

EXHIBIT 5 BOH
DATE 2/8/09
HB 417

MAREI

The Montana Association of Real Estate Inspectors supports HB 417, the registration of Home Inspectors in Montana.

Although there is a current home inspection bill which was passed by the 1999 legislature, SB 210, it is a consumer protection bill and does not set competency criteria for the people providing these services. Currently anyone may do home inspections for a fee. We need no specialized education or certification. We meet no standard of practice or standard of ethics.

HB 417 would

- require the annual registration of all persons selling real estate inspections on properties of 4 residential units or less
- require an inspector to successfully complete the NHIE, The National Home Inspector Examination (or its equivalent) ... this is a nationally recognized and proctored competency exam for real estate inspectors
- require an inspector to complete 20 hours of continuing education annually
- require adherence to a Code of Ethics specified within the law
- require adherence to a Standards of Practice specified within the law

Our bill would not

- require a minimum level of E and O insurance
- require a basic level of education ... this basic level of competency would be provided for by the National Home Inspector Examination noted above
- provide any form of grand father clause

This bill is so detailed, with such clear definitions, that adjudication of complaints against errant inspectors would be handled by The Department of Labor and Industry legal staff, within existing programs, at no additional cost to the state ... perhaps similar to boiler operators, crane operators and construction blasters. This registration program will be paid for by registration fees collected from inspectors. They are expected to be less than \$100 annually.

Should you have any questions, please contact me.

Steve Jacoby, President
Montana Association of Real Estate Inspectors / MAREI

581.0833



National Home Inspector Examination

EXHIBIT 5 B04
DATE 2-18-09
HB 417

800 E. Northwest Highway, Suite 700
Palatine IL 60074
847-298-7750
info@homeinspectionexam.org

2009 NHIE Client States

Alabama	adopted 10/03
Alaska	adopted 7/03
Arizona	adopted 4/01
Arkansas	adopted 7/03
Illinois	adopted 10/02
Indiana	adopted 5/05
Kentucky	adopted 1/06
Louisiana	adopted 11/00
Maryland	adopted 10/08 in statute
Massachusetts	adopted 5/01
Mississippi	adopted 3/02
New Jersey	adopted 6/02
North Dakota	accepted 8/05
Oklahoma	adopted 5/03
Pennsylvania	accepted 12/01
Rhode Island	adopted 7/01
South Dakota	adopted 10/03
Tennessee	adopted 1/06
Virginia	adopted 7/02
Washington State	adopted 1/09
West Virginia	adopted 5/06
Wisconsin	adopted 1/00

Home Inspector Test Comparison Worksheet*

Considerations	National Home Inspector Examination	Other test
Sponsoring organization	<p><i>Examination Board of Professional Home Inspectors dba National Home Inspector Examination</i></p> <p>EBPHI is an independent IRS 501c(6) not-for-profit organization whose sole mission is "to establish the standard of competence for home inspectors and to enhance consumer confidence in home inspection professionals."</p>	
Regulatory status	<p><i>Twenty-three States</i></p> <p>NHIE is named by twenty-three state home inspector regulatory bodies, in most cases as the required examination for licensing. Examination fee is also reimbursed by the federal Veterans Administration for military personnel.</p>	
Independence	<p><i>Not a membership or lobbying organization</i></p> <ul style="list-style-type: none"> • EBPHI is not reliant on membership to increase dues revenue and has no mission to address home inspector market concerns. • EBPHI does not take a position regarding licensing or lobby legislatures. 	
Legal defensibility	<p><i>Never named in suit against client states</i></p> <p>Development, maintenance and administration of the NHIE are performed pursuant to accepted psychometric standards for public protection testing. Compliance with these standards confers a high degree of legal defensibility.</p>	
History	<p><i>Testing since October 1999</i></p> <p>More than 26,000 tests administered</p>	
Costs	<p><i>No cost to state regulatory body</i></p> <ul style="list-style-type: none"> • \$40,000 and 1,200 subject matter expert man hours invested annually to maintain quality of the NHIE. • Client states represented by home inspector subject matter expert of their choice in annual Item Writing Workshop. • State-specific module development available.* 	
Test maintenance	<ul style="list-style-type: none"> • Quarterly monitoring of test performance • Annual item bank development and full-scale review of test performance • Complete role definition study every 3-5 years. Just completed in 2007-08 (next scheduled for 2011) 	

Test format	<ul style="list-style-type: none"> • Closed book, four hour exam • 200 multiple choice questions, 25 as rotating unscored field test pool items • Delivered at proctored test-centers via secure internet connection; candidates subject to several security checks 	
Test content	<p><i>Test blueprint based on formal role delineation study performed every 3-5 years</i></p> <ul style="list-style-type: none"> • Inspection Methods, 27% • Building Systems, 42% (exterior, structural, roofing, electrical, insulation/ventilation, plumbing, interior, fireplace/chimney,., • Reporting, 26% • Professional Practice, 5% 	
Compliance with accepted test development standards	<p><i>Complies with public protection and employment testing standards</i></p> <ul style="list-style-type: none"> • American Educational Research Association • American Psychological Association • National Council on Measurement in Education • Council on Licensure, Enforcement and Regulation <i>CLEAR</i> • National Organization for Competency Assurance <i>NOCA</i> 	

*State specific module exams are available through your exam administrator. If the client State is willing to participate in the funding of the State specific module, EBPHI can develop the exam for the State.

