



Congratulations!

You are now the proud owner of a brand new home built by MainVue Homes!

This Homeowner's Manual is designed with information to help maintain your home. We hope that you will properly maintain your home, and all its parts, during the warranty period and beyond. Normal wear and tear, inherent materials characteristics, and regular service required by mechanical systems mean that periodic maintenance is a necessity.

Minor adjustments or repairs performed immediately can save you from more serious, time-consuming, and potentially costly repairs later. Please be aware that neglecting routine maintenance can void applicable limited warranty coverage on all or part of your home. Removal, modifications, or repairs made to items or areas that are covered under the warranty – including those not in accordance with your builder's or manufacturer's warranties - may also void these guarantees.

You can ensure enjoying your home for a long time if it's cared for as described in this manual.

Some items mentioned here apply to your home; others do not. Please disregard those that obviously do not apply.



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Chapter 1

RECOMMENDED MAINTENANCE SCHEDULES

Home maintenance includes regular, seasonal, and one-time tasks. This schedule identifies some of the more common tasks that should be performed on weekly, monthly or semi-annual bases. Tailor this to fit your situation, adding or deleting items as required.

This maintenance tasks and schedule should not replace the manufacturer's recommendations. We suggest using licensed contractors for any tasks you feel unprepared to complete. A simple plumbing or electrical repair done incorrectly can cost many times more than enlisting a professional.

Continuous Maintenance

- Visually survey your yard and existing drainage patterns. Verify that the ground slopes away from the foundation.
- Stabilize any bare areas with grass, ground cover or landscaping materials to discourage erosion. Dig out areas where sand has accumulated. Fill in any low spots where necessary to re-establish drainage flow.
- Adjust sprinkler systems to avoid over-spraying the house or causing puddles near the foundation.

Monthly Maintenance

- Check operation of smoke detectors by pushing the test button. Check and replace the battery if necessary.
- Test Ground Fault Circuit Interrupters (GFCI) to insure proper protection.

- Clean garbage disposal blades by grinding ice cubes and citrus fruit rinds.
- Clean or replace dirty filter in range hood fan.
- Check for evidence of leaks around toilets, under sinks and around dishwasher.
- Clean and freshen sink drains by flushing with hot water and baking soda.
- Inspect furnace and air-conditioning filters, humidifier, and electronic air cleaners. Replace as required (at least every 6 months).
- Clean aerators on faucets. Depending upon water hardness, you may need to use a rust or scale remover to return them to normal condition or have them replaced.
- Monitor and maintain floor coverings on a required basis. Regular vacuuming will reduce wear of carpets and other floor coverings. Repair tears and remove stains as soon as possible.

Twice-Yearly Maintenance

- Inspect roof shingles, identifying anything that might cause leaks or problems.

Roof – Visually inspect all surfaces from the ground, if possible. Look for torn, broken, missing, or cracked shingles; accumulated debris; gaps in flashing; exposed joints, and obstructed vent pipes. Check in attic for wet insulation or water stains on roofing underside (see “Roof, Gutters and Downspouts”).

- Inspect and clean gutters and downspouts.

Hire a gutter cleaning service to ensure debris is removed from gutters and downspouts.

- Inspect home’s exterior, including condition of siding, paint, masonry, stucco and wood trim.

Perform a walk-around inspection of perimeter walls. Look for cracks in brick, stone, tile and stucco. Identify any areas where mortar has fallen out. Check for warped siding, gaps in wood trim, and peeling or blistering paint. Sand, scrape, wire-brush, caulk, stain, repaint and apply wood preservatives where necessary.

- Inspect doors and windows to verify proper operation, security and weather-resistance. Clean tracks for windows and sliding glass doors before applying silicone lubricant.

Check overall door and window integrity and operation. Examine weather-stripping at all windows and entrance doors. Make sure a tight air seal is formed when closed. Replace any loose or damaged weather-stripping.

Test door and window hardware (hinges, knobs, pins, latches, locks, etc.). Make sure door latch bolts and dead bolts engage properly. Adjust, tighten and lubricate where necessary.

Look for binding or rubbing in frames; cracked panes; difficult operation; locking problems; and cracking or peeling paint or varnish.

- Inspect the plumbing system (see “Plumbing”)

Turn on water at all sinks, bathtubs and showers; operate dishwasher, garbage disposal, and washing machine, and flush all toilets. Start by checking on all drains to make sure nothing overflows. Then, test for any leaks in water and sewer pipes.

Survey inside cabinets, closets, on the floor, under lower-level ceilings and in basement or crawl spaces (if applicable). If any water line leaks are found, locate the shut-off valve nearest to the leak; turn the valve to the right (clockwise) one-quarter rotate until it locks into the “off” position. If any sewer line leaks are found, trace the piping back to the area it serves and discontinue use of those fixtures until repairs are made.

- Inspect plumbing fixtures and appliances.
- Maintain wall finishes by adhering to recommendations in this manual (see “Walls and Ceilings”).

With paint or stain, look for peeling, cracking, blistering, fading, or scuff marks. With brick or stone veneer, check for mortar cracks. Repair as needed.

- Monitor and maintain cabinets and countertops following recommendations in this manual (see “Millwork and Cabinets” and “Countertops”).

Check out the hardware. Adjust, tighten or lubricate knobs, hinges, latches, rollers and drawer guides.

- Inspect the foundation, basement or crawl space following instructions in this manual (see “Crawl Space”).

Gain access to crawl space through the trap door. Inspect concrete. Look for water stains or cracks. Seal cracks that may allow water to enter with an appropriate concrete caulk or hydraulic cement. Check ground for any standing water.

- Check the main service panel. Look for rust, water stains, soot stains or melted wires.
- Check general condition of exterior air conditioning unit; remove debris as necessary.
- Inspect the attic. Before entering this space, purchase a paper filter mask from a hardware store to avoid lung irritation from possible airborne insulation fibers. Make sure there are no pests nesting in the insulation, and that baffles are secured in place.
- Inspect and replace caulking and grout around tubs, showers, and sinks, as needed (see “Plumbing/ Caulking”).

Yearly Maintenance

- Have carpets professionally cleaned at least once a year.
- Examine caulking around windows, doors and other areas following instructions in this manual.
- Complete annual furnace and air conditioning maintenance by a licensed HVAC contractor.
- Schedule professional inspection of major appliances, especially if gas fueled.
- Clean and re-stain wood decks and fences.
- Schedule professional dryer vent cleaning.
- Seal grout at all tile areas.



Chapter 2

WINTERIZING YOUR HOME

As winter approaches, take time to consider all the areas in and around your home that can be affected by the change in weather. Use this checklist to help you.

Driveway / Walks

Cold weather can make cracks grow and begin crumbling. Sealing them may help minimize this.

Preventing Frozen Plumbing

Before temperatures dip, take preventive measures to keep your plumbing from freezing. Frozen plumbing interrupts your water supply and can damage property.

Locate Your Main Shut-off Valve

It is important to know where your shut-off valve is, in case of any emergency including frozen or broken water lines. By turning off the main valve which controls all water flow into your pipes, you can stop flooding and excessive water loss.

Indoor Precautions

Do not allow indoor temperatures to drop below 55°.

Outdoor Precautions

Drain water from exterior faucets and pipes where a valve is provided. Do this by shutting off the hose bib supply line, and then opening the hose bib to drain all the water from the pipe.

Disconnect and store all hoses from your outside hose bibs (faucets) to prevent a freeze-triggered break that would not be covered under the warranty.

If the outside temperature drops below 20°, wrap all exterior pipes and faucets, and hose bibs with suitable insulation materials.

Turn off sprinkler system pipes. Use a licensed professional to winterize the system.

Frozen Pipes

You can often hear or see water leaking if a frozen pipe bursts. If your pipes freeze, make sure you are home when they thaw out. During and after this thawing period, it is vital that you walk throughout your home and yard looking and listening for water. **Burst pipes from a freeze are not warrantied.**

Furnace

Have a professional service your furnace annually. Keep your circulating air clean and save on your heating bill by using the correct size filters for regular replacement.

Gutters

Clean out leaves and debris. Clogged gutters can allow water to back up in the house.

Windows

Leaks around windows can be a significant source of heat loss. Check caulking and putty; replace as needed.

Chapter 3

LANDSCAPING

To avoid gas, electrical, telephone or cable TV service interruptions, do not trench or excavate until underground utilities have been located and flagged. Utility companies will provide this service to you free of charge. Call 811 or go to www.callbeforeyoudig.org. You must obtain proper building permits and comply with all municipality requirements.

Washouts caused by constant or heavy rainfall are common with a new lawn. They result from drainage “swales” doing their job by diverting water to the desired location. Such conditions will occur in a new lawn until root systems of newly planted grass, trees, shrubs, etc. are matured.

Care of Trees and Shrubs

The first year is a crucial time for newly transplanted plantings. Be sure to water and keep soil moist daily during warm, dry months. Once plants are established, water thoroughly and less frequently.

Roots develop and grow in the presence of water, fresh air and nutrients. Except for naturally shallow rooted plants (rhododendrons and azaleas, for example), plants will establish to the depth of where these essentials are found. If only the top foot of soil is kept well-watered, roots will develop that range. This means shallow-watered plants, if not irrigated properly, will be vulnerable to severe hot-weather damage because they have no water reserve from which to draw.

Keep your plant beds weed-free at all times. Insect spray may be required, based on specific needs to each plant variety. Consult a local garden center for advice.

Feed plants with appropriate fertilizer in March and November. Air and water will penetrate planting beds more easily with weekly weeding and raking. Fertilization needs will vary according to soil type, plant species, amount of rain, soil PH, and other factors. Typically, a fertilizer with high nitrogen content is all that is needed. Read directions thoroughly and determine plant needs.

If a tree is healthy and vigorous, the need to fertilize may be every other year. A 3-1-1 ratio fertilizer is recommended. Early spring is the most efficient time to fertilize, but applications can also occur in late fall and winter.

