## InspectionTechnologies Company 17 Wright Lane, South Hero Vermont 05486 (866) 816-6907

Inspection No:	201005-1234	Inspector:	Michael Schirmer
Inspection Date:	5/5/2010		
Dwelling:	2404 Sesame Stre Stratus Vermont	et	
Client:	Homer Buyer 222 Baguette Cedar Lake, V		
Client's Agent: Real Estate Co:	Matt Finish Real Estate As	ssociates	



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We attempt to give the client a comprehensive, clear-cut, unbiased view of the home. The purpose of the inspection is to identify "MAJOR" problems associated with the property being purchased or sold, although minor items may also be mentioned. Areas that may be of concern to us may not be of concern to the client and some items that may be of concern to the client may be considered minor to us, therefore, it is advisable to read the entire report. Where repairs or replacements are suggested, we recommend licensed professionals in that field be called upon to make those repairs. We do not perform verification of repairs, therefore, we advise client to obtain all paperwork from these professionals concerning the work performed. These professionals will be happy to provide you with written statements concerning their work. We further recommend maintaining all paperwork on repairs for future reference.

### **GENERAL INFORMATION**

MAJOR SYSTEMS - Our evaluation of major systems is both visual and functional, provided power and/or fuel is supplied to the component. Identifying or testing for the presence of asbestos, radon, lead based products or other potentially hazardous materials is not within the scope of this report. Judging the sufficiency of water flow in plumbing or the cooling efficiency of air conditioning is a subjective evaluation, therefore, we only note a poor condition if, in the inspector's opinion, the adequacy seems to be less than normal. We urge you to evaluate these systems prior to closing. DISMANTLING AND/OR EXTENSIVE INSPECTION OF INTERNAL COMPONENTS OF ANY APPLIANCE, INCLUDING HEATERS AND HEAT EXCHANGERS, IS BEYOND THE SCOPE OF THIS REPORT. THE LOCAL UTILITY COMPANY WILL CONDUCT SUCH AN INSPECTION UPON REQUEST.

INTERIOR: Our review of interior rooms is visual and evaluated with similar aged homes in mind. Cosmetic considerations and minor flaws such as a torn screen or an occasional cracked window may not always be reported. Inspector does not always make judgment as to whether or not defects should be addressed 'prior to closing'. It is the responsibility of the client and his/her agent to determine which defects are 'prior to closing' issues.

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### **GENERAL CONDITIONS**

0001	Inspector	Michael Schirmer.
0002	Structure Type	The house is a single family home. Built on a gently sloping lot.
0003	Levels	1 story structure. Walkout basement.
0005	Estimated Age	The home was built approximately 2005.
0006	Weather Conditions	Cloudy; Warm. The temperature is 55 degrees and the relative humidity is 48 %.
0007	Occupant Status	Currently occupied. Vacation home.
0008	Attending Inspection	Buyers agent.
0009	Start Time/Stop Time	The time of inspection was 11:30 to 2:00.

#### Exterior

Our exterior evaluation is visual only. Our review does not take into consideration normal wear, cosmetic issues or code/manufacturer's specifications.

Step #	Component	Comments
0101	Driveway	Serviceable. Gravel.
0102	Walkways	Serviceable. Stone.
0103	Fences/Gates	Not Present.
0104	Siding	MAINTENANCE. Cedar Shingles. Vertical Shiplap. Stone facing.

The stone veneer is not a structural or weight bearing wall. The structure is supported by the wood frame system behind the stones.

Suggest caulking all penetrations through siding such as pipes, wires and vents as needed to avoid water intrusion and pests.



0105 Trim

Serviceable. Wood.

0106 Windows & Frames

Serviceable. Roll-Out. Metal clad.

0107	Electrical Fixtures	ACTION. Outdoor Outlets; Lighting.
		Ground fault interrupter provided for safety at the exterior front rightward receptacle outlet, although failed to re-set after a ground fault was applied to the receptacle. As this outlet failed our testing, will not reset - and is now inoperable. Recommend replacement as needed by a qualified electrician to redeem operation.
0108	Gutters & Downspouts	Serviceable. Metal.
0109	Hosebibs	MAINTENANCE. Left side; Rear.

Left side hose bibb leaks when under pressure. Possible deteriorated seals. Suggest replacement as needed to avoid leaks and water waste. Consult a qualified plumber.



0110 Sprinkler System

Not Present.

0111 Bell/Chime

MAINTENANCE. Door bell/chime inoperable at time of inspection.

0112 Exterior Doors MAINTENANCE. Wood; Glass Patio. Vinyl clad. Metal screen door.

> Missing damper/self-closer noted at the rear screen door. Suggest installing a proper damper/self-closer to avoid door damage.

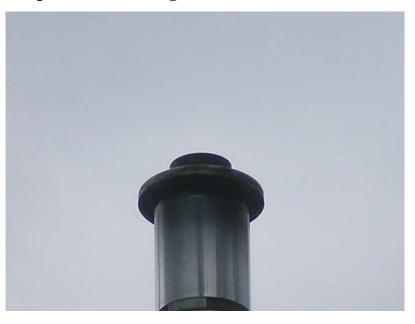


0113 Chimney

MAINTENANCE. Masonry. Metal.

Inspection of the masonry chimney flues were limited by the presence of a rain hood.. The Consumer Products Safety Commission suggests annual cleaning of all solid fuel chimneys (fireplace). Client should confirm with seller when last cleaned and reviewed.

