

owner's manual for new

homes

Dear Homeowner: On behalf of Tartan Homes, welcome to your new home!

Buying a new residence is among the biggest and most important purchases you will make and Tartan is proud to be a part of your decision. As a discriminating purchaser, you have selected Tartan to provide for YOUR housing needs, we pledge to do our utmost to deliver a high quality home that meets your expectations and makes you proud for years to come.

We are confident you will enjoy your home and we look forward to providing you with many years of comfort, low-maintenance and trouble-free living.

Once again, welcome to your new Tartan home and community. May both give you great pleasure.



IMPORTANT NOTICE

30 DAY INSPECTIONS

In the event that any items were missed on your Pre-move Inspection of your home, you have 30 days from your closing date to provide a written listing of any such items. This list must be faxed to Tartan within 30 days of your closing date (Fax: 613-822-0368).

SERVICE DEPARTMENT

All service calls during business hours (8:00 a.m. to 4:30 p.m.) are to be directed to Tartan's service department at Finlay Creek and River's Bend 613-822-1356 and Jackson Trails – 613-822-2949. Please note that non-emergency calls will be returned within 48 hours.

24-HOUR EMERGENCY SERVICE

Any emergency service calls relating to plumbing, electrical or heating systems, during non-business hours, should be directed to the following:

PLUMBING B.E. MECHANICAL 📞 (613) 749-5611

HEATING *Check the sticker on furnace for Emergency Heating phone number*

Emergency service calls to the above contractors, which are deemed not to be an emergency, will result in the homeowner being billed directly by that contractor. For example, service calls for problems such as blocked toilets are not considered emergencies.

For further assistance call: Tartan Pager # (613) 788-8693

TARTAN | 233 Metcalfe Street | Ottawa, Ontario | K2P 1P9 | 📞 (613) 238-2040 | 📠 (613) 238-1056

TABLE OF

contents

Section 1: Introduction, Inspections and Warranties

How to use this manual	54
Home Warranty	54
Inspection.	56
Municipal Property Taxes.	57

Section 2: Inside Your Home

Appliances	57
Cabinets.	57
Countertops	58
Drywall	58
Electrical System	59
Fireplace.	59
Flooring	60
Heating/Ventilation/Air Conditioning	63
Insulation	64
Interior Doors	65
Lighting	65
Painting	65
Plumbing System.	66
Rough-Ins.	68
Smoke Alarms	68

Section 3: Outside Your Home

Asphalt Driveway	69
Concrete Foundation	69
Drainage.	69
Eavestroughing/Downspouts	70
Exterior Caulking	70
Exterior Electrical Outlets.	70
Exterior Taps	71
Fencing.	71
Landscaping.	72
Precast Concrete Patio Pavers/Walks	72
Masonry	73
Overhead Garage Doors	73
Posts and Beams	73
Property Line	74
Roofing.	74
Siding	75
Windows	75

Section 4: Glossary 76

Section 5: Index 53

index

Air Conditioning	64
Appliances	57
Asphalt Driveway	69
Attic Ventilation	74
Cabinets	57
Carpeting	61
Caulking	70
Ceramic Tile	61
Chimneys	64
Circuit Breaker Panel	59
Concrete Floors	62
Concrete Foundation	69
Countertops	58
Door Hardware	65
Drainage	69
Drywall	58
Eavestroughing/Downspouts	70
Electrical	59
Fencing	71
Fireplace	59
Floor Humps and Dips	62
Floor Squeaks	62
Garage Doors	73
Glossary	76
Hardwood Floors	60
Heating/Ventilation	63
Hot Water Tank	66
Humidity Control	63
Ice Damming	74
Insulation	64
Interior Doors	65
Landscaping	72
Lawns	72
Lighting	65
Marble	61
Masonry	73
Painting	65
Plumbing	66
Precast Pavers/Walks	72
Property Line	74
Roofing	74
Rough-Ins	68
Siding	75
Smoke Alarms	68
Steel Beams/Posts	73
Toilets	66
Trees and Shrubs	72
Vinyl Flooring	60
Windows	75

INTRODUCTION, INSPECTIONS AND WARRANTIES

what this manual is about

AND HOW TO USE IT

Choosing Tartan means your home has been carefully designed and built by a team of professional tradespersons who strive for the highest standards in every home that bears the Tartan name. But like a new car, fresh off the assembly line, your home contains thousands of individual components that may need adjustments in coming months. That's why we've prepared this homeowners manual. Based in part on Construction Performance Guidelines for the Ontario Home Building Industry, a document prepared by the Tarion Warranty Program, it is designed to provide answers to the most frequently asked questions about the ownership and operation of a new home.

We encourage you to take the time to read this booklet in its entirety. When you're done, you will have a basic understanding of the workings of your home. You will know how to maintain various building systems, structures and components, you'll know which repairs are covered by your home's warranty and when to report them, and you will be equipped to resolve common problems in a way that will ensure your home is a pleasure to live in for many years.

This booklet is not intended to serve as a complete home repair guide; it does not replace the operations and maintenance manuals provided by the manufacturers of specific equipment such as your furnace, nor does it take the place of the Tarion Warranty Program. Please refer to the section below for further details on your home's warranty coverage under the Ontario program.

Furthermore, after-sales service and warranty issues are specifically referred to in numerous places in your agreement of purchase and sale, mostly in schedules E and G. It is important for you to read and understand these articles fully.

Included as an appendix to this booklet are documents produced by the Tarion Warranty Program. As part of our warranty obligations, we are required to present them to you. They clearly outline our respective warranty rights and obligations. Included also are blank copies of the 30-Day report and Year-End reports. Please read the Tarion Warranty Program material thoroughly.

It's time to learn about the proper upkeep and operation of your home. Let's get started!

HOME WARRANTY

Your home is protected from deficiencies by quality commitments made by Tartan Homes, and by the Tarion Warranty Program; there are three categories of protection or coverage:

One-Year Warranty Protection – Tartan warrants that the home is:

- constructed in a workmanlike manner and is free from defects in material;
- fit for habitation
- constructed in accordance with the Ontario Building Code for one year from the date of first possession.

Two-Year Warranty Protection – Tartan warrants for two years from the date of possession that the home is:

- free from water penetration through the basement or foundation of the home;
- constructed in a workmanlike manner and is free from defects in materials including windows, doors and caulking such that the building envelope of the home prevents water penetration;
- free from defects in material and work with respect to the electrical, plumbing and heating delivery and distribution systems;
- free from defects in materials and work resulting in detachment, displacement or physical deterioration with respect to the exterior cladding of the home;
- free from violations of Ontario Building Code regulations under which the building permit was issued, affecting health and safety, including, but not limited to, fire safety, insulation, air and vapour barriers, ventilation, heating and structural adequacy.

Seven-Year Major Structural Defect Warranty Protection – Homes are protected for seven years from the date of first possession against major structural defects as defined by regulations. Structural defects include:

- any defect in material or work that results in the failure of a load-bearing part of the home's structure and adversely affects its load-bearing function;
- any defect in materials or work that materially and adversely affects the use of the building as a home.

Items Not Covered Under Your Warranty – It is important that homeowners know what is not covered by the warranty. According to the Tarion Warranty Program Plan Act the following are excluded from warranty coverage:

- defects in materials, design and work supplied by the homeowner;
- secondary damage caused by defects, such as property damage and personal injury;
- normal wear and tear;
- normal shrinkage of materials caused by drying after construction;
- damage caused by dampness or condensation due to failure by the homeowner to maintain adequate ventilation;
- damage resulting from improper maintenance;
- alterations, deletions or additions made by the homeowner;
- settling of land around the building or along utility lines, other than beneath the footings of the building;
- damage resulting from acts of God;
- damage caused by insects or rodents, except where construction does not meet specifications of the Ontario Building Code;
- damage caused by municipal services or other utilities;
- surface defects in work and materials specified and accepted in writing by the homeowner at the date of possession.

