

Updated 8/18/2022

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.

EXAMINATION BOARD OF PROFESSIONAL HOME INSPECTORS 847-298-7750 www.homeinspectionexam.org

HOME INSPECTOR REGULATION

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.

The examination is administered nationwide. If you are seeking licensing in Florida, Illinois, Nevada, Oklahoma, South Dakota, Texas, Tennessee, Vermont or Washington State, you **MUST** take the National Home Inspector Examination through those states' contracted test administrators. For more information, go to EBPHI's website at www.homeinspectionexam.org.

For information about home inspection laws and regulations, see EBPHI's website at www.homeinspectionexam.org.

THE NATIONAL HOME INSPECTOR EXAMINATION®

The NHIE has contracted with PSI to conduct its examination program. PSI provides examinations through a network of computer examination centers throughout the United States.

The NHIE 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. This examination development methodology is in accordance with accepted psychometric standards for a "high stakes" public protection examination. These standards are promulgated by organizations such as the American Education Research Association (AERA), the National Council for Certifying Agencies (NCCA), the American Psychological Association (APA) and the Equal Employment Opportunity Commission (EEOC).

EXAMINATION PREPARATION

To assist you in preparing for the National Home Inspector Examination, this Handbook provides details about the exam, the Content Outline for the test, and sample questions and answers.

The questions on the examination are designed to measure your ability to understand and apply the fundamental principles of Home Inspection and to demonstrate your knowledge of applicable laws and rules in Illinois. The examination consists of 190 four-option multiple-choice questions covering four major content areas. The first three are based on the National Home Inspector Examination (NHIE) produced by the Examination Board of Professional Home Inspectors (EBPHI) and the last category covers state law. The total testing time is 4 hours.

| Examination | # of Items | Time Allowed | Passing Score |
|--|---------------|-----------------|---|
| National Home Inspector Examination with IL State Law | 190 | 4 hours | 140 correct out of 190 scored items |

Now you can take practice quizzes online at https://nationalhomeinspectorexam.org/practice-quizzes/ to prepare for your Home Inspector Examination.

Please note that the practice quizzes are intended only to help testing candidates become familiar with the general types of questions that will appear on a licensing examination. The quizzes are NOT a substitute for proper education and study. Furthermore, scoring well on a practice quiz does not guarantee a positive outcome on an actual licensing examination.

Note: You may take the practice quizzes an unlimited number of times; however, you will need to pay each time. The practice quizzes vary in cost from \$15 - \$25 depending on the quiz selected.

EXAMINATION PREAPPROVAL

You must be preapproved by the Board before you can take the examination.

Illinois Department of Financial and Professional Regulation 320 West Washington St. Springfield, IL 62786 Phone: 800-560-6420

CONTENT OUTLINE

SEE PAGE 11 FOR THE CONTENT OUTLINE EFFECTIVE 4/1/24

This content outline based on the role delineation study, is intended to provide candidates with topics for study that may appear on the National Home Inspector Examination. The percentage of questions on the examination for each content area is indicated below. 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.

DOMAIN 1: PROPERTY AND BUILDING INSPECTION/SITE REVIEW (63%)

Task 1: Identify and inspect site conditions to assess defects and issues that may affect people or the performance of the building. (5%)

A. Vegetation, Grade, Drainage, and Retaining Walls

- i. Common types, materials, and terminology
- ii. Applicable standards, installation methods, and clearance
- Typical defects (e.g., negative grade, earth to wood contact, overgrown vegetation, missing drainage/drains)
- iv. Common safety issues

B. Driveways, Patios, and Walkways

- i. Common types, materials, and terminology
- ii. Applicable standards and installation methods
- iii. Typical defects (e.g., root damage, large cracks, improper slope)
- iv. Common safety issues (e.g., trip hazards, slippery surface)

C. Pool and Spa Access Barriers

- i. Applicable safety standards and terminology
- ii. Common safety issues (e.g., fencing, latches, alarms)

Task 2: Identify and inspect **building exterior components** to assess defects and issues that may affect people or the performance of the building. (5%)

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

- i. Common types, materials, and terminology
- ii. Applicable standards and installation methods
- iii. Typical defects (e.g., missing sections, improper installation, water infiltration, decay)

B. Exterior Doors and Windows

- i. Common types, materials, and terminology
- ii. Applicable standards and installation methods
- iii. Typical defects (e.g., decayed wood, missing flashings, cracked glass)
- iv. Common safety issues (e.g., safety glazing, sash support)
- C. Decks, Balconies, Stoops, Stairs, Steps, Porches, and Applicable Railings
 - i. Common types, materials, and terminology
 - ii. Applicable standards and installation methods
 - Typical defects (e.g., improper deck ledger attachment, improper rail or stair construction, missing flashing)

iv. Common safety issues (e. g., loose handrails and guards, handrails not graspable, uneven riser height)

D. Garage Vehicle Doors and Operators

- i. Common types, materials, and terminology
- ii. Applicable standards and installation methods
- iii. Typical defects (e.g., damaged rollers, broken springs)
- iv. Common safety issues (e.g., missing/failing/malfunctioning safety sensors, improper adjustment of pressure reverse)

Task 3: Identify and inspect **roof components** to assess defects and issues that may affect people or the performance of the building. (6%)

A. Roof Coverings

- i. Common types, materials, and terminology
- ii. Applicable standards and installation methods
- iii. Typical repair methods and materials
- iv. Typical defects (e.g., improper installation, cracking, damage, decay)
- v. Characteristics of different roofing materials
- vi. Sheathing and underlayment requirements for different types of roof coverings

B. Roof Drainage Systems

- i. Common types, materials, and terminology
- ii. Applicable standards and installation methods
- iii. Typical defects (e.g., ponding, improper slopes, clogging/leaking)

C. Roof Flashings

- i. Common types, materials, and terminology
- ii. Applicable standards and installation methods
- iii. Typical defects (e.g., separation, improper installation, missing flashing)

D. Skylights and Other Roof Penetrations

- i. Common types, materials, and terminology
- ii. Applicable standards and installation methods
- iii. Typical defects (e.g., leakage, improper installation, deteriorated boot)

Task 4: Identify and inspect **structural components** to assess defects and issues that may affect people or the performance of the building. (4%)