Replace missing spark arrester at the rear chimney for safety. Appears to have blown off - unable to locate.



0114	Lot/Grade Drainage	Serviceable. Sloped lot.
0115	Gas Meter	Not Present.
0116	Exposed foundation	COMMENTARY. Homes built with a slab construction may have plumbing, gas and electrical lines running beneath the slab. As it is impossible to determine the condition of these items by a visual inspection, they are specifically excluded from the scope of this inspection.

Non-compliant: Rigid Styrofoam insulation noted on exterior of foundation. This is generally not an accepted practice due to its ability to allow wood destroying insects to travel behind and through the insulation into the framing structures of the home. It is standard practice to require a minimum of 6 inches of bare concrete between ground surface and the sill plate (first course of siding) to avoid insects and moisture damage to the foundation. Suggest buyer consider removing this insulation as a future enhancement to the property or regularly monitor areas of band joists and sill. 320.4 Foam plastic protection.

In areas where the probability of insect infestation, extruded and expanded polystyrene, polyisocyanurate and other foam plastics shall not be installed on the exterior face or under interior or exterior foundation walls or slab foundations located below grade. The clearance between foam plastics installed above grade and exposed earth shall be at least 6 inches (152 mm).

#### Exceptions:

1. Buildings where the structural members of walls, floors, ceilings and roofs are entirely of noncombustible materials or pressure preservatively treated wood.

2. When in addition to the requirements of R320.1, an approved method of protecting the foam plastic and structure from subterranean insect damage is provided.

3. On the interior side of basement walls.



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### 0117 Exterior Comments

MAINTENANCE. Front leftward area of the yard is soft and pitted. This condition is usually an indication of the presence of moles. Consult a qualified pest elimination service as needed.

### Patio/Porch/Balcony/Area Ways

We suggest periodically checking concrete/wood and other materials for signs of deterioration. Suggest periodically treating all wood and monitoring drainage around concrete slabs to help prevent deterioration.

Step #	Component	Comments
0201	Cover	Serviceable. Portico.
0205	Deck	COMMENTARY. Properly through-bolted or lag bolted to house. Proper flashing installed at the ledgers.
		Joists are toe nailed into the ledger and outer band joist only at the front deck jut-out and at the rear entry landing. Recommend adding joist hangers to avoid failure potential. Consult a qualified contractor as needed. 502.6.2 Joist framing. Joists framing into the side of a wood girder shall be supported by approved framing anchors or on ledger strips not less than nominal 2 inches by 2 inches (51 mm by 51 mm).





0206 Stairs/Stoops

0207

Railing

Serviceable. Wood.

ACTION. Wood.

All sections of deck guard railings are loose and/or entirely detached at the bottom rails. Recommend further review by a qualified contractor for properly securing for safety.



#### Page 12

#### Roof

Our evaluation of the roof is to determine if portions are missing and/or deteriorating. Portions of underlayment and decking are hidden from view and cannot be evaluated by our visual inspection. Leaks are not always visible to the inspector, nor can the inspector determine the watertight integrity of a roof by visual inspection. If such a review is desired, client should contact a qualified licensed roofing contractor.

Step #	Component	Comments
0301	Roofing Type & Materials	Serviceable. Metal; Asphalt composition shingle; Sloped. Standing Seam.
0302	Number of Layers	Serviceable. One.
0303	Flashings	Serviceable. Metal. Visible areas of flashing appear intact and correct.
0304	Conditions	<ul><li>Serviceable. Standard architectural shingles have a life cycle of up to 30 years. Roofing appears to be original construction. 2005.</li><li>Roofing appears in serviceable condition. No loose, damaged, or missing pieces noted at the time of inspection.</li></ul>
0305	Skylights	Not Present.
0306	Roof Penetrations	Serviceable.

Spa Equipment & Area

Step #	Component	Comments
2402	Walkways	Serviceable.
2405	Handrails	Not Present.
2407	Electrical System	Serviceable. Proper electrical disconnect was observed.
2410	GFI	Serviceable. Responded to test.
2411	Heater	Serviceable.
2413	Pump	Serviceable.
2414	Motor	Serviceable.

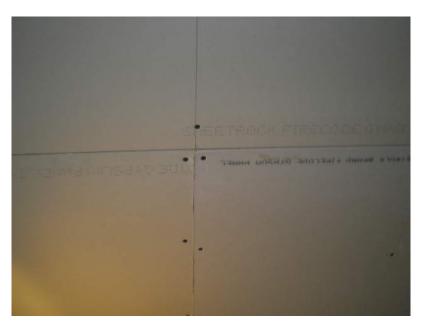
#### Garage

Attached garages should be separated from common walls of the house by a proper fire wall and fire door. This is to keep the migration of any smoke, fumes or fire from entering the house in the event of a fire in the garage. A self closer on the fire door between the garage and the house is an additional safety precaution. These features may not have been considered/required when home was built. Recommend not storing combustible/volatile materials in garage area and avoid running engines in garage area for safety. It is recommended all garage doors be equipped with a safety reverse device to reverse the direction of the door if it should meet any resistance on the way down (important safety where children are present). Some older home may not have these safety reverse devices present, these may not have been required when the home was built. Buyer may wish to consider upgrading if not present.