Care of New Seeded Lawn

During initial germination and growth of your new lawn, the seedbed should be kept moist until a good stand of grass appears. An oscillation type lawn sprinkler should be used to water your lawn. Direct water application from a hose nozzle is ineffective and may cause erosion damage.

The better job you do watering, the better your lawn will germinate and fill in. Frequent light watering for the first 2 to 3 weeks after seeding are necessary. During hot summer months, it may be necessary to water as often as 3 or 4 times per day. On average, 10 to 15 minutes at a time per area should be enough to soak the top surface without saturating the soil to the point of puddling.

Too much water can be just as detrimental as not enough. It can wash away seeds as well as the nutrients needed for their proper development. Newly seeded lawn should be grown to an average of 2 1/2 - 3 1/2 inches before the first mowing.

Care of Sod

Care for your new sod is extremely important. It is common for sod to turn brown shortly after being laid due to transplant shock. If watered routinely, this sod will revive itself.

Newly laid sod must be watered daily to aid rooting. A new sod lawn should be kept moist at all times during the initial two-week period. On hot summer days, it may be necessary to water 3 or 4 times daily for 15 to 30 minutes each time; on cool dry days, 1 or 2 times for 15 to 30 minutes each time. If it rains, watering may not be needed. After this period, water your lawn every 1 or 2 days during warm, dry months. New sod should not be mowed until rooted well into the soil. If you grab the lawn and pull up on it easily, it should not give way and pull up from the soil. The lawn may take up to two weeks before rooted sufficiently for mowing.

New sod is particularly susceptible to pests such as Crane Fly, which can destroy a lawn in days, if the lawn has not been treated. Regular pest control measures by a licensed, certified professional are strongly recommended.

Sod lawns require yearly aeration and thatching as a part of routine maintenance, to allow water to penetrate to the roots, and stimulate lawn growth. Yearly over-seeding is also recommended, to maintain the dominant grass strains in your lawn.

Fertilizing Lawns

The three major elements of a complete fertilizer are nitrogen, phosphorus and potassium.

- Nitrogen —The element needed most by your lawn. It promotes root and blade growth and makes the grass a healthy green color; lawn will grow slowly and become yellowish without enough nitrogen.
- Phosphorus —It helps the early root formation and growth; new lawns require more phosphorus.

Established lawns need less, as it does not flush from soil as readily as nitrogen.

- Potassium — It is the second most important element. It strengthens the grass and helps it withstand stress associated with foot traffic and periods of drought.

The series of numbers on a fertilizer bag represents the percentage, by weight, of nitrogen, phosphorus and potassium contained in the bag. A ratio of 16-4-8 represents 16% nitrogen, 4% phosphorus, 8% potassium and is recommended for established lawns. Fertilizer with a ratio of 3-1-2 in its formula, such as 21-7-14 or 15-5-10 is also suitable for Northwest lawns.

Lawns should be fertilized every 6 to 8 weeks from February through November. An application of lime each November is helpful in balancing the acidity level prevalent in Northwest soils. Do not use wood or moss killers on your new lawn for at least the first year.

Suggested Fertilizing Schedule

| February 15th | April 7th | June 1st | August 1st |
|--|---|-----------------|-------------------|
| Spring feed (with iron for control of moss) | Spring feed and lime lawn (pelleted lime) | Summer feed | Summer feed |
| October 1st | November 15th | | |
| Fall/winterizer (with iron for control of moss) and lime lawn (Dolomite) | Fall/winterizer (at half recommended rate or setting on spreader) | | |

Mowing

A lawn that is mowed correctly resists weeds, insects and disease and appears lush and healthy. Conversely, a lawn mowed infrequently will remove too many of the grass blades at one time and will produce a lawn that looks thin and uneven.

After a lawn is established, mow at a height of approximately 1 1/2" - 2 1/2" inches. Do not cut wet grass. The grass blades may not be standing up straight and this can cause an uneven cut. Mowing a wet lawn can also lead to soil compaction.

Remove clippings, as this will give grass a better chance to spread and fill in. Alternate mowing patterns. Mowing the same direction all the time can cause wear patterns and lead to soil compaction.

Watering

Water during daylight hours. Morning is the best time because cool morning air has more moisture and will help prevent water evaporation. Avoid late evening watering, as wet or damp lawns at night are more susceptible to fungus and disease problems.

Sandy soils dry out faster and need water more frequently; soils with high clay content tend to dry slower but need more water to penetrate to the desired depth. With clay soils, it may be necessary to water in intervals to avoid wasteful runoff until the desired water amount has been applied.

When a lawn becomes established, it needs approximately 1" of water once weekly to maintain a healthy

appearance. To find out how long it takes your sprinkler to produce 1" of moisture, place a number of shallow containers at regular intervals in a line running out from the sprinkler. Turn on the water and note the time it takes to fill the containers to 1". When you know how long it takes your sprinkler to discharge 1" of water, multiply that time interval by the number of inches you want. The result equals the length of time to leave the sprinklers on.

Suggested Watering Times

New Sod

Minimum of 20 minutes every day (10 minutes twice daily)

Existing Grass (over 3 months)

Water 4-5 days in a row for a minimum of 20 minutes, skip a few days and start again

Shrubs and Trees

Deep-water for 10-15 minutes every other day

Weed Control

For information on insect, weed, or other controls for maintaining healthy landscaping, we recommend you rely on a maintenance service or your local Agricultural Extension agent.

Utility Lines

Lawn settlement will not disturb your utility lines. However, you may see a slight depression develop in the front lawn along the utility trench line. To correct this, roll back the sod and spread topsoil underneath to level the area, then re-lay the sod.

Chapter 4

FOUNDATIONS, GROUNDS AND GRADING

Your home's foundation walls are composed of steel reinforcing rods with poured concrete mixed to industry standards and applied by professionals. Even though the foundation is engineer-designed and constructed according to engineering requirements, wall cracks can still develop. Unless there is water seepage coming through a fissure, it is most likely a surface crack and will not be detrimental to your home's structural integrity.

Foundation vents allow for crawl space ventilation. Unwanted mold and mildew may occur if these vents are blocked.

Proper grounds care around your house will add to your home's beauty while protecting its structure. Your home site has been graded to assure drainage of surface water to an approved point of disposal. It is essential that you maintain any slopes around your home to permit water to drain away as rapidly as possible. If you do not do this, your home may suffer major structural water damage.

During construction, it is necessary to excavate an area larger than your home's foundation. Additionally, 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 soil consolidation will occur, especially after prolonged rainfall. This can continue to occur for the first few years you are in your home, depending on precipitation amounts and other factors.

Settling

Normal settling may occur around the house and in utility ditches; fill any resulting depressions with dirt. Keep the fill below the top of the foundation to prevent water from entering a joint and possibly causing wood decay or water leakage.

Block Wall or Slump Stone Fences and Partitions

These walls, fences and partitions have been professionally engineered and built according to all required building specifications at the time of construction. Footings, which have been constructed to support these walls, are designed to carry the weight placed upon them. Any modification could jeopardize the wall's integrity and might cause eventual failure.

If you choose to make modifications, it is your responsibility to meet all municipality requirements for safety compliance. You should also check with your Homeowners Association.

Swales

Swales (drainage ditches) have been provided, as required, in drainage areas along property lines or in the same approximate location that natural drainage crossed your property before construction. In most cases, drainage swales do NOT follow property boundaries.

Typically, a lot will receive water from and/or pass water onto other lots. For this reason, homeowner changes in grade often affect sites adjacent to or near their homes. Do not change the grade or block the free water flow through these swales. In many instances, your Covenants, Conditions and Restrictions document may specifically prohibit changes to established swales.

Do not inadvertently fill in a swale or impede surface water flow when maintaining or altering your landscaping, or during any of your home site's construction, including patios and decorative walls. Keep these swales properly seeded so they do not erode. Drainage swales can be changed by erosion if the landscaping is unmaintained for a prolonged period.

Avoid deep saturation and/or long-term ponding of waters in landscaped areas, particularly in the vicinity of the house. Sprinklers should not be allowed to spray onto exterior house walls.

Catch Basins

Catch basin inlet grates should be kept debris-free. Sediments under water at the catch basin bottom, and any oil floating on the water should be removed. Plugged inlets cause flooding and erosion. Missing, loose or broken catch basin inlet grates need to be reset or replaced.

What Can Negatively Affect Drainage?

Extra Watering for New Sod and Topsoil

Extra watering needed for new sod may cause temporary drainage problems; so may severe weather conditions. Topsoil has organic matter designed to hold water. For projects requiring additional topsoil, we recommend that you purchase "winter mix topsoil" produced with a higher percentage of sand to aid drainage.

Heavy Planting

Some homeowners plant heavily around patios with little or no planting on the side yards. Consequently, soil around the patio may become heavily watered while other parts of the yard receive little or no water. This can create unequal soil expansion. To reduce erosion on hills or banks, plant ground cover and/or

shrubbery suitable to the area.

Leaks

If your home is in an area where conditions warrant it, underground portions of the foundation (typically for homes with basements) have been damp-proofed to prevent groundwater from entering. Should excessive leakage occur, especially during the rainy season, examine your drainage system carefully. You may need to repair gutters or downspouts. If the ground level slopes downward toward the foundation, add and pack soil to bank upwards so water flow will be directed away from foundation walls. Never water toward the foundation.

Changes in Soil Moisture

Any change in grading may affect proper drainage patterns, allowing surface water to puddle or saturate the ground at or near the foundation. This could cause structural damage.

Homeowners sometimes create unequal soil moisture conditions around their foundation by creating water traps. Often, this happens after installing additional concrete walks, patios, borders, landscape planting areas or flower bed edging. You should take into consideration how water will drain from your home before making any modifications or additions.