The warranty is also not applicable to:

- temporary or seasonal homes;
- homes built on pre-existing footings or foundations;
- homes that have been lived in or rented prior to sale or built in converted buildings;
- homes purchased from a receiver or trustee under certain circumstances;
- damage caused by the homeowner, tenants or guests;
- damage resulting from improper maintenance;
- variations in square footage.

To ensure coverage for specific equipment and appliances found in your home, complete and mail guarantee cards to the appropriate companies. If you have questions about specific warranty periods, Tartan's Customer Service Department will verify the date of your closing for appliance manufacturers.

ITEMS

not covered UNDER YOUR WARRANTY

INSPECTION PROCEDURES

The Tarion Warranty Program material in the back of this booklet includes additional information on inspection procedures, and on specific warranty rights and obligations.

Pre-delivery Inspection:

The Pre-delivery Inspection (PDI) takes place before you take possession of your new home. Ideally, this inspection will take place within a week of closing and occupancy. At this time, homeowners are given a PDI package, which includes this manual, a copy of the 30-Day and Year-End inspection reports to be used later, as well as warranty and product information on some of the appliances that will come with the new home.

Together, you and a representative of Tartan's construction department will complete the PDI, during which homeowners must ensure that incomplete, missing or damaged items are listed on the Pre-Delivery Inspection report (PDI). The builder is then obligated to finish the work or supply the missing features listed on the PDI in order to complete the sales contract.

Damaged items found during the PDI must also be listed on the report to ensure they are recognized as conditions that existed before the homeowner took possession of the house. Often it is impossible to determine who is responsible for damage that is reported after occupancy, so listing a condition on the PDI removes any doubt that the damage existed before the time of occupancy.

It is very important for you to understand that incomplete, missing or damaged items not reported on the PDI will not be covered by warranty. By extension, these items will not be repaired by the builder.

Generally, the construction department will ensure that all items on the PDI list are completed prior to the closing date.

30-Day Inspection and Report:

After you move in, you may find other minor items that require attention. Please record these on the 30-Day Inspection Report included here. Mail the completed form to Tartan Homes or drop it off at the Sales Office before the 30 days are up. Tartan will not book or conduct this inspection. Send a copy to the Tarion Warranty Program people as well, as per the instructions in their material.

Occasionally items that appear on the PDI list are not completed by the closing date. You should list these items again on the 30-day list to ensure their prompt attention.

Warrantable items on the 30-day list will be booked for repair through Tartan's Service Department and should be completed within several months of occupancy. For emergency items such as heat and hydro interruptions, please call the utilities or the furnace manufacturer directly. For water penetration issues, please call Tartan's service number.

As with the PDI, it is very important for you to complete the 30-Day list and submit it to Tartan not more than 30 days after closing. As with the PDI, items that are not listed on the 30-Day list will not be repaired by the builder. Also, if the 30-Day list is late, you may have to wait till year-end for these items to be deemed warrantable. You should also be aware that damaged items appearing on the 30-Day report will only be deemed warrantable if these items also appear on the PDI.

The Year-End Inspection and Report

During the course of the first year of occupancy there may be some deficiencies which require attention. Emergency items will be dealt with immediately, whereas other warrantable items will be dealt with as part of the Year-End report.

Before the first anniversary of your occupancy you can submit a Year-End report, a blank copy of which is included here. The Tartan service department will not book or conduct this Year-End inspection. Send a copy to our service department and to the Tarion Warranty Program people. We will review the list and repair items that qualify under the Tarion Warranty Program. As a courtesy, Tartan will visit your home once and deal with issues related to shrinkage and settling of your home. This work will include caulking, repairing nail pops, and doing plaster touch-ups, but will not include sanding or painting.

Please note that the installation of new equipment in the first year of ownership may void the warranties of other house components or systems. For example, the installation of central air conditioning may void the furnace thermostat warranty. Please read warranty information supplied by manufacturers before installing new equipment.

INSPECTION PROCEDURES

Now that you own a home, you are required to pay property taxes that are used by the City of Ottawa to provide services such as garbage collection and street cleaning and to build and operate recreational facilities such as libraries and community centres. In accordance with Ontario's Assessment Act, your new home will be assessed shortly after you move in; soon after, you will be informed of the amount of annual taxes you are required to pay. Once you take possession, it is your responsibility to ensure your home and property has been properly assessed.

INSIDE YOUR HOME

APPLIANCES

When the builder provides electrical and gas appliances with the purchase and sale of the new home, connections to mechanical and electrical systems are the purchaser's responsibility. Carefully review the manufacturer's installation, operation and maintenance instructions prior to installing and operating appliances. File all warranty registrations with the applicable manufacturer. If service is required, contact the manufacturers' local service agents.

CABINETS

Cabinets should be cared for similar to furniture products. On a regular basis, cabinet doors and interiors should be cleaned with a damp, soft cloth and dried after exposure to water. Grease splatters should be removed from surfaces as soon as possible. Spray waxes with Naphtha should be avoided since their chemical composition could react poorly with moisture and result in a milky appearance in the finish. Good quality lemon oil is recommended.

As with furniture, finishes may appear to fade over time depending on exposure to sunlight. Where natural or composite wood products are used to manufacture cabinets, shade, texture and tonal characteristics may vary between doors and other components. As with other wood products, cabinet materials and components are affected by humidity levels and temperature variations. Those cabinet doors which are located directly above or next to appliances will fade in colour before the other doors. Where plastic laminate materials are used in cabinet construction and finishes, refer to care and maintenance suggestions under the heading Counter Tops.

Cabinet assemblies and the structures supporting them may be affected by material shrinkage that can result in gaps, cracking, changes in alignments and separation from adjacent walls and ceilings. Unless excessive, these conditions are generally considered normal and are easily repaired with caulking by the homeowner.

Squeaky cabinet doors can be silenced with commercially available lubricants. In time, it may be necessary to make minor adjustments to keep doors properly aligned. Adjustments are made by loosening or tightening screws in the hinge assembly.

COUNTER TOPS

Most standard kitchen and vanity counter tops are manufactured from a long-lasting composite-type plastic laminate material. Only damage specifically identified on the Pre-Delivery Inspection report is eligible for warranty coverage.

Damage resulting from normal wear and tear is excluded from the warranty. To prolong the appearance and performance of kitchen and vanity counter tops, Tartan Homes recommends:

- Hot items and in-use electrical appliances should be placed on protective insulating pads, rather than directly on a countertop.
- Surfaces should be cleaned with a damp soapy cloth; difficult stains should be removed with a household solvent.
- Avoid cutting or chopping on plastic laminate surfaces.
- All joints and seams should be kept free from standing water, liquids or moisture, which may result in seam separation that must be repaired by the homeowner.
- When using an automatic dishwasher, avoid leaving the door ajar after use because rising steam may contact counter top edges and cause permanent damage or de-lamination.
- Adjust the cooking range height so that the range top is at least 1/4-inch higher than the adjacent counter top. Otherwise, heat from the cooking surface could cause plastic laminates to separate, an item that is not covered by your warranty.
- It is unnecessary to add finishing polishes to plastic laminate counter tops but improved lustre and protection may be achieved by applying glass wax, liquid car polish or lemon oil.

DRYWALL

Drywall is the interior gypsum board-based finishing system used to cover wall and ceiling surfaces inside the home. Usually 1/2-inch thick, the sheets are fastened to the interior wood framing followed by the installation of metal corner reinforcements and the application of different coats of tape and joint compounds to cover fastenings, joints and corners.

Final coats of joint compound are sanded smooth so that base and finish paint coatings may be applied. During the adjustment period, material shrinkage and settlement of the structure may result in drywall cracking at the joints and nail pops where fastenings appear as small bumps or depressions along the face of finished gypsum board. This condition is common to wood frame construction and is not considered to be a defect in materials or work.