A. Foundation

- i. Common types, materials, and terminology
- ii. Applicable standards and installation methods
- iii. Typical modifications, repairs, upgrades, and retrofit methods and materials
- iv. Typical defects (e.g., cracks, settlement) and their common causes and effects
- v. Soil types and conditions and how they affect foundations
- vi. Applied forces and how they affect foundation systems (e.g., wind, seismic, loads)
- vii. Water management (e.g., waterproofing, foundation drains)

B. Floor Structure

- i. Common types, materials, and terminology
- ii. Applicable standards and installation methods
- iii. Typical modifications, repairs, upgrades, and retrofit methods and materials
- iv. Typical defects (e.g., improper cuts and notches in structural members, decayed or damaged structural members)
- v. Applied forces and how they affect floor systems (e.g., wind, seismic, loads)
- C. Walls and Vertical Support Structures

- i. Common types, materials, and terminology
- ii. Applicable standards and installation methods
- iii. Typical modifications, repairs, upgrades, and retrofit methods and materials
- Typical defects (e.g., decayed or damaged structural members, earth to wood contact, structural deformation)
- v. Seismic and wind-resistant construction methods and hardware

D. Roof and Ceiling Structures

- i. Common types, materials, and terminology
- ii. Applicable standards and installation methods
- iii. Typical modifications, repairs, upgrades, and retrofit methods and materials
- iv. Typical defects (e.g., moisture stains, sagging rafters, modified/damaged trusses)
- v. Applied forces and how they affect roof/ceiling structures (e.g., wind, seismic, loads)

Task 5: Identify and inspect **electrical systems** to assess defects and issues that may affect people or the performance of the building. (6%)

A. Electrical Service: Service Lateral, Service Drop, Service Entrance, Service Equipment, and Service Grounding

- i. Common types, materials, and terminology
- ii. Applicable standards and installation methods
- iii. Typical modifications, repairs, upgrades, and retrofit methods and materials
- iv. Typical defects (e.g., height, deteriorated conductor sheathing)
- v. Electrical service amperage
- vi. Service grounding and bonding
- vii. Alternative energies
- viii. Common safety issues (e.g., exposed conductors, improper cover fasteners, missing dead front cover)

B. Interior Components of Service Panels and Subpanels

- i. Common types, materials, and terminology
- ii. Applicable standards and installation methods
- iii. Typical modifications, repairs, upgrades, and retrofit methods and materials
- iv. Typical defects (e.g., double-tapping, over-fusing)
- v. Panel grounding and bonding
- vi. Panel wiring
- vii. Theory of operation and purpose of over-current protection devices (e.g., circuit breakers and fuses, GFCI, AFCI)
- viii. Inspection safety procedures
- ix. Known problem electrical panel boards (e.g., Federal Pacific/Stab-Lok)
- x. Common safety issues (e.g. open knock outs, discoloration at conductor connections, multiple neutrals under one screw)

C. Wiring Methods

- i. Common types (e.g., non-metallic sheathed cable, conduit), materials, and terminology
- ii. Applicable standards and installation methods
- iii. Typical modifications, repairs, upgrades, and retrofit methods and materials
- iv. Typical defects (e.g., improper use of or lack of junction boxes, unprotected non-metallic sheathed cable, lack of proper support)
- v. Concerns and considerations about solid-conductor aluminum wiring
- vi. Obsolete electrical wiring system (e.g., knob and tube wiring, cloth-covered NM cable)

- vii. Common safety issues (e.g., open splices, no cable clamps at penetrations, exposed conductors)
- D. Devices, Equipment, and Fixtures (e.g., switches, receptacles, lights, fans)
 - i. Common types, materials, and terminology
 - ii. Applicable standards and installation methods
- iii. Typical modifications, repairs, upgrades, and retrofit methods and materials
- iv. Typical defects (e.g., reverse polarity, open equipment grounds, non-functional GFCI or AFCI protection)
 v. Equipment grounding
- vi. Wiring, operation, and location of typical devices and equipment (e.g., receptacles and lights, appliances, ground fault circuit interrupter protection, arc fault circuit interrupter protection)
- vii. Common safety issues (e.g., absence of GFCI)

E. Alternative Energy Systems

- i. Common types, materials, and terminology (e.g., solar, wind)
- ii. Applicable standards and installation methods
- iii. Disconnect location
- iv. Common safety issues (e.g., improper connection to other systems, lack of disconnect method)

Task 6: Identify and inspect **cooling systems** to assess defects and issues that may affect people or the performance of the building. (4%)

- A. Cooling
 - i. Common types, materials, and terminology
 - ii. Applicable standards and installation methods
 - Typical defects (e.g., suction line insulation missing, condensation and/or rust on components, restriction of air flow at the condensing unit)
 - iv. Theory of refrigerant cycle (e.g., latent and sensible heat, air conditioning, heat pumps)
 - v. Testing methods
 - vi. Condensate control and disposal

vii. Alternative energies

B. Distribution Systems

- i. Common types, materials, and terminology
- ii. Applicable standards and installation methods
- iii. Typical defects (e.g., damaged or disconnected ducts, incorrect installation)

Task 7: Identify and inspect **heating systems** to assess defects and issues that may affect people or the performance of the building. (5%)

A. Heating

- i. Common types, materials, and terminology
- ii. Applicable standards and installation methods
- iii. Typical defects (e.g., dirty fan, misfiring oil burner)
- iv. Theory of heating system operation
- v. Testing methods
- vi. Condensate control and disposal
- vii. By-products of combustion (e.g., H2O, CO2, CO, NO2), their generation, and how and when they become a safety hazard
- viii. Common safety issues

ix. Alternative energies

- B. Distribution Systems
 - i. Common types, materials, and terminology
 - ii. Applicable standards and installation methods
- iii. Typical defects (e.g., damaged or disconnected ducts; clogged, missing or damaged filters; leaking pipes)

C. Vent Systems

i. Common types, materials, and terminology

- ii. Applicable standards and installation methods
- iii. Typical defects (e.g., separated vent, back drafting, clearance to combustible materials)
- iv. Theory of vent system operation
- v. Common safety issues

Task 8: Identify and inspect insulation, moisture management systems, and ventilation systems in conditioned and unconditioned spaces to assess defects and issues that may affect people or the performance of the building. (4%)

A. Thermal Insulation

- i. Common types, materials, and terminology
- ii. Applicable standards and installation methods
- iii. Typical defects (e.g., missing, uneven, or damaged insulation, flame spread concerns, improper clearances)
- iv. Theory of heat transfer and energy conservation
- v. Recommended insulation levels (e.g., R-value)
- vi. Common safety issues (e.g., fire hazards)