Step #	Component	Comments
0501	Location	Serviceable. Attached.
0502	Exterior	Serviceable. Garage is attached. See EXTERIOR section for more information.
0503	Roof	Serviceable. Garage is attached. See ROOF section for more information.
0506	Floor/Slab	MAINTENANCE. Concrete.
		Common settling cracks noted from left to right. We recommend sealing or caulking cracks with an elastomeric masonry caulking to avoid water penetration, which can lead to freeze expansion of the cracks and voids beneath the slab.
0507	Garage Door	MAINTENANCE. Wood; Roll up panel.
		Water damage noted to exterior varnish. Suggest re-finishing to prolong the life of the wood. We suggest an epoxy or marine varnish for longer finish life.
0508	Garage Door Hardware	Serviceable. Safety springs installed as required.
0509	Garage Door Opener	Serviceable. This garage door is equipped with two safety reverse devices which operated when tested at the time of inspection. Light beam return; tested OK. Obstruction return; tested OK. The U.S. Product Safety Commission recommends that these devices be checked monthly for proper operation and safety.

0510	Windows/Screens	Serviceable.
0511	Fire Door	<ul> <li>COMMENTARY.</li> <li>Fire Door and weather stripping rated for fire/fume safety with an installed self-closer may not have been considered when home was built. Recommend client not store volatile and combustible materials in the garage area or operate engines in the garage area for safety.</li> <li>309.1 Opening protection.</li> <li>Openings from a private garage directly into a room used for sleeping purposes shall not be permitted. Other openings between the garage and residence shall be equipped with solid wood doors not less than 1 3/8 inches (35 mm) in thickness, solid or honeycomb core steel doors not less than 1 3/8 inches (35 mm) thick, or 20-minute fire-rated doors.</li> </ul>
0512	Service Door	Not Present.
0513	Fire Wall/Ceiling	COMMENTARY.

Fire Ceiling is compromised due to sheetrock joints and nails must be taped and finished.



No Fire Wall. Fire rated walls and ceilings rated for fire/fume safety on common walls adjacent to main living areas may not have been considered when home was built. Recommend client not store volatile and combustible materials in the garage area or operate engines in the garage area for safety.

309.2 Separation required.

The garage shall be separated from the residence and its attic area by not less than 1/2-inch (12.7 mm) gypsum board applied to the garage side. Garages beneath habitable rooms shall be separated from all habitable rooms above by not less than 5/8-inch (15.9 mm) Type X gypsum board or equivalent. Where the separation is a floor-ceiling assembly, the structure supporting the separation shall also be protected by not less than 1/2-inch (12.7 mm) gypsum board or equivalent.

0514 Garage Framing & Supports

Serviceable.

#### 0517 Electrical

ACTION.

Ground fault interrupter (GFI) present for safety.

Missing outlet covers noted at the garage door opener receptacle outlets. Suggest installing required covers to avoid shock hazard. E3806.9 Covers and canopies.

Outlet boxes shall be effectively closed with a cover, faceplate or fixture canopy.



Exposed/loose/hanging wires noted at the rear wall of the garage. This is a safety concern if used where it could be subject to physical damage or accidental human contact. Wires were not 'live' at the time of inspection, although inspector cannot determine if wires could be made live by an unidentified circuit breaker or switch. Client should consult with a qualified electrician for removal or proper termination as needed to avoid shock hazard.



#### 0518 Garage Comments

#### ACTION.

House is pre-wired and pre-plumbed for central vacuum system. No central unit has been installed.

Remove or properly cover exposed foam plastic insulation between the auto doors.

314.1.2 Thermal barrier.

Foam plastic, except where otherwise noted, shall be separated from the interior of a building by minimum 1/2inch (12.7 mm) gypsum board or an approved finish material equivalent to a thermal barrier to limit the average temperature rise of the unexposed surface to no more than  $250^{\circ}F(121^{\circ}C)$  after 15 minutes of fire exposure to the ASTM E 119 standard time temperature curve.

The gypsum board shall be installed using a mechanical fastening system in accordance with Section R702.3.5. Reliance on adhesives to ensure that the gypsum board will remain in place when exposed to fire shall be prohibited.



Note: There is a large pile of foam plastic insulation stacked in the rafters. Suggest removal due to fire safety concerns.



#### Kitchen

The kitchen inspection is a combination of visual and operational testing. Appliances are operated (if power is supplied) using normal operating controls. Calibrations to cooking systems or their efficiencies are not evaluated nor are life expectancies given. NOTE: Dishwashers can fail at any time due to their complexity. Our review is to determine if the system is free of leaks and excessive corrosion.



Step # Component

1301 Floor

#### Comments

MAINTENANCE. Wood.

Flooring is buckled from in front of the dishwasher to the refrigerator. Flooring is loose in front of the refrigerator. This condition is generally a sign of a previous kitchen flood. One or more flooring boards may need to be replaced. Check subflooring for water damage. Consult a qualified flooring contractor as needed.

1302	Walls	Serviceable. Paint.
1303	Ceiling	Serviceable. Paint.
1304	Doors	Serviceable.
1305	Windows/Screens	Serviceable.
1306	Cabinets	Serviceable.
1307	Counter Tops	Serviceable. Granite.
1308	Electrical	MAINTENANCE. Four (4) ceiling light fixture inoperable at time of inspection. Possible burnt bulbs. Suggest client verify proper operation prior to closing.
1309	Sinks	Serviceable.
1310	Faucets	Serviceable.
1311	Traps/Drain System	Serviceable.
1312	Disposal	Not Present.
1313	Dishwasher	ACTION. Drinking water protection: No loop in drain line. A loop in drain line is required to prevent dirty drain water from entering the dishwasher. P2717.2 Sink and dishwasher.