Nail pops or unsightly cracks that are readily noticeable when viewed under normal lighting conditions from a normal viewing position from the wall will be completed by Tartan Homes once, at the end of the first year of occupancy. The homeowner is responsible for sanding and reapplying paint to repaired areas. Drywall damage reported at the time of the Pre-Delivery Inspection will be considered for warranty coverage.

Drywall installed on ceilings, even after being put in place according to the Ontario Building Code, may appear to sag, bulge or be wavy, often because of lighting conditions or glossy finishes. Spray-applied textures and matte finishes minimize this condition. However, if ceiling sags or waves vary from the specified plane by more than 12 millimetres, Tartan Homes will make repairs.

Ceiling/wall joint separation, commonly referred to as “truss uplift,” is considered acceptable if cracks are less than 4 millimetres in width. It may occur when outdoor temperatures are considerably colder than indoor temperatures and can appear as a minor crack or a larger gap. Cracks or gaps in excess of 4 millimetres will be repaired by Tartan Homes. Repairs should be delayed until the truss returns to its original position.

Joints in interior trim and moulding are tight fitting at the time of installation but minor gaps may appear because of normal shrinkage of materials during drying after construction. This condition is excluded from warranty coverage unless gaps or cracks are in excess of 1.5 millimetres. Gaps exceeding 1.5 mm will be repaired by Tartan Homes once, at the end of the first year of occupancy.

ELECTRICAL SYSTEM

Circuit Breaker Panel

The circuit breaker electrical panel is usually found on a wall in the basement and contains circuit breakers with switches for the electrical circuits throughout the home. The legend printed on the electrical panel should be marked to indicate which outlets in the home are protected by the applicable numbered circuit breaker. Circuit breakers are intended to be left in the ON position for normal working circuits. Under some conditions, circuit breakers disengage to the OFF position, severing power from the circuit. When this happens, the switch may not fully retract to the OFF position and appear to be ON. To confirm, manually move the switch to fully OFF and then to fully ON.

Circuit breakers that have been disengaged automatically are referred to as tripped breakers. These may simply be the result of an appliance overload. However, breakers tripped repeatedly may be the result of a more serious condition or defective appliance that may cause damage or fire. In this case, the condition should be checked by a qualified electrician.

Where an outlet or appliance does not appear to have power, the circuit breaker should be checked to confirm that the applicable breaker is ON. Electric kitchen stoves normally contain electrical fuses within the appliance. Where the stove does not appear to have power, check fuses in the stove, as well as the circuit breaker and review the manufacturer's operation and maintenance manual.

Ground Fault Circuit Interrupter (GFCI) or (GFI)

New homes are equipped with Ground Fault Circuit Interrupters (GFI) for specific circuits to reduce the risk of electrical shock caused by a ground fault in electrical tools and appliances. The GFI receptacle is intended to protect exterior electrical outlets and bathroom outlets.

The exterior GFI receptacle is usually located at the circuit panel or at one of the exterior outlets. The interior bathroom GFI receptacle is usually located in one of the bathrooms. The GFI receptacle has two buttons at the center of the outlet. One black button for test and one red button for reset. GFIs should be tested monthly in accordance with the manufacturer's instructions.

Electrical Safety

Avoid handling electrical equipment or cords with wet hands or around moisture. Repair or replace damaged fixtures, fittings and cords. When planning amendments, alterations or expansion to the electrical systems, use the services of a qualified electrician. Repeated failure of electrical circuits should be checked by a qualified electrician.

FIREPLACE

Natural Gas Fireplace

The Natural Gas Fireplace is considered a gas-fired appliance. Review the manufacturer's operation and maintenance manual for safe, efficient performance of the fireplace.

Wood Burning Fireplace

When wood burning appliances such as a fireplace or wood stove are installed, building regulations require the installation of a CO Detector to help detect hazardous levels of Carbon Monoxide gas. Review the CO detector's operation and maintenance manual to ensure the highest level of performance. Use dry hardwood for fireplace burning and never use the fireplace to incinerate other products or materials. Prior to lighting a fire, review the manufacturer's operation and maintenance manual.

Repeated intense fires located close to the glass door system may result in damage to the glass and personal injury. Maintain moderately sized fires towards the back of the fire box. Combustible deposits of soot and creosote that accumulate inside the chimney should be cleaned on a regular basis to avoid chimney fire that could cause personal injuries or permanent damage to the venting system and home.

FLOORING

The flooring in your new home is a combination of hardwood flooring, carpeting, resilient flooring, ceramic tile and marble.

To protect flooring from denting, scratching and tearing, put glides or rests under furniture and appliances and do not drag or drop heavy or sharp objects across the floors. The Ontario New Home Warranty Program's publication "What Every New Home Buyer Should Know" contains useful information about care and maintenance of all types of flooring.

Changes in height between different flooring materials sometimes occur, caused by material thickness and/or installation methods. Standard practice is to install a transition strip of material such as wood, metal or marble to ease the change in height. These strips do not constitute a tripping hazard and may be used at the builder's discretion.

Vinyl Flooring

Resilient flooring, also known as cushion flooring, sheet flooring, or vinyl flooring, is installed with adhesives over an underlay material that is fastened to the sub floor. Seams and ends should remain firm and should not become loose with normal use and maintenance.

Seams in the underlay material beneath the vinyl flooring are sometimes visible at the floor surface. While the flooring industry attempts to conceal the seams with filler compounds, some conditions persist and are unpreventable. Defects recorded and reported to the builder during the pre-occupancy inspection time will be repaired.

Vinyl floors should be swept daily using a soft broom or dust mop to prevent accumulation of grit that can scratch and dull the surface finish. They should be washed with lukewarm water and a mild detergent rather than harsh cleaners that can cause fading and discolouration. Stubborn scuff marks can usually be removed with a damp cloth and scouring powder.

Soft-backed floor mats are highly recommended for floor protection but avoid coca fiber or rubber backed mats, which may stain or scratch the surface. Avoid using Rolling Casters on vinyl floor surfaces; extended direct exposure to sunlight or the use of inappropriate cleaning materials, all of which may result in discolouration. None of these are covered by your home's warranty.

Hardwood Flooring

Hardwood Flooring is normally made from kiln-dried hardwood that is finished on site or in a factory. As with other wood products, hardwood flooring may be affected by humidity levels that can cause shrinkage and expose gaps between the boards. The homeowner is responsible for maintaining indoor humidity levels through humidification, ventilation, air conditioning or dehumidification. A hydrometer can be used to monitor indoor humidity.

Where humidity levels are excessive, the wood may swell and result in buckling, cupping (high edges), crowning (center strip is higher than the edges) or lifting of the boards, conditions that are not warrantable. Extended direct exposure to sunlight will result in colour fading, discolouration and earlier-than-normal drying of the wood; areas around heat registers may be more susceptible to damage. All of these conditions are also non-warrantable. If the floor cups or crowns, the homeowner should wait for the floor to correct itself in an environment of stable humidity before sanding. Immediate sanding may cause serious damage to the hardwood.

Wood is a natural product and variation in colour and grain pattern from one piece of flooring to another is considered normal. Reflected light, particularly from large windows, magnifies irregularities in a floor and should not determine acceptance. Knots are natural characteristics of wood and are acceptable within the specified grade.

Hardwood, if cared for properly, should last a lifetime. Regularly sweep or vacuum dirt and grit from the floor, then clean it with a damp mop, using a mild detergent if necessary. The floor should be dried immediately after the damp mopping. Over time, the floor may become scratched and marked. This can be corrected by contacting a floor refinishing company that will sand and refinish the entire floor area.

Cracks up to 2 millimetres in width are considered acceptable. They can be filled with wood filler by the homeowner to give the flooring a more pleasing appearance.

Carpeting

If carpeting is your flooring of choice, the builder will provide a prepared sub floor to reduce ridges and gaps, under padding to cushion the floor finish, and top it off with the finished carpet layer attached by a fastening system.