Chapter 5

CONCRETE AND ASPHALT

Concrete

By maintaining good drainage away from your home, you protect your home's foundation and the concrete flatwork (basement floor, porch, patio, driveway, garage floor, steps and sidewalks). By maintaining drainage away from all concrete slabs will minimize cracking and other forms of movement.

"Efflorescence" is a white flaky, or dusty, material that may appear on your concrete. It is a natural occurrence where calcium carbonate comes through a porous material. No maintenance is required; it does not impact concrete life.

Normal settlement and periodic seismic activity will cause your concrete walks, patios and driveways to crack. This is normal and to be expected. Monitor the cracks in your concrete and fill with concrete caulking or other concrete repair material if the cracks become wider than 1/4" inch.

Concrete walks and patios may rise and fall due to freezing and thawing of the soils in which they are constructed. This is a normal condition and does not require correction.

Since concrete is a porous material, it freely transmits water vapor. It is not uncommon for there to be moisture on the slab as concrete dries. Do not store untreated organic material on a garage floor; this can promote mold and mildew growth. Always elevate these products from the garage floor.

Protect concrete from chemical agents, including pet urine; fertilizers; radiator overflow; repeated hosing or de-icing agents.

Use care in choosing whether to allow heavy trucks, including moving vans or concrete trucks, on your driveway. Heavy vehicles can crack or damage the surface.

Cracks

In anticipation of normal stress, we have provided for contraction and expansion joints to minimize cracking, where needed. Cracks may also develop due to seasonal movement.

Caulking cracks and sealing the concrete surface are suggested corrections and considered normal homeowner maintenance. Some minor regrading of areas adjacent to your concrete walkways may also be required. Since non-structural concrete (concrete without a foundation, such as walks, driveways and steps) is a rigid material placed over soil (a non-rigid material), some cracking is inevitable.

Minor cracks with no significant vertical or horizontal displacement are a common occurrence; they do not signify structural integrity loss or require repair or replacement. Small cracks and minor surface variations are inevitable, but they do not reduce the concrete's serviceability. You should expect it to last indefinitely, with a few precautions.

Ice, Snow and Chemicals

Remove snow and ice promptly, taking care not to dig into the concrete or asphalt surface. A thin layer of ice can be topped with sand or kitty litter for traction. Provide a doormat outside to wipe sand off shoes before entering the home; a mat just inside the door will give added protection.

Never use de-icing salts or chemicals on any concrete surface. Driveways, sidewalks and garage floors may be damaged by de-icing agents (salt) applied to streets and highways during the winter. Your vehicle's undercarriage may pick up salt residue and drip it on your driveway or garage floor when you park. Uncared for, salt residue may eventually cause scaling and pitting of exposed concrete surfaces (this concrete surface cratering or chipping away is known as "spalling".) Salt can eventually kill grass, shrubs and trees as it runs off these surfaces, too.

Minimizing Spalling

1. Check the drainage to make sure water or salt is not trapped on the concrete surfaces by grass, landscaping, or other obstructions along the driveway edges.
2. Hose down exposed concrete surfaces as soon as possible after ice and snow have been removed from the streets. Clean any salt residue from your car.
3. Apply a sealer to exposed concrete surfaces twice each year, once just before cold weather and again in April after a thorough surfaces cleaning. Use clean sand for traction, not chemical salts.
4. Use clean sand – not chemical salts - for traction.

Cleaning

Sweeping is recommended for keeping exterior concrete clean. Repeated garage floor hose-cleaning can increase soil movement by allowing water to penetrate concrete's porous materials and any existing cracks.

If washing is necessary, do this when temperatures are moderate. Avoid washing concrete with cold water from an outside faucet when temperatures are high, and the sun has been shining on it. The abrupt temperature change can damage the concrete's surface bond.

Asphalt

Some communities have asphalt leading to concrete driveways. Asphalt combines sand, gravel and petroleum-based products to form a driving surface. It has many concrete-like characteristics, including ex-

pansion and contraction during temperature changes. Asphalt is a low-maintenance surface. With proper care, it will last many years.

What Damages Asphalt?

Like any other surface in your home, asphalt requires protection from things that can damage it. Over time, weather and earth movement effects will cause minor settling, cracking asphalt or defective material. Standing water can seep into cracks and cause premature deterioration.

Never burn leaves or rubbish on a blacktop surface.

The grade along the side of the driveway should be maintained properly to prevent settlement cracks from forming. Settling next to your garage floor of up to 1½" across the driveway's width is normal. Elsewhere in the driveway, settling or depressions of up to 1" in any eight-foot radius are considered normal. Cracks should be sealed periodically with an asphalt sealant compound. This is considered a normal homeowner maintenance responsibility.

Care of Asphalt

Gasoline, oil, turpentine, and other solvent or petroleum products can dissolve or damage blacktop- surface driveways and walkways. Hose off or wash immediately with sudsy water (ex. dishwashing soap), followed by rinsing thoroughly with plain water. When possible, use biodegradable products; soap and/ or detergent may be a violation in some cities.

Avoid any concentrated or prolonged loads on your asphalt, particularly in hot weather. High heeled shoes, motorcycle or bicycle kickstands, trailers, outdoor furniture legs, or even cars left in the same spot for extended periods can create asphalt depressions or punctures. Avoid non-residential traffic, including heavy trucks; your driveway was designed for residential use only.

Exposure to sunlight and other weather conditions will fade your driveway, allowing the surface gravel material to be more visible. This is normal and not a material or structural problem.



Chapter 6

ROOF, GUTTERS AND DOWNSPOUTS

If properly maintained, your home's roof will give you years of good service. Flashings redirect water in places where the roof abuts walls, chimneys or valleys, and where two roof slopes meet. Leaks are most likely to occur here - at roof jacks (square, capped attic vents at various roof locations) or at flashing around vent pipes. These areas are protected by metal flashing designed to prevent water from leaking into the house. Flashing should be inspected for signs of rust at least once a year.

Plumbing roof vents are made of plastic pipes, which expand and contract with temperature changes. In doing so, the seal may be broken. To prevent leaking, these should be resealed periodically.

Keep roof and valleys debris-free. Debris left for extended periods of time can result in discoloration, deterioration, or leaking, and would not be covered by the warranty.

Caution

Severe injury can result from climbing onto the roof, slipping and falling to the ground. Please allow only an experienced professional on your roof. If someone must walk on your roof for any reason, they should be careful not to damage the surface or flashings. Such weight and movement have a tendency to loosen and break roofing material. That can cause leakage. Repairs should be completed as soon as roofing material has dried.

Gutters and downspouts are designed to draw rainwater from the roof through downspouts to the ground, and away from the house into the tight line. This then carries the flow underground away from the foundation to the storm system. Keep downspout extensions connected to the storm drain system so that

roof run-off is channeled far away from the home's foundation area.

Gutters and downspouts need to be kept in good repair. Leaves and debris should be cleaned at least yearly.

If an overflow occurs, inspect gutters for clogs or foreign matter. Plugged drain lines can cause yard saturation and a damp crawl space/or basement. Standing water of up to 1" can be expected in gutters.

Buried drainpipes should be checked by flushing with water to verify free flow to the curb-face outlet. Clear this if it's obstructed.

Chapter 7

SIDING

Siding for your home was chosen to give you years of reliable service. Material shrinkage or settling may crack caulking. This can create open points in the siding, exposing unpainted surfaces and around joints of your home's doors and windows.

Joints where two pieces of siding come together do not require caulking. Instead, flashing has been installed behind each joint to minimize maintenance and improve weather barriers.



Chapter 8

MASONRY, BRICK AND STONE

Masonry is an extremely low maintenance material; however, periodic inspection is necessary to check for cracks resulting from normal settling. Small weep holes were created at regular intervals at the bottom of masonry walls. This allows moisture which accumulates between the masonry's interior surface and the sheathing material behind it to escape. These holes must be kept open.

Caulking has been used to seal the joint where two materials come together and prevents leakage. In time, caulking will dry out, revealing cracks. Repair these promptly to prevent unseen damage.

Occasionally inspect stone or brick joints for signs of cracking or water intrusion. White flaky material on the brick or stone is called "efflorescence." It's a natural occurrence where calcium carbonate comes through porous material. No maintenance is required.



Chapter 9

FENCING, GATES, AND DECKS

Due to their wood nature, fencing and gates will absorb water (swell) and then dry (shrink). Over time, this normal process will cause nails and other attachments to loosen. It will require occasional re-tightening to maintain firm attachment to supporting pieces. Some wood “curling” and “cupping” is to be expected.

In areas where wooden gates and fences are painted or sealed with a stain, you must maintain these finishes to prevent deterioration.

Do not swing on gates or jump or climb over gates; this will cause them to fall out of alignment.

Cedar Decks

Cedar is a hardwood frequently used outdoors. It typically lasts longer than other types of wood. With proper maintenance, your home’s new deck will be a beautiful and enjoyable feature. Annual cleaning and regular sealing are basic proper maintenance tasks for a cedar or wood deck.

Periodically sweep the deck to remove grit and debris. Leaves, dirt and other stationary debris increase the wood’s moisture content and can cause premature aging. It is also a good idea to regularly rearrange stationary items on your deck, allowing the wood under them to breathe and retain less moisture.



Chapter 10

ELECTRICAL

Your new home has been wired to meet the applicable local code requirements and safety standards for normal use of electrical appliances. Only a licensed electrical contractor should be allowed to make any repair or modification to your electrical system. Never attempt to make a repair yourself. There are, however, simple steps which you should follow in diagnosing an electrical problem.

Power Failures

In the event of complete power failure, first check to see if your neighbor has power. If not, notify the power company. If the power failure has occurred only in your house, check the main circuit breaker (see below) located in the panel box to determine if it has been “tripped.” If this fails to correct the problem, flip the main circuit breaker (see below) to the OFF position and call the power company.