B. Moisture Management

- i. Common types, materials, and terminology
- ii. Applicable standards and installation methods
- iii. Typical defects (e.g., improper vapor retarder installation)
- iv. Theory of moisture generation, relative humidity, and moisture movement in buildings
- v. Effects of moisture on building components, occupants, and indoor air quality
- vi. Moisture control systems (e.g., humidifiers/dehumidifiers, vapor retarders)

C. Ventilation Systems of Attics, Crawl Spaces, and Roof Assemblies

- i. Common types, materials, and terminology
- ii. Applicable standards and installation methods
- iii. Typical defects
- iv. Theory of air movement in building assemblies (e.g., stack effect, pressure differences)
- v. Closed attics and crawl spaces
- vi. Screening, sizing, and location requirements for ventilation openings

Task 9: Identify and inspect **mechanical exhaust systems** to assess defects and issues that may affect people or the performance of the building. (5%)

A. Mechanical Exhaust Systems (e.g., bath, kitchen, dryer)

- i. Common types, materials, and terminology
- ii. Applicable standards and installation methods
- iii. Typical modification, repair, upgrade, and retrofit methods and materials
- iv. Typical defects (e.g., improper termination, plastic dryer ducts)
- v. Relationship between mechanical systems and ventilation systems
- vi. Common safety issues (e.g., fire hazards)
- B. Indoor Air Management Systems (e.g., heat recovery ventilators)
 - i. Common types, materials, and terminology
 - ii. Applicable standards and installation methods
 - iii. Typical modification, repair, upgrade, and retrofit methods and materials
 - iv. Typical defects (e.g., inoperative, no bypass ducting)

Task 10: Identify and inspect **plumbing systems** to assess defects and issues that may affect people or the performance of the building. (5%)

A. Water Supply Distribution System

- i. Common types, materials, and terminology
- ii. Applicable standards and installation methods
- iii. Typical modification, repair, upgrade, and retrofit methods and materials
- iv. Typical defects (e.g., cross-connection, back flow, dissimilar metals)
- v. Common water pressure/functional flow problems and how they affect the water distribution system (e.g., hard water build-up, old galvanized piping, pressure reducer valves)
- B. Fixtures and Faucets
 - i. Common types, materials, and terminology
 - ii. Applicable standards and installation methods
- iii. Typical modification, repair, upgrade, and retrofit methods and materials
- iv. Typical defects (e.g., leaks, fixture attachment
- v. Common safety issues (e.g., absence of anti-scald valve, hot/cold reverse)

C. Drain, Waste, and Vent Systems

- i. Common types, materials, and terminology
- ii. Applicable standards and installation methods (e.g., supports/spacing)
- iii. Typical modification, repair, upgrade, and retrofit methods and materials (e.g., joining dissimilar piping materials)
- iv. Theory and usage of traps and vents
- v. Identification of public or private disposal (when possible)
- vi. Typical defects (e.g., flex pipe, deterioration, leakage, venting or drain slope)

D. Water Heating Systems

- i. Common types, materials, and terminology
- ii. Applicable standards and installation methods (e.g., storage tank, tankless)
- iii. Typical defects (e.g., vent/flue issues, fuel connection and temperature pressure relief system defects)
- iv. Accessory items (e.g., seismic restraints, expansion tanks, recirculation systems)
- v. Connections to and controls for energy source
- vi. Combustion air requirements
- vii. Common safety issues (e.g., no temperature pressure relief valve, missing or improperly connected vents)
- E. Fuel Storage and Fuel Distribution Systems
 - i. Common types, materials, and terminology
 - ii. Applicable standards and installation methods
- iii. Typical defects (e.g., missing piping supports, missing shut-off, leaking storage tank)
- iv. Common safety issues
- F. Drainage Systems, Sump Pumps, Sewage Ejection Pumps, Related Valves and Piping
 - i. Common types, materials, and terminology
 - ii. Applicable standards and installation methods
 - iii. Typical defects (e.g., inoperative sump pump, improperly installed system, broken lid)
 - iv. Pump and discharge locations

Task 11: Identify and inspect **interior components** to assess defects and issues that may affect people or the performance of the building. (4%)

- A. Walls, Ceiling, Floors, Doors, and Windows, and Other Interior System Components
 - i. Common types, materials, and terminology
 - ii. Applicable standards and installation methods

- Typical defects in interior surfaces caused by defects in other systems (e.g., structural movement, moisture stains)
- iv. Typical defects in interior surfaces NOT caused by other systems (e.g., defective operation of doors and windows, damage, absence of safety glazing)
- v. Egress requirements (e.g., window security bar release, basement windows, sill height)
- vi. Applicable fire/safety and occupancy separation requirements (e.g., fire walls, fire rated doors, and penetrations)
- vii. Smoke alarms and carbon monoxide alarms

B. Steps, Stairways, Landings, and Railings

- i. Common types, materials, and terminology
- ii. Applicable standards and installation methods
- iii. Typical defects (e.g., improper riser height and tread depth, baluster spacing, loose guards)
- iv. Common safety issues (e.g., loose treads, missing handrails)

C. Installed Countertops and Cabinets

- i. Common types, materials, and terminology
- ii. Applicable standards and installation methods
- iii. Typical defects (e.g., damaged components)
- iv. Common safety issues (e.g., improperly secured cabinets and countertops)

D. Smart Homes

i. Emerging smart home technologies, applications, terminology and operation

Task 12: Identify and inspect fireplaces, fuel-burning appliances, and their chimney and vent systems to assess defects and issues that may affect people or the performance of the building. (6%)

- A. Solid fuel-burning (wood, pellet, coal) fireplaces and appliances
 - i. Common types, materials (manufactured, masonry) and terminology
 - ii. Common solid fuel chimney, vent connector, vent types, materials and terminology
 - iii. Common masonry fireplace types, masonry flues, materials, applications, terminology and installation methods
 - iv. Masonry chimney foundation, height, clearance requirements and terminations (e.g., clearances to combustible materials)
 - v. Applicable standards and installation methods
 - vi. Fuel types, combustion characteristics and combustion air requirements
- vii. Typical defects (e.g., hearth defects, clearance requirements, smoke chamber and flue issues)
- viii. Operation of equipment, components and accessories ix.
- ix. Common safety issues (e.g., creosote buildup, lack of spark arrestors)
- B. Gas and liquid fuel-burning (natural gas, propane) fireplaces and appliances
 - i. Common types, materials (vented, direct vent, unvented) and terminology
 - ii. Common gas and liquid fuel chimneys, vent connectors, vent types, materials and terminology
 - iii. Common masonry and manufactured fireplace types, flues, materials, applications, terminology and installation methods
 - iv. Chimney foundation, height, clearance requirements and terminations (e.g., clearances to combustible materials)
 - v. Applicable standards and installation methods

