.

Homeowner Assoc. Be sure to check your homeowner association guidelines and/or requirements prior to landscaping or making changes in an established design.

Waiting to Landscape Generally, Berkeley Homes installs front yard landscaping only, leaving the responsibility for the backyard to the Homeowner. Ground left unlandscaped too long will erode. Any erosion due to the Homeowner's untimeliness in landscaping will not be Berkeley Homes' responsibility to bring back to the correct grade.

MIRRORS To clean your mirrors, use any reliable liquid glass cleaner or polisher available at most hardware or grocery stores. Avoid splashing water under the mirror. The moisture will cause the silvering to deteriorate.

PAINT / STAIN

Interior

Interior Paint — The walls, woodwork, and doors of your home have been decorated with the finest paint products and should give you long service if cared for properly.

Touch-ups — When doing paint touch-ups use a small brush, applying paint only to the damaged spot. Touch-up may not match the surrounding area exactly, even if the same paint mix is used.

Stain — For interior stain touch-ups, Old English Furniture Polish and Scratch Cover is inexpensive, easy to use, and blends in with the wood grain. Follow directions on bottle when using.

Wall Cracks — Do not attempt to fix drywall cracks or other separations due to shrinkage until after the first heating season. See "Drywall" for additional information concerning repairs.

Exterior

Surface Preparation — When you wish to repaint any exterior wood work on your home, the blistered or peeling portions should be prepared with a wire brush or scraped with a putty knife, sanded, and spotted with primer. All cracked caulking should be redone with any loose caulk being removed. Then the entire areas can be painted. Be certain to apply a top quality exterior paint that has been formulated for hot sun and low humidity.

Severe Weather — Regular painting and repair will preserve the beauty of and add value to your new home. Hail and wind can cause a great deal of damage in a severe storm and the house should be inspected after such weather. Damage caused by severe weather should be reported to your insurance company promptly.

PLUMBING — Plumbing installation and its operation generally give the new homeowner little trouble.

Shut Offs — Your main water shut-off is located in your basement. It is important to know and remember the location of the shut-off for emergencies such as a water line freeze, break, or leak. It is also helpful to know if you install a lawn sprinkler system or if you plan an addition to your home.

Sprinklers — A Homeowner installed sprinkler system is your responsibility. One installed by Berkeley Homes is covered under the one-year warranty. (See the sprinkler maintenance requirements at the end of this section.)

Freezing Pipes — *Prevent*
Provided the home is heated at a normal level, pipes should not freeze.

Heat should be set at 65 degrees if your are away during winter months. Garage doors should be kept closed to protect plumbing lines which may run through this area. In unusually frigid weather or if you will be gone more than a day or two, open cabinets doors to allow warm air to circulate around pipes.
An ordinary hair dryer can be used to thaw pipes that are frozen. Never use an open flame.

If you leave the home unheated during late fall, winter, or early spring, be sure to drain all water lines and fixtures.

Aerators

Even though your plumbing lines have been flushed out to remove dirt and foreign matter, there are usually small amounts of minerals that enter the line. Aerators on the faucets strain most of this from your water. However, minerals, etc... caught in these aerators may cause the faucets to drip because washers wear more rapidly when they come in contact with foreign matter. (See "Dripping Faucet" for additional information.)

Laundry Tub

If you have a laundry room tub, the faucet does not have an aerator. This is to allow the tub faucet to accept a hose connection.

Care and Cleaning

Porcelain & Fiberglass

Follow manufacturer's directions for cleaning fiberglass and porcelain fixtures. Abrasive cleaners will remove the shiny finish, leaving fiberglass behind a porous surface that is difficult to maintain. A spray disinfectant or a liquid detergent is usually recommended. For stubborn stains, you can use a solvent like turpentine or paint thinner, without harming the surface.

Porcelain

Porcelain enamel can be damaged by a sharp blow from a heavy object. It can also be scratched. Do not stand in the bathtub wearing shoes unless you have placed a protective layer of newspaper over the bottom of the tub. If paint is splattered onto the porcelain enamel surfaces during redecorating, it should be wiped up immediately. If some spots are dry before being noticed, use a recommended solvent.

Stainless Steel

Stainless steel sinks should be cleaned with soap and water to preserve their luster. Do not use abrasive cleaners; these will damage the finish. An occasional cleaning with a good stainless steel cleaner will enhance the finish. Care should be taken to avoid leaving produce on a stainless steel surface since prolonged contact with produce can stain the finish.

Marble

Man-made "marble" possesses a natural resilience and will not chip as readily as will porcelain enamel. Equal care should be given, however. You should not use abrasive cleanser or razor blades on man-made marble since both will cause certain damage to the surface.

