

Pacific West Home Inspections
Residential and Commercial Building Inspections

Serving the Shuswap – Columbia, Okanagan, Thompson – Nicola, Cariboo – Chilcotin Regions

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Report #: 0000-2011

July 28th, 2011

Mr & Mrs Smart

1234 New Home Drive
Shuswap, B.C.

RE: New Building Evaluation Performed at 1234 New Home Drive, Shuswap, BC.

Dear Mr & Mrs Smart

At your request, a visual inspection of the above referenced property was conducted on July 27th, 2011. This inspection report reflects the visual conditions of the property at the time of the inspection only. Hidden or concealed defects, material deterioration and damage cannot be included in this report. No warranty or guarantee is either expressed or implied. This report is not an insurance policy, nor a warranty service.

An earnest effort was made on your behalf to discover all visible defects, however, in the event of an oversight, maximum liability must be limited to the fee paid. The following is an opinion report, expressed as a result of the inspection. Please take time to review limitations contained in the inspection agreement.

The intellectual material amassed from the inspection is the property of Dave Brice, the inspector. "This report was prepared for the exclusive use of the said client indicated herein this report summary, the main report and the inspection contract engagement agreement only and may not be used or otherwise relied upon by any third person without our written consent. We accept no liability to any third person whatsoever". Unauthorized users are advised that this inspection report is not a standalone documentation of the material amassed or communicated to the client. This report presentation, without the Engagement Contract, the Standards of Inspection and the walk through discussion of the finding, should not solely be relied upon.

REPORT SUMMARY

Overall, the single family residential home appears to have been constructed in a workmanlike manner and appears somewhat consistent with the present building trades and standards in effect at the time of construction. However, there are several building components and systems that have not been completed and finished by the primary contractor as yet of which should have been completed by now given the length of time from the start of the project sometime in the Spring of 2010. Typically, a residential building with this square footage in size would normally be undertaken from start to finish anywhere from 5 to 7 months or less if the primary contractor was only building one house at a time and not several at once. However, such is dependent of availability of sub-trades.

Forward below is an outline of issues and conditions presently observed, viewed and found within the interior and exterior areas of the home. Many appear to be incomplete installations to finishing. A few appear to be missing and/or excluded building components of which all need to be addressed as possible consequences could result in the future.

1.0. Safety Issues And Concerns

There appears to be a few safety hazards and potential safety hazards to be found or observed (unless more hidden from view or don't know of), that could possibly pose a threat to the persons occupying the building at this time. These issues or conditions observed should be addressed and rectified immediately.

1.1. North Concrete Block Retaining Wall: A public and homeowner safety issue needs to be addressed (possible liability concern). No guard railing or fencing is installed along the top of the foundation wall and therefore pose a falling hazard.

1.2. Upper Deck Guard Railing: The top and bottom small plastic holding brackets that are attached to the column supports trim of which are holding in place the guard railing in-place appear to be underrated (to small) and therefore, their present use are questionable for holding the guard railing securely into place. Have existing plastic brackets replaced with metal, galvanized brackets.

1.3. Upper Deck Guard Railing: Span length of the longer sections of the guard railing appear to need mid span support such as an additional 4x4 column post as the railing moves considerably. The design strength for a guard rail should resist a horizontal load of 100 lbs or concentrated load of 200 lbs applied inward or outward at any point at the top of the guard. The top of the guard rail shall resist an evenly distributed vertical load of 300 lbs (appears doubtful by trial - but don't try for safety sake).

Outlined below are issues that should or need to be addressed presently, (some cases immediately, depending on the nature) as that item detailed within the report may possibly affect the structure of the building in a way of present or future damage and/or deterioration of structural building materials and/or mechanical components or systems of the building.

2.0. Incomplete And Unfinished Building Issues

2.1. Exterior Trim: The following issues needing to be completed.

2.1.1. Paint and/or seal all cut ends that are potentially susceptible to exposure to weather conditions such as wind driven rain and snow (prevent wood material from swelling and development of wood decay).

2.1.2 Seal around the perimeter of the windows where the trim meets along the edge where small openings/gaps are observed. This will prevent exposure to weather conditions such as wind driven rain and snow (prevent water from penetrating to areas behind the trim and siding).