- vi. Fuel types, combustion characteristics and combustion air requirements
- vii. Typical defects (e.g., hearth defects, clearance requirements, smoke chamber and flue issues)
- viii. Operation of equipment, components and accessories
- ix. Common safety issues

Task 13: Identify and inspect **common permanently installed kitchen appliances** for proper condition and operation. (4%)

- i. Applicable standards, installation methods, and terminology
- ii. Basic operation using normal controls
- iii. Typical defects (e. g., inoperative burner, drain loop on dishwasher missing)
- iv. Common safety issues (e.g., absent anti-tip bracket)

DOMAIN 2: ANALYSIS OF FINDINGS AND REPORTING (25%)

Task 1: Inform the client what was inspected and describe building systems and components by their distinguishing characteristics (e.g., purpose, type, size, location). (6%)

- i. Minimum information required
- ii. Describing the type of systems and the location of system components

Task 2: Describe inspection methods and limitations in the inspection report to inform the client what was not inspected and why. (4%)

- i. Minimum and critical information required in an inspection report (e.g., environmental factors, inspection safety limitations, inaccessible areas or components)
- ii. Common methods used to inspect particular components (e.g., walk on roof, observe attic or crawl space from hatch)
- iii. Common and emerging test instruments and their proper use for qualitative analysis (e.g., moisture meters, carbon monoxide meters, infrared cameras)

Task 3: Describe systems and components inspected that are not functioning properly or are defective. (5%)

- i. Expected service life of building and mechanical components
- ii. Common indicators of potential failure (e.g., rust and corrosion, excessive or unusual noise/ vibration, lack of routine maintenance)
- iii. Common defects and their descriptions
- iv. Common safety issues

Task 4: Describe systems and components in need of further evaluation or action. (5%)

- i. Correct professional or tradesperson required to effect repairs or perform further evaluations
- ii. Relationships between components in the building
- iii. When to immediately inform building occupants of a lifethreatening safety hazard (e.g., gas leak, carbon monoxide accumulation, exposed energized wires)

Task 5: Describe the implication of defects so that the client understands what could occur if the defects are not corrected. (5%)

- i. Association of related defects or areas where systems interact (e.g., water damaged ceiling with damaged plumbing vent collar above)
- ii. Common defects and their implications

DOMAIN 3: PROFESSIONAL RESPONSIBILITIES (12%)

Task 1: Discuss the elements of and obtain a written preinspection agreement (e.g., scope, limitations, terms of services) with the client or client's representative to establish the rights and responsibilities of the inspector and client. (7%)

- i. Purpose of a preinspection agreement
- ii. Elements of a preinspection agreement (e.g., exclusions and limitations, limits of liability, dispute resolution, jurisdictional requirements)
- iii. Timing of delivery and signing of preinspection agreement

Task 2: Maintain quality, integrity, and objectivity of the inspection process. (5%)

- i. Fundamental legal concepts (e.g., fiduciary and contractual responsibility, negligence, applicable governing regulations)
- ii. Conflicts of interest (e.g., inspector interest in the property, third-party stakeholders with financial interest in the outcome of the inspection)
- Types and purpose of financial protection (e.g., general liability, professional errors and omissions, insurance warranties)
- iv. Protection of the client's interest

REFERENCES

This is a list of published sources used in generating the questions on the National Home Inspector Examination. However, EBPHI does not imply that study of all or only these materials will ensure a passing score on the examination. There are many training providers and other valuable publications relevant to home inspection that can be helpful to candidates who are studying for the examination. Additionally, the value of field experience cannot be discounted. The examination is closed book.

A NOTE ABOUT BUILDING CODES

It is generally accepted that home inspectors are not expected to report code violations in inspected properties. However, the role delineation study on which the National Home Inspector Examination is based reflects the actual practice of the profession as defined by surveys of home inspectors throughout the nation.

These "subject matter experts" believe that knowledge of basic code parameters is vital to adequate practice of home inspection. Thus, code references are included in this list.

- National Home Inspector Exam, Home Inspection Manual, 2019. <u>https://nationalhomeinspectorexam.org/books/</u>
- International Residential Code (IRC) 2015, 2018. <u>http://shop.iccsafe.org/2018-international-residential-coder.html</u>

- National Electrical Code, 2014, 2017. <u>http://shop.iccsafe.org/nfpa-70-national-electrical-code-nec-2017-edition-1.html</u>
- Carson/Dunlop, The Home Reference Book, 27th Edition. <u>https://www.carsondunlop.com/store/home-reference-book-in-soft-cover-usa/</u>
- A Practical Guide to Home Inspection, 2016.
 <u>https://www.ahit.com/products/books/Practical-Guide-Home-Inspection-4ed.htm</u>

NHIE SAMPLE QUESTIONS

Following are samples of the types of questions used in the National Home Inspector Examination. These samples do not represent the full range of content or difficulty levels contained in the examination, but they will help you become familiar with the format and style of questions on the test. Select the BEST answer to each question and then check your responses with the key that follows.

- 1. A gas-fired clothes dryer exhaust vent
 - A. must be at least a class B type vent.
 - B. may vent into a vent or chimney used by a gas furnace.
 - C. must be screened at the duct termination.
 - D. must be vented to the outdoors.
- 2. When a central air conditioning compressor is operating properly,
 - A. the low pressure line is warm and the high pressure line is cold.
 - B. the low pressure line is cold and the high pressure line is warm.
 - C. cold air will be exhausted from the condensing unit.
 - D. condensation will form on the high pressure line.
- 3. Most problems with concrete are caused at the time of installation. What single factor causes most of these?
 - A. The concrete has insufficient thickness.
 - B. Too much water is added.
 - C. Too much portland cement is added.
 - D. Too little portland cement is used.
- 4. Which of the following BEST describes this report statement? "The gutters are pitted and it would be foolish to repair them. Replacement with copper gutters would be more prudent."
 - A. disclaimer of potential failing system
 - B. appropriate recommendation
 - C. implication of condition
 - D. overstepping of inspector's role
- 5. Metallic-sheathed cable, commonly called BX/Armored Cable,
 - May be used beneath covered decks and under exterior eaves.
 - B. is the preferred wiring system for kitchen disposers.
 - C. does not require a third copper grounding conductor.
 - D. requires a bare copper grounding conductor.

| 1. D | 4. D |
|------|------|
| 2. B | 5. C |
| 3. B | |

EXAMINATION SCHEDULING PROCEDURES

Examination Fee: \$125

EXAMINATION FEES ARE <u>NOT</u> REFUNDABLE OR TRANSFERABLE.