The main circuit breaker is located in the electrical service panel box in your garage.

Main Circuit Breaker

Your home is equipped with a main circuit breaker which completely controls the electrical current to your home. Inside the breaker box door, you will find a description of which circuit breakers control various rooms and appliances in your home.

Circuit Breakers

Your electrical wiring and appliances are protected by circuit breakers located in the main panel box. They have three positions: ON, OFF and TRIPPED. A circuit breaker which has tripped must first be turned OFF

before it can be turned back ON or reset.

When you flip the breaker, there will be an audible click. Simply switching the breaker directly from “tripped” to the ON position will not restore service.

Causes of Tripped Circuit Breakers

1. Large appliances or too many small appliances on one circuit.
2. Worn out cords or defective plug connections.
3. Defects within an appliance.
4. Starting an electrical motor. Motor start-up requires more current than needed to operate.
5. Outlet exposed to a high level of moisture.
6. If after resetting the circuit breaker, it trips again, you should immediately attempt to locate the cause and correct.
7. Arc fault circuit interrupters (AFCI). Most outlets and lights are protected by AFCI breakers – special breakers in your electrical panel with a small “test” button found on the breaker’s face. Designed to keep you safe from damage and sparking electrical equipment and cords, they are also extremely sensitive to some consumer devices and electronics. If you are unable to reset a breaker, or experience frequent “nuisance” tripping, try unplugging items from the circuit to identify what is causing it to trip. If a device is not damaged or sparking, but still causing an AFCI break to trip frequently, try plugging that device into a bathroom or kitchen outlet.

GFCI Breaker

The ground fault interrupter (GFCI) is a low-voltage breaker required by building code as a safety feature to control the electrical current to “wet” areas of your home. The GFCI breaker controls plugs in bathrooms, garages, outside and the convenience outlet near the kitchen sink. It’s designed to sense any extra load on this circuit and to cut power from the circuit to prevent electrical shock. The TEST/RESET button is located on one of the GFCI plugs. Push the button “in” to reconnect power to the plug.

Outlets

Electrical boxes located on a home’s exterior walls may allow cold air to flow through the outlet. Flickering lights can occur when 110v interior outlets are overloaded. Dedicated circuits are required for such items as irons, microwaves, etc.

If an Outlet is not Working

1. Check first to see if it is controlled by a wall switch (see next section).
2. Next check the circuit breaker.
3. Finally, check for a tripped GFI breaker (see above).

Switched Outlets

When you first move into your home, you may find an outlet that does not operate. First, determine if the outlet is one that operates from a wall switch in that room. If so, only the upper receptacle in the appropriate duplex receptacle will be controlled by the wall switch. If the outlet is not controlled by a switch in the room, check to make sure the appliance/light fixture is operable in another location. (The appliance may need repair, or the light fixture may need a new bulb.)

Smoke Detectors/Carbon Monoxide Detectors

Smoke detectors are proven life-saving devices. One or more smoke detector(s) is installed in your new home per building code requirements. They provide early-stage fire warning, before smoke reaches dan-

gerous concentrations. This warning is especially crucial during sleeping hours.

Detector(s) should be tested every six months to assure it's operating. Check this when you change clocks for Daylight Saving Time. Install new batteries yearly.

Refer to the operating manual for specific maintenance recommendations.

Except for light fixtures, your electrical system is warrantied (parts and labor) against defects of material or workmanship for one full year.

Power Surges

Power surges can burn out bulbs or damage sensitive electronic equipment, including TVs, alarm system, computers, etc. Results of local conditions are beyond the builder's control.

Underground Cables

Most communities have underground utilities. To check where buried service leads before digging or moving large amounts of soil, call 811, or go online to www.callbeforeyoudig.org. In most cases, wires run in a straight line from the service panel to the nearest public utility pad.

Electrical Safety Tips

1. Do not overload any one circuit by using too many appliances at the same time.
2. If your portable power tools are equipped with three wire cords, the third wire should be grounded.
3. Always remove appliance plugs before touching a water faucet while holding an appliance (i.e., water is a conductor of electricity).
4. Never touch a fan, radio or any other appliance while in a bathtub or shower.
5. Never touch an electrical device at the same time you touch part of the plumbing system.
6. Always consult a licensed electrician and obtain necessary permits before attempting any electrical work.
7. Always turn off any electrical circuit if there is the possibility of touching exposed connections or wiring.
8. Periodically inspect cords and plugs on consumer devices. Repair or discard if they are damaged.
9. Never run electrical cords across walkways, or under rugs and furniture. They can be damaged.



Chapter 11

HEATING AND AIR CONDITIONING

Your heating system was designed and engineered to properly heat your home in accordance with industry standards, local building codes, local energy codes, and typical temperatures for your area. There may be times when outdoor temperatures rise above or fall below the design temperatures. Room locations will also provide a temperature differential, particularly when the system is controlled by a single thermostat for one or more floor levels. To get maximum efficiency from your heating system, read and follow all warranty and operating information provided with your furnace. If you have other questions, or if an emergency arises, contact the contractor or Customer Service. Your heating system should be professionally serviced yearly.

The heating system was planned with a furnished home in mind. If you move in during cooler months and have not yet acquired all of window coverings and furnishings, the home may seem cooler than you would expect.

Heat Vents

Generally, heat can be diminished in seldom used or interior rooms. Experiment with your home's adjustable registers to set your preferred heat flow. Do not allow furniture or window coverings to block or obstruct return air vents.

Noise and Odor

As ductwork heats and cools while airflow moves through your heating system, you may hear popping, pinging, ticking or cracking sounds. This is normal.

After an extended period of non-use, it is normal for the heating system to emit an odor for a few moments when it is first turned on. This odor is dust that has settled in the ducts and should dissipate quickly.

Filters

Check filters regularly on any heating or cooling system. Dirty filters result in reduced efficiency and higher operating cost. If your system has a disposable filter, replace it every 3 months for the first 2 years, and every 3-6 months after that. Heavy use, high traffic in and out of the home, or other environmental conditions may require more frequent replacement.

Verify that the filter arrow points in the direction of air flow. Permanent filters may be vacuumed or tapped to loosen dirt, then washed with warm water or mild detergent. It is also recommended that ducts be professionally cleaned about every 2 years for maximum efficiency.

Temperature/Thermostat

Normal temperature may vary from floor to floor as much as 10° or more on extreme weather days. Severe weather may cause the system to cycle on and off more frequently and for longer periods of time.

The furnace will automatically come on when the temperature at the thermostat registers as different from 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°. Recommended settings are:

Cooling Mode:

- Recommended temperature setting – 73° to 75°
- Lowest cooling temperature setting – 68°

Heating Mode:

- Recommended temperature setting – 70°
- Lowest heating temperature setting – 62°

Fan Setting:

- Recommended – Fan “on” so it will circulate air through the home even when the system is not heating or cooling.

Please note: new high-efficiency heat pump systems are designed to provide slightly cooler supply air temperatures when in heating mode compared to a gas furnace. This results in longer heating cycles, more even and consistent temperatures in the home, and ultra-high efficiency. It is best to leave the thermostat set to one temperature all day. If a nighttime setback is desired, it will take longer to get the home back up to temperature in the mornings.

Thermostats installed with these systems are “communicating” and are different than other more traditional systems. If you change out your thermostat to a different brand or model, it will be necessary to hire a professional who has experience with the new systems and access to the necessary adapter modules. Please note: this would void a portion of your HVAC warranty.

Do not overheat your home. Excessive shrinkage in framing lumber may occur, damaging the home.

Ventilation

Ventilation (exchanging of inside air) is important to maintain indoor air quality. Your home has a whole home exhaust fan with a timer. Run the fan a total of 6 to 8 hours daily in about 3 different time blocks to exhaust stale air. Fresh air is drawn in through vents in your windows and/or a fresh air intake at your furnace. Properly functioning, your ventilation system will limit excess humidity levels.

Troubleshooting

If Your Heater is not Working

- Check the thermostat.
- Check the circuit breakers.
- Check the blower switch.
- Check the lower fan panel.
- Check the furnace pilot.
- Check the Filter

Check the Circuit Breaker

Before calling a service professional, check the circuit breaker to be certain it is in the full ON position. A tripped breaker must be turned all the way off, then back on, to reset. With air conditioning models, the system switch must be on HEAT and the fan switch should be on AUTO.

Check the Blower Switch

A primary reason that a furnace might not work is that the blower switch has been turned off. It looks like a regular light switch and is typically located within six feet of the furnace. This switch overrides all furnace commands and manually shuts down the blower and, therefore, the furnace. This switch is usually only used when maintenance service is being performed. If you have young children, check to see that they have not used this switch.

Check the Lower Fan Panel

The lower fan panel must be positioned correctly for the furnace blower to operate. This panel compresses a button that tells the blower it is safe to operate. If this panel is not on tightly, the fan will not come on and the furnace will not operate.

Check the Furnace Pilot

The ignition system is often the second reason why your furnace might not function. Your gas furnace uses a hot point ignition system or an electronic spark; it does not have a pilot light. It will not operate if the furnace cover is off, has been jarred or if the blower switch has been turned off.

Turn on your air-conditioning system only when outside air temperature is greater than 65°. Set thermostat to desired temperature or to a temperature slightly higher than normal if you're away from home during the day. This allows for quicker cooling to your desired temperature at night rather than trying to cool a hot house.

If the system is operating properly, ensure that the condensation drain tube is draining water and is unobstructed. (It is usually a clear plastic tube located next to the heat pump which drains into a floor drain or to the outside.) Verify that the outside compressor unit operates free and clear of any debris. Remember to remove any protective cover left on the unit during winter.

Radiation from the sun will heat your walls, floors and furniture so it's best to shield the inside of your home from direct sunlight and outside air. Outside air contains heat and humidity. Both will significantly slow the cooling process.

