

## SAFE HOMES CANADA HOME INSPECTION REPORT SUMMARY

**ADDRESS:** , Ontario

**BUYER:**

**INSPECTOR:** Andrew Christie, CET, RHI

**DATE:** June x 2007

**AGE OF HOME:** 1 year (approximately)

### Scope of the Report

This inspection is intended to assess the structure, building envelope, interior finishes, and the mechanical and electrical systems. The inspection precedes the homeowners' one year warranty anniversary, relating to Tarion coverage. It is a visual inspection only. The inspection was carried out on behalf of, and as a service to, the current owner. The furnace's heat exchanger, any non-observable elements, including buried pipes, and any water conditioning and filtering equipment are excluded from the inspection. Work that should be carried out by the builder is in **bold**.

### FOUNDATIONS

The poured concrete foundation walls are sound and stable, as observable. Two fairly decisive but normal settlement/stress cracks are observable at the foundation walls; one at each of the left and right walls. Both those cracks have been sealed by poly urethane injection. There may be cracks in places that are not observable on this date. There is no evidence of water infiltration into the basement at this time. Use pipes to extend the down pipes well away from the structure to help minimize the probability of water entry, and to protect the exterior elements. The moisture barrier (dimpled plastic sheeting) that has been installed around the outside face of the foundation walls is not sealed at its top edge, and it has been installed such that the top edge of the system is below grade, which maximizes the probability of water infiltration. **The top edge of the moisture barrier should be fully sealed to make the system effective. The drain that runs downward from the right side window well near the back right corner of the home appears to have been filled – at least partially – with earth. Work will be required to clear the drain.** At this point, no action is required at the cracking in the basement floor slab; that cracking is normal.

### WALL SYSTEMS

The masonry systems are sound and stable, but a number of deficiencies are observable. **Patching is required at two of the horizontal mortar joints at the top of the front garage wall. A very decisive settlement/stress crack should be fully sealed at the midpoint of the left wall. It may be necessary to use a flexible sealant; re-mortaring may result in repeated cracking. Caulking is incomplete at the right side main floor window near the rear wall. Further, the flashing work at the top of the window is incomplete. Caulking is incomplete at the tops of some of the mortar joints at the cementitious sills. (Some of the joints have been appropriately sealed, while others have not.) The mortar has degraded significantly (or was not installed properly**

during construction) at two of the sill joints, most notably at the front second floor window. The central section of sill at the rear family room window is loose and should be re-adhered by a qualified masonry contractor. The vinyl siding is stable in spite of some obvious bowing; monitor the bowing through the seasons. It may or may not be necessary to carry out repairs at the siding. Minimally, the bottom horizontal closure mouldings require additional fastening; they are quite wavy. The key to preserving the wall system is to maintain a full seal at all joints and junctions. Be sure to maintain all door sill joints; add caulking at the uncaulked joints around the bottoms of the doors, including the bottom of the door jambs at the garage doors (not builder work). Builders sometimes do not caulk the joints where the siding's closure mouldings meet the window and door assemblies, or other elements of the building envelope. At this home, it is recommended that the joints where the siding's closure mouldings meet the perimeter aluminum flashings be fully sealed with caulking.

## **FLOOR STRUCTURE**

The wood floor members are quite sound; there is no evidence of excessive deflection at the floor assemblies. Waferboard sheathing bears upon lumber joists. The joists bear upon the foundation walls, and upon structural steel beams. The beams bear upon the foundation walls and upon structural steel posts. A small floor assembly – which includes the lower bathroom - is in place between the main floor and the basement floor. The built-up wood column that supports the middle of the right side header at that floor is not protected from contact with the concrete. That contact may cause limestone-related deterioration over time, but no immediate action is recommended. The front end of the right side header is supported by one two-by-four only. **A second, similar members should be installed alongside the existing two-by-four.**