EXHIBIT 5B0H
DATE 2/18/09
HB 417



National Home Inspector Examination

Policies Procedures Content

Examination Board of Professional Home Inspectors
800 E. Northwest Highway, Suite 700, Palatine, IL 60074
Phone 847-298-7750 e-mail info@homeinspectionexam.org



Examination Board of Professional Home Inspectors® , Inc.

The Examination Board of Professional Home Inspectors (EBPHI) is an independent, not-for-profit corporation founded in 1999. EBPHI's mission is "to establish the standard of competence for home inspectors and to enhance consumer confidence in home inspection professionals." The National Home Inspector Examination (NHIE) addresses this mission by encouraging regulatory bodies in state and local governments, as well as professional membership organizations, to adopt the National Home Inspector Examination for competency assessment.

Administration of the NHIE ensures that home inspection professionals meet basic knowledge and practice requirements for purposes of regulation. Successful completion of the examination answers the needs of the public, government and home inspectors. For information about home inspection laws and regulations, see EBPHI's website at www.homeinspectionexam.org.

Registration Information

Tennessee and Oklahoma registration

The states of Tennessee and Oklahoma have contracted with PSI, Inc., to administer the National Home Inspector Examination required for licensing. TO REGISTER, go to <http://candidate.psiexams.com>. For more information, see our website at www.homeinspectionexam.org.

Illinois and South Dakota registration

The states of Illinois and South Dakota have elected to add state-specific questions to the National Home Inspector Examination and to use a different test administrator. Both the Home Inspector Examination for Illinois and the Home Inspector Examination for South Dakota are administered by Applied Measurement Professionals (AMP). TO REGISTER, go to www.goamp.com. For more information, see our website at www.homeinspectionexam.org.

All other states

EBPHI contracts with Pearson VUE to administer the National Home Inspector Examination at more than 220 proctored test centers throughout North America. To register, go to www.catglobal.com or call toll-free 877-543-5222.

Payment information

- Payment is required at time of online or phone registration.
- No payments are accepted at test centers.
- Examination fees are non-refundable, non-transferable and subject to change.

Examination fee

- In all states except Tennessee, Oklahoma, Illinois and South Dakota, the cost of the National Home Inspector Examination is \$225.
- For the states noted, see websites listed in "Registration Information" above.

To change or cancel a reservation without penalty

- To change or cancel a reservation without monetary penalty, notify Pearson VUE's Customer Care Center no less than four business days before the scheduled examination.
- Cancellations received less than four business days before the scheduled examination will be charged the full examination fee.
- If you are absent for a scheduled examination and have not rescheduled or canceled according to policy, the full examination fee for the missed examination session is due. You will not be permitted to take subsequent examinations until all fees owed to Pearson VUE for previous examinations have been paid.
- If you are taking the exam through a different test administrator, contact them (See "Registration Information" above) for their policies and procedures.



Permitted absence from a scheduled examination

If, on the day you are scheduled to test, you are unable to attend the examination for which you were scheduled, you may be excused for the following reasons:

- Illness, either yourself or an immediate family member
- Death in the immediate family
- Disabling traffic accident
- Court appearance or jury duty
- Military duty

Re-examination procedures

- To make an appointment for re-examination, follow the online or telephone procedures outlined above for making an examination appointment.
- You may retake the National Home Inspector Examination as many times as you wish (unless otherwise regulated by your state). However, you must wait 30 days between retakes. Each examination requires a separate fee.

Special examination arrangements and services

- EBPHI certifies that its test administrators comply with the provisions of the Americans with Disabilities Act (42 USC Section 12101, et. seq.) and Title VII of the Civil Rights Act, as amended (42 U.S.C. 2000e, et. seq.) in accommodating individuals who, because of a disability, need special arrangements to enable them to take an examination. If you need special arrangements for testing because of a disabling condition, you may ask for special testing services. All examination sites have access for individuals with movement disabilities.
- Any individual requesting special testing arrangements due to impaired sensory, manual, speaking skills, or other disability must submit a request to the appropriate test administrator which includes name, address, and social security number, the test date desired, test location, time of examination, and a description of the special requirements. This request must also include supporting documentation from a physician or other qualified professional reflecting a diagnosis of the condition and an explanation of the need for test aids or modifications.