1314	Stove/Cook Top	Serviceable. Propane Gas.
1315	Oven	Serviceable. Electric.
1316	Hood/Fan/Light	Serviceable. Vents to exterior.
1317	Microwave	Serviceable. Built-in microwave ovens are tested using normal operating controls. Unit was tested for microwave leaks and appeared to be serviceable at time of inspection.
1318	Heat Source	Serviceable. Radiant floor heating.
1319	Kitchen Comments	Serviceable. ISE hot water dispenser noted and tested.

#### Bathroom

Our focus in bathrooms is directed at identifying visible water damage and/or visible plumbing problems. We may not always mention common faults such as stuck stoppers or dripping faucets. If considered important, you should check these items independently. Minor cosmetic issues such as common rust, corrosion and stains may not always be reported.

Step #	Component	Comments
1901	Location	Serviceable. Center; 1st level.
1902	Floor	Serviceable. Tile.
1903	Walls	Serviceable. Paint.
1904	Ceiling	Serviceable. Paint.
1905	Doors	Serviceable.
1906	Windows/Screens	Serviceable.
1907	Electrical	MAINTENANCE. Ground fault interrupter provided for safety.
		Tub/shower light fixture inoperable at time of inspection. Possible burnt bulb. Suggest client verify proper operation prior to closing.
1908	Exhaust Fan	Serviceable.
1909	Heat Source	Serviceable. Radiant floor heat.
1910	Tub/Surround	Serviceable.
1911	Tub Enclosure	Serviceable.
1912	Tub Faucet	Serviceable.
1913	Shower/Surround	Serviceable.
1914	Shower Door	Serviceable.
1915	Shower Faucet	Serviceable.
1916	Sink	Serviceable.

1917	Sink Faucet	Serviceable.
1918	Traps/Drain Supply	Serviceable.
1919	Toilet	MAINTENANCE. Replace missing bolt cap.
1920	Counter/Cabinets	Serviceable.

## Bathroom #2

Step #	Component	Comments
1901.2	Location	Serviceable. Left hand side; 1st level.
1902.2	Floor	Serviceable. Tile.
1903.2	Walls	Serviceable. Paint.
1904.2	Ceiling	Serviceable. Paint.
1905.2	Doors	Serviceable.
1906.2	Windows/Screens	Serviceable.
1907.2	Electrical	Serviceable. Ground fault interrupter provided for safety.
1908.2	Exhaust Fan	Serviceable.
1909.2	Heat Source	Serviceable. Radiant floor heat.
1910.2	Tub/Surround	Serviceable.
1911.2	Tub Enclosure	MAINTENANCE. Separation observed at the juncture of tub and floor covering and at the juncture of the tub to tub decking. Suggest caulking to prevent water penetration and possible water damage.

Loose tiles observed at the tub decking. Grout gaps observed. Suggest further review by a qualified tile contractor for repairs as needed to avoid water intrusion to the substrate.



1912.2 Tub Faucet

1913.2 Shower/Surround

Serviceable.

MAINTENANCE. Cracked tile observed at the stall threshold. Recommend sealing or replacing to avoid water intrusion to the substrate.



1914.2 Shower Door

Serviceable.

1915.2	Shower Faucet	Serviceable.
1916.2	Sink	Serviceable.
1917.2	Sink Faucet	Serviceable.
1918.2	Traps/Drain Supply	Serviceable.
1919.2	Toilet	Serviceable.
1920.2	Counter/Cabinets	Serviceable.
1921.2	Spa Tub	Serviceable. Ground fault interrupter provided for safety. Wired to GFI circuit breaker at electrical service panel. Trips and resets at GFI circuit breaker at electrical service panel.

## Bathroom #3

Step #	Component	Comments
1901.3	Location	Serviceable. Basement.
1902.3	Floor	Serviceable. Tile.
1903.3	Walls	Serviceable. Paint.
1904.3	Ceiling	Serviceable. Paint.
1905.3	Doors	Serviceable.
1906.3	Windows/Screens	Serviceable.
1907.3	Electrical	MAINTENANCE. Ground fault interrupter provided for safety.
		Tub/Shower light fixture inoperable at time of inspection. Possible burnt bulb. Suggest client verify proper operation prior to closing.
1908.3	Exhaust Fan	Serviceable.
1909.3	Heat Source	Serviceable. Radiant floor heat.
1910.3	Tub/Surround	Serviceable.
1911.3	Tub Enclosure	Serviceable.
1912.3	Tub Faucet	MAINTENANCE. Spout escussion is loose. Suggest repairs as needed to avoid water intrusion into the plumbing wall.



1913.3	Shower/Surround	Serviceable.
1914.3	Shower Door	Not Present.
1915.3	Shower Faucet	Serviceable.
1916.3	Sink	Serviceable.
1917.3	Sink Faucet	Serviceable.
1918.3	Traps/Drain Supply	Serviceable.
1919.3	Toilet	Serviceable.
1920.3	Counter/Cabinets	Serviceable.
1921.3	Spa Tub	Serviceable. Ground fault interrupter provided for safety. Wired to GFI circuit breaker at electrical service panel. Trips and resets at GFI circuit breaker at electrical service panel.
1922.3	Bathroom Comments	Serviceable. Sauna area and electric sauna heater was reviewed and tested.