Your examination fee will be forfeited if you do not test within 1 year of the date your examination fee is received by PSI.

The fee is for <u>each</u> registration, whether you are taking the examination for the first time or repeating. You may re-take the National Home Inspector Examination as many times as you need. You must wait 30 days between retakes.

ON-LINE (https://test-takers.psiexams.com/ilrep)

For the fastest and most convenient examination scheduling process, PSI recommends that you register for your examinations using the Internet. You register online by accessing PSI's registration website at https://test-takers.psiexams.com/okhi. Internet registration is available 24 hours a day.

Log onto PSI's website and select Sign in / Create Account. Select Create Account. You are now be ready to pay and schedule for the exam. Enter your zip code and a list of the testing sites closest to you will appear. Once you select the desired test site, available dates will appear.

TELEPHONE REGISTRATION

For telephone registration, you will need a valid credit card (Visa, MasterCard, American Express or Discover).

PSI registrars are available at (855) 340-3893, Monday through Friday between 6:30 am and 9:00 pm, and Saturday-Sunday between 8:00 am and 4:30 pm, Central Time, to receive your payment and schedule your appointment for the examination.

CANCELING AN EXAMINATION APPOINTMENT

You may cancel and reschedule an examination appointment without forfeiting your fee if your *cancellation notice* is received 2 days before the scheduled examination date. For example, for a Wednesday appointment, the cancellation notice would need to be received on the previous Monday. You may call PSI at (855) 746-8173 in order to cancel and reschedule your appointment.

Note: A voice mail message is not an acceptable form of cancellation. Please use the PSI website or call PSI and speak directly to a Customer Service Representative.

MISSED APPOINTMENT OR LATE CANCELLATION

Your registration will be invalid, you will not be able to take the examination as scheduled, and you will forfeit your examination fee, if you:

- Do not cancel your appointment 2 days before the schedule examination date;
- Do not appear for your examination appointment;
- Arrive after examination start time;
- Do not present proper identification when you arrive for the examination.

EXAM ACCOMMODATIONS

All examination centers are equipped to provide access in accordance with the Americans with Disabilities Act (ADA) of 1990, and exam accommodations will be made in meeting a candidate's needs. Applicants with disabilities or those who would otherwise have difficulty taking the examination may request alternative arrangements by submitting the Exam Accommodations Request Form found at the end of this bulletin.

EXAMINATION SITE CLOSING FOR AN EMERGENCY

All PSI examination centers are equipped to provide access in accordance with the Americans with Disabilities Act (ADA) of 1990, and exam accommodations will be made in meeting a candidate's needs. A candidate with a disability or a candidate who would otherwise have difficulty taking the examination should request for alternative arrangements by Clicking Here.

Candidates granted accommodation in accordance with the ADA, MUST schedule their examination by telephone and speak directly with a PSI registrar.

You will need to fill this out if requesting to test out of state.

SOCIAL SECURITY NUMBER CONFIDENTIALITY

PSI will use your social security number only as an identification number in maintaining your records and reporting your examination scores to the board. A Federal law requires state agencies to collect and record the social security numbers of all licensees of the professions licensed by the state.

EXAMINATION SITE LOCATIONS

The Illinois Contractor licensing examinations are administered at the PSI examination centers listed below:

| Addison -College of DuPage | Elgin - Training Institute of Elgin | Naperville - IT Expert System |
|--|--|--|
| 301 S. Swift Road, Door 12 Addison, IL 60101 US | 620 Wing Street, Suite 9 Elgin, IL 60123 US | 1560 Wall Street, Suite 111 Naperville, IL 60563 US |
| Bloomington - Sales Consultants of | Franklin Park - HRB | Naperville, Illinois (HRB) |
| Bloomington, Inc | 9507 Grand Ave | 1213-1300 S. Naper Blvd |
| 513 E. Locust St Bloomington, IL 61701 US | Franklin Park, IL 60131 US | Suite 108 Naperville, IL 60540 US |
| | | Napel Ville, 12 00540 05 |
| Buffalo Grove - HRB | Galesburg - Carl Sandburg College | Park Ridge - Royal Testing Center |
| 56 W. Dundee Road | 2400 Tom L Wilson Blvd | 1550 N. Northwest Highway, 1st Fl., Ste |
| Buffalo Grove, IL 60089 US | Galesburg, IL 61401 US | 106 Park Ridge, IL 60068 US |
| | | |
| Carbondale - HRB | Glen Ellyn - College of DuPage | Rockford - HRB |
| 628 E. Walnut St | Glen Ellyn Campus | 3720 N Main Street |
| Carbondale, IL 62901 US | 425 Fawell Blvd, BIC 2A08 Glen Ellyn, IL 60137 US | Rockford, IL 61103 US |
| | | |
| Carbondale - Southern Illinois University | Glen Ellyn - HRB | Schaumburg - IT Expert System |
| 605 Agriculture Drive | 800 Roosevelt Road | 951 N Plum Grove Rd , Suite A |
| MC 4722 Room 781, 7th Floor | Building A, Suite 106 | Schaumburg, IL 60173 US |
| Carbondale, IL 62901 US | Glen Ellyn, IL 60137 US | |
| Carol Stream - College of DuPage | Lake-In-The-Hills - Blue Skies Pilot Shop | SPRINGFIELD, ILLINOIS |
| Carol Stream Campus | 8411 Pyott Road, Suite 106 | PSI Springfield |
| 500 N Kuhn Rd. | Lake-In-The-Hills Airport | 3223 South Meadowbrook Road, Suite B |
| Carol Stream, IL 60188 US | Lake-In-The-Hills, IL 60156 US | Springfield, IL 62711 US |
| Champaign - Parkland College | Matteson - HRB | Urbana |
| 2400 W Bradley Ave, U203 | 4163 W. 211 Street | HRB |
| Champaign, IL 61821 US | Matteson, IL 60443 US | 114 North Vine Street, Suite D Urbana, IL 61801 US |
| CHICAGO | Midlothian - Royal Testing Center | Urbana - Urbana Adult Education |
| PSI Chicago | 4645 W 147th St. | 211 N Race St |
| 332 S. Michigan Avenue | Midlothian, IL 60445 US | Urbana, IL 61801 US |
| Chicago, IL 60604 US | | |
| Collinsville - TEKSOLV | Mokena - CT Resources | West Chicago - Illinois Aviation Academy |
| 100 Lanter Ct | 20006 S Wolf Road, Suite B | 32 W 751 Tower Rd |
| Collinsville, IL 62234 US | Mokena, IL 60448 US | West Chicago, IL 60185 US |
| Des Plaines - IT Expert System | Moline - Black Hawk College | Westmont - College of DuPage |
| 2400 E. Devon Ave, Suite 257 | 6600 34th Avenue | Westmont Center |
| Des Plaines, IL 60018 US | Moline, IL 61265 US | 650 Pasquinelli Dr. |
| | | Westmont, IL 60559 US |
| | Naperville - College of DuPage | |
| | 1223 Rickert Drive | |
| | Naperville, IL 60540 US | |