Make sure all cooling and return air vents are clean, clear and unobstructed. Set air vent vanes upward on lower floors and slightly downward on upper floors.

If Your Air Conditioner does not work

- Check thermostat is set to COOL setting.
- If that doesn't work, check the circuit breakers (there are two: one which controls the compressor and one which controls the fan). Verify that both are in the ON position.
- If either is tripped, switch it to the OFF position then to the ON position.
- If that doesn't work, call a qualified HVAC contractor for assistance as necessary.

Chapter 12

PLUMBING

Your plumbing system has been professionally installed and inspected. It should provide you with years of service requiring minimum maintenance. If any problem occurs, take care of it promptly to prevent a bigger problem, involving more costly repairs.

You will find special plumbing precautions taken during freezing weather detailed in “Winterizing Your Home.”

Main Water Shut Off Valves

The main supply valve, usually located near where the water enters the house, controls the flow to your entire system. It will be specifically pointed out during homeowner orientation. Make sure everyone in your household knows where it is and how to turn it off in an emergency.

Interior Water Shut Off Valves

Intake valves are located near each fixture, usually behind the toilet, under the sink, etc. Turn off the water supply at this valve when making repairs.

Hose Bibs

Your home is equipped with frost-resistant hose bibs – however, these hose bibs are not frost/freeze-proof. It is imperative that you remove all hoses from the bibs before winter’s freezing temperatures. Leave them off, unless in use, until warmer spring temperatures return. It should also be noted that leaving a hose bib on and using a sprinkler timer, or a hand-held spray device to control the water flow, may prematurely wear out the washer, requiring more frequent repairs to prevent the hose bib from dripping.

Bathtubs, Sinks, and Showers

The tubs, sinks, showers and toilets in your new home are composed of one or more of the following materials: porcelain, fiberglass, ceramic tile or stainless steel. All of these materials are vulnerable to scraping and dulling, and may scratch or chip.

All glass used in bathtub and shower enclosures is tempered safety glass. In rough rolled glass, slight imperfections, including bubbles, streaks, tear drops, runs and similar markings, might be found. It's the nature of this glass and is not considered a defect.

What Can Damage Fixtures?

Vitreous china and porcelain enamel surfaces are smooth and glossy. They have a mirror appearance and are as hard as steel but can be damaged with careless use. The surface will chip if hit by a heavy or sharp object. It can be scratched or dulled by repeated scraping or banging of metal utensils, such as in a sink. Once a surface is scratched or nicked, the finish is more likely to stain, and it becomes increasingly harder to restore the luster.

Care of Vitreous China and Porcelain Enamel

Avoid gritty or abrasive cleansers and any powders with a lye base; they can dull or stain the finish if used improperly or excessively. The safest cleansers are non-abrasive powders, or spray-on bathroom cleaners. They will remove the most common stains caused by dirt, food, grease, rust or water minerals. Showers and tubs are typically made from fiberglass. To clean, use a non-abrasive product or a liquid detergent.

Care of Glass Shower Enclosures/Stalls

To clean glass shower enclosures/stalls, use a non-abrasive product, a spray designed for bathrooms, or an ammonia-based commercial glass cleaner.

Care of Stainless Steel Fixtures

Stainless steel fixtures require a non-abrasive cleanser or a commercial stainless steel cleanser to retain their luster. These fixtures generally resist staining. Occasional scrubbing with a good stainless steel cleaner will enhance the finish. Do not leave produce on a stainless steel surface; prolonged contact with produce can stain the finish.

Caulking

Normal high-moisture content common in bathrooms, the tub's weight when filled with water, settling of the home over time, and typical materials expansion and contraction will cause the tub and shower stall and adjacent tile wall surfaces to separate. Tubs and showers may develop separation at the 90° angle where tile meets tile, the 90° angle where vertical and horizontal surfaces meet and where tile meets plastic, fiberglass or other material.

When this occurs, use a reputable tub and tile product to re-caulk and repair the cracks.

Periodically, caulking around a bathtub or sink may appear dried out or cracked. Remove it and apply new caulk.

Drains

Each plumbing fixture in your home has a drain trap called a "P" trap. It's a J-shaped piece of pipe designed to provide a water barrier between your home and the potential of sewer gas. The traps hold water, preventing airborne bacteria and sewer gas odor from entering the house. Infrequently used fixtures should be turned on at regular intervals to replace evaporating water and to ensure that the barrier remains intact.

Faucets

Because faucets have moving parts, they are likely to need repairs sooner than nonmoving fixtures. You can extend the life of your faucets by treating them gently.

Avoid force when turning water on and off; use normal hand pressure only.

Some outside faucets are “frost proof,” but for this feature to be effective, hoses must be removed after each use.

Aerators

Aerators are attached to faucets in kitchens and bathrooms to reduce splashing and cut back on water use. They collect bits of debris from the water supply and need periodic cleaning. Unscrew the aerator from the end of the faucet; remove any debris; remove and rinse the washers and screens; replace them in their original order and screw the aerator back on the faucet.

Toilets

New “water saver” toilets do require particular care. Using some products that may be labelled as “flushable” by the manufacturer is not recommended. Only small quantities of toilet paper should be flushed.

These toilets have a maximum of 1.6 gallons of water. Therefore, for some solids, you may need to flush more than once - part way through, not in a row.

It is wise to only use single- or double-ply toilet tissue – never triple-ply - with these toilets. Refrain from using tissue to dispose of other types of items, even if they are identified as “flushable” by their manufacturer.

Clean your toilets regularly to prevent discoloration. Use commercial cleaners made especially for toilets, according to directions. Never mix cleaners with household bleach or ammonia. Do not use toilet cleaners on any other fixtures.

Toilet is Clogged

Disposing of substances not meant for a toilet is the main cause toilet clog. This includes hair; disposable diapers; baby wipes; excessive or the wrong type of toilet paper; sanitary supplies; Q-tips; dental floss, and children’s toys.

Keep the lid closed when not in use to prevent foreign objects from accidentally falling in, and causing a stopped-up drain.

Toilet is Running

A toilet that doesn’t flush properly or runs too much may need a simple water level adjustment. It’s likely the tank float has lifted too high, preventing the valve from shutting off completely.

Water Lines

Supply lines carrying water into your home are highly rust- and corrosion-resistant. They should last the lifetime of your home. If a system leak should occur around a loose or damaged joint during the warranty period, contact Customer Service. We recommend you do not try to repair the leak yourself. (Any damage or leakage from items or appliances installed by the homeowner is the homeowner’s responsibility.)



Chapter 13

FIREPLACES

Fireplaces are not intended to be the home's sole heat source. Firebox or brick discoloration is the normal result of use and requires no corrective action.

Gas Fireplaces

Indoor gas fireplaces are a direct-vent typical fireplace. With this system, no damper is needed. The fireplace vents directly outside, without need of a chimney.

There is a delay between turning on the switch and flame ignition. If you notice any deviation in this and any gas smell, shut the wall switch off immediately, close the gas valve at the fireplace and report it to the gas company. Periodic maintenance by a certified fireplace service is recommended for optimum use.

Cleaning

Use ammonia-free cleaner to clean glass. Ammonia will cause a white cloudy build-up on the glass which over time will become worse. It is recommended to clean the glass approximately every 6 months to avoid excessive build-up which may be difficult to remove.



Chapter 14

GARAGE DOORS

Your garage doors and hardware have been selected to provide years of service. The garage door is intended for privacy and security; it is not intended to be weather-tight; or dust-, daylight-, rodent- or insect-proof.

What Damages Garage Doors?

If an overhead door is left up for extended periods of time, it may warp inward. Also, if the door is left open during wet weather, water that will warp and crack materials may collect. Consult a licensed professional to correct these conditions.

Care of Garage Doors

Even Even though quality doors and frames have been installed, these doors are subject to temperature extremes and severe weather. Don't make hasty adjustments on new doors; condensation and humidity of a new home may only temporarily affect them.

Moving garage door parts should be lubricated with a silicone or Teflon-based spray lubricant once every 3 to 6 months. Check to see if screws fastening hardware to doors need tightening.

Door springs are under considerable tension, requiring special tools and knowledge for accurate, safe servicing. Call a professional garage door technician for repairs to door springs.

Garage Door Opener

Maintain the “electric eye” alignment feature that determines if an object is in the path of the door. If proper alignment is not maintained, the garage door opener will not function.

Chapter 15

WINDOWS

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

Once a month, clean vinyl surfaces with warm, clear water. Do not use any abrasive cleaners.

Sticking Windows

Most sliding windows (both vertical and horizontal) are designed for an average pull. Apply a silicone lubricant if sticking occurs or if excessive pressure is required to open or close. Do not use a petroleum-based product, such as WD-40.

Condensation

Condensation on interior surfaces of windows and frames results from high indoor humidity and low outside temperatures and/or inadequate ventilation. If your home includes a humidifier, follow the manufacturer's direction, especially during cooler temperatures.

Excess condensation may result in unwanted mold and/or mildew growth (for more on this topic, see "Mildew").

If troublesome condensation persists, see your heating contractor about proper use of ventilating fans, or potential additional or upgraded fans.



Chapter 16

ATTIC ACCESS AND INSULATION

Attic Access

Attic space is not intended for storage. Access is provided for maintaining the attic space. When performing any tasks in the attic, be careful not to step off wood beams onto the drywall. This can result in injury and/or damage to the ceiling below. Vents along the perimeter and roof of your home allow air into and through the attic. These vents provide ventilation to unheated areas, so they need to remain open and unblocked.



Chapter 17

CRAWL SPACE

The crawl space is the open area between the foundation walls, floor joints on the first floor, and the ground of a home that does not have a basement. There are air circulation vents in the rim joists, and sometimes in the foundation itself. These vents are provided to evaporate moisture and prevent mildew. A moisture barrier (usually 4 or 6 mil Visqueen) covers crawl space dirt to retain any moisture underneath.