Seams may be visible depending on the type of carpet and various light conditions but should become less obvious over time with normal use and cleaning. Under certain conditions, carpeting may tend to buckle or lift in areas. This is considered normal and may be the result of variations in humidity levels or traffic.

Where carpets must be cut to execute floor repairs, seams in the repair area may be more visible. Location of seams varies due to predetermined manufactured widths and installation restrictions and are discretionary. Seams around pickets and end caps on stairs are often visible.

Carpeting will last for many years if properly cared for. Daily or weekly vacuuming will remove dirt and lint that causes wear but it is also wise to have the carpet cleaned professionally to remove stubborn dirt and improve its appearance. Spills should be cleaned immediately to prevent stains. Stain removers and other rug cleaning products are available at hardware and building supply stores.

The builder will repair spotted or faded carpet recorded on the Pre-Delivery Inspection report.

Ceramic Tile

The ceramic tile found most commonly in entranceways and bathrooms, and sometimes in kitchens and family rooms, is made from quarry tile, glazed ceramics, slate or marble. Joints between tiles are filled with grout.

Homeowners should avoid dropping heavy objects on tiles, which could result in cracks. Tiles can be cleaned with mild soap and water. If caulking comes loose, consult a building supply store for the appropriate replacement. Tartan Homes will repair any severe cracks or separations once at the end of the first year.

Ceramic tiles, whether on walls or floors, are simple to clean. They can be wiped with a damp cloth or washed with soapy water and rinsed. Excessive water should not be applied to grout joints, which can break down and loosen. The builder will replace broken or damaged tile recorded during the pre-occupancy inspection or 24-hour inspection.

The builder will replace defective tiles but it should be noted that it is not always possible to perfectly match the colour of new and existing tiles or the grout between the tiles. The builder will not normally remove and re-tile whole areas due to colour lot variations. Avoid using harsh abrasive cleaning products. Where sealants such as caulking are used, caulking that becomes cracked to separated should be removed, dried and replaced to avoid moisture penetration and damage.

Marble and Agglomerated Marble

Marble is natural stone polished to a high lustre. It is normal to see veins, small cracks and colour variations. Agglomerated marble is a similar material that has been manufactured from natural stone that tends to exhibit less veins, cracking and colour variation.

As a ceramic, marble is brittle and may be damaged by impacts from hard objects and its polished finish is easily damaged. Marble products can be cleaned similar to ceramic tiles. Never use cleaning compounds or products that contain acid such as lemon or vinegar. Scratches can be masked with glass wax or liquid car polish.

Variation in Colour Occurring During Floor Repairs

Variation between dye lots within a specified colour or pattern is normal. Spare original material may be left in the residence for future repairs at the builder's discretion. Where a dye lot match is unavailable, material may be removed and used for repair from another inconspicuous location.

Floor and Stair Squeaks

Over time, the kiln-dried lumber or engineered system used to build your floors and stairs will dry out and shrink slightly, causing occasional floor and stair squeaks. These are common to all forms of wood frame construction and are not considered a defect. Squeaks may appear and subside on their own over time, however, completely squeak-free floor systems are not possible with conventional wood frame residential construction.

Low-humidity indoor environments can cause excessive shrinkage in the wood, resulting in loose floor and stair connections. Homeowners must maintain indoor humidity levels to prevent excessive drying of materials and even then, squeak-free stairs may not be attainable.

Floor Humps and Dips

Other conditions, which may result from the drying period in floor systems, include humps or sags from joists that tend to buckle and twist. This condition is relatively common and may result in minor slopes in your floors. Generally, a slope of 1/4 inch in 8 feet of length is considered acceptable. Where slopes substantially exceed this range, report the condition in writing to Tartan Homes within the first year of the warranty period and the builder will conduct an inspection.

Concrete Floors

Concrete surfaces, including basement and garage floors, may show varied texture, pitting, powder-like deposits and minor cracks, none of which should be cause for concern. Concrete floors naturally crack during curing due to shrinkage. Cracks greater in width than 2 millimetres, roughly the thickness of a 25-cent coin, will be repaired by Tartan Homes. Where repairs are necessary, colour and/or texture may not match the surrounding concrete.

Concrete may appear to be coated in powder-like white dust. This is usually a form of salt compound used in the concrete manufacturing process and may appear over time as the material cures and strengthens. The powder can usually be removed by brush. Should the purchaser wish to paint the concrete floor, consult with a local paint supplier about products that can be applied and continue to allow the concrete curing process. Tartan Homes recommends concrete floors not be painted for at least one year after installation.

Should your floor become damp, the condition will be repaired under your home warranty but only if there is an accumulation of water; dampness and condensation are not warranted. Homeowners must take immediate steps to prevent damage to their property and report any losses to their home insurance provider. A thorough investigation prior to construction and during excavation will assist in determining whether ground water levels may adversely affect the use of the building.

HEATING, VENTILATION, **AIR CONDITIONING**

Revised July 2007

This section of the manual describes the HVAC system in your Java suite. HVAC stands for Heating, Ventilating and Air Conditioning. It is very important that you gain a general understanding of your home's HVAC operations; improper use can result in excessive humidity and the related problems of condensation and mould.

The HVAC system in your Java suite is very energy efficient, requires very little maintenance, will provide you with optimal in-door air quality throughout the year, and is easy to operate.

The components of your HVAC system are:

- The on-demand gas boiler: The wall-mounted, tank-less heater provides hot water for domestic use and for the furnace, or air handler, which is used to heat the air in the cooler months.
- 20-gallon storage tank: This tank sits on the floor of the mechanical room in front of the boiler. This tank stores water that has been heated by the boiler and will help provide ample hot water at times of peak demand.
- The air handler: This is mounted on the ceiling of the mechanical room. There is a coil next to the fan in the air handler. In the cooler months, hot water is circulated through the coil, and the air is warmed. In the warmer months, the air is cooled by the air conditioner. The fan in the air handler supplies and circulates the air throughout the suite
- Air conditioner: The condenser for the air conditioner sits on your balcony. The coolant is circulated through to the air handler when the air conditioner is returning.

The four components listed above are leased to you by OZ Home Comfort, according to the contract signed as part of your Agreement of Purchase and Sale.

The following HVAC components are part of your suite and will belong to you on closing:

- The HRV: The HRV (Heat Recovery Ventilator) is a more recent home-comfort product. It is responsible for removing old, stale air from your suite, and replacing it with fresh air. In the Java suites the HRV ventilates out air from the bathroom and out of the main living area, and returns fresh air. This provides three primary benefits:
 - 1) The old air is expelled at the same time as the new air is drawn in. In the winter, the heat from the old air is “recovered” and is transferred to the new fresh air. In the summer, the reverse occurs. This pre-heating or pre-cooling of the fresh air is a great energy saver, and the savings realized from this device are far greater than the costs of running the HRV.
 - 2) The HRV ensures a proper supply and circulation of fresh air throughout the year.
 - 3) The HRV ensures the proper venting of humid air.

For all these reasons, but particularly for reasons 2 and 3, it is important to let your HRV run when it is programmed to do so. Manually turning it off will not save you money and could lead to humidity problems and other problems related to the improper supply of fresh air.

- Ductwork: usually made from sheet metal, distributes warm air and returns it to the furnace for re-heating.
- Kitchen Hood Fan: This manually operated device removes odours or fumes related to kitchen work and helps remove excess humidity from the suite. You should clean the filter regularly.
- Dryer Fan: You should clean out the lint filter after every two or three uses of your dryer.
- Grills and diffusers: control the direction and flow of heated air.
- Thermostats and switches: control temperature and humidity.
- Gas venting: exhausts by-products of combustion outside the home.

During your PDI, a Tartan representative will give you a thorough demonstration on how to set and control the system. He or she will also provide you with the manufacturers' manuals and all the contact information you might need for emergency service calls.