2.1.3. Corner trim has been applied/installed over top of the siding. This is not the best practice but is acceptable. Reason not to be the best practice is that wind driven rain and snow can enter into the slight open gap and into areas behind the trim. Need to seal gap openings.

2.1.4. Need to seal/cover small openings where small birds, insects can potentially enter into areas of the building envelop and possible wind driven rain and snow entry.

2.1.5. All exterior penetrations need to be sealed. Observed two areas at the east side of the home that have not been sealed which are the master bedrooms laundry dryer vent cover and the hot water tanks air inlet and exhaust pipes. Both require round foam backer rod, sealed and the opening having applied "Blue Skin Breather" type membrane installed (as per architect drawings - typical construction standard and practice). This needs to be completed and finished correctly by today's building standards and practice. Since this appears not to be installed at these two locations, this raises the question if those sealant materials and membranes were installed at all other wall exterior penetrations.

2.1.6. No trim has been installed along the bottom of the east and west siding to give a better, completed finish look (better building practice).

2.1.7. Unfinished trim observed at the lower south area of the building along the bottom of the siding, below the sliding glass patio door and the nail fastener points on the surface of the trim around the windows.

2.1.8. Some unfinished, exposed trim ends are observed at the south area of the home and therefore need to be painted for protection.

2.2. Structural Component: Within the northeast room (storage room), there is a large, main support beam installed from the east foundation wall to the west wood framing wall. The beam is supported with manufactured pocket type metal brackets at both ends. Viewed that a number of the bolt holes in the metal bracket to install metal thread type bolt rods have no bolt rods installed and that only a few of the bolt rods have been installed and the metal nut is not fully fastened (to a few). Since there are a specific number of holes for metal bolt rods to be installed and that only a few have metal bolt rods having been installed, because of that specific number, I'm sure it was the professional designers intentions that a number of bolt rods were to be installed with metal washers and nuts. Why the absence of bolt rods from the other holes within the metal bracket is not known. I recommend to inquire with the buildings architect if the absence of the bolt rods that have not been installed is ok to the design.

2.3. Garage Door Entry (Into The Interior): Automatic closing hinge springs need adjustment so that the door closes on its on to the frame.

2.4. Interior Doors: Laundry room door needs to be installed to the frame hinges and a number of the doors have no door stoppers installed and therefore, potential damage to the walls could occur from the doors hardware.

2.5. Interior Trim: Viewed several areas where the trim is missing or is yet to be installed.

2.6. Built-in Vacuum System: No vacuum unit is installed (standard with new housing construction).

2.7. Kitchen: Drywall board around the framing box for counter cook top fans vent pipe located above the top of the wall cabinets is unfinished (sanding of drywall compound, finishing and painting is needed).

2.8. Kitchen: At the front area of the island, lower left area facing towards the sink (below area of the microwave oven), the indoor vacuum floor kick-out cover and duct pipe are not installed (non-completed).

2.9. Main Laundry Room: Sink facilities, plumbing and the counter/floor cabinets have not been installed.

2.10. Main Laundry Room: Dryer vent entry has not been installed.

2.11. Exterior Grounds: Exterior grounds need to be landscaped.

2.12. Property Site Drainage: Need to grade slope of soils away from foundation, garage entry area, and main front area sidewalk. The slope should fall away from these areas at a minimum of 1/2 inch per foot and extend at least 10 feet away from the foundation, sidewalks and garage if possible for proper drainage of water (this is a must).

2.13. Perimeter Foundation Drainage: Perimeter drainage clean out pipes are viewed around the perimeter of the building. Several need to be lowered to a reasonable height of which should be at least 12 inches from finish grade and capped.

2.14. Patio Decks (Lower South Side): No patio deck has been constructed (concrete slab type).

2.15. South Lower Side Of The Building (Basement Sliding Patio Door): No stairs or landing has been designed or constructed. This poses a falling hazard. Need to design and construct by today's building standards and practices a stair or landing within this area.

2.16. West Side Of The Building (Garage Door Entry/Exit): No stairs or landing has been designed or constructed. This poses a falling hazard. Need to design and construct by today's building standards and practices a stair or landing within this area.