#### Plumbing

#### Step # Component Comments

1001 Plumbing Supply System Serviceable. Water pressure at time of inspection was 72 psi. Pressure was within normal range of 40 to 80 psi. Property has public water supply. Shut off location is at water main in basement utility room.



1002 Plumbing Waste System Serviceable. On site waste disposal system noted. As per the Inspection Agreement, these underground systems are not within the scope of our visual review. Only conditions in the area above the system can be observed if the location is known. A large quantity of water is drained during the inspection and all drainage appeared free-flowing and functional at the time of inspection unless otherwise noted.

System is SeptiTech equipment. System fail alarm is located in the laundry area.

- 1003 Supply Pipes Serviceable. Copper. No leaks noted at time of inspection.
- 1004 Waste Pipes Serviceable. PVC. No leaks noted at time of inspection.
- 1005 Pipe Insulation Not Present.
- 1006 Pipe Strapping/Supports Not Present.

1008	Water Heater	Serviceable. Operates as a separate zone from the boiler. Hot water was noted at all tested plumbing fixtures indicating the water heater zone was functioning properly from the furnace at the time of inspection. The heating cores within the storage tank are not visible or accessible to the inspector without disassembling storage tank and are not specifically tested at the time of inspection.
1010	Sump Pit	Not Present. Floor drain.
1011	Cross Connections	Not Present.

## Laundry Area

Step #	Component	Comments
0601	Floor	Serviceable. Tile.
0602	Walls & Ceiling	Serviceable. Paint.
0603	Doors	Serviceable. Solid.
0604	Windows/Screens	Serviceable.
0605	Cabinets	Not Present.
0606	Laundry Sink/Tub	Serviceable.
0607	Cross Connections	Not Present.
0608	Electrical	Serviceable.
0609	Exhaust Fan	Not Present.
0610	Washer Hook-ups	Serviceable.
0611	Dryer Hook-ups	ACTION. Propane Gas.
		Natural gas dryer is fueled by LP Gas/Propane, which is a safety concern requiring immediate review by a qualified gas service technician for installation of the required conversion kit or to approve/certify current installation.
0612	Heat Source	Serviceable. Radiant floor heating.

0613 Laundry Comments

#### ACTION.

When a fuel burning appliance is operated in a tight space, it is standard practice that the space have a louvered door or air vents be placed in the wall for adequate combustion air/draft balancing air. Dryer requires approximately 250 sq.ft. of combustion air/draft balancing air to operate properly and safely. Recommend further review by a qualified gas service technician for adding proper make-up air as required to ensure safety. We suggest changing the solid door to a louvered door. See 'Heating/AC' section of this report for additional information.

G2407.4 (304.4) Makeup air provisions.

Makeup air requirements for the operation of exhaust fans, kitchen ventilation systems, clothes dryers and fireplaces shall be considered in determining the adequacy of a space to provide combustion air requirements.

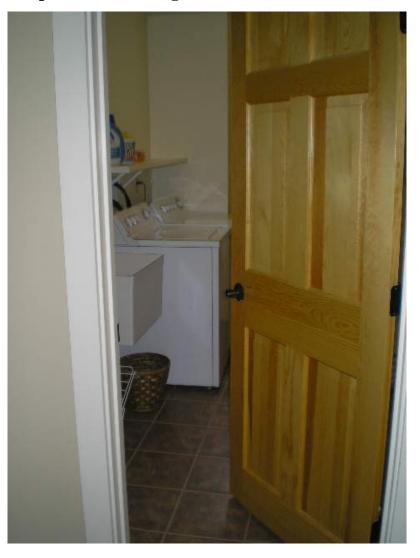
G2407.5 (304.5) Indoor combustion air.

The required volume of indoor air shall be determined in accordance with Section G2407.5.1 or G2407.5.2, except that where the air infiltration rate is known to be less than 0.40 air changes per hour (ACH), Section G2407.5.2 shall be used. The total required volume shall be the sum of the required volume calculated for all appliances located within the space. Rooms communicating directly with the space in which the appliances are installed through openings not furnished with doors, and through combustion air openings sized and located in accordance with Section G2407.5.3, are considered to be part of the required volume.

G2407.5.3.1 (304.5.3.1) Combining spaces on the same story. Each opening shall have a minimum free area of 1 square inch per 1,000 Btu/h (2,200 mm2/kW) of the total input rating of all gas utilization equipment in the space, but not less than 100 square inches (0.06 m2). One opening shall commence within 12 inches (305 mm) of the top and one opening shall commence within 12 inches (305 mm) of the bottom of the enclosure. The minimum dimension of air openings shall be not less than 3 inches (76 mm).