INSULATION

Your new home has been insulated with blown fibreglass insulation in the ceiling and fibreglass batts in the walls, basement and cathedral ceilings. The insulating system also includes vapour air barriers and sealants. Together, this system exceeds the minimum requirements of the Ontario Building Code. Unless damaged in some way, most insulation products should retain their thermal resistance properties for many years.

Attic insulation is applied to spaces using loose material that is blown in mechanically. Sometimes batt insulation is also used depending on the design of the roof and ceiling. Where loose material is used, it should be checked periodically, especially after violent winds, to confirm the layer remains relatively uniform in thickness. Attic insulation should not be crushed by storing items on top of it, an action that is not covered by your warranty.

Should you need to inspect insulation in the attic, note that the spaces between structural members will not support a person's weight. When redistributing or adding insulation ensure the material remains loose because compressing insulation reduces its insulating value. Ensure also that the soffit venting spaces remain unobstructed.

Few houses are completely draft free. At times, usually during extreme weather, some air can be forced into the home through openings such as exterior electrical outlets, door weather stripping and the chimney.

If air leakage into your home is excessive, advise the builder in writing during the first year of the warranty period so arrangements may be made to inspect and, if necessary, correct the problem.

INTERIOR DOORS

Door assemblies usually contain wood or composite wood materials in their manufacture. As with all wood products, they can be affected by temperature and moisture conditions, which may result in doors that fit tightly or loosely within the frame assembly.

During the first months of occupancy there will be some shrinkage and settling of the wood framing. It is therefore best to wait at least 6 months before adjusting or planing interior doors. Planing may void the manufacturer's warranty. Usually, doors tend to re-align themselves after the initial settlement and shrinkage period. However, if the condition is excessive and persists, the builder will make adjustments at the end of the first year of the warranty period.

Door hardware

Most hardware products are finished with a plating process but over time and even under normal use, the plating will show wear. Homeowners should lubricate door locks and handle mechanisms at six-month intervals using a powdered graphite type lubricant rather than oil-based products. Under normal use and with periodic maintenance, lock mechanisms should perform for several years.

LIGHTING

Replacement of light bulbs in all lighting fixtures is the purchaser's responsibility. In enclosed lighting fixtures, avoid using bulbs greater than 60 watts capacity. When in doubt, refer to the notice affixed inside most fixtures that identifies the type of bulb the fixture is designed to use.

Some exterior lighting fixtures may be controlled by a light-sensitive photo-electric switch located somewhere on the house exterior. This switch automatically activates connected lighting at dusk or when darkness falls. If this type of switching is a requirement of a site or subdivision agreement with municipal authorities, expired bulbs should be replaced when necessary.

PAINTING

Tartan Homes coats walls, ceilings, trim work and doors with quality paints and finishes. Railings, mantles and hardwood flooring are coated with natural wood finishes, unless painted, to enhance natural characteristics of wood products. Some wood surfaces may be factory finished.

Defective work observed and recorded during the Pre-Delivery Inspection or 24-hour Inspections will be corrected by the builder.

After your home has been occupied, repainting and touch-up work may not exactly match existing work either in colour or sheen. Natural lighting throughout the day may change the appearance of a properly painted surface. Brush marks are acceptable in cut in areas and on trim and may vary in appearance with paint type. Repainted areas shall match the original finished surface for colour, sheen and texture as closely as possible. Tartan will not paint over plaster touch-ups done at Year-End.

Exterior windows and other components may require periodic repainting, including doors, door frames, wood louvers and permashield trim panels.

PLUMBING SYSTEM

As in all homes, plumbing systems in new residences require care and maintenance to ensure they continue to function properly and dependably. Your plumbing systems consists of the following components:

- Pressurized water delivery and distribution via copper and/or composite plastic piping from the water meter to faucets and fixtures.
- Sanitary drainage and venting to drain used water from fixtures and toilets. This piping is usually made of composite plastic.
- Water heating system to provide hot water to faucets. This normally includes a hot water storage tank fuelled by natural gas.
- Faucets and controls to control flow and temperature at the fixtures. These may also include special connections for automatic clothes and dishwashing appliances.
- Fixtures such as kitchen sink, basin, toilet, bathtub, shower cabinet, laundry tub and as otherwise indicated on specific house designs.
- Basement floor drains.

Main Shut-Off Valve

The Main Shut-Off Valve for water service to the home is usually located in the basement, adjacent to the water meter and towards the front of the home. If a leak in the plumbing develops, close the shut-off valve immediately to reduce the risk of water damage. Report the problem to Tartan's Service Department.

Basement Floor Drain

This drain is usually located in the area of the basement containing the water heater. It is covered with a small grate and should be filled with water periodically to reduce the risk of sewage type odours escaping from the plumbing trap beneath the floor.

Basement Sewage Back-Up

If a sewage back-up occurs in the basement during the warranty period, contact the Service Department so that the lateral sewer line may be inspected and, if necessary, cleared of obstruction. If the obstruction is construction related Tartan will make repairs free of charge.

Toilet Back-Up

If a toilet becomes blocked and does not drain during the first two weeks of occupancy, contact the Service Department to have a plumbing professional inspect the toilet assembly and drainage system. Problems that are construction related will be repaired by the builder; other problems are the responsibility of the homeowner. Should toilets become blocked later, it is the homeowner's responsibility to contact and pay a plumbing specialist.

Water Heater

The water heater unit is normally a natural gas-fuelled appliance rented from the local gas providing authority. This can be confirmed by checking the Agreement of Purchase and Sale. If a problem develops with the water heater, contact the gas providing authority directly for service. Maintain normal heat settings for domestic use.

Plumbing Vents (Please refer to section III, Outside Your Home)

PLUMBING **FIXTURES**

Plumbing fixtures are the sinks, basins, toilets, showers and bathtubs that are part of the plumbing system. Their smooth surfaces should be cleaned regularly with mild non-abrasive cleaners using generous amounts of water.

Chips and scratches on enamel surfaces that are reported on the PDI or the 24-Hour will be repaired by Tartan's contractor, who will provide a one-year warranty from time of repair. Tartan will not replace tubs or showers unless advised to do so by our contractor.

All fixtures are covered by a one-year warranty on work and materials and must be maintained in accordance with the manufacturer's instructions. Damage resulting from improper maintenance and damage not reported on the PDI Report, including chipped or cracked porcelain, enamel or fibreglass surfaces, is excluded from warranty coverage.

When caring for plumbing fixtures, avoid:

- Use of abrasive cleaners and soap pads that can scratch and dull the glossy surfaces and cause them to become porous. Steel pads and some harsh cleaners may result in permanent damage.
- Scraping surfaces, including stainless steel sinks, with metal objects or utensils.
- Impacts on fixtures from hard objects such as a dropped hand shower or bottle which could result in hard-to-repair chips or scratches.
- Stepping into a bath or shower enclosure with footwear that might have grit attached to the sole.
- Use of sinks, basins and tubs to mix harsh chemical compounds. Photographic and developing solutions can cause permanent staining.
- Disposal of grease, fat and petroleum-based products into fixtures and into the drainage system. This material can lead to a plugged system.

Periodically clean the water-filled traps attached to most plumbing fixtures to ensure they remain free of accumulations and obstructions. The Ontario New Home Warranty Program publication "What Every New Home Buyer Should Know" contains additional useful and important information.

Newer low-volume toilets that are required for new homes by the Ontario Building Code use less water to flush waste than older models, making their operation more sensitive to the effects of the amount of waste, amount of paper and volume of water in the tank. In some cases, multiple flushes may be required.

Faucets/Controls

Faucets and controls are usually finished with a high-lustre chrome material, which may be wiped as necessary with a soft, damp cloth. Use only warm water to remove dry water spots. Avoid using cleaners that contain abrasives or harsh chemicals that could damage the finish and void warranty coverage. Avoid using alcohol based or other organic solvents.

Wax polish may be applied to surfaces periodically to facilitate regular cleaning.