The crawl space is not intended as a storage area. Items placed in this area will hold moisture above the moisture barrier and can cause future damage.

Standing Water

Standing water under the vapor barrier is not uncommon, especially during rainy months or if you are watering your lawn excessively. However, the crawl space is graded to allow any ground water or seepage to exit the crawl space through a positive drain system.

If standing water exists below the barrier, peel back the Visqueen and trench from the water to the positive drain. Landscaping that is correctly installed and grading that is correctly maintained also help prevent excessive water from entering crawl spaces.

Keep the vapor barrier and the crawl vents unobstructed to prevent mildew.

Do not damage or displace the Visqueen vapor barrier while under your home.



Chapter 18

CONDENSATION

Condensation occurs where warm, moist air inside the house comes in contact with a colder surface, such as windows, toilet tank, etc. Within the home, condensation may result from excessive moisture from showering, steam cooking, laundry, or a large number of indoor plants.

Reducing Condensation

1. Use vents, exhaust fans or open windows to draw moist air in kitchen, bathrooms and utility rooms outside.
2. Remove excessive humidity with a dehumidifier.
3. Check your whole house fan timer to ensure that it is running 6-8 hours per day in at least 3 increments of time, and that it is set to “Auto.”
4. Wrap cold pipe surface with pipe insulation or slip-on foam tubes.



Chapter 19

MILDEW

Mildew develops from a combination of moisture, warmth and source of nutrients.

This fungus spreads when its microscopic spores are carried in the air. When these spores land, they feed on the surface or on material that has accumulated there. Mildew can be dormant until the right environment occurs. During damp weather, mildew can appear on previously unaffected areas. Mildew may be black, green, red, purple or gray – and can go undetected because it frequently resembles dirt.

Outdoors, mildew thrives in warm, shady spots, such as under eaves, near or behind bushes, shrubs and trees, and on soffits and siding that are obscured from the sun. During humid and/or rainy periods, mildew can find a foothold on nearly any painted or unpainted exterior area.

Mildew can also be found inside a home. Bathrooms, kitchens, laundry rooms, closets, bedrooms and basements are all potential environments for mildew growth.

Homeowners may assume mildew disappears if it is covered with a fresh coat of paint – but mildew will feed on new paint and grow through it before spreading to new areas.

Unfortunately, there are no known methods of permanently eliminating mildew growth. It is usually easier to eliminate from a painted surface, however – but even paint has mildew-resistant limits. Many paint companies incorporate as much “mildewcide” as is allowed under legal and technical limits. However, even with the best preventative procedures, mildew may reappear if growth conditions are favorable.

What you can do: keep your new house surfaces clean and free of dirt and other contaminants that may become a mildew feeding source. Cut back trees and shrubbery too near the house. Considering consulting with your paint company about whether extra mildewcide can be added to the coatings.

To determine if mildew exists, scrub affected areas with bleach and cleaning solution. A quick way to identify mildew: place a drop of household chlorine bleach on the discolored area. If discoloration remains, it's dirt.

Before adding detergent to any household bleach solution, read product labels to see if they contain ammonia or ammonium compounds. These mixtures can form harmful vapors.

Chapter 20

WALLS AND CEILINGS

Your new home's interior walls are constructed of gypsum wall board ("drywall"). This material was used for its stability, even painting surface and resistance to fire.

General maintenance includes periodic repainting of walls and ceilings.

Minor repairs, including filling cracks and nail holes, can be done when redecorating.

Drywall possesses many desirable qualities, but like all building materials it has limitations. Normal house settlement, acclimation, and seasonal expansion and contraction may cause small cracks at doors and windows, and at some wall and ceiling joints. Such cracks are not serious and do not reflect any structural weakness. Your home is engineered to make this movement as even as possible. Throughout your home's lifetime, drying of framing materials (studs, beams, etc.), seasonal expansion and contraction, and general settlement will occur. This may cause some cracks and "nail pops" which involve nails coming loose from studs or joists, pushing dried joint compound ahead of them. The result: a bump or blister in drywall surface.

Cracks and nail pops may appear on interior walls or ceilings in your new home. These blemishes are to be expected; they do not affect the building's structural integrity. Weather changes (temperature and moisture content) will cause these small cracks to widen on occasion and almost disappear on others. You may also notice minor separation of molding at the joints or small interior wall cracks around doorways, archways, and at wallboard joints.

Delay immediate repair of these cracks, as further shrinkage may reopen them. The best time for repairing hairline cracks is about one year after occupancy, after the largest portion of shrinkage and settling should have occurred. There is no feasible method to prevent drywall cracks caused by settling and shifting of the home. However, maintaining an even home temperature during its first year to help the drying out process may reduce shrinkage cracks.

Settling

Wood, Wood, the most versatile and widely used of all framing materials, was used in building the framework for your home. The size and grade of individual framing members provide a safety factor beyond that necessary to withstand the stresses to which they will be subjected. Wood is susceptible to natural predators such as carpenter ants, termites and mold.

All wood will shrink and all houses will settle. To minimize the adverse effects of shrinkage and settling, a new home break-in period is required. During this period your home's temperature and humidity level should be maintained as constant as possible. Do not over- or under-heat your new home. In winter, a hot, dry house will cause the wood to dry too rapidly, resulting in rapid contraction and joint separation. To avoid this, an interior temperature of between 68° and 75° is recommended.

Separation of wood trim and backsplashes from the adjacent material is a normal result of shrinkage. This may require caulking and/or touch-up painting. Shrinkage may cause a piece of trim to pull away from the wall. Fix this by driving another nail in adjacent to the existing nail hole (but not in it). Fill both nail holes with putty and touch up with paint as needed.

Truss Uplift / Partition Separation

Trusses are prefabricated structural assemblies which hold up the roof and the top floor ceilings. They tend to be a stronger, lighter approach to roof framing. Trusses – which get their strength from their highly efficient geometric shape – are a series of triangles fastened together with gusset plates.

Attics in newer houses have lots of insulation and ventilation. They also have roof trusses instead of rafters and ceiling joists. The bottom chord of a truss is buried below a deep blanket of insulation. Even on the coldest days the bottom chord is warm. Top chords, however, are above the insulation and are subject to temperature extremes.

When exposed to different temperature conditions, upper and lower truss chords will often expand and contract at different rates. When top chords grow and the bottom chord shrinks, truss arches in the middle may cause the ceiling to lift off the walls during one season – and drop back down in another. This phenomenon is called “truss uplift” or “partition separation.” It may produce a gap of up to 1½” but is not cause for panic; it is not a defect in your home.

If a house exhibits symptoms of truss uplift, this may be disconcerting to the Homeowner. However, it is simply a common symptom of seasonal expansion and contraction. The cracks may be repaired when the trusses have settled back down onto the interior walls. The symptoms of truss uplift often lessen over time.

Chapter 21

DOORS AND LOCKS

Doors in your home are wood, fiberglass, composite wood products or metal and are subject to shrinkage and warping. Humidity changes and using forced air furnaces may make minor door adjustments necessary to keep doors operating and latching correctly. Also, wood trim or casing around door openings is made of wood and may shrink.

Exterior Doors

Door operation is affected most by humidity extremes. Exterior doors may swell and shrink due to the air's temperature and moisture content.

To a certain extent, the entry door and all exterior doors made of wood will dry out. Door frames may be subject to a small amount of movement, requiring periodic door adjustments.

Care of Door Hardware

To maintain the polished metal and prevent corrosion, regularly wipe all metal parts with a soft cloth to remove dirt and grime.

A “squirt” of lubricant available at grocery stores, hardware stores and auto parts dealers will keep the inner part of door locks working smoothly. Use graphite to lubricate “keyed” locks.

Weather-resistance

Exterior doors may require occasional fine tuning to maintain a good seal. This can easily be done by prying up plug covers on the adjustable threshold before turning screws to adjust the plate up or down.

Well-sealed doors should be somewhat hard to open and close. A slight air crack around a door, however, is normal. Flexible weather-stripping may need to be replaced periodically.

Sliding Glass Doors

Periodically clean and lubricate tracks and wheels on sliding glass doors to assure smooth operation. Promptly remove rocks and dirt from the track to avoid damaging the track and nylon guide wheels. If a door is hard to open or close, check the track to determine if an object may be restricting its operation. Never force a door because you may force it out of square.

The door's moveable vent has adjustment screws on the jamb edges. When tightened or loosened, this provides the required tensions for smooth operation.

Small drain holes are located in the track, permitting water to escape from the track channel. Be sure these holes are kept open. Otherwise, water may back up under the moveable vent and leak inside the house. Although this door is equipped with weatherstripping to provide a tight seal, rain may seep around the edges in a hard storm if wind blows the water directly against door surfaces. No sliding door will provide an absolute watertight seal against all elements.

Interior Doors

Rubber doorstops were installed in your home to minimize damage to gypsum wallboard if doorknobs strike this surface. However, this doorstop is not intended to stop a door that is slammed open and may cause damage to the door.

Care of Bi-fold Doors

Use silicone spray or a similar type of dry lubricant to maintain bi-fold closet door tracks. Do not use oil, which collects dust and gets sticky.

For extra strength, bi-fold doors are hung at both the top and the bottom on tracks with nylon guides. Forcing the doors shut will cause the guide mechanism to fall out of alignment. Doors can be readjusted by using a Phillips screwdriver and a small adjustable wrench.

Expansion or contraction of the framing members surrounding the opening, or normal settling of the home, may cause a slight change in the opening's size or shape. This permits the nylon guide to slip from the track, usually at the top.

Chapter 22

APPLIANCES

If you suspect a gas leak, turn off the main valve near the meter and call the gas company immediately.

Read the instruction books and other papers that came with each appliance to ensure their long life and to maximize use of all features. All are covered by detailed factory warranties. Mail warranty registration cards directly to the manufacturer or register on their website. If you have a problem with an appliance, call the customer service number in the manufacturer's warranty.