Fixtures	Clean plumbing fixtures with a soft sponge and soapy water, then polish with a dry cloth. Drying with a soft cloth or towel will prevent water spots.
Gold/Antique Brass	Gold fixtures and antique brass on lavatories should not be cleaned with an abrasive cleaner. Use only mild soap and water.
Toilet Seat Cover	Do not stand on the toilet seat cover. It is not designed for this purpose and may crack.
Tank Care	Similarly, avoid exposing the toilet to blows from sharp or heavy objects; this can cause chipping or cracking. Avoid abnormal pressures against the sides of the tank. It is possible to crack the tank at the points where it is attached to the bowl.
Dripping Faucet	A dripping faucet may be repaired by shutting off the water at the valve directly under the sink, then remove the faucet stem, change the washer, and reinstall the faucet stem. The shower head is repaired the same way. It is important to replace the washer with another of the same type and size. The frequency of this repair can be minimized by remembering not to turn faucets off with excessive force.
Copper Pipe	Copper pipe should be maintained by running water through each faucet for approximately one minute each week to minimize stagnation.
Diminished Pressure	It will occasionally be necessary to remove and clean the aerators on faucets and shower heads to allow proper flow of water, normally every three to four months is sufficient.
Leaks	If a major plumbing leak occurs, the first step is turn off the supply of water to the area involved. This may mean shutting off the water to the entire home. Then contact the appropriate contractor.
Running Toilet	To stop running water, check the shut-off float in the tank. You will most likely find it has lifted too high in the tank, preventing the valve from shutting off completely. The float should be free and not rub against any surface. Also check the chain on the flush handle; if it too tight, it will prevent the rubber stopper at the bottom of the tank from sealing resulting in running water.
Clogs	Many plumbing clogs are caused by improper garbage disposal use. Always use plenty of cold water when running the disposal. This applies to grease also. Supplied with a steady flow of cold water, the grease congeals and is cut up by the blades. If you use hot water, the grease remains a liquid, then cools and solidifies in the sewer line.

Allow the water to run a minimum of 15 seconds after shutting off the disposal.

Clogged traps can usually be cleared with a plumber's helper (plunger). If you use chemical agents, follow directions carefully to avoid injury or damage to the fixtures or personal injury.

Clean the drain stopper, usually found in bathroom sinks, by loosening the nut under the sink at the back, pull out the rod attached to the plunger and lift the stopper out. Clean and return the mechanism to it's original position.

The toilets that builders are required to install are low volume "water saver" toilets. Due to the low volume of water per flush, you may have to flush a number of times and still experience more clogs. The main causes of toilet clogs are various domestic items such as paper diapers, excessive amounts of toilet paper or the wrong type of paper, sanitary supplies, Q-Tips, dental floss, children's toys, etc...

Sill Cocks (Outside Faucets) Outside faucet are "freeze proof", but in order for this feature to be effective, hoses must be removed after each use. If a hose is left attached, the water that remains in the hose can freeze and expand back into the pipe, causing a break in the line. Repair of a broken line to an exterior faucet is a maintenance item**. Berkeley Homes does not warrant sill cocks against freezing**.

Water Heater Carefully read the manufacturer's instructions for your specific brand and model of water heater.

Safety The area around a gas-fired water heater should be vacuumed as needed to prevent dust from interfering with proper flame combustion. The top of a gas-fired water heater should never be used as a storage shelf.

Temperature Set the water heater thermostat at the recommended setting; higher settings waste energy. The recommended thermostat setting for normal everyday use is "normal" on gas models and "140 degrees" on electric models.

Energy Savings Cold water clothes washing techniques and short duration showers can save considerable energy.

Pilot Never light a gas pilot or turn on electricity when the heater tank is empty. Always turn off the gas or electric power before shutting off the cold water supply (located at the top of the tank.)

To light the hot water heater pilot, first remove the cover panel on the tank to expose the pilot. Then rotate the on/off/pilot knob to "pilot." When the knob is in this position, the red button can be depressed.

While depressing the red button, hold a match at the pilot. Once the pilot lights, continue to hold the red button down for 30 to 60 seconds. When you release the red button, the pilot should stay lit. If it does not, wait several minutes to allow the gas to dissipate from the tank and repeat the entire process again. If it stays lit, rotate the on/off/pilot knob to the "on" position.

Reinstall the cover panel and then adjust the temperature setting with the regulating knob on the front of the tank. Water heaters sometimes collect small quantities of dirt and scale in the main gas lines which may put out the pilot light.