2.17. Garage: No filler trim is installed around the inside of both vehicle doors (left, right and top areas). Further, no trim installed around the inside of the west exterior door.

3.0. Observation Of Poor Workmanship Issues

3.1. Drainage Gutters And Drain Spouts: Need the building contractor to amend the following issues.

3.1.1. The front facing gutter at the north side of the home has been installed to low at the west end of the roof and therefore, fast moving water from the surface of the roof drains over top of the gutters and onto the ground.

3.1.2. The front facing gutter at the west side of the garage has been installed with a negative slope at the north end and therefore, water is standing within the gutter and during a rain fall, the water from within the gutter is flowing over the front side of the gutter and onto the ground.

3.1.3. Several of the drain spouts are not securely fastened to the outside surface of the building. Loose metal brackets, loose or missing metal screws are observed.

3.1.4. Gutters are filled with tree debris and asphalt shingle granulars and therefore, water within the gutters can not drain into the drain spout openings.

3.1.5. Both of the drain spouts located at the northwest and southwest corners of the building need to drain into a drainage pipe or have the drain spout extended at least 5 feet away from the foundation of the home.

3.1.6. The drain spout located at the southeast corner of the buildings upper deck column support needs to be connected to a underground drainage system or the drain spout extended at least 5 feet away from the foundation of the home.

3.2. Exterior Water Taps: The south lower exterior water tap is loose from within the exterior cavity of the wall. The water service pipe and frost-free tap must be secured within the wall to prevent movement and once achieved, the perimeter opening through the wall needs to be sealed.

3.3. Interior Hand Rails: Upper section of the stairs, the bottom of the right handrail is higher then the bottom of the left handrail.

3.4. Interior Hand Rails: Lower section of the stairs, the right side of the hand rail fasteners are loose and pulling away from the wall.

3.5. Master Bedroom Laundry Facilities: The dryer appliances venting material should be replaced with 4 inch metal smooth pipe with a good connection to the wall metal pipe with all joints wrapped in metal tape. Reason, the present aluminum flexible pipe can collect moisture/condensation (has small ridges) and therefore mold and mildew will develop along the bottom areas of the pipe.

3.6. Main Floor Hallway Bathroom: The sink counter back splash is not installed.

3.7. Main Floor Hallway Bathroom: Extremely poor workmanship and finishing is noted at the back of the sink counter/cabinets at the floor. What is viewed is that the contractor has built a small three sided wooden box to hid issues. When this box was removed, the following was observed.

3.7.1. The hot and cold water service lines are installed through the floor and enter from the back of the cabinets.

3.7.2. Stone tile is not installed within this area underside of the cabinets (exposed wood subfloor and construction debris).

3.7.3. A small section of drainage is exposed from the edge of the floor and wall.

3.7.4. Finishing trim is not installed along the back wall to the floor.

3.7.5. Within the floor cabinet, a portion of the cabinets back cover has been hacked away.

By appearance, the present conditions viewed could have been avoided with the hot and cold water pipes installed within the interior wall and both exiting just above the floor cabinets shelf without hacking the back wood wall of the cabinet. Strongly recommend that the building contractor at his/her expense install a new floor cabinet/counter, finish trim, floor, and properly install the plumbing into the wall.

3.8. Basement Bathroom: The following issues are observed to the bathroom sink area.

3.8.1. The sink counter does not have a back splash installed.

3.8.2. The sinks drain stopper connection at the drain pipe leaks.

3.8.3. Finishing trim is not installed along the back wall to the floor.

3.8.4. Finished wall trim ends at the left and right of the floor cabinets have poorly finished ends.

Have the building contractor amend issues.

3.9. North Concrete Sidewalk: Workmanship of the sidewalk is appalling. Due to the present installation and finishing of the concrete sidewalk, the concrete needs to be removed and replaced with new aggregate concrete and finished by todays building standards and practices.

3.10. Upper Deck Guard Railing: The far southeast guard railing does not fit squarely even between the column supports (poor install) replace.

3.11. Upper Deck Guard Railing Material: Wood material used is very rough and appears to be a poor choice (used from building scrap?). Guard railing is a feature and better choice of wood (smoother, straight and with minimal defects) should be used. I would ask the builder to replace worst section wood of guard railings (nearly all).