## **ROOFING**

The shingles are sound and stable overall. **A handful shingles are lifting slightly – likely due to inappropriate nailing - at all the roof slopes. However, at the right high roof slope, it appears as though inappropriate nailing has caused lifting – and may cause penetration points – at 15 to 20 shingles. Such nailing issues sometimes lead to premature failure of the shingles. The Tarion organization, the homeowner's real estate lawyer, and the builder should all be advised, in writing, about this concern. The shingles should be re-examined before the two year anniversary.** **A handful of shingles were 'gouged', perhaps by scaffolding, during construction, at the front low roof. They should be patched, perhaps with mastic, to prevent premature failure.** There is no evidence of past or current water entry through the roof assemblies. The low roof was examined by walking on it. The high roof was examined by moving a ladder around the home. The roof structure is sound underfoot, and as observable from inside the attic. Plywood sheathing bears upon a truss assembly. Insulation is adequate. The average depth is 11 to 12 inches. Existing insulation is loose cellulose. Attic ventilation is adequate, if very slightly lacking at the soffit baffles. No action is recommended. Always remove all old shingles when re-shingling. Always use metal in the valleys. Apply mastic at the exposed nail heads at ridge shingles. Extend the down pipes that are dumping water onto the low roof so they drain into the lower troughs or all the way to the ground. Part of the front trough at the front low roof is dumping water directly onto the roof; the rear end of the trough is uncapped. **It should be capped – and an additional down pipe installed, if**

necessary - to prevent premature shingle degradation, and to promote effective drainage.

### **SOFFITS, FASCIA AND FLASHINGS**

See the Roofing section. Over the years, re-sink fasteners at the fascia metal as required.

### **WINDOWS**

There is no evidence of failure at the thermal seals. The casement windows are mechanically functional. Windows are a mixture of styles. The homeowner stated that significant frost occurs at the rear family room windows during winter. Apparently, the moisture results in some mold production. A number of joints have opened where the inside face of the windows meet their adjacent finishes, likely due to shrinkage of wood as it dried out. **Before the windows can be properly assessed, all exterior and interior joints should be fully sealed.** While the windows may be faulty in some fashion, it may be necessary/practical to install a heat recovery ventilator (HRV). Further investigation is required. See the Wall section.

### **ELECTRICAL**

The service is 100 amps. All wiring is copper. All receptacles are grounded. GFCI receptacles are in place in the kitchen, outside and in the bathrooms. Consider adding GFCI protection in the laundry room. The distribution panel is at the right wall in the basement. **The seller stated that lamps have required replacement at the ensuite shower and in the kitchen twice during the first year of ownership, which should be noted in Tarion documents.**

### **HEATING/COOLING**

The gas-fired furnace is providing heat throughout. The gas fireplace is functional. Be sure to invite a qualified heating contractor to carry out a preventative maintenance (PM) inspection at the furnace, the gas fireplace and water heater, annually. Note that the water heater and furnace are direct vented through the right wall. The AC unit was not tested.

### **PLUMBING**

The water supply is municipal. The sanitary disposal system is town sewers. The main shutoff valve is at the right wall in the basement. It is functional. Drains are ABS plastic. Supply pipes are plastic. Fixtures are functional.

### **INTERIOR FINISHES**

Imperfections are observable at various locations, but the home is in nice condition. Be sure to maintain a full seal at the key joints in the bathrooms.

### **WATER CONTROL AND SITE DRAINAGE**

**Some sections of eaves trough, including the trough around the perimeter of the front, low roof, contains a significant amount of (probable) construction-related debris, and the troughs are not draining properly. Significant cleanout is required.** It may or may not be necessary to adjust the slopes of the troughs; further investigation is required after the troughs are cleaned out. See the Foundation and Roofing sections. Expect re-spiking over the years.

## **HOUSEHOLD APPLIANCES**

The appliances were not tested.

## **HOME AND CHILD SAFETY**

There is no screen at one of the right side second floor windows; it presents an acute falling hazard for toddlers and small children. See the Heating and Electrical sections. See the Window section.

## **FIRE SAFETY**

Alarms were not inspected.

## **FUNGHI, RODENTS AND INSECTS**

See the Window section. There is no evidence of significant mold production or insect activity. Minimizing relative humidity in the basement, and eliminating specific sources of possible water infiltration, are keys to preventing mold production. See the Foundation, Walls and Roofing sections.

## **OUTSIDE STRUCTURES**

**The driveway paving is incomplete.**

Andrew Christie, CET, RHI