REPORTING TO THE EXAMINATION SITE

On the day of the examination, you should arrive at least 30 minutes prior to your scheduled appointment time. This allows time for the sign-in and identification verification procedure as well as providing time for you to familiarize yourself with the examination process. *If you arrive late, you may not be admitted to the examination site and you will forfeit your examination registration fee.*

REQUIRED IDENTIFICATION AT EXAMINATION SITE

You must provide 1 form of identification. The identification must match the name you scheduled with.

NOTE: ID must contain candidate's signature, photo, be valid and unexpired.

- State issued driver's license
- State issued identification card
- US Government Issued Passport
- US Government Issued Military Identification Card (not allowed for remote testing)
- US Government Issued Alien Registration Card
- Canadian Government Issued ID

Failure to bring the proper documentation invalidates your registration. You will not be able to take the examination as scheduled, and you will forfeit your examination fee.

SECURITY PROCEDURES

The following security procedures will apply during the examination:

A piece of scratch paper and pencil will be provided at the site. You will need to return them to the proctor at the end of the examination.

- Only non-programmable calculators that are silent, battery-operated, do not have paper tape printing capabilities, and do not have a keyboard containing the alphabet will be allowed in the examination site.
- Candidates may take only approved items into the examination room.
- All personal belongings of candidates, with the exception of close-fitting jackets or sweatshirts, should be placed in the secure storage provided at each site prior to entering the examination room. Personal belongings **include**, **but are not limited to**, the following items:
 - Electronic devices of any type, including cellular / mobile phones, recording devices, electronic watches, cameras, pagers, laptop computers, tablet computers (e.g., iPads), music players (e.g., iPods), smart watches, radios, or electronic games.
 - **Bulky or loose clothing or coats** that could be used to conceal recording devices or notes, including coats, shawls, heavy jackets, or overcoats.
 - Hats or headgear not worn for religious reasons or as religious apparel, including hats, baseball caps, or visors.
 - **Other personal items**, including purses, notebooks, reference or reading material, briefcases, backpacks, wallets, pens, pencils, other writing devices, food, drinks, and good luck items.
- Person(s) accompanying an examination candidate may not wait in the examination center, inside the building or on

the building's property. This applies to guests of any nature, including drivers, children, friends, family, colleagues or instructors.

- No smoking, eating, or drinking is allowed in the examination center.
- During the check in process, all candidates will be asked if they possess any prohibited items. Candidates may also be asked to empty their pockets and turn them out for the proctor to ensure they are empty. The proctor may also ask candidates to lift up the ends of their sleeves and the bottoms of their pant legs to ensure that notes or recording devices are not being hidden there.
- Proctors will also carefully inspect eyeglass frames, tie tacks, or any other apparel that could be used to harbor a recording device. Proctors will ask to inspect any such items in candidates' pockets.
- If prohibited items are found during check-in, candidates shall put them in the provided secure storage or return these items to their vehicle. PSI will not be responsible for the security of any personal belongings or prohibited items.
- Any candidate possessing prohibited items in the examination room shall immediately have his or her test results invalidated, and PSI shall notify the examination sponsor of the occurrence.
- Any candidate seen giving or receiving assistance on an examination, found with unauthorized materials, or who violates any security regulations will be asked to surrender all examination materials and to leave the examination center. All such instances will be reported to the examination sponsor.
- Copying or communicating examination content is violation of a candidate's contract with PSI, and federal and state law. Either may result in the disqualification of examination results and may lead to legal action.
- Once candidates have been seated and the examination begins, they may leave the examination room only to use the restroom, and only after obtaining permission from the proctor. Candidate will not receive extra time to complete the examination.

TAKING THE EXAMINATION BY COMPUTER

The examination will be administered via computer. You will be using a mouse and computer keyboard.

TUTORIAL

Before you start your examination, an introductory tutorial is provided on the computer screen. The time you spend on this tutorial, up to 15 minutes, DOES NOT count as part of your examination time. Sample questions are included following the tutorial so that you may practice answering questions, and reviewing your answers.

TEST QUESTION SCREEN

One question appears on the screen at a time. During the examination, minutes remaining will be displayed at the top of the screen and updated as you record your answers.

IMPORTANT: After you have entered your responses, you will later be able to return to any question(s) and change your response, provided the examination time has not run out.

EXPERIMENTAL QUESTIONS

In addition to the number of questions per examination, up to 25 "experimental" questions may be administered to candidates during the examinations. These questions will not be scored and the time taken to answer them will not count against examination time. The administration of such non-scored experimental questions is an essential step in developing future licensing examinations.

EXAMINATION REVIEW

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.

SCORE REPORTING

Your score will be given to you immediately following completion of the examination. The following summary describes the score reporting process:

<u>On screen</u> - your score will appear immediately on the computer screen. This will happen automatically at the end of the time allowed for the examination;

 If you <u>pass</u>, you will immediately receive a successful notification.

If you <u>do not pass</u>, you will receive a score report and a diagnostic report indicating your strengths and weaknesses by content domain.

To become licensed, it is your responsibility to follow through with the appropriate authority in your state.

HOW THE TEST IS SCORED

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, or cut score, is established by a criterion-referenced methodology suggested in accepted standards for public protection examinations. This methodology ensures that home inspectors who pass the test are competent to practice in the public arena.