3.12. Crawl Space: Contractor left personal and building debris in the crawl space, have cleaned.

4.0. Recommendations - Suggestions - Improvements

4.1. Crawl Space Entry Cover: The plywood used to cover the opening appears weak due to the size of the opening and therefore, any weight could potentially collapse/break the plywood. This is a safety concern as a median weight person could fall into the opening and onto the crawl space floor which is several feet in depth. Recommend to improve the plywood covering by strengthening the opening by installing a removable wood or metal brace across the middle of the opening. Further, for looks, replace the loose and several pieces of the carpet that has been poorly fastened to the outside surface of the plywood covering. I'm sure a full piece can be found and applied to the surface of the plywood with glue and metal staples.

4.2. Crawl Space: No crawl space floor drain is observed. Recommend to install a floor drain at the lowest point within the crawl space with a drain pipe leading to the exterior. This would be beneficial in that if there was ever an event where one of the water service pipes or waste drain pipes developed a leak, the water and liquid waste can drain outside of the crawl space and not cause a flood within.

4.3. Crawl Space: No mechanical or natural venting of the crawl space was observed (hidden or not installed?). Recommend to install some type of venting within the crawl space or have heated (present conditions are humid, stale air and signs of unknown type of staining on the underside surface of the subfloor plywood sheathing).

4.4. Attic Access: The location of the attic hatch opening is poorly located as one of the garage door opener units is installed directly centre of the opening. It appears to be an oversight such a location was chosen. However, a person of median build can enter through either side of the opener unit but a person of a larger build or has a physical impairment would likely not be able to. Recommend to provide a secondary entry into the attic within the garage where there is no impairment for entry by any means.

4.5. Attic Insulation: Insulation is somewhat compacted at various locations (sub-trades?) and the true R-factor at this point in time may be substantially less than that originally installed. Installation of additional insulation is recommended.

4.6. Roof: Recommend to obtain the professional roofing contractor that installed the roof covering and flashing materials to further investigate roof covering oddity (area where hump and loose shingles are noted), replace the metal valley flashing of which is damaged, clean left over roofing material debris and replace the torn shingle at the front north side of the roof.

4.7. Garage Floor: Surface of the floor material appears serviceable with a few expansion cracks (appear to be). No control joints have been cut into the surface of the concrete and therefore, cracks may develop wherever (observed already).

4.8. Garage East Foundation & Wall: Appears that the east wall foundation/footing has settled (moved). A significant opening between the foundation footing and edge of the garage floor is viewed. Typically, such an occurrence is due to certain unknown ground condition oddities, insufficient compaction of natural soils or gravels or water intrusion underside or around the foundation footing. Not much can be done about the present situation of which should not have never occurred in the first place, but these type of things can happen if design and construction is lacking a certain amount of attention. One solution is to replace the foundation footing and pour another of the same design but that would be a significant expense and time. Recommend to monitor this area within the garage for approximately for a year to see whether the gap expands by movement or the exterior wall moves such as cracks in the drywall board. If not, have the building contractor return then and fill the gap opening with a round type of foam gasket and top up with concrete mortar or an rubber expanding compound sealant which would be a better choice as this would allow for possible expansion and contract movement.

5.0. Home Maintenance And Upkeep Issues

5.1. None.

6.0. Other Building And Property Issues

6.1. Solar Hot Water Ready Regulation: Noted that the building contractor has not incorporated into the building to be "Solar Hot Water Ready" as per required for future installation. However, at this time, this regulation appears not to be applicable with the local government of jurisdiction.

6.2. Adaptable Living: Noted that "Adaptable Living" components were not incorporated in the design of the building for such as building access requirements, doorways, bathrooms, kitchens, corridors, and electrical outlets/switches/controls. Such design incorporated during the construction of the home would have added a special value to the home for future resale. At this time, it is not an requirement or regulation with the local government of jurisdiction. More information can be obtained from the Saferhome Standards Society at

www.saferhomesociety.com.

6.3. Required Principle Ventilation System: Noted that the home appears not to have a operating principle exhaust fan.

This is required in every dwelling, regardless of the type of heating system must have a Principle Ventilation Exhaust Fan or a Ducted Central Ventilation System (HRV). And of course, have a exhaust fan in every kitchen, bathroom or water-closet room.