Condensation — Condensation inside your new water heater will in many cases cause a small drip onto the burner flame. This causes no harm and in most cases will disappear in a short period of time.

Drain Tank — Review and follow manufacturer's timetable and instruction for draining several gallons of water from the bottom of the water heater. This helps to prevent build-up of chemical deposits from the water and prolongs the life of the tank as well as saving energy dollars.

No Hot Water — If you discover you have no hot water, check the pilot, temperature setting, and water supply valve before calling for service. Refer to the manufacturer's literature for specific locations of these items and other troubleshooting information.

ROOF — Fine quality roofing has been installed on your home and will last for many years, free from care. A few reminders on the maintenance of your roof could save a great deal of expense and discomfort in the future.

Limit Walking — Limit walking on your roof. The weight and movement will have a tendency to loosen and break the integrity of the roofing material which can in turn result in leakage. Never attempt to walk on the roof of your home when shingles are wet--they are extremely slippery.

During hot weather, composition shingles will be soft and pliable and they can be damaged; extremely cold weather will make them brittle and similarly subject to damage.

Severe Weather — After severe storms, a visual inspection of the roof for damages is called for. Notify your homeowner's insurance company if damage is noted.

Clean Gutters — Maintain the gutters and downspouts so that they are free of debris and able to quickly and efficiently drain precipitation from the roof.

Leaks — When a leak is noticed, try to detect the exact location; this will greatly

simplify locating the area that requires repair when the roof is dry.

SMOKE DETECTOR

Smoke detectors are electric with a 9 volt transistor battery backup. Read the manual from the manufacturer for specific instruction on the proper care of your smoke detector.

Cleaning

Your smoke detector should be blown or vacuumed out to prevent a false alarm at least once each year. For your safety, it is important that this device be kept clean and in good operating condition.

STAIRS

All the stairs used in the construction of our homes are factory fabricated, glued and nailed. There is not a known method of installation that will prevent vibration in a staircase when used by adults. Often there will be a slight shrinkage where the stairs meet the wall. When this occurs, a thin bead of latex caulk can be applied and when dry, painted to match the wall.

VENTS

A sheet of plastic can be placed over the insulation in the attic in front of vents to protect ceilings from driving rain/snow. Be cautious in placing the plastic as not to displace insulation or step off wood members onto drywall.

The crawl space vents in your home will automatically open and close as the temperature changes. In the winter it is a good idea to place a piece of insulation over the vent to keep the cold out.

WINDOWS, SCREENS & PATIO DOORS

During heavy rains, water may collect in the bottom channel of window frames. Weep holes are provided to allow excess water to escape to the outside. Keep the bottom window channels and weep holes free of dirt and debris for proper operation.

Cleaning

Once a month, clean metal or vinyl surfaces with warm, clear water. Do not use any powdered cleaner. After each cleaning, apply a silicone lubricant.

Ventilation

Proper ventilation will prevent excessive moisture from forming on the inside of the windows. This helps reduce cleaning chores considerably.

Condensation

Condensation on interior surfaces of the window and frame is the result of high humidity within the home and low outside temperatures. The humidity level within the home is largely influenced and controlled by your family's lifestyle.

Storing Screens

Many homeowners prefer to remove and store screens for the winter to allow more light into the home. Use caution in removing screens. They are easily perforated and the frames are bent if not handled with care.

Sticking Windows

Most sliding windows (both vertical and horizontal) are designed for a ten pound pull. If sticking occurs or excessive pressure is required to open or close the window, a silicone lubricant should be applied. This is available at most hardware stores. **Do not use a petroleum base material**.

Door Tracks

Patio door tracks must be kept clean to allow smooth operation and prevent damage to the door frame. Paraffin is a good lubricant for these tracks.

Door Locks

Sliding doors lock from the inside only; there is not key. Acquaint yourself with the operation of the door hardware for maximum security.

Invisible

Under certain lighting conditions, door glass may be hard to see. If you keep the screen fully closed when the glass door is open, everyone will be accustomed to opening something before going through.

Broken Glass

If any panes of glass become broken, you should contact a glass company for reglazing. Glass is very difficult to install without special tools. **Berkeley Homes is not responsible for broken windows after occupancy unless they were noted on the orientation list.**

WOOD TRIM

Separation of wood trim from the adjacent material is a normal result of shrinking which can require caulking and/or touch-up painting as a repair. It is a good idea to wait until after the first heating season and make all such repairs at one time when redecorating.