- Test administrators will provide auxiliary aids and services, except where it may fundamentally alter the examination or results or result in an undue burden. Due to the unique nature of each request for special arrangements and the types of variables involved with testing (testing frequencies as permitted by each state and individual test center capabilities), an individual requesting special services should do so at least 15 business days in advance of his or her desired test date.
- Test administrators will determine the time and place of specially arranged examinations and confirm these arrangements with the individuals directly. All special examination arrangements are subject to Examination Board of Professional Home Inspectors' policies.

Reporting time

Specific reporting times will be given when you make your examination reservation. It is suggested that you report for testing at least 15 minutes before your examination appointment. Allow additional time to find the test center.

Tardiness

Individuals who arrive late for their scheduled examination forfeit their reservation. Persons excluded from testing because of lateness will be considered absent and will owe Pearson VUE the full examination fee.

What to bring

- Your confirmation number
- Two forms of signature identification, one of which must be photo-bearing, preferably a driver's license
- Your failing score report, if you are retaking the examination

If you do not present all of the above items on examination day, you may be denied admission to the test and considered absent. You will owe the full examination fee.



At the testing center

- When you arrive at the test center, report to the test center manager. Present your confirmation number, identification, and the other required documents. The manager will request information from you and take your picture. This photograph will be printed on your score report.
- The test center manager will assign you a seat and assist you with your computerized testing unit. You will have an opportunity to go through a tutorial to become familiar with the system. The time you spend on the tutorial will not reduce the time allotted for taking your examination. When you feel comfortable, you may begin your examination.
- You are given four hours to complete the National Home Inspector Examination. The timing of the examination begins the moment you look at the first question on your examination. After four hours have elapsed, the testing unit will automatically turn off. Alert the test center manager when you have completed your test by raising your hand.
- If you encounter any problem during the exam, please notify the test center manager immediately. If your problem is not addressed to your satisfaction, contact EBPHI by email at info@homeinspectionexam.org or call 847-298-7750.

Examination comments

- Should you wish to comment on any question on the exam, be sure to flag it and then follow the instructions at the end of the test. Comments are accepted only for specific, individual questions; a failing score on the NHIE is not considered grounds for comment.
- Comments on questions on the National Home Inspector Examination are reviewed by the Examination Board of Professional Home Inspectors with the advice of its test development contractor. Should a question require modification or elimination such that failing scores might be changed, affected candidates will be rescored. In no case will resolution of candidate comments result in modification of individual candidate scores. Comment determinations that do not affect passing scores will not be applied, but may affect future versions of the exam.

Test center regulations

To ensure that all individuals are tested under equally favorable conditions, the following regulations and procedures are observed at each test center:

- No personal belongings, such as briefcases, large bags, study materials, extra books or papers, electronic pagers or cellular phones, are permitted in the testing room. Any such items brought into the testing room will be collected and returned after the test is completed. Test administrators are not responsible for lost or misplaced items.

- No one is permitted to eat, drink, or smoke during the examination.
- Under no circumstances will you be permitted to work beyond the time allotted for the examination. Time limits are generous, with ample time to answer all questions and to check all work.
- You may not leave the room during an examination without permission from the test center manager. If you need to leave the examination for any reason, no extra time will be allowed for the examination.
- Examinees using notes, books or other aids; taking part in an act of impersonation; or removing test materials or notes from the testing room, will be summarily dismissed from the examination and reported to the Examination Board of Professional Home Inspectors.
- Use of calculators is not permitted.
- Test center personnel are not familiar with the questions on the NHIE and have been instructed not to attempt to assist with tested material.

Cancellations and delays

Test administrations are delayed or canceled only in emergencies. If severe weather or a natural disaster makes the test center inaccessible or unsafe, the test administration may be canceled. Listen to your local radio stations for announcements and information regarding severe weather conditions that may result in test delays and/or cancellations.

How the test is scored

- Official scoring of your examination will take place immediately. You will leave the test center with your official score sheet in hand.
- The National Home Inspector Examination is "scale scored" from 200-800, with 500 as the pass point. Your pass/fail status is determined by whether you answered enough questions correctly to meet or exceed the pass point of the examination. This pass point is established by methodology suggested in accepted standards for public protection examinations.

Using your score report

- If you took this examination to qualify for licensing or other regulation in your state, contact the regulating agency to determine how to submit your passing score report. You will find links to regulatory bodies at www.homeinspectionexam.org.
- At Pearson VUE test centers, you will receive two originals of your score report, as well as a Certificate of Achievement. If you are taking the exam through a different test administrator, contact them for information.



National Home Inspector Examination Content Outline

The National Home Inspector Examination is based on a formal role delineation study that defines the profession as practiced in the field. Home inspector subject matter experts from a variety of practice specialties and geographic areas contribute to the study, and home inspectors from throughout the nation then review the study via a statistically valid survey. The resulting content areas and their associated knowledge and skill requirements serve as the "blueprint" for the National Home Inspector Examination. The percentage of questions on the exam for each content area is indicated below.