Basins and bathtubs are normally equipped with pop-up type drain stoppers that should be removed periodically to remove accumulations or obstructions and ensure drainage is normal and pop-up mechanisms operate properly.

Aerators and filters in faucets and shower heads should be removed and cleaned regularly to remove particles in water systems that can accumulate and restrict water flow. Water connections and drainage systems for optional equipment such as ice-makers and humidifiers should also be inspected and maintained in accordance with the manufacturers' printed instructions.

ROUGHED-IN SYSTEMS

In some cases, according to the provisions of the agreement of purchase and sale, the builder provides roughed-in systems to accommodate future installations of systems or products such as a central vacuum. This section summarizes what is normally included with roughed-in systems.

Central Vacuum Rough-In

Homes with a central vacuum rough-in are equipped with a number of outlets in finished areas of the home. The outlets are normally connected to a composite plastic piping distribution system which is terminated in the basement for future connection of a central vacuum system.

Dishwasher Rough-In

When the home has a dishwasher rough-in, there is an opening in the base of the kitchen cabinets to accommodate future installations of a standard size built-in type dishwasher. Plumbing waste rough-in is usually close to the kitchen sink waste pipe for future connection. An electrical wire is placed with one end either stapled to the sub floor under a dishwasher cabinet or suspended under the floor within a floor system space. The other end of the wire is normally coiled at or near the electrical system circuit panel. The wire is not connected to a breaker for electrical safety.

Rough-in systems, whether for mechanical, electrical, communications or otherwise, usually require finishing components and connections in order to function as a complete system. These are not provided by the builder.

SMOKE DETECTORS

Smoke Detector Alarms provided with new homes require minimal maintenance. However, they should be tested in accordance with the manufacturer's instructions and should be cleaned regularly with a vacuum cleaner to ensure intake openings remain free of dust, grease or other obstructions which might impair proper operation. Most detection equipment is connected to the home's electrical system for power but some may be battery powered. If your smoke detector begins beeping for no apparent reason, press the re-set button to avoid an unnecessary service call.

OUTSIDE

your HOME

ASPHALT DRIVEWAYS

With reasonable care, your asphalt driveway will last for many years. But as an external surface that is subjected to weather, traffic and the weight of your vehicle, it is not uncommon to see minor indentations and tiny cracks, stones that flake out and uneven areas, as well as some settling under car tires and dents from sharp objects, especially during hot weather.

To minimize damage, remember that your driveway is designed for cars and light trucks. Do not park heavy vehicles on it and avoid the following potential causes of damage: oil or gas leaks from your car; high heels and bicycle stands that cause holes in warm weather, and turning an automobile's front wheels while the vehicle is stationary.

If gasoline, paint or solvents are spilled, wash them from your driveway immediately with soap and water. Avoid chemical de-icers that can also damage your driveway's surface. Calcium chloride is a safe alternative to melt ice on asphalt.

Should heaving or settlement result in depressions exceeding 150 millimetres (six inches) during the first year of occupancy, the builder will patch or pad the subject area, which can often include where the driveway meets the garage. Repairs will be carried out one year after paving is completed. Cracks exceeding 6 mm (1/4 inch) will also be repaired. Periodically, ground frost penetration may move asphalt areas and alter surface drainage patterns. Such damage is beyond the builder's control but will often settle back into place when warm weather returns.

Damage resulting from movement of municipal services or other utilities is the responsibility of the homeowner and is not covered by your home's warranty, nor are tire marks, surface stone flaking, minor cracks at edges caused by expansion and contraction or damage caused by other people using your driveway.

Asphalt may require periodic maintenance and care to prolong performance and appearance. Re-sealing asphalt surfaces may help protect the finish.

CONCRETE FOUNDATIONS

Minor surface cracking in foundation walls is a common occurrence in new homes and has no detrimental effect on the performance of the foundation.

Cracks may appear initially at the concrete curing stage where moisture evaporates from the material and the loss of volume results in material shrinkage cracks. Minor surface cracking may also result from stresses caused by extreme seasonal temperature variances where the material encounters stages of expansion and contraction. Dampness or condensation is not considered a warrantable item. Homeowners must take immediate steps to prevent damage to their property and report any losses to their home insurance provider.

DRAINAGE

Exterior grading adjacent to the building is designed to promote surface water drainage away from the home and should not be adjusted. Where grading changes and is determined to be the cause of water penetration into the building, leaking will not be the builder's responsibility. Homeowners can restore proper grading by adjusting soil next to the home. Many leaks stop once grades are restored.

EAVESTROUGHING AND **DOWNSPOUTS**

Tartan Homes does not install eavestroughing on its homes. Where eavestroughing and downspout systems are installed by the homeowner, water discharge locations should be checked periodically to ensure that the grade next to your home continues to direct water away from the walls. Placement of erosion control pads at discharge locations, or lengthening the ground level portion of the downspout will reduce the risk of erosion and move water farther from your home.

Eavestroughs should be kept free of debris, leaves or other material that may reduce the water flow. Do not direct the flow from the downspouts onto your driveway.

During winter, ensure water does not become trapped and freeze in the trough system. This condition could contribute to ice damming at the roof.

EXTERIOR **CAULKING**

Exterior caulking is an important component of the building envelope system that helps keep moisture and air from penetrating a home. Caulking is generally applied to seal intersections between finished materials, around windows, doors, plumbing, electrical outlets and other mechanical and electrical equipment projecting through the building exterior. Caulking should remain somewhat firm but reasonably pliable to accommodate minor movement of the building structure.

If caulking develops large cracks or separates from surfaces, it should be removed and replaced with a good quality sealant. Leaks through caulking after two years are not warrantable.

EXTERIOR **ELECTRICAL OUTLETS**

Exterior outlets are installed on the outside of your home to enable you to power electrical lawnmowers, hedge trimmers, Christmas lights, etc., without the need to run an extension cord from inside the home. If an exterior outlet is not working, ensure that the circuit breaker on the electrical panel is in the ON position and press the reset button on the electrical outlet found in the garage. If the exterior outlet continues to malfunction, and you have lived in the home for less than 12 months, contact Tartan's service department.

EXTERIOR **TAPS** (hose bibs)

Exterior taps, sometimes called hose bibs or water hydrants, are the water faucets serving the house exterior. Sometimes there is a tap located inside the garage. This too is an exterior tap.

Prior to the onset of freezing temperatures, the water fed to these taps should be shut off from inside the home at the stop and waste valve (located behind the exterior tap) near the basement ceiling space. Remove the small drain cap from the side of the stop and waste valve and store the cap for next warm season use.

Remove, drain and store equipment such as garden hoses. Open the exterior tap from outside to permit trapped moisture to drain away and leave the tap open for the cold season. Reverse this procedure in spring when sub-zero temperatures are no longer a possibility.

When finishing basements, valves and other equipment that require periodic adjustment must remain accessible and should not be altered in any way that might affect their safe operation.

FENCING

One of the first projects tackled by many owners of new homes is the installation of backyard fencing. Before doing so, the following issues should be considered:

- some development and subdivision documents contain restrictions and may include time delays to allow the developer to complete subdivision and grading work on adjacent properties. Before installing a fence, review the Agreement of Purchase and Sale together with attachments and covenants;
- most municipalities enforce restrictions and constraints as to location, type and size of fences permitted. Again, review your Agreement of Purchase and Sale.

Lot boundaries are established and confirmed after the house foundation has been erected. The builder's land surveyor provides a survey certificate describing the property and the building's location on the lot. Survey markers are commonly used by surveyors to carry out their fieldwork and may or may not remain in place after the house has been constructed. Avoid reliance on any existing survey markers of any type to determine property line locations. Survey markers may have been installed for various purposes or may have been moved by grading and construction operations. To establish property lines to ensure location of proposed fencing within the property, retain the services of a professional land surveyor.

Prior to excavating, contact and obtain clearance from applicable utility authorities to avoid damaging underground services and utilities. Most utilities provide this clearance service at no charge.