Wood will shrink less lengthwise than across the grain. In an area of low humidity, such as Colorado, all lumber is more vulnerable to shrinkage than in more humid climates. Shrinkage may cause a piece of trim to pull away from the wall. Drive another nail in close to the existing nail hole (but not in it.) Fill the old nail hole with putty and touch-up with paint as needed.

If the base shoe (small trim between base molding and the floor) appears to be lifting from the floor, this is probably due to slight shrinkage of the floor joists below. Similar to a piece of trim that is pulling away, this can be corrected by removing the old nails and re-nailing. It is best to wait until you are redecorating to do this. Shrinkage may occur during the first two years or longer, depending on weather, the temperature you maintain in your home, and whether or not you have a humidifier.

During a damp period, some swelling may occur. In most cases, this will not be noticeable except where a door may fit more tightly than usual (see "Doors".)

SPRINKLER SYSTEM WINTERIZATION

Backflow prevention assemblies must be drained for the winter where freezing temperatures may occur. If water inside the assembly should freeze, damage to the assembly and the system may occur. Proper draining procedures must be followed to avoid this problem Berkeley Homes neither warrants or accepts responsibility for frozen sprinkler systems.

DRAINING PROCEDURE (See Diagram)

To drain the backflow prevention assembly for protection against freezing, use the following procedures:

1. Turn off the main shut-off value (A), which provides the water to the system. (This valve is located inside the house.)
2. Open all inlet and outlet drain valves on the system (B & E). (Some systems have two-inlet valve (B); both must be open.) Open inlet and outlet shut-off valves on backflow prevention assembly (C & D) and all testcocks (F). Leave valves C& D in half open/half shut (45 degree) positions to allow for full drainage of ball valve shut-off.
3. Drain the sprinkler piping system and heads downstream of the backflow prevention assembly.

   MANUAL SYSTEM – Open all zone valves to allow water to drain from sprinkler heads.
   AUTOMATIC SYSTEM – Allow the clock to operate each zone for a full cycle at least two (2) times to allow water to drain from sprinkler heads.

IMPORTANT: Be sure that all drain valves (B & E) and testcocks (F) are left in the open position for the winter to prevent freezing.

The above procedure will allow your system to drain by gravity.

Should you elect to "blowout" the piping system downstream of the backflow prevention assembly make sure the outlet drain valve (E) is open and the backflow prevention outlet shut-off valve (D) is closed. Connect an air line to the outlet drain valve (E) and introduce air of adequate volume to clear downstream system of water.

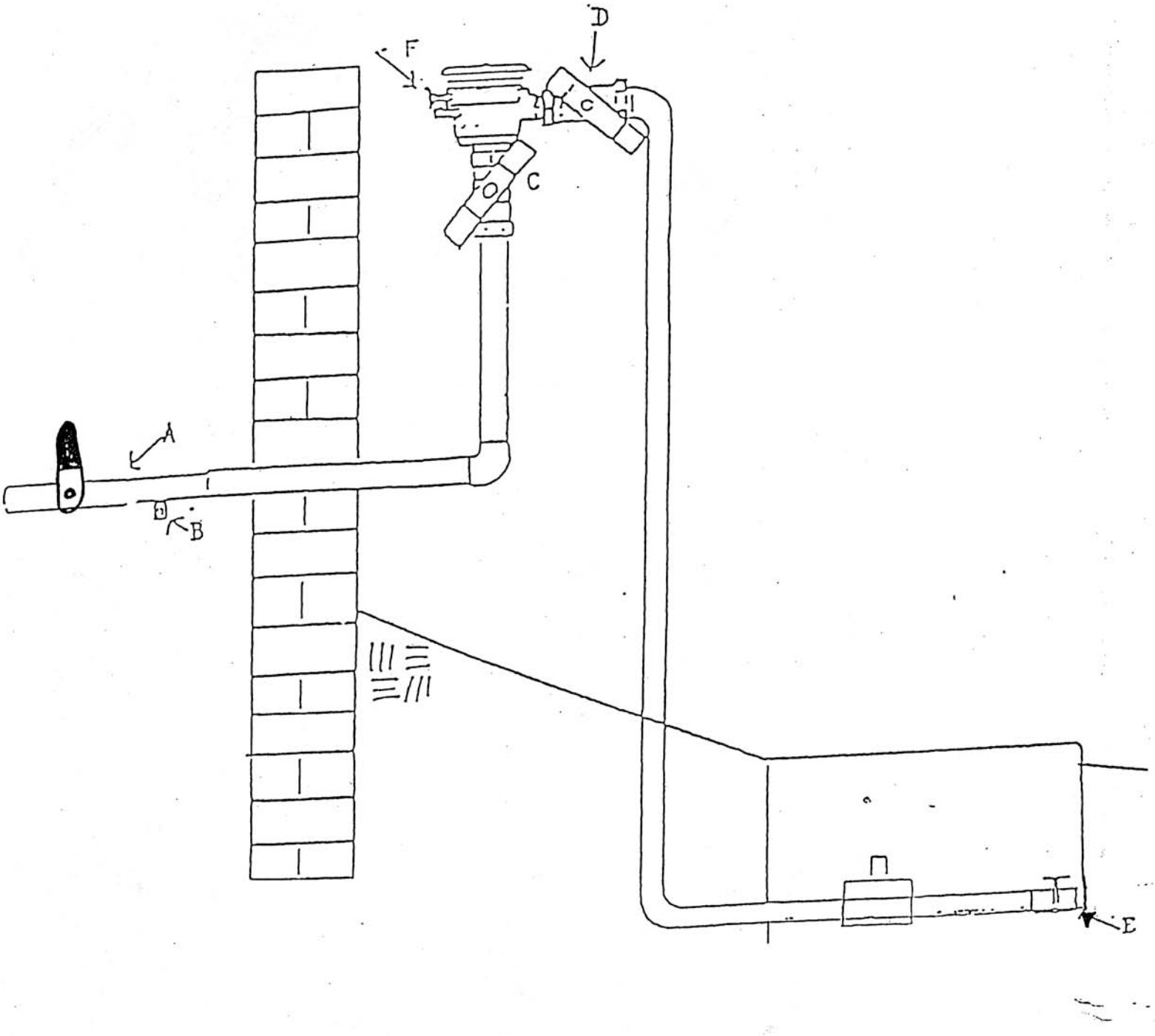
IMPORTANT: Open outlet shut-off valves to the backflow preventor assembly (C & D) to a half open/half closed (45-degree) position after blowout procedure is complete. Leave all drain valves (B & E) and testcocks (F) open for the winter to prevent freezing.