This document, based on the role delineation study, is intended to provide home inspectors with topics for study that may appear on the National Home Inspector Examination. The contents of this document are neither a complete listing of all topics covered by the examination nor all skills necessary to perform a competent inspection.

I. Inspection Methods (27%)

Task 1: Sensory Observation Seeing, smelling, touching, and hearing observed components during the course of inspections.

- a. Exterior systems
- b. Structural systems
- c. Roofing systems
- d. Electrical systems
- e. Heating and cooling systems
- f. Insulating and ventilation systems
- g. Plumbing systems
- h. Interior systems
- i. Fireplace and chimney systems

Task 2: Measurement Methods Using instruments to determine or quantify conditions.

- a. Exterior systems
- b. Structural systems
- c. Roofing systems
- d. Electrical systems

- e. Heating and cooling systems
- f. Insulating and ventilation systems
- g. Plumbing systems
- h. Interior systems
- i. Fireplace and chimney systems

Task 3: Additional Methods Using probes, disassembly, or other processes to determine the condition of not-readily-accessible systems and components.

- a. Exterior systems
- b. Structural systems
- c. Roofing systems
- d. Electrical systems
- e. Heating and cooling systems
- f. Insulating and ventilation systems
- g. Plumbing systems
- h. Interior systems
- i. Fireplace and chimney systems

II. Building Systems (42%)

Task 1: Identify and inspect **site conditions** using applicable standards for material selection and installation procedures to assess immediate and long-term safety and maintenance issues that can affect the building or people.

a. Vegetation, Grading, Drainage, and Retaining Walls

- i. Common retaining wall types, materials, applications, installation methods, construction techniques, and clearance requirements
- ii. Common grading and drainage system types, materials, applications, installation methods, and construction techniques
- iii. Typical defects (e.g., negative grade, vegetation effecting building)
- iv. Typical vegetation, landscape conditions, maintenance practices, and how they affect the building
- v. Maintenance concerns and procedures
- vi. Safety issues, applicable standards, and appropriate terminology

Task 2: Identify and inspect **building exterior** components using applicable standards for material selection and installation procedures to assess immediate and long-term safety and maintenance issues that can affect the performance of the building.

a. Wall Cladding, Flashing, Trim, Eaves, Soffits, and Fascia

- i. Common types (e.g., plywood, aluminum cladding, step flashing, composite siding, SIPs, EIFS)
- ii. Typical defects (e.g., nailing, water infiltration, decayed wood)
- iii. Appropriate tools and their uses (e.g., probe, awl, moisture meter)
- iv. Maintenance concerns and procedures
- v. Safety issues, applicable standards, and appropriate terminology

b. Exterior Doors and Windows

- i. Common door and window types, materials, applications, installation methods, and construction techniques
- ii. Typical defects (e.g., delaminating, decayed wood, thermal seal failure, cracked glass)
- iii. Appropriate tools and their uses (e.g., probe, awl, moisture meter)
- iv. Maintenance concerns and procedures
- v. Safety issues, applicable standards, appropriate terminology, and glazing requirements (e.g., egress requirements)

c. Roof Coverings

- i. Common roof-covering types, materials, applications, installation methods,

b. Driveways, Patios, and Walkways

- i. Common types, materials, applications, installation methods, and construction techniques
- ii. Typical defects (e.g. root damage, trip hazards)
- iii. Maintenance concerns and procedures
- iv. Safety issues, applicable standards, and appropriate terminology

c. Decks, Balconies, Stoops, Stairs, Steps, Porches, and Applicable Railings

- i. Common types, materials, applications, installation methods, and construction techniques
- ii. Typical defects (e.g., flashing, attachment issues, railings, decayed wood)
- iii. Appropriate tools and their uses (e.g., probe, awl, moisture meter)
- iv. Maintenance concerns and procedures
- v. Safety issues, applicable standards, and appropriate terminology

construction techniques, and manufacturing requirements

- ii. Typical roof covering repair methods and materials
- iii. Typical defects (e.g., cracking, curling, deterioration, miscellaneous damage)
- iv. Characteristics of different roofing materials
- v. Deck and sheathing requirements for different types of roof coverings
- vi. Maintenance concerns and procedures
- vii. Safety issues, applicable standards, and appropriate terminology

d. Roof Drainage Systems

- i. Common drainage system types, materials, applications, installation methods, and construction techniques
- ii. Typical modifications, repairs, upgrades, and retrofits methods and materials
- iii. Typical defects (e.g., ponding, improper slopes, disposal of water runoff)
- iv. Maintenance concerns and procedures
- v. Safety issues, applicable standards, and appropriate terminology

e. Flashings

- i. Common types, materials, applications, installation methods, and construction techniques
- ii. Typical defects (e.g., separation, corrosion, exposed nailing)
- iii. Purpose of roof flashing
- iv. Maintenance concerns and procedures
- v. Safety issues, applicable standards, and appropriate terminology



f. Skylights and Other Roof Penetrations

- i. Common skylight and other roof penetration types, materials, applications, installation methods, and construction techniques
- ii. Typical defects (e.g., cracked glazing, faulty flashing)
- iii. Maintenance concerns and procedures
- iv. Safety issues, applicable standards, and appropriate terminology