The National Home Inspector Examination is "scale scored" from 200 to 800, with 500 as the pass point. It is important to keep in mind that your total score on the examination is not

the average of the sub-scores in each of the content areas on a failing score sheet. Some content areas contain more questions than others. Also, the number of available "points" is not related to the number of questions, because items vary in difficulty, criticality, and importance to competent practice.

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 <u>www.homeinspectionexam.org</u>. If you took this examination to qualify for a professional membership organization, contact that organization for instructions.

DUPLICATE SCORE REPORTS

You may request a duplicate score report after your examination by emailing <u>scorereport@psionline.com</u> or by calling (855) 746-8173.

A FINAL WORD

Home inspection professionals offer a vital service to the public in evaluating the condition of a prospective home. The Examination Board of Professional Home Inspectors believes that all home inspectors should meet minimum knowledge and practice standards. The National Home Inspector Examination is designed to assess these qualities in order to meet regulatory or membership organization requirements. GOOD LUCK!

CONTENT OUTLINE

This content outline is based on the role delineation study, it is intended to provide candidates with topics for study that may appear on the National Home Inspector Examination. The percentage of questions on the examination for each content area is indicated below. 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.

DOMAIN 1: PROPERTY AND BUILDING INSPECTION/SITE REVIEW (70%)

TASK 1: Identify and inspect **site conditions** to assess defects and issues that may affect people or the performance of the building. (5%)

Knowledge

A. Vegetation, Grade, Drainage and Retaining Walls

- 1. Common types, materials and terminology
- 2. Applicable construction standards and installation methods
- 3. Typical defects (e.g., negative grade, earth to wood contact, poor drainage)
- 4. Common safety issues

B. Driveways, Patios and Walkways

- 1. Common types, materials and terminology
- 2. Applicable construction standards and installation methods
- 3. Typical defects (e.g., large cracks, improper slope, settlement/upheaval)
- 4. Common safety issues (e.g., trip hazards, slippery surfaces)

C. Pool and Spa Access Barriers

- 1. Applicable safety standards and terminology
- 2. Common safety issues (e.g., fencing, latches, alarms)

TASK 2: Identify and inspect **building exterior components** to assess defects and issues that may affect people or the performance of the building. (5%)

Knowledge

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

- 1. Common types, materials, and terminology
- 2. Applicable construction standards and installation methods
- 3. Typical defects (e.g., missing sections, water infiltration, decay)

B. Exterior Doors and Windows

- 1. Common types, materials and terminology
- 2. Applicable construction standards and installation methods
- 3. Typical defects (e.g., decayed wood, missing flashings, cracked glass)
- 4. Common safety issues (e.g., safety glazing, egress, interior-keyed deadbolt)



C. Decks, Balconies, Stoops, Stairs, Steps, Porches and Associated Railings

- 1. Common types, materials and terminology
- 2. Applicable construction standards and installation methods
- 3. Typical defects (e.g., improper deck ledger attachment, improper rail or stair construction, insufficient/incorrect fasteners)
- 4. Common safety issues (e. g., loose or missing handrails and guards, handrails not graspable, non-uniform riser height/tread depth)

D. Garage Vehicle Doors and Operators

- 1. Common types, materials and terminology
- 2. Applicable construction standards and installation methods
- 3. Typical defects (e.g., damaged rollers, broken springs)
- 4. Common safety issues (e.g., missing/misaligned/malfunctioning obstruction sensors, improper adjustment of automatic reverse)

TASK 3: Identify and inspect **roof components** to assess defects and issues that may affect people or the performance of the building. (6%)

Knowledge

A. Roof Coverings

- 1. Common types, materials and terminology
- 2. Applicable construction standards and installation methods
- 3. Typical repair methods and materials
- 4. Typical defects (e.g., improper installation, damage, deterioration)

B. Roof Drainage Systems

- 1. Common types, materials and terminology
- 2. Applicable construction standards and installation methods
- 3. Typical defects (e.g., ponding, improper slope, overflowing/leaking)

C. Roof Flashings

- 1. Common types, materials and terminology
- 2. Applicable construction standards and installation methods
- 3. Typical defects (e.g., separation, improper material transitions, missing/damaged flashing)

D. Skylights and Other Roof Penetrations

- 1. Common types, materials and terminology
- 2. Applicable construction standards and installation methods
- 3. Typical defects (e.g., leakage, improper flashing installation, deteriorated boot/collar)



TASK 4: Identify and inspect **structural components** to assess defects and issues that may affect people or the performance of the building. (6%)

Knowledge

A. Foundation

- 1. Common types, materials and terminology
- 2. Applicable construction standards and installation methods
- 3. Typical modifications, repairs, upgrades and retrofit methods and materials
- 4. Typical defects (e.g., cracks, settlement, water entry)
- 5. Soil types and conditions and how they affect foundations
- 6. Applied forces and how they affect foundation systems (e.g., seismic, loads, hydrostatic pressure)
- 7. Water management (e.g., waterproofing, foundation drains, sump pumps)

B. Floor Structure

- 1. Common types, materials and terminology
- 2. Applicable construction standards and installation methods
- 3. Typical modifications, repairs, upgrade and retrofit methods and materials
- 4. Typical defects (e.g., improper cuts and notches in structural members, decayed or damaged structural members, undersized columns or pier supports)
- 5. Applied forces and how they affect floor systems (e.g., wind, seismic, loads)

C. Walls and Vertical Support Structures

- 1. Common types, materials and terminology
- 2. Applicable construction standards and installation methods
- 3. Typical modifications, repairs, upgrade and retrofit methods and materials
- 4. Typical defects (e.g., decayed or damaged structural members, earth to wood contact, lack of fire separation)
- 5. Applied forces and how they affect the wall structure (e.g., wind, seismic, loads)

D. Roof and Ceiling Structures

- 1. Common types, materials and terminology
- 2. Applicable construction standards and installation methods
- 3. Typical modifications, repairs, upgrade and retrofit methods and materials
- 4. Typical defects (e.g., sagging rafters, modified/damaged trusses)
- 5. Applied forces and how they affect roof/ceiling structures (e.g., wind, seismic, loads)



TASK 5: Identify and inspect **electrical systems** to assess defects and issues that may affect people or the performance of the building. (7%)