Tartan Homes is not responsible for settlement damage resulting from additions to the property subsequent to the closing date.

LANDSCAPING

Lawns

A lawn is part of the landscaping that turns a construction site into a pleasant and habitable property but it won't survive without your care and attention. The nursery grown sod installed on your property requires frequent, even daily, watering until the grass has rooted to the soil and shows evidence of vigorous growth. At this point, watering can be reduced to weekly depending on the weather. During warm summer months the soil should be wetted to a depth of at least 120 millimetres (five inches).

Shallow watering may result in shallow root growth, making the lawn susceptible to early drying or burning. Cutting grass shorter than two inches may also result in early drying. Avoid walking on newly installed sod when it is wet.

Semi-annual applications of fertilizer and weed control are suggested for continued healthy growth. Consult a local garden centre for information on suitable products. In spring, avoid letting snow remain in shaded areas for extended periods that could result in damage. Lawns may appear healthier in different sections depending on exposure to sunshine and other elements. Minor settlement of grades is common in landscaped areas. The purchaser is responsible for all landscape maintenance.

Sprinklers should be adjusted to keep water away from building surfaces to reduce the risk of moisture damage in the home.

PRECAST CONCRETE PATIO PAVERS/WALKWAYS

Most homes are equipped with concrete paver walkways and concrete paver patios that are susceptible to minor settling as a result of ground frost penetration. In most cases of settling, affected areas return to their original positions in warm weather. If they do not, the homeowner can correct this problem by adding sand under affected slabs. Tartan Homes is not responsible for re-leveling slab walkways or patios after the initial installation.

If affected areas do not return to their original positions, the purchaser should correct depressions and uneven surfaces. This will avoid related damage such as a flooded basement, which could result from altered drainage patterns.

It is normal for hairline cracks to appear in paver stones as a result of temperature and precipitation variances. Avoid the use of chemical de-icing compounds and cooking salts that can damage the surface of precast paving units.

Trees and Shrubs

Trees and shrubs planted by Tartan Homes are good quality nursery material but healthy growth will occur only if the greenery is protected and maintained by the homeowner. When planted in spring, trees are warranted for a period of 90 days; trees planted in autumn are warranted to the next growing season. The warranty is not valid where care and maintenance of plant material has been neglected.

Compact root systems, common to newly planted material, require more moisture than is provided by normal rainfall. Ensure tree planting pits – the dish-shaped soil areas located at the base of the tree—are thoroughly watered weekly during spring and summer to provide sufficient moisture and nutrients to the roots. Also, ensure tree planting pits remain free of weeds and are cultivated at a radius of three to four feet to a depth of four to six inches to promote air transfer to the root systems. The dish shape of the tree-planting pit should be maintained for the first two years as a reservoir for water.

Avoid raising soil above the base of a tree trunk because this could result in serious damage to the tree. Do not plant floral or other ornamental plants at the base of the tree for two years as this may divert necessary moisture away from the tree. Provide regular applications of fertilizer and, where necessary, insect control after consultation with a garden centre.

MASONRY

The masonry finish on the outside of a house usually consists of bricks or stones held together by cement mortar. These finishes should last the lifetime of the house.

Generally, masonry requires little maintenance, although mortar joints and masonry cladding exposed to water and ice, and regular temperature fluctuations, may require repairs at some point. Hairline cracks are not a problem but larger cracks in excess of 1/4 inch will be repaired by Tartan within the warranty period, as will conditions of loose mortar.

If brick becomes dirty, contact a professional brick cleaner or clean it by flushing the surface with the spray from a garden hose, gently scrubbing the brick or stone with water and a soft brush, or using a brick cleaning solution available at hardware and building supply stores. Always follow directions.

Water that finds its way out of the space behind masonry drains through small openings known as weepholes set in the base of the wall and above windows and doors. Never fill or cover these holes. Also note that mortar joints are not waterproof. When locating flower beds next to the home, keep soil at least 200 millimetres (eight inches) below the lower edge of the masonry to prevent water damage to the finish, insulation and framing of the walls. Earth next to the house should be graded and maintained to move moisture away from the building.

OVERHEAD GARAGE DOOR

To ensure smooth operation of your overhead garage door, manufacturers recommend three applications per year of 10-W-40 oil to moving parts, the track system and the interior face of the door, the latter to reduce road salt damage.

When repainting, avoid a high gloss paint finish. Use a good quality oil-based exterior paint with surface preparation done in accordance with the paint manufacturer's instructions. Opening properly balanced overhead door systems should not require excessive force. Applying excessive force could cause a door panel to release from the track, resulting in damage or injury to the user.

Homeowners who install automatic garage door operators should consult the manufacturer's installation manual prior to starting the work. Some door types may require additional reinforcement to accommodate certain types of door opening systems. Tartan Homes provides a ceiling-mounted electrical outlet in the garage as a convenient power source for added door operator systems. Review operation and maintenance instructions to promote safe operation.

POSTS AND BEAMS

Steel posts and beams, sometimes made of wood, are essential structural components designed to support specified loads for the building.

They should not be altered, adjusted, removed or cut in any way that will affect their performance without consulting with a qualified professional structural engineer. Steel angles that support brickwork over windows and door openings are also structural components.

PROPERTY **LINE**

Once the foundation has been poured, a survey certificate that accurately locates your home on the lot is prepared as part of your legal documents. This document accurately describes the property line boundaries in relation to the home's location on the lot. A copy of this document is provided to the purchaser at time of closing.

Survey pins hammered into the ground approximately two feet below grade at the corners of your lot define your property's boundaries. Because these pins are sometimes moved during construction, it is advisable to obtain the services of a surveyor before building a fence to ensure your fence is built on your property. Prior to digging fence post holes or making other excavations on your property, call local utilities to locate underground services.

ROOFING AND **FLASHING**

The asphalt shingles and metal flashing on your roof are the most commonly used roofing materials used in residential neighborhoods and will last many years without the need for repairs or replacement. Under normal conditions they will allow no water penetration into our home.

Slight variations in colour may occur during the manufacture of roofing materials and cannot be controlled by the builder. In most cases, these are hardly noticeable and will become less so over time. They do not affect the performance of your roof, nor do variations or puckering that may be the result of roof sheathing and or fastenings expanding and contracting as temperatures vary.

The roof should be inspected annually to ensure shingles are not broken or cracked and to determine if caulking around venting, skylights and flashings continues to provide impermeable seals. Damaged caulking should be re-sealed and damaged shingles replaced. Damage caused by weather is not the builder's responsibility but may be covered by your house insurance.

Ice Damming

Heavy build-ups of snow at the roof eaves, in combination with daytime thaws and re-freezing at night can lead to a condition known as ice damming. Ice dams can prevent water from draining from the roof and may lead to roof leaks as water moves under the shingles, potentially causing damage to interior walls and ceilings. Warranty coverage applies only where the ice dams result from a demonstrated defect in the work or material supplied by the builder. When damage occurs, homeowners should take immediate steps to prevent damage and report any losses to their insurance company.

The most effective way to avoid ice damming is to make arrangements to have a roofing contractor remove snow and ice. Where ice dams have already formed, have the ice removed so that normal drainage patterns are restored.

Climbing onto a sloped, ice-covered roof is extremely hazardous and is not recommended. When removing ice and snow from a roof, care should be taken to ensure shingles remain undamaged. Additional information is available in "What Every Home Buyer Should Know," a publication from the Tarion Warranty Program.

Attic Ventilation and Roof Vents

Attic ventilation, using roof vents and soffit openings, is designed to move air through attic spaces and to the outdoors to avoid substantial temperature differences between attic and outdoor air and to control moisture. All openings should remain free of obstructions to function properly. During winter periods in severe storm conditions, wind may force snow to blow through attic vent openings in the attic space. Accumulated snow should be carefully removed before it melts and causes water damage. This condition is the responsibility of the homeowner.