Task 3: Identify and inspect **structural system** elements using applicable standards for material selection and installation procedures to assess immediate and long-term safety and maintenance issues that may affect the structural stability of the building.

a. Foundation

- i. Common foundation types, materials, applications, installation methods, and construction techniques
- ii. Typical foundation system modifications, repairs, upgrades, and retrofits methods and materials
- iii. Common foundation conditions and defects (e.g., cracks, settlement, decomposition) and their common causes and effects
- iv. Soil types and conditions and how they affect foundation types
- v. Applied forces and how they affect foundation systems (e.g., wind, seismic, loads)
- vi. Safety issues, applicable standards, and appropriate terminology

b. Floor Structure

- i. Common floor system types (e.g., trusses, concrete slabs), materials, applications, installation methods, and construction techniques
- ii. Typical modifications, repairs, upgrades, and retrofits methods and materials
- iii. Typical defects (e.g., improper cuts and notches in structural members)
- iv. Limitations of framing materials (e.g., span)
- v. Applied forces and how they affect floor systems (e.g., wind, seismic, loads)
- vi. Safety issues, applicable standards, and appropriate terminology

c. Walls and Vertical Support Structures

- i. Common types, materials, applications, installation methods, and construction techniques
- ii. Typical modifications, repairs, upgrades, and retrofits methods and materials
 - x. Typical defects (e.g., decayed wood, earth to wood contact)
- iii. Seismic and wind-resistant construction methods and hardware
- iv. Fire blocking
- v. Safety issues, applicable standards, and appropriate terminology

d. Roof and Ceiling Structures

- i. Common roof and ceiling structure types, materials, applications, installation methods, and construction techniques
- ii. Typical roof structure modifications, repairs, upgrades, and retrofits methods and materials
- iii. Acceptable truss and ceiling structural-member modifications, repairs, upgrades, and retrofits methods and materials
- iv. Typical defects (e.g., moisture stains, sagging rafters, cut trusses, decayed framing)
 - v. Limitations of framing materials (e.g., span)
 - vi. Applied forces and how they affect ceiling structures (e.g., wind, seismic, loads)
- vii. Safety issues, applicable standards, and appropriate terminology
- viii. Seismic and wind-resistant construction and hardware
- ix. Applied forces and how they affect roof structures (e.g., wind, seismic, loads)
- x. Maintenance concerns and procedures

Task 4: Identify and inspect **electrical system** elements using applicable standards for material selection and installation procedures to assess immediate and long-term safety and maintenance issues.

a. Service Drop of Service Lateral, Service Equipment, and Service Grounding

- i. Common types, materials, applications, installation methods, and construction techniques
- ii. Typical modifications, repairs, upgrades, and retrofits methods and materials
- iii. Typical defects (e.g., water and ruse in panel equipment, height)
- iv. Electrical service capacity
- v. Service grounding and bonding
- vi. Maintenance concerns and procedures
- vii. Safety issues, applicable standards, and appropriate terminology

b. Interior Components of Service Panels and Subpanels

- i. Common types, materials, applications, installation methods, and construction techniques

- ii. Typical modifications, repairs, upgrades, and retrofits methods and materials
- iii. Typical defects (e.g., floating subpanels, double-tapping, over-fusing)
- iv. Main disconnects
- v. Panel grounding and subpanel neutral isolation
- vi. Panel wiring
- vii. Overcurrent protection devices
- viii. Function of circuit breakers and fuses
- ix. Maintenance concerns and procedures
- x. Inspection safety procedures
- xi. Safety issues, applicable standards, and appropriate terminology

c. Wiring Systems

- i. Common types, materials, applications, and installation methods
- ii. Typical modifications, repairs, upgrades, and retrofits methods and materials
- iii. Typical defects (e.g., open splices, exposed romex)
- iv. Problems with aluminum wire
- v. Obsolete electrical wiring system
- vi. Maintenance concerns and procedures
- vii. Safety issues, applicable standards, and appropriate terminology

d. Devices, Equipment, and Fixtures (e.g., switches, receptacles, lights)

- i. Common types, materials, applications, installation methods, and construction techniques
- ii. Typical modifications, repairs, upgrades, and retrofits methods and materials
- iii. Typical defects (e.g., reverse polarity, open grounds, faulty GFCIs)
- iv. Equipment grounding
- v. Wiring, operation, location of typical devices and equipment (e.g., air conditioners, GFCI, arc fault)
- vi. Maintenance concerns and procedures
- vii. Safety issues, applicable standards, and appropriate terminology

Task 5: Identify and inspect **cooling systems** using applicable standards for material selection and installation procedures to assess immediate and long-term safety and maintenance issues that may affect performance of the building.