#### Page 36

# InspectionTechnologies



Step #	Component	Comments
0901	Heating	Serviceable. Hot water; Oil. Electrical safety switch (Firomatic) noted. Electrical disconnect provided near this unit.
		Boiler is a Peerless cast iron model. Appears to be original equipment installation.
0902	Conditions	<ul> <li>ACTION.</li> <li>Discharge pipe is missing on the temperature pressure relief valve. Suggest installing the required 3/4 inch metal discharge pipe on the temperature pressure relief valve to within 1-1/2 feet of the floor or to exterior of the building to ensure safety.</li> <li>M2002.4 Pressure-relief valve.</li> <li>Boilers shall be equipped with pressure-relief valves with minimum rated capacities for the equipment served. Pressure-relief valves shall be set at the maximum rating of the boiler.</li> <li>Discharge shall be piped to drains by gravity to within 18 inches (457 mm) of the floor or to an open receptor.</li> </ul>

A very important code exists that when an ignition source is in a garage, or is located in a room that communicates with the garage through openings, the ignition source must be raised a minimum of 18" above the floor due to explosion hazard of gasoline vapors from vehicles. i.e.: M1307.3 Elevation of ignition source. Appliances having an ignition source shall be elevated such that the source of ignition is not less than 18 inches (457 mm) above the floor in garages. For the purpose of this section, rooms or spaces that are not part of the living space of a dwelling unit and that communicate with a private garage through openings shall be considered to be part of the garage.

The inspector believes that obtaining air for combustion through a draft hood located in the garage is not only unsafe, but through ducting might even draw potential gasoline vapors directly into the combustion chamber of the boiler. This is an explosion hazard requiring immediate review by a qualified heating contractor for removing the garage source for combustion air or to approve/certify current installation. We suggest changing the utility room solid door and the laundry room solid door to louvered doors. See steps 0908 below and 0613 (Laundry) for additional information. M1701.4 Prohibited sources.

Combustion air ducts and openings shall not connect appliance enclosures with space in which the operation of a fan may adversely affect the flow of combustion air. Combustion air shall not be obtained from an area in which flammable vapors present a hazard.





0903	Exhaust Venting	Serviceable. Barometric damper present. Chimney.
0904	Thermostat	Serviceable. 4 zones plus water heater.
0905	Ducting	Serviceable. Ceiling diffusers noted for the air conditioning system.

#### 0906 Air Conditioning System MAINTENANCE. Electric.

Condenser is located at the exterior rear of the building. The base of the condenser unit is not level. This could affect proper operation and efficiency of this unit. Suggest further review by a qualified HVAC contractor for re-leveling as needed.



Electrical disconnect provided at the equipment however is in lock-down and could not be reviewed.



Outside temperature at time of inspection was below 60 degrees. To prevent damage to the air conditioning system, manufacturers warn against operating air conditioning units when the outside temperature is less than 60 degrees. This unit was not tested. Client is advised to verify proper operation of the unit with seller prior to closing.

Fan center is located in the attic.



#### 0907 A/C Temperature

Not Inspected.

#### Differences

Heating & A/C

0908

Comments

#### ACTION.

Draft balancing air for gravity venting of exhaust is obtained from within the small utility room only. When a fuel burning appliance is operated in a tight space, it is standard practice that the space have a louvered door or air vents be placed in a wall at both the ceiling level and the floor level for adequate draft balancing air. Boiler requires approximately 500 sq.ft. of draft balancing air (make-up air) to operate properly and safely. Recommend further review by a qualified heating contractor for providing proper make-up air or to approve/certify current installation. We suggest changing the utility room solid door and the laundry room solid door to louvered doors. See steps 0902 above and 0613 (Laundry) for additional information.

M1701.1 Air supply.

Liquid and solid fuel-burning appliances shall be provided with a supply of air for fuel combustion, draft hood dilution and ventilation of the space in which the appliance is installed, in accordance with Section M1702 or Section M1703. The methods of providing combustion air in this chapter do not apply to fireplaces, fireplace stoves and direct vent appliances.

M1702.2 Confined space.

Where the space in which the appliance is located does not meet the criterion specified in Section M1702.1, two permanent openings to adjacent spaces shall be provided so that the combined volume of all spaces meets the criterion. One opening shall be within 12 inches (305 mm) of the top and one within 12 inches (305 mm) of the bottom of the space, as illustrated in Figure M1702.2. Each opening shall have a free area equal to a minimum of 1 square inch per 1,000 Btu/h (2.20 mm2/W) input rating of all appliances installed within the space, but not less than100 square inches (0.064 m2).



#### **Electrical System**

#### Step # Component Comments

1101 Electrical Main Box Serviceable. Amps. The main electrical service is approximately 200 amps. Branch circuit wiring is copper. Breakers present to provide overload protection. Main conductor is aluminum. Main disconnect noted. Service entrance is underground. System appears to be properly grounded. The main panel is located at the laundry/utility area.

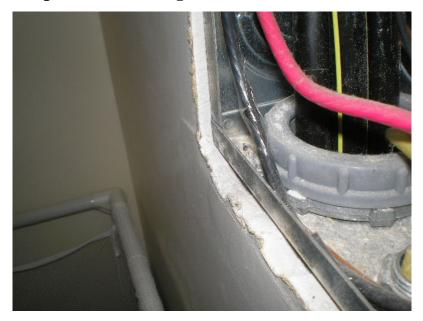
Voltage. The main electrical service is approximately 240 volts.