If an appliance fails to operate, check first to see if it is properly plugged in, and the gas is turned on. Then check the fuse box or circuit breaker. Follow trouble-shooting steps provided in the instruction manual before calling the manufacturer's repair service. If you do not have the instruction manual, download and print one from the manufacturer's website.

Dishwashers

Your owner's manual from the manufacturer instructs you how to properly load your dishwasher. Do not allow plastic, glass, utensils, or other objects to remain on the bottom of the dishwasher, as pump damage may occur. Small amounts of water will remain in the bottom of the dishwasher at all times. This is normal and helps to prime the motor for the next usage.

Ranges, Ovens, Broilers and Hoods

Clean the outside surfaces of your appliances with a non-abrasive cleaner recommended by your appliance manufacturer. Clean your oven or broiler frequently to prevent heavy buildup of baked on spills. Do NOT place aluminum foil on the bottom of the oven.

Clean or change the filter on your range hood regularly. This will reduce the fire hazard and maintain your fan's maximum pulling power. It also helps keep area walls, floors and ceilings clean. Mesh filters can be cleaned by swishing them up and down in hot sudsy water. Rinse with hot water and drip dry. Regularly wash the hood's underside with a damp, sudsy cloth to remove deposits before they harden.

Clogged Burners

Gas stoves, ovens or broilers may fail to light if the burners are clogged. Soak removable burners in a solution of hot soapy water and baking soda to clean.

Disposals

Your disposal's instruction booklet will give you precise directions for its operation. Many plumbing clogs are caused by improper garbage disposal use. Do not put bones; pasta products; rice; or potato, carrot, or onion skins down the disposal.

Many people mistakenly assume that because their waste disposal is capable of grinding up most of their garbage, it is also capable of eliminating grease and other substances that they would not otherwise put down the drain. Always use plenty of cold water when operating the disposal. It keeps the sink drain open and cools the disposal motor. This is especially true when grinding greasy substances.

Allow water to run 10-15 seconds before and after shutting the disposal off. If the drain stops up, do not put chemicals down the disposal. Avoid putting large amount of fibrous material (such as corn husks, celery, flowers, artichoke leaves, banana peels, etc.) down your disposal. Always run plenty of cold water when grinding food.

Using the Reset Button

Most units have a RESET button (see your manual) which turn the disposal off if it becomes overloaded with a substance it cannot grind. If this happens, first turn the unit off at the switch, and then follow directions on unjamming the unit. Wait about 3 minutes before pushing the RESET button and turn the switch back on. If it does not restart, turn it off again and check the circuit breaker panel to see if the breaker has been tripped.

Be sure that the switch is at OFF and the unit is unplugged before attempting to unjam or remove anything from the disposal.

Unjamming

If the disposal jams, move the switch to OFF position, and unplug the disposal. Make sure to note which outlet you pull it out of as it MUST go back into the exact same one. If possible, remove the substance obstructing the disposal's operation. If needed, use the disposal wrench to free the blades.

Place one end of the wrench in the hole at the center bottom of the disposal under the sink. With the water running, rotate the wrench in either direction until it turns easily. You may have to rock it back and forth a bit to get it going. Once it rotates easily in the one direction, rotate it in the other direction until it moves freely. Once you have the wrench moving freely, remove it completely and set it a safe distance away. This is an important safety requirement. Depress the reset button if needed, plug the unit back into the exact same receptacle from which you unplugged it. With the water still running and your hands completely away from the unit, turn the switch to the ON position. Depending upon how much waste you put down it, you may need to repeat these steps 2-3 times.

Gas Shut-off Valves

There is a shut-off on the gas line at or near its connection to each appliance that operates on gas. Also,

there is a main shut-off at the gas meter located outside your home. If you suspect a gas leak, shut off the gas, leave the home and call the gas company immediately for emergency service.



Chapter 23

SURFACES AND BACKSPLASHES

Porcelain Tile

Porcelain tile is subject to shade variations, which is a normal condition. Porcelain tile is durable and, with reasonable care, will give you years of good service.

What Damages Tile?

Porcelain tile can be damaged by sudden impacts or abrasives. Avoid using rough and jagged utensils on tile. Never scour tile with steel wool or cleaning abrasives such as scouring powder.

Where is Caulking Needed?

You may notice a separation developing at 90° angles where horizontal and vertical surfaces meet, at the joint where the sink meets the countertop surface and at 90° angles where the countertop surface meets the back, side, and end splash.

This separation is natural and caused by the difference in the amount of expansion and contraction between the various materials used. To prevent water damage to surrounding areas, it is important to caulk these areas when separation occurs.

Tile Care

Porcelain tile requires little care and is one of the easiest surfaces to keep clean. Porcelain tile backsplashes normally need only to be cleaned with a damp cloth or sponge. For a stubborn soil, use a mild soap in water solution, or a neutral PH non-abrasive cleaner.

Grout Care

Tile grouting is subject to cracking due to lumber settling and shrinkage of lumber. It's inevitable that this will occur during your home's first year.

Although tile is difficult to stain, grout located in the joint will stain from food, water and cleaning solutions. Grout that becomes yellowed or stained can be cleaned with a fiber brush, cleanser and water. As a preventative measure, you may apply a sealer to the grout to reduce the chance of discoloration. This sealant is available at most hardware stores. Apply it soon after you move in, and then according to frequency suggested in the product directions. Sealant may alter grout color, so test it in an inconspicuous area before applying elsewhere.

Caulking Care

There are a couple types of caulking compounds. Silicone caulk contains silicone and will not accept paint. It works best where water is present, including where a bathroom sink meets a countertop. Latex caulk is used for areas that require painting, such as cracks and corners.

Check caulking every six months. Remove excess build-up and completely redo as necessary. There are a variety of caulking compounds available, including one specially designed to match your grout. Each has specific uses and directions for applications.

Laminated Countertops

Protect your countertops surface by never cutting directly on them. Never place hot items, including irons and pans, on laminated countertops.

Laminated Vinyl Tile Care

High-pressure laminates can be kept shiny and looking new with a mild detergent or soap, followed by a light clear water rinse before drying.

Use a cutting board with rubber feet when using sharp knives. Laminates, like glass, can be cut by sharp blades. Never clean these surfaces with a sharp object such as a razor blade or knife.

Indelible ink, which comes from some food packages, is a common countertop stain that sometimes comes off with an all-purpose spray cleaner. Take care when handling packages and clean up any stain immediately.

Wipe up strong solutions immediately. Tea, beet juice, vinegar and washable ink can be removed with an all-purpose spray cleaner or other non-abrasive cleaner.

In routine maintenance, it may be necessary to re-caulk the joint between the sink and the countertop. Siliconized caulking is typically installed in these areas to prevent water intrusion.

Natural Stone (marble, granite, slate) Care

Natural stone is not man-made and comes from the earth. That is why we have no control over extreme color changes and veining from one piece to the next. Variations in thickness and patterns are also characteristics of natural stone — two pieces will never be identical. Slate is a stone that normally includes a rough, uneven finish. Avoid acidic foods or chemical cleaners coming in contact with granite — these can discolor the granite. Make sure to clean with mild soap and water or specific stone cleaner. Never place hot irons, pans or similar onto the countertop.

Quartz Countertops Care

Quartz countertops are easily maintained with a few simple precautions. Never use steel wool or abrasive cleansers that can scratch and dull the finish. Routine home maintenance may include re-caulking the joint between the countertop and wall or backsplash surface. Never place hot items, including irons and pans, on the countertop.



Chapter 24

FLOORING

Protect Your Floor While Moving Furniture and Appliances

Be extremely careful when moving heavy furniture, refrigerators, and washers and dryers. These objects are the most common causes of scratches, indentations, and floor tears in new homes. When moving heavy furniture or appliances, place plywood or hardboard panels on the new floor and “walk” the objects across the panels. Carpet samples or remnants can also be used. Never slide furniture on a vinyl floor; no vinyl will withstand this abuse and may tear or wrinkle. Always use furniture pads and floor protection when moving any heavy furniture or appliance.

Floor Squeaks

Some floor squeaks are unavoidable. Lumber shrinkage as well as temperature and humidity changes may cause squeaks. Unfortunately, a squeak-proof floor cannot be guaranteed. Please refer to the warranty section for details.

Carpet

Carpeting in your home was laid by a professional installer as prescribed by the manufacturer. Cleaning, normal foot traffic, moving furniture over the carpet, etc. will cause the carpet to stretch. Stretching cannot be prevented by the manufacturer, installer or builder. Traffic factors – including the home’s number of children, pet activity and other uses - will determine frequency of needed cleaning and how the carpet “wears.”

Keep outside soil from being tracked indoors and prevent soil accumulation inside by using mats at all entrances. Relocate furniture periodically to allow even distribution of traffic and carpet wear. Use mats and

runners in heavy traffic areas to reduce wear.

Seams

Your home's carpet has been installed firmly in place against the base molding and along the stairs. Seams are a necessity since most carpeting is manufactured in 12' roll widths. With certain carpeting types and styles (particularly Berber), the joint at the seams may appear to have dissimilar material colors, making these seams more visible (especially on stairways). Some appearance changes may occur in high-traffic areas due to pile crush.

Generally, as time goes by, carpet fibers will begin to relax a bit. Seams which might be slightly noticeable when new will begin to become less detectable.

Vacuuming

Soil and dust left in carpets are gritty, sharp-edged particles that erode the pile as effectively as sandpaper. Regular, thorough vacuuming removes them. Vacuum often — a clean carpet is a longer wearing carpet. The vacuum cleaner should be equipped with a brush or beater bar which is properly adjusted for the height and type of carpet being cleaned — the brush or beater bar is more effective than using suction only.