a. Cooling

- i. Typical defects (e.g., cracked heat exchanger, low delta T)
- ii. Theory of refrigerant cycle (latent and sensible heat)
- iii. Theory of heat transfer
- iv. Theory of equipment sizing
- v. Methods of testing the systems
- vi. Performance parameters
- vii. Condensate control and disposal
- viii. Maintenance concerns and procedures
- ix. Safety issues, applicable standards, and appropriate terminology

b. Distribution Systems

- i. Common distribution system types, materials, applications, installation methods, and construction techniques
- ii. Typical defects (e.g., damaged ducts, insufficient air flow)
- iii. Methods of testing the system
- iv. Maintenance concerns and procedures (e.g., filter, humidifier)
- v. Safety issues, applicable standards, and appropriate terminology

c. Venting Systems

- i. Common venting system types, materials, applications, installation methods, and construction techniques
- ii. Typical defects
- iii. Theory of venting
- iv. Equipment sizing
- v. Safety issues, applicable standards, and appropriate terminology

Task 6: Identify and inspect **heating systems** using applicable standards for material selection and installation procedures to assess immediate and long-term safety and maintenance issues that may affect the performance of the building.

a. Heating

- i. Typical defects (e.g., cracked heat exchanger, low delta T)
- ii. Theory of refrigerant cycle (latent and sensible heat)
- iii. Theory of heat transfer and how it takes place in different heating system types
- iv. Theory of equipment sizing
- v. Methods of testing the systems
- vi. Performance parameters
- vii. Condensate control and disposal
- viii. Byproducts of combustion, their generation, and how and when they become a



safety hazard

- ix. Maintenance concerns and procedures
- x. Safety issues, applicable standards, and appropriate terminology

b. Distribution Systems

- i. Common distribution system types, materials, applications, installation methods, and construction techniques
- ii. Typical defects (e.g., damaged ducts, insufficient air flow)
- iii. Methods of testing the system
- iv. Maintenance concerns and procedures (e.g., filter, humidifier)
- v. Safety issues, applicable standards, and appropriate terminology

c. Combustion Venting Systems

- i. Common venting system types, materials, applications, installation methods, and construction techniques
- ii. Typical defects (e.g., separated flue, back-drafting, clearance to combustible materials)
- iii. Theory of venting
- iv. Equipment sizing
- v. Safety issues, applicable standards, and appropriate terminology

Task 7: Identify and inspect **insulation and attic/crawl space ventilation systems** using applicable standards for material selection and installation procedures to assess immediate condition and long-term safety and maintenance issues that may affect the performance of the building.

a. Thermal Insulation

- i. Common thermal insulation types, materials, applications, installation methods, and construction techniques
- ii. Typical defects (e.g., lack of insulation, uneven insulation)
- iii. Theory of heat transfer and energy conservation
- iv. Performance parameters (e.g., R-value)
- v. Maintenance concerns and procedures
- vi. Safety issues, applicable standards, and appropriate terminology

b. Moisture Management

- i. Common vapor retarder types, materials, applications, installation methods, and construction techniques
- ii. Typical defects (e.g., inadequate ventilation, evidence of condensation)
- iii. Theory of moisture generation and movement
- iv. Performance parameters
- v. Vapor pressure and its effects
- vi. Theory of relative humidity
- vii. Effects of moisture on building components, occupants, and indoor air quality
- viii. Moisture control systems
- ix. Appearance or indications of excessive moisture
- x. Likely locations for condensation to occur
- xi. Maintenance concerns and procedures
- xii. Safety issues, applicable standards, and appropriate terminology

c. Ventilation Systems of Attics, Crawl Spaces, Roof Assemblies, and Interior Spaces

- i. Common types, materials, applications, installation methods and construction techniques
- ii. Typical ventilation defects and how they affect buildings and people
- iii. Theory of air movement
- iv. Theory of relative humidity
- v. Air movement in building assemblies
- vi. Interdependence of mechanical systems and ventilation systems
- vii. Appliance vent systems requirements (e.g., clothes dryers, range hoods, bathroom exhausts)
- viii. Screening, sizing, and location requirements for vent openings
- ix. Maintenance concerns and procedures
- x. Safety issues, applicable standards, and appropriate terminology

Task 8: Identify and inspect **plumbing systems** using applicable standards for material selection and installation procedures to assess immediate and long-term safety and maintenance issues that may affect the performance of the building.

a. Water Supply Distribution System

- i. Common water distribution types, materials, applications, installation methods, and construction techniques
- ii. Typical modifications, repairs, upgrades, and retrofits methods and materials
- iii. Typical defects (e.g., cross-connection, back flow)
- iv. Common water pressure/flow problems and how they affect the water distribution system (e.g. softeners, private well equipment, hard water build-up,

old galvanized piping).