Plumbing Vents

Plumbing vents provide ventilation to portions of the plumbing drainage system and help exhaust sewage gas odours from the system. They normally outlet through the roof as composite plastic piping. If a sewage-like odour is observed, it may be the result of a blockage to the vent, most often caused by excessive snow accumulation or bird or squirrel nests. Blockages should be removed to restore proper ventilation. Tartan Homes recommends that you call a professional roofer to examine and eliminate the problem.

SIDING

Siding, whether it is made from metal, vinyl, wood or composite materials may expand and contract and minor gaps or bulges may appear between joints and connections. The builder will repair excess separations or bulges at the end of the first year of the warranty period.

Vinyl and metal siding can be washed with a mild, nonabrasive detergent and water to be returned to its original condition. Colouring will fade over time from exposure to natural elements and discolouration may occur if siding is exposed to sprinkler or garden watering.

Metal siding, although durable, may become permanently dented when struck with sufficient force with small or sharp objects. Vinyl siding resists denting but may become brittle in cold temperatures when it can be shattered upon impact. Vinyl siding can be distorted with extreme heat so barbeques should be kept well away from siding.

WINDOWS

Windows installed by Tartan Homes are usually one of the following:

- Wood frames and sashes
- Wood frames and sashes (clad with vinyl, metal or factory coating)
- Extruded PVC frames and sashes

Exterior wood window frames and sashes require regular painting, while windows made from PVC or clad with vinyl, metal, or a factory coating, require little maintenance, other than regular cleaning.

Most modern windows are resistant to air and moisture penetration when properly adjusted and closed to ensure positive contact with weatherstripping. Most window sashes including fixed, casement, slider or awning are glazed with insulating sealed glazing units warranted against failure for at least four years by the manufacturer. Labour costs are usually not covered where glazing units require replacement after the first year of the warranty.

Although windows are weather resistant, they may at times experience air leakage during extreme cold and wind conditions. Drafts may be observed at times near windows during extreme cold temperatures even when there is no wind. These are caused by convection currents within the home as warm air rises and cooler air descends. This should not be confused with actual air leakage. If condensation and frost are observed on windows, humidity levels in the home should be adjusted.

Weatherstripping becomes worn with use and should be inspected and replaced by the homeowner on a regular basis.

Hardware mechanisms on operable window sashes are usually designed to lock the sash against the weather seal of the frame. If there is more than one locking device, as with some casement windows, ensure all are locked or unlocked. Locking only one could result in twisting of the window sash making it difficult to operate.

Caulking material around windows and doors should be inspected and maintained by the owner.

glossary

Agglomerated Marble	Composite manufactured marble made from natural marble.
Asphalt	Asphaltic concrete mixture for paving of roadways, driveways and walkways.
Attic	The unfinished and unheated spaces located within the roof assembly above the ceiling and below the roof.
Building Envelope	Exterior assemblies of a building, including walls and roof, which separate the interior spaces from exterior elements and weather.
Cast-in-Place Concrete	Concrete work which has been erected in its fluid state into site constructed formwork to be shaped and cured.
CMHC	Canada Mortgage and Housing Corporation.
Composite Plastic	Processed plastic-based products designed for special purposes such as vent piping, water piping and conduits.
Creosote	Tar-like substance that may accumulate on the inside surface of fireplace chimney vent piping.
Drainage Patterns	Sloped surfaces designed to shed or channel rain water to specified locations for drainage. May apply to lot grading, driveways or roof design.
Fascia	Flat exterior trim assembly at the end of the roof between the roof finish on top and the soffit beneath. Fascia is usually clad in aluminum.
Finish Carpentry	Interior finishing carpentry systems including interior doors, baseboards, casings, quarter rounds, wood coves, shelving and capping.
Flashing	Metal or composite plastic smooth-surfaced drainage system designed to be installed at intersections beneath and behind brickwork and roofing to promote water drainage away from the building.
Floor System	Structural elements, such as floor joists or engineered floor, to span spaces between beams or walls and covered with subfloor sheathing.
Footings	Cast-in-place concrete perimeter base which supports the foundation walls and the house structure.
Formwork	Temporary forms, usually made of wood, constructed at the worksite to hold and shape cast-in-place concrete for footings, foundations and curbs.
Foundation	Cast-in-place concrete perimeter walls supported by the footings and supporting the building wood frame structure.
GFI	Ground Fault Circuit Interrupter for specific electrical circuits to reduce the risk of electrical shock caused by a ground fault in electrical tools and appliances.
Grading	Sloped ground surfaces designed to maintain drainage patterns around buildings and the building lot.
Ground Frost	Frost and frost action which occurs beneath the ground surface in winter.
Hose Bib	Sometimes called Lawn Service or Wall Hydrant. The exterior water faucets designed to accept normal garden hose connections.

HRV	Heat Recovery Ventilator required with some heating systems to assist in control of indoor air quality and humidity levels.
Humidistat	Device used to measure relative humidity in air.
HVAC	Heating, Ventilation and Air-Conditioning systems.
Ice Dams	Ice ridges that may form on roof edges from freeze and thaw cycles of accumulated snow deposits.
Insulation Baffle	Device, usually made of styrofoam, installed in attic spaces to maintain air space to soffit venting between roof trusses and ceiling insulation.
Joists	Heavy lumber (or engineered system) used as the structural Floor System.
Kiln-Dried	Lumber which has been artificially dried to reduce moisture content to specified levels in order to reduce shrinkage and twisting through the drying period.
Lintel	Structural component (usually wood) to carry structural loading across and over openings such as windows and doors.
Material Shrinkage	Shrinkage that occurs in material such as concrete and wood as moisture content is reduced throughout the drying-out period.
Mechanical	Plumbing, drainage, heating, cooling and ventilation systems in buildings.
Millwork	Specialty woodwork, such as cabinetwork, including fabricated columns, mantles, railings, etc.
OBC	Ontario Building Code.
OCHBA	Ottawa-Carleton Home Builders' Association.
ONHWP	Ontario New Home Warranty Program
PDI:	Pre-Delivery Inspection.
Pins	Survey markers used by surveyors to layout and establish property lines, setbacks and easements.
Precast Concrete	Concrete which has been cast, shaped and cured at the factory to be later shipped and erected at the worksite. This can include entry steps.
Rebar	Reinforcing steel rods sometimes inserted into cast-in-place concrete work and assemblies to increase strength and resist cracking.
Roof Vents	Venting systems placed through the roof to promote air circulation in the attic.
Sash	Part of a window assembly which houses the glass and sometimes is the operable component in the window frame.
Siteworks	Exterior cladding material such as aluminum, vinyl and wood to cover walls.
Soffits	The underside portion of the roof assembly which overhangs or projects beyond the exterior wall and is usually clad in aluminum with small openings for ventilation.
Sono-Tubes	Sometimes called Sono-Posts or Piers, are cylindrical forms placed on pads or footings and filled with concrete to form posts or piers.

Studs	Structural components, usually wood 2x4 or 2x6, to construct the vertical parts of wood frame wall assemblies.
Subfloor	Interior sheathing material, usually a form of wood product, fastened directly to the upper side of the floor system and under the floor finish assemblies.
Subgrade	Soils and earth conditions beneath the footings.
Telepost	Structural Steel Posts equipped with a telescopic adjustment and commonly visible in basements supporting structural beams.
Thermopane	Commonly used industry term to describe window glass units that are sealed with a vacuum between the glass to reduce temperature transmission.
Trusses	Wood structures that are factory engineered and constructed to be shipped to the worksite and erected to form major components of the roof assembly.
Unit Pavers	Usually made of precast concrete and used as patio slabs or interlocking bricks for walkways and patios.
VCT	Vinyl composition tile.
Weep Holes	Small openings at the bottom course of brickwork to promote drainage of any moisture which may have collected behind the brick finish.
Window Well	Usually a type of corrugated metal enclosure to retain exterior grade levels where basement windows extend to below exterior grade surfaces.