IMPORTANT: When finished, make sure main shut-off valve (A) remains closed to prevent accidental refilling of the system.

SPRINKLER SYSTEM START-UP

1. Close valves C, D, and F.
2. Close drain E.
3. Close bleed valve B.
4. Open A **slowly** – water should run for approximately 10 seconds since valve C is closed.
5. Slowly open valve C. There will be a small amount of water that comes out of the top of the vacuum breaker. This will stop after the vacuum breaker has been pressurized. Do not be alarmed about water coming out.
6. Slowly open valve D. This concludes the start-up of your irrigation system. Please turn on all valves manually in your garage and check out for any winter damage.

Sprinkler System Detail



Sprinkler System Winterization

Backflow prevention assemblies must be drained for the winter where freezing temperatures may occur. If water is left inside the assembly during days of low temperature and wind chills the system will be damaged. Proper draining procedures must be followed to avoid this problem. Berkeley Homes neither warrants nor accepts responsibility for frozen sprinkler systems.

Draining Procedure (See Diagram)

1) Close the stop and waste valve that is located in your front yard, [redacted] This should be performed in early fall. South Adams Water and Sanitation will shut off the water at the irrigation meter.
2) Position valves A & B in a half open / half shut (45 degree) position to allow for the ball valves to fully drain.
3) Open the two test cock valves (C) located on the side of the backflow assembly.
4) Open the outlet valve (D) located in the valve box. **Note:** It is a good idea to clear away any dirt or rocks form the outlet valve to insure that the water drains out freely.
5) Continue to run the sprinkler clock for a couple of days to allow water to drain from all heads.

Important: Be sure not to change the position of the above-mentioned valves until you are ready to reactivate the system.

Winter Watering

Due to our extremely dry climate, your lawn and other vegetation will need to be watered during the fall and winter. Your system cannot be used during cold months therefore hand watering is required.

Sprinkler System Start-up (See Diagram)

1) **South Adams Water and Sanitation** will notify you of when your service will be turned on at the meter. You should close valves A and B prior to the water being turned on.
2) When you are ready to activate the system close the two test cock valves (C) and outlet valve (D).
3) Slowly open valve A. There will be some water coming out of the top of the vacuum breaker. This will stop after the vacuum breaker has been pressurized.
4) Slowly open valve B.
5) Check and repair any leaks in the valves and in the valve box.
6) Remove nozzles and filters.
7) Manually run all valves to clean out any dirt or other debris from the lines.
8) Reinstall the filters and nozzles, check for winter damage and repair as needed.
9) Readjust for proper coverage.
10) Reprogram your clock and your ready to go.

Sprinkler System Detail