- v. Pipe deterioration issues (e.g., PVC, galvanized, brass)
- vi. Maintenance concerns and procedures
- vii. Safety issues, applicable standards, and appropriate terminology

b. Fixtures and Faucets

- i. Common fixture and faucet types, materials, applications, installation methods, and construction techniques
- ii. Typical modifications, repairs, upgrades, and retrofits methods and materials
- iii. Typical defects (e.g., cross-connection, back flow)
- iv. Maintenance concerns and procedures
- v. Safety issues, applicable standards, and appropriate terminology

c. Drain, Waste, and Vent Systems

- i. Common types, materials, applications, installation methods, and construction techniques
- ii. Typical modifications, repairs, upgrades, and retrofits methods and materials
- iii. Typical defects (e.g., faulty installation, deterioration, leakage)
- iv. Theory and usage of traps and vents
- v. Acceptable piping, materials, and applications
- vi. Indications of defective venting or drain slope
- vii. Identification of public or private disposal (when possible)
- viii. Joining dissimilar pipe materials
- ix. Proper support spacing
- x. Maintenance concerns and procedures
- xi. Safety issues, applicable standards, and appropriate terminology

d. Water Heating Systems

- i. Common types, materials, applications, installation methods, and construction techniques (e.g., instant, tankless, indirectly heated)
 - ii. Typical water heater defects (e.g., improper vent/flue materials, condition, unsafe locations, connections)
 - iii. Accessory items (e.g., drain pans, seismic restraints)
 - iv. Connections to and controls for energy source
 - v. Combustion air requirements
 - vi. Maintenance concerns and procedures
 - vii. Safety issues, applicable standards, and appropriate terminology
- #### **e. Fuel Storage and Fuel Distribution Systems**
- i. Common types, materials, applications, installation methods, and construction techniques
 - ii. Typical defects (e.g., unprotected fuel lines, leaking fuel fittings)
 - iii. Defects in above-ground oil/gas storage tanks
 - iv. Fuel leak indications, repairs, and remediation methods
 - v. Basic components of gas appliance valves and their functions
 - vi. Tank restraints and supports
 - vii. Underground storage tank indicators and reporting requirements
 - viii. Maintenance concerns and procedures
 - ix. Safety issues, applicable standards, and appropriate terminology

f. Drainage Sumps, Sump Pumps, Sewage Ejection Pumps, and Related Piping

- i. Common types, materials, applications, installation methods, and construction techniques
- ii. Typical defects (e.g., inoperative sump pumps, improperly installed equipment)
- iii. Sump pump location significance
- iv. Pump discharge location significance
- v. Wiring installation methods
- vi. Maintenance concerns and procedures
- vii. Safety issues, applicable standards, and appropriate terminology

Task 9: Identify and inspect **interior** components using applicable standards for material selection and installation procedures to assess immediate and long-term safety and maintenance issues that may affect the performance of the building.

a. Walls, Ceiling, Floors, Doors, and Windows

- i. Types of defects in interior surfaces not caused by defects in other systems
- ii. Typical defects in interior surfaces caused by defects in other systems
- iii. Safety issues, applicable standards, and appropriate terminology

b. Walls, Ceiling, Floors, Doors, Windows, and Related Fire/Life Safety Equipment

- i. Common wall, ceiling, floor, door, and window types, materials, applications, installation methods and construction techniques
- ii. Typical defects (e.g., physical damage, water damage)
- iii. Egress requirements



- iv. Applicable fire/safety and occupancy separation requirements (e.g., smoke detectors, window bars, ladders, firewalls, fire doors, and penetrations)
- v. Operation of windows, doors, window bars, and other fire/life safety equipment and components
- vi. Maintenance concerns and procedures
- vii. Safety issues, applicable standards, and appropriate terminology

c. Steps, Stairways, Landings, and Railings

- i. Common step, stairway, landing, and railing types, materials, applications, installation methods, and construction techniques
- ii. Typical defects
- iii. Maintenance concerns and procedures
- iv. Safety issues, applicable standards, and appropriate terminology

d. Installed Countertops and Cabinets

- i. Common cabinet and countertop types, materials, applications, installation methods, and construction techniques
- ii. Typical defects
- iii. Maintenance concerns and procedures
- iv. Safety issues, applicable standards, and appropriate terminology

e. Garage Doors and Operators

- i. Common garage door and door operator types, materials, applications, installation methods, and construction techniques
- ii. Typical defects
- iii. Maintenance concerns and procedures
- iv. Safety issues, applicable standards, and appropriate terminology

Task 10: Identify and inspect **fireplace and chimney systems** using applicable standards for material selection and installation procedures to assess immediate and long-term safety and maintenance issues that may affect performance of the building.