Further to this, make-up air for the principle exhaust fan has to be employed, therefore, the continue operation of the central heating fan (assuming). Basically, this comes where there are Natural Aspirating Fuel-Fired Vented Appliances, such as the gas fireplace inserts, gas fired cook tops of which are potentially subject to back drafting, hence make-up ventilation air is required for the principle exhaust fan of which in this case, the bathroom or the kitchen fan

A continuous whole-house exhaust system provides ventilation by using a single-point or multi-point central fan to remove air from the building. Supply air enters the building envelope through gaps or provided vents. If the building envelope is tight, there is a possibility that negative pressure can be created inside the building leading to back drafts from combustion appliances Often these systems incorporate a pressure relief damper to alleviate pressure imbalances. Supply air enters the building in an uncontrolled manner and may be pulled in from relatively undesirable areas such as garages, musty basements (or crawlspaces) or dusty attics. Whole-house exhaust systems may not be appropriate in areas where levels of outside environmental contaminants are high. In the case of radon, researchers have found that exhaust systems may actually increase the indoor levels of contaminants. In severe climates, very cold supply air may create drafts, while in moist humid climate zones, exhaust only systems can cause moisture damage to the building structure. Filtration cannot be sensibly added to an exhaust only ventilation system, unless one considers the building envelope as part of the filtration system.

An intermittent exhaust system is installed similar to a continuous exhaust system; generally it consists of one central fan to remove stale air from the building, but may also incorporate several fans in areas of high sources (*i.e.* bathrooms and kitchens). In this case, the fan(s) runs only part of the time at a higher rate and are sized to provide the necessary ventilation. The rate of ventilation when the system is operated intermittently must be larger than if it were operating continuously. There are several advantages for using intermittent ventilation systems. The occupant can reduce the amount of outdoor air entering the building during periods of the day when the outdoor air quality is poor. Peak load concerns may make it advantageous to reduce ventilation for certain periods of the day. When the ventilation system is integrated with the heating and cooling system, cyclic operation may also make more sense.

A timer can be used to control the fan which usually has a switch for the occupant to turn on when needed. The disadvantage here is that the occupant controls the ventilation and must be relied on to know when ventilation is needed. If the fan is noisy, the occupant may choose to operate the system, which could result in under-ventilation. Many systems use a timer to automatically run the fan for a certain amount of time each day so that the occupant is not relied on to sense when ventilation is needed. However, the occupant often has control over a switch to turn the fan on high when extra ventilation is needed.

(The principle ventilation exhaust fan shall be controlled by an adjustable time control device capable of providing a minimum of two 4-hour operating periods per day, and have a separate manual switch when serving both the principle ventilation exhaust function and a bathroom or water closet room exhaust function, or be designed to run continuously).

6.4. Radon Gas: No provisions where designed or constructed for the future ventilation of Radon gas's of which may or may not exist. This is not a standard building requirement but may be required in the future for all existing and new construction of homes (this comment is for information purposes only).

7.0. Home Energy Improvement Recommendations

7.1. None.

8.0. Concluding Statement

After viewing and observing by visual inspection of the homes interior and exterior finished structure and mechanical systems and components, the primary building contractor and/or his/her sub-trades need to be obtained to finish, complete, perform repairs, implement improvements, and replace certain building components and systems where needed to meet certain obligations, building standards (code and non-code related) and to be performed in good practice. All of the items mentioned within the report and herein the summery need to be performed by a professional trades person knowing the current building standards and practices of today. In comparison with other professional building contractors I know personally and as a previous construction contractor myself, what has been viewed and through conversation of issues, a lower standard then expected for a independent builder is viewed.

None of the issues and conditions appear to be affecting the habitability of the home at this present time but may in the future.

Thank you for selecting my firm to do your new home evaluation. If you have any questions regarding the inspection report or the building, please feel free to call me.

Sincerely,
PACIFIC WEST HOME INSPECTIONS

Mr Dave Brice CHI
Owner/Inspector
ASTTBC & BCIPI Certification #: PI0284.
WETTBC Certification #: 5824.
BPCPA Home Inspection Licence #: 47668.