Busy traffic lanes should be vacuumed at least twice weekly, if not daily. This will help to maintain the upright position of the nap. The entire area should be vacuumed once or twice weekly. Up to 3 passes with the vacuum is considered light cleaning; 5 to 7 may be needed for heavy cleaning.

Professional Cleaning

Select your professional carpet cleaner carefully. A professional cleaner will give you client references; check them out. Expect the cleaner to inspect your premises to warn of any pre-cleaning problems and before quoting a price for their work.

Hardwood Floors

Wood is a natural product so it's subject to natural characteristics. This can include grain and color variations. Wood is further subject to seasonal expansion and contraction due to temperature and humidity. Minor surface scratching will occur during normal installation and preparation of hardwood floors.

When new, small splinters of wood may 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.

What Damages Hardwood Floors?

Warping will occur if the floor becomes wet repeatedly or is thoroughly soaked even one time. Heavy-traffic areas are likely to exhibit finish dulling. A white, filmy appearance is caused by moisture (often from wet shoes or boots). Use protective mats at exterior doors to help prevent sand grit and moisture from getting on the floor.

Rubber backing on area rugs or mats can cause yellowing and warping of the surface. Exposure to ultra-violet light (sunlight) may cause a floor finish to change in color, resulting in hardwood color variation under furniture, area rugs, inside pantries, etc.

Waxing or using furniture polish is not recommended.

Hardwood Floors Care

Sweep/Sweep daily or as needed. Never wet mop or steam-clean a hardwood floor. Clean up food spills

immediately using a dry cloth. If a spill requires a damp cloth, cloth dry the area immediately.

Tile Floors Care

For tile floors, vacuum when needed and occasionally use a wet mop with warm water (mild solution, no detergent) to clean. Floors can be cleaned by mopping on a mild soap-less solution detergent in water and rinsing thoroughly. For floors in wet areas, use a soft cloth or sponge with an all-purpose cleaner or medium-strength solution of soap-less detergent. Use bleach in case of fungal growth (athlete's foot). Rinse well.

Vinyl Floors

Vinyl floor coverings are manufactured in either 6' or 12' goods, so seams are a necessity.

Caution! Do not disturb welded seams. Avoid walking or placing furniture on new vinyl flooring for at least 24 hours after installation.

Do not use cleaning or finishing agents on the new floor until the adhesive has set thoroughly. This takes about 2 weeks.

What Damages Vinyl Floors?

Tears, cuts, and indentations may result from high heels; rocks embedded in shoes; dropping sharp objects; unprotected chair or table legs, or children's toys. Deep burns and cuts should be repaired by a qualified flooring installer.

Never allow standing water on your vinyl flooring. Edges can lift or curl if excessive moisture is allowed on the floor. Use a caulking designed for this task to seal edges. Bathmats can hold moisture against your vinyl floor. They should be removed from the floor promptly after bathing to prevent discoloration and damage to the vinyl floor.

Although vinyl flooring wear layers are designed to withstand routine household wear, they will lose their brilliant shine if repeatedly subjected to sand and dirt, especially in heavily traveled areas. Frequent sweeping will prevent abrasive action, prolonging your floor's built-in shine.

Certain spills and smears can be especially harmful – including solvent-type shoe polish; hair waving and dyeing solutions; lipstick; wax crayons; furniture oils and polishes; animal excretions, and others. Wipe up all spills quickly before they set.

Some rubber-backed mats can cause the floor to discolor over time. A mat or rug that does not have a rubber or latex backing is recommended.

Asphalt and tar deposits on shoes may discolor a vinyl floor, especially in hot weather. A non-staining fiber mat placed near entrances will help remove deposits on shoes. Also, a vinyl coating finish may help protect the flooring. If it does become discolored, the finish can be removed and the flooring recoated.

Care of vinyl floors

Remove loose dirt daily with a broom, dust mop or vacuum cleaner. When spills occur, wipe them up immediately with a damp sponge, cloth, or mop. When thorough cleaning is required, use diluted detergent or a cleaner recommended for your flooring. Use just enough mechanical action with a mop, cloth, or floor scrubber to loosen dirt. Wipe up the cleaning solution, then rinse and allow to thoroughly dry. Do not flood the floor with water.

Laminate Floors

Laminate flooring is beautiful, naturally durable and an environmentally responsible choice. With a little care, your laminate flooring will look great for years to come.

What Damages Laminate Floors?

Surface dust and grime can scratch the floor or dull the finish.

- Entry mats will help collect the dirt, sand, grit, and other substances such as oil, asphalt, or driveway sealer that might otherwise be tracked onto your floor.
- To prevent area rugs from slipping, use an approved vinyl rug underlayment.

Furniture, and foot traffic can also cause damage.

- Use floor protectors and wide load-bearing leg bases/rollers to minimize the chance of indentations and scratches from heavy objects. As a rule, the heavier the object, the wider the floor protector.
- Keep your pets' nails trimmed to prevent them from scratching your floor.
- Never try to slide heavy objects across the floor.
- A protective mat should be used for furniture or chairs with castors.

Excessive moisture or humidity can damage the floors and cause unusual settling or warping.

Cleaning Laminate Floors

- Regularly sweep, dust, or vacuum the floor (with no beater bar) to prevent dirt and grit accumulation that can scratch the floor or dull its finish.
- Use a damp cloth to immediately blot spills. Never allow liquids to stand on your floor.
- Periodically clean the floor with products made specifically for Laminate Floors.
- Do not wash or wet mop the floor with soap, water, oil-soap detergent, or any other liquid cleaning method. This could cause swelling, warping, delamination, and joint-line separation – voiding the warranty.
- Do not use steel wool, abrasive, or strong ammoniated or chlorinated cleaners.
- Do not use any type of buffing or polishing machine.
- Do not use any type of steam-cleaning machine.

Chapter 25

MILLWORK AND CABINETS

Millwork

Millwork in your home is an MDF (Medium Density Fiberboard) product. It's coated at a factory and painted with a water-based semi-gloss paint. It is extremely versatile product and requires little care. Periodic dusting or wiping with a soft, damp-dry cloth or sponge is about all is required for cleaning. Avoid damaging the surface; protect it from excessive amounts of water.

Cabinets

Your cabinets are a selection of high gloss, painted, and textured veneers with full overlay doors and drawers for a luxury look and finish. These materials provide a hygienic, durable surface that is both beautiful and functional. Cabinet surfaces require little care. Clean them with a damp-dry cloth or soft sponge, and non-abrasive cleaner, and protect surfaces from damage.



Chapter 26

PAINTED AND STAINED SURFACES

Your home's overall beauty and value can be best protected by regularly repainting exterior surfaces. All exterior wood materials require periodic repainting.

Exterior Paint

Exterior paint is particularly subject to fading or chalking caused by the sun and weather. Wood trim boards may pull away from one another and from other materials. This requires caulking with a good exterior caulk before repainting to prevent possible leaks and to improve your home's appearance. Wood trim will also develop raised grain as it ages and dries. Much of this aging occurs during the first year. Raised grain can result in peeling paint; however, this is not due to a defect in materials or workmanship.

Paint maintenance of wood trim and gutters is another homeowner responsibility. Before starting, make sure the area to be painted or caulked is clean of dirt, grease, and debris.

Do not allow yard sprinklers to spray water on your home's exterior walls. This causes blistering, peeling, splintering, and other damage to your home. White or light color painted trim will show grain and cracks more readily than darker colors, and will likely require additional maintenance.

Severe weather, including hail and windstorms, can cause a great deal of damage. Inspect your home after such storms. Promptly report any damage to your homeowner's insurance company.

Plan on caulking and repainting your home's exterior surface about 3 years after closing. After that, paint as often as your paint manufacturer suggests for your area and climate.

Interior Paint

Where painted, interior woodwork has been finished with a semi-gloss paint. Surfaces may be wiped with a soft damp-dry sponge and soapy or clear water. Exercise caution by limiting water use on painted millwork to avoid water damage and swelling. Please remember: modern water-based paints may become somewhat soft during extreme heat. Storing items on a painted millwork windowsill may damage the paint; this would not be covered under warranty.

Most walls and ceilings in your home have been painted with latex paint. Do not wipe or scrub these walls; this could remove both the texture and the paint. Use matching touch-up paint over soiled spots, nicks and scrapes. Use spackle to cover any small defects before paint touch-up.

In kitchen and bath areas, the walls and ceiling are painted with satin or eggshell finish latex paint. These surfaces may be wiped clean using a damp sponge or cloth.

Painted interior doors and their frames are semi-gloss as well for durability and easy care.

The best time to patch any small cracks, chips and gouges is before repainting. Make sure that the surface to be worked on is free of dirt, grease and debris before applying any patching materials (latex caulking, spackling compound, etc.) or paint.

While more protected than exterior painted surfaces, interior paint is exposed to light and other elements which cause fading and discoloration. When doing touch-ups with semi-gloss or satin/eggshell paint, use a small brush. Apply paint only to the damaged spot. Touch-ups will be shinier than surrounding areas and may be visible under certain lighting conditions.

Stained Surfaces

Certain wood finishes are intentionally stained rather than painted. Stain provides a protective finish that penetrates and protects the material while allowing a natural grain and weathering process that in no way shortens the material's life. The change in appearance brings out the wood's beauty and lends a mellow patina as time goes by.

Stained surfaces will not last indefinitely. Eventually they will need to be re-stained and sealed. Because natural-finish wood entry doors are subject to the sun's rays, they will require more frequent re-coating than a painted door.

On surfaces which are stained rather than painted, a natural aging and weathering process will occur. If you don't like the weathered look, you may want to re-stain the material every 2 or 3 years. Due to wood characteristics, color variation will result when stain is applied. Light colored stains will more readily show the grain and crack, requiring additional maintenance.

Varnish applied over stain protects a stained finish. However, it may crack or peel as a result of weather conditions, especially on a door exposed to the sun for long periods of time. Varnish may need sanding and resealing periodically and is part of homeowner's maintenance.