a. Fireplaces, Solid-Fuel Burning Appliances, Chimneys, and Vents

- i. Common manufactured fireplaces and solid-fuel burning appliance types, materials, applications, installation methods, and construction techniques
- ii. Common manufactured fireplaces and solid-fuel burning appliance chimney, vent connector, and vent types, materials, applications, installation methods and construction techniques of direct-vent and non-vented fireplaces
- iii. Common masonry fireplace types, materials, applications, installation methods, and construction techniques
- iv. Common direct-vent fireplace vent types, materials, applications, installation methods, and construction techniques
- v. Chimney terminations (e.g., spark arrestors)
- vi. Chimney height and clearance requirements
- vii. Theory of heat transfer and fire safety fundamentals
- viii. Effects of moisture and excessive heat on fireplaces
- ix. Fuel types and combustion characteristics
- x. Typical defects
- xi. Combustion air supply requirements
- xii. Operation of equipment, components, and accessories
- xiii. Maintenance concerns and procedures
- xiv. Safety issues, applicable standards, and appropriate terminology

Task 11: Identify and inspect **common permanently installed kitchen appliances** to determine if the on-off controls operate.

- a. *Installation methods*
- b. *Operating using normal controls*
- c. *Typical defects*
- d. *Maintenance concerns and procedures*
- e. *Safety issues, applicable standards, and appropriate terminology*

Task 12: Identify and inspect **pool and spa systems** using applicable standards for material selection and installation procedures to assess immediate and long-term safety and maintenance issues.

- a. *Identify type of construction*
- b. *Mechanical systems*
- c. *Electrical system*
- d. *Typical defects*
- e. *Maintenance concerns and procedures*
- f. *Safety issues, applicable standards, and appropriate terminology*

Task 13: Identify and inspect **lawn irrigation systems** using applicable standards for material selection and installation procedures to assess immediate and long-term safety and maintenance issues that may affect the performance of the system and building.

- a. *Common water distribution types, materials, applications, installation methods, and construction techniques*
- b. *Typical modifications, repairs, upgrades, and retrofits methods and materials*
- c. *Typical defects (e.g., cross-connection, back flow)*
- d. *Common water pressure/flow problems and how they affect the water distribution system*
- e. *Pipe deterioration issues (e.g., PVC, galvanized, brass)*
- f. *Maintenance concerns and procedures*
- g. *Safety issues, applicable standards, and appropriate terminology*

III. Reporting (26%)

PERFORMANCE DOMAIN II: ANALYSIS AND REPORTING

Task 1: In the inspection report, identify building systems and components by their distinguishing characteristics (e.g., type, size, location) to inform the client what was inspected.

- a. *Minimum information required in an inspection report (e.g., property data, construction materials, installation techniques, locations of main system shut-offs)*
- b. *Describing the type of systems and the location of system components*
- c. *Correct technical terms to describe systems and components of the building*

Task 2: Describe inspection methods and limitations in the inspection report to inform the client what was not inspected.

- a. *Minimum and critical information required in an inspection report (e.g., weather conditions, inspection safety limitations, components not accessible)*
- b. *Common methods used to inspect particular components (e.g., roofs, attics, sub-floor crawl spaces, mechanical components)*

Task 3: Describe systems and components inspected that are not functioning properly or are otherwise defective in comparison to the accepted norm.

- a. *Common expected service life of building and mechanical components*
- b. *Common safety hazards*
- c. *Common test instruments and their proper use for qualitative analysis (e.g., moisture meters, CO meters, probes)*

Task 4: List recommendations to correct deficiencies or items needing further evaluation.

- a. *Correct professional or tradesperson required to effect repairs or perform further evaluations*
- b. *Common remedies for correction*
- c. *Relationships between components in the building*
- d. *When to immediately inform building occupants of a life-threatening safety hazard (e.g., gas leak, carbon monoxide accumulation)*

IV. Professional Practice (5%)

PERFORMANCE DOMAIN III: BUSINESS OPERATIONS

Task 1: Identify the elements of the written inspection contract (e.g., scope, limitations, terms of services) to establish the rights and responsibilities of the inspector and client.

- a. *Purpose of a contract*
- b. *Elements of a contract*
- c. *Timing*
- d. *Accepted standards of practice*
- e. *Dispute resolution options*

Task 2: Identify conflicts of interest to the client (e.g., inspector interest in the property, third-party stakeholders with financial interest in the outcome of the inspection).

- a. *Potential conflicts of interest involving parties other than the client*
- b. *Potential conflicts between client and inspector*
- c. *Relationships with other business professionals (e.g., engineers, contractors, building officials, realty agents, appraisers, lenders)*

Task 3: Identify responsibilities to the client in order to maintain the quality, integrity, reputation, and objectivity of the inspection process while protecting the client's interests

- a. *Fundamental legal concepts (e.g., fiduciary responsibility, contractual responsibility, liability, negligence, due diligence, consumer fraud)*
- b. *Boundaries of personal expertise and professional scope of practice*
- c. *Types of financial protection (e.g., general liability and riders, professional, E&O, automobile, bonding, warranties)*
- d. *Accepted ethical and professional standards*