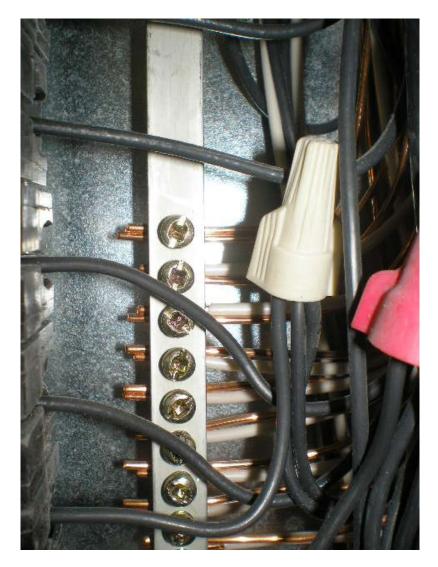
1102 Sub Panels/Location

Not Present.

1103	Smoke Detectors	ACTION. Smoke detectors not tested. Inspector does not test when a constant monitoring security system may exist and/or in applications with fire security systems. We recommend confirming proper operation with seller prior to closing.
		<ul> <li>Smoke detectors might not be the photoelectric type as now required. Consult the security system installer.</li> <li>Photoelectric-only type of smoke alarms are required to be installed in the vicinity of any bedrooms and on each level of a dwelling, for all new dwellings and dwellings that are sold or transferred, beginning January 1, 2009.</li> <li>The law allows the use of photoelectric and carbon monoxide combination alarms but it does not allow ionization /photoelectric combination alarms to be used for these specific locations.</li> </ul>
1104	Electrical System Comments	ACTION. Properly bonded.
		Replace one (1) missing panel cover screw.
		<ul> <li>Panel cover improperly installed over wall covering. Suggest further review by a qualified electrician to cut back wall surface to allow for proper installation of panel box cover. E3807.3 Position in wall.</li> <li>In walls of concrete, tile or other noncombustible material, cabinets and panelboards shall be installed so that the front edge of the cabinet will not set back of the finished surface more than 0.25 inch (6.4 mm). In walls constructed of wood or other combustible material, cabinets shall be flush with the finished surface or shall project therefrom.</li> </ul>

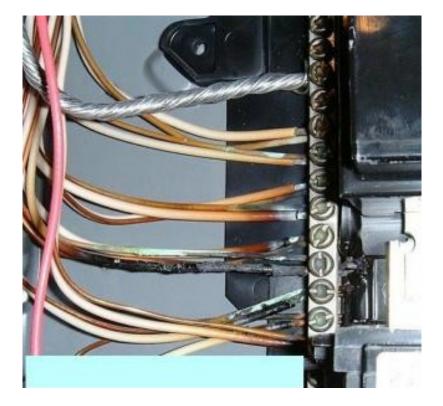


The connection of a neutral and equipment-grounding conductor in the same termination creates an issue and is not an ideal configuration and VOIDS THE UL RATING OF THIS PANEL. One of the objectives of the particular arrangement of bonding jumpers, neutrals and equipment grounds is to allow circuit isolation while keeping the equipment grounding conductor still connected to the grounding electrode (see UL 869A -Reference Standard for Service Equipment). When the neutral is disconnected, the objective is to still have the equipment ground solidly connected to the grounding electrode. If both the neutral and grounded conductor is under the same terminal, this cannot be accomplished.



If the screw were loosened by an electrician or became loose, one would lose both the return path for current as well as the fault clearing ability should a hot contact a metallic surface. An example of this condition occurring is in the following photograph. Note the scorching and burnt wires. Most would not want this potential in their home. Recommend further review by a qualified electrician for correction as needed or to approve/certify the current installation. E3606.4 Grounded conductor terminations. Each grounded conductor shall terminate within the panel board on an individual terminal that is not also used for another conductor, except that grounded conductors of circuits with parallel conductors shall be permitted to terminate on a single terminal where the terminal is identified for connection of more than one conductor.

For example purposes only:



## **Other Interior Areas**

Step #	Component	Comments
2201	Location	<ul> <li>ACTION.</li> <li>Inspector was unable to locate the Building Energy Standards Certificate as required for all homes newer than 1997. You must obtain a copy of this certificate from the seller or the builder and post it where required for full compliance with the Vermont Energy Code: Section 8.2b</li> <li>Filing the Vermont Residential Building Energy Standards Certificate.</li> <li>Once the certificate is completed, you need to file the required copies and attach the original to the house:</li> <li>Make at least three copies of the completed certificate, retaining one for your records.</li> <li>Attach the original certificate to the house by permanently affixing it on or near the electrical service panel or heating equipment.</li> <li>Within 30 days of completing construction, send one copy each to:</li> <li>*The town clerk for the town or city in which the home is located. (Note: Check local procedures before filing the certificate; local fees and forms may be required.)</li> <li>*The Vermont Department of Public Service (Energy Efficiency Division, 112 State Street, Drawer 20, Montpelier VT 05620-2601).</li> <li>If a home required by law to meet the Energy Code does not comply, a home owner may seek damages in court within six years of occupancy or the filing of the required certification as noted in Section 1.1 of the Vermont Energy Code.</li> <li>Missing hand railing noted at steps. Suggest graspable hand railing be installed as a safety enhancement.</li> <li>311.5.6 Handrails.</li> <li>Handrails shall be provided on at least one side of each continuous run of treads or flight with four or more risers.</li> </ul>
2202	Floor	Serviceable. Wood; Tile; Carpet.
2203	Walls	Serviceable. Paint.
2204	Ceiling	Serviceable. Paint.
2205	Doors This is a Confide	Serviceable. NY Lic. # 16000013385 ential Report Any Use by Unauthorized Persons Prohibited

2206 Windows/Screens

#### ACTION.

Unqualified windows noted in basement bedroom. Consult State Fire Marshall whether or not this will be a problem in obtaining Certificate of Occupancy.

Fire safety standards require bedrooms to have one door and one useable window for emergency fire escape. Suggest client consider installing an egress window in this bedroom that ensures fire safety or consider not using this room for sleeping areas. Window must be a minimum of 24" High, 20" Wide, and window sill must not be higher than 44" from the floor.

310.1 Emergency escape and rescue required. Basements with habitable space and every sleeping room shall have at least one openable emergency escape and rescue opening. Where basements contain one or more sleeping rooms, emergency egress and rescue openings shall be required in each sleeping room, but shall not be required in adjoining areas of the basement. Where emergency escape and rescue openings are provided they shall have a sill height of not more than 44 inches (1118 mm) above the floor. Where a door opening having a threshold below the adjacent ground elevation serves as an emergency escape and rescue opening and is provided with a bulkhead enclosure, the bulkhead enclosure shall comply with Section 310.3. The net clear opening dimensions required by this section shall be obtained by the normal operation of the emergency escape and rescue opening from the inside. Emergency escape and rescue openings with a finished sill height below the adjacent ground elevation shall be provided with a window well in accordance with Section R310.2.



2207 Electrical

### ACTION.

Exposed/loose/hanging wires noted at the living room cathedral ceiling. Client should consult with a qualified electrician for installation of intended lighting and/or ceiling fan or to properly terminate in a covered junction box for safety.



		Loose receptacle outlet noted in the dining room right wall forward. Suggest resecurring to avoid further damage and for safety. E3902.6 Receptacle mounted in boxes. Receptacles mounted in boxes that are set back of the wall surface shall be installed so that the mounting yoke or strap of the receptacle is held rigidly at the surface of the wall. Receptacles mounted in boxes that are flush with the wall surface or project therefrom shall be so installed that the mounting yoke or strap is seated against the box or raised cover.
2208	Closets/Wardrobe	COMMENTARY. Basement owner's closets were locked at the time of inspection. Unable to review these areas.
2209	Heat Source	Serviceable. Radiant floor heating observed.
2210	Fireplace	<ul> <li>ACTION.</li> <li>No open fireplaces allowed after 1998 according to the Vermont Energy Code. Full hearth doors need to be installed for compliance with this code.</li> <li>Section 2.2b Solid-Fuel Appliances:</li> <li>Solid-fuel appliances must have tight-fitting metal, glass or ceramic doors.</li> <li>If a home required by law to meet the Energy Code does not comply, a home owner may seek damages in court within six years of occupancy or the filing of the required certification as noted in Section 1.1 of the Vermont Energy Code.</li> </ul>



Fireplace damper operable at time of inspection.

2nd level fireplace reviewed and tested. Gas logs; direct venting; operates from wall switch.



### Attic

Water stains around roof penetrations such as chimneys, plumbing vents, and heating vents are very common. It is difficult to determine if these stains are active. Insulation in the attic is one of the best ways to improve the energy efficiency of a home. Our report measures insulation materials by thickness. Generally, the greater the thickness the more resistance to heat loss.

Step #	Component	Comments
0401	Access	COMMENTARY. Attic access located at the rear center bedroom ceiling scuttle hatch. Entering attics that are heavily insulated can cause damage to the insulation and attic framing. Attics with deep insulation cannot be safely entered due to limited visibility of the framing members upon which the inspector must walk. In such cases, the attic is only partially accessible, thereby limiting the review of the attic to the view of the hatch area only.
0402	Framing	Serviceable. Rafters. 2x4 rafters; 24" centers. Queen Post



## 0403 Sheathing

Serviceable. Plywood.



0404 Insulation/Vapor Barrier MAINTENANCE.

Rolled in; Cellulose. Insulation thickness varies approximately from 13 inches. Approximately R-42. Today, the minimum requirement for northern climates is R-38.

Gaps noted at several areas down the center (serviceman tracking). Suggest rearranging insulation to avoid gaps in the overall insulation value of the attic insulation.



0405 Ventilation

Serviceable. Soffit vents; Gable vents. Proffer vents noted.

- 0406 Electrical Serviceable.
- 0407 HVAC Ducts Serviceable.
- 0408 Duct Insulation Serviceable.
- 0409 Duct Strapping/Supports Serviceable.

#### 0410 Attic Comments

#### ACTION.

Exposed foam plastics sprayed onto gable of cathedral. Manufacturer requires covering foam plastics with a minimum ignition barrier material at interior applications due to fire volatility, rapid burn, and emission of fumes when burning. Recommend removal, or covering as recommended as a fire safety enhancement to the property.

We suggest installing a layer of mineral fiber or applying ASTM-E84 fireproof paint.

314.2.3 Attics and crawlspaces.

Within attics and crawlspaces where entry is made only for service of utilities, foam plastics shall be protected against ignition by 1 1/2-inch-thick (38 mm) mineral fiber insulation, 1/4-inch-thick (6.4 mm) wood structural panels, 3/8-inch (9.5 mm) particleboard, 1/4-inch (6.4 mm) hardboard, 3/8-inch (9.5 mm) gypsum board, or corrosion-resistant steel having a base metal thickness of 0.016 inch (0.406 mm).