Knowledge

A. Electrical Service (Laterals, Drops, Entrance, Equipment, and Grounding)

- 1. Common types, materials, and terminology
- 2. Applicable construction standards and installation methods
- 3. Typical modifications, repairs, upgrade and retrofit methods and materials
- 4. Electrical service amperage
- 5. Service and equipment grounding and bonding
- 6. Typical defects (e.g., improper grounding, exposed conductors, water entry)
- 7. Common safety issues

B. Components of Service Panels and Subpanels

- 1. Common types, materials and terminology
- 2. Applicable construction standards and installation methods
- 3. Typical modifications, repairs, and upgrade methods and materials
- 4. Panel grounding and bonding
- 5. Panel wiring (e.g., color coding, conductor sizing)
- 6. Principles of operation and purpose of protection devices (e.g., circuit breakers and fuses, GFCI, AFCI)
- 7. Inspection safety procedures
- 8. Known problem electrical panel boards (e.g., Federal Pacific/Stab-Lok, Zinsco/Sylvania)
- 9. Typical defects (e.g., double-tapping, over-fusing, loose connections)
- 10. Common safety issues (e.g., open knock outs, overheating, multiple neutrals under one screw)

C. Wiring Methods

- 1. Common types (e.g., non-metallic sheathed cable, armored cable, conduit), materials and terminology
- 2. Applicable construction standards and installation methods
- 3. Typical modifications, repairs, and upgrade methods and materials
- 4. Considerations related to solid-conductor aluminum branch circuit wiring
- 5. Outdated electrical wiring system (e.g., knob and tube wiring, cloth-covered cable)
- 6. Typical defects (e.g., improper use of or lack of junction boxes, unprotected nonmetallic sheathed cable, lack of proper support)
- 7. Common safety issues (e.g., open splices, no cable clamps at penetrations, exposed conductors)



D. Devices, Equipment and Fixtures

- 1. Common types, materials and terminology
- 2. Applicable construction standards and installation methods
- 3. Typical modifications, repairs, upgrade and retrofit methods and materials
- 4. Equipment grounding and bonding
- 5. Wiring, operation and location of typical devices and equipment (e.g., receptacles and lights, appliances, AFCI and GFCI protection)
- 6. Typical defects (e.g., reverse polarity, open equipment grounds, non-functional GFCI or AFCI protection)
- 7. Common safety issues (e.g., absence of AFCI or GFCI, ungrounded receptacle)

E. Alternative Energy Systems (e.g., Solar, Wind, Generator)

- 1. Common types, materials and terminology
- 2. Applicable construction standards and installation methods
- 3. Disconnect location
- 4. Common safety issues (e.g., improper connection to other systems, lack of transfer switch)

F. Electric Vehicle Service Equipment

- 1. Common types, materials and terminology
- 2. Applicable construction standards and installation methods
- 3. Common safety issues

TASK 6: Identify and inspect **cooling systems** to assess defects and issues that may affect people or the performance of the building. (4%)

Knowledge

A. Cooling

- 1. Common types, materials and terminology
- 2. Applicable construction standards and installation methods and normal operation procedures
- 3. Principles of refrigerant cycle (e.g., theory of heat transfer, air conditioning, heat pumps)
- 4. Condensate control and disposal
- 5. Typical defects (e.g., missing suction line insulation, condensation and/or rust on components, restriction of air flow at the condensing unit)
- 6. Common safety issues (e.g., missing or damaged disconnect, damaged wiring)

B. Distribution Systems

- 1. Common types, materials and terminology
- 2. Applicable construction standards and installation methods
- 3. Typical defects (e.g., damaged or disconnected ducts, dirty air filter, lack of duct support)



TASK 7: Identify and inspect **heating systems** to assess defects and issues that may affect people or the performance of the building. (5%)

Knowledge

A. Heating

- 1. Common types, materials and terminology
- 2. Applicable construction standards, installation methods, and normal operation procedures
- 3. Principles of heating system operation
- 4. Connections to and controls for energy source
- 5. Condensate control and disposal
- 6. By-products of combustion (e.g., H2O, CO2, CO, NO2), their generation and how and when they become a safety hazard
- 7. Typical defects (e.g., dirty fan, misfiring burner, short cycling)
- 8. Common safety issues (e.g., inadequate combustion air, loose flue connections, flame rollout)

B. Distribution Systems

- 1. Common types, materials and terminology
- 2. Applicable construction standards and installation methods
- 3. Typical defects (e.g., damaged or disconnected ducts, clogged, missing or damaged filters, leaking pipes)

C. Vent Systems

- 1. Common types, materials and terminology
- 2. Applicable construction standards and installation methods
- 3. Principles of vent system operation
- 4. Typical defects (e.g., improperly sloped vent, improper vent materials, inadequate clearance to combustible material)
- 5. Common safety issues (e.g., back drafting/spillage, separated vent, venting too close to operable window)

TASK 8: Identify and inspect **insulation, moisture management systems and ventilation systems** in conditioned and unconditioned spaces to assess defects and issues that may affect people or the performance of the building. (5%)

Knowledge

A. Thermal Insulation

- 1. Common types, materials and terminology
- 2. Applicable construction standards and installation methods
- 3. Principles of heat transfer and energy conservation
- 4. Recommended insulation levels
- 5. Typical defects (e.g., exposed paper backing, improper clearances, inadequate air sealing)
- 6. Common health and safety issues (e.g., excessive moisture, infestations, fire hazards)



B. Moisture Management

- 1. Common types, methods, materials and terminology
- 2. Applicable construction standards and installation methods
- 3. Principles of moisture generation, relative humidity, and moisture movement in buildings (e.g., attic air bypasses, occupant use)
- 4. Effects of moisture vapor on building components, occupants and indoor air quality
- 5. Moisture control systems (e.g., humidifiers/dehumidifiers, vapor retarders)
- 6. Typical causes (e.g., missing or insufficient ventilation, missing/improperly installed insulation)

C. Ventilation Systems of Attics, Crawl Spaces and Roof Assemblies

- 1. Common types, materials and terminology
- 2. Applicable construction standards and installation methods
- 3. Typical defects
- 4. Principles of air movement in building assemblies (e.g., stack effect, pressure differences)
- 5. Conditioned/encapsulated attics and crawl spaces

TASK 9: Identify and inspect **mechanical exhaust systems** to assess defects and issues that may affect people or the performance of the building. (5%)

Knowledge

A. Mechanical Exhaust Systems (e.g., bath, kitchen, dryer)

- 1. Common types, materials and terminology
- 2. Applicable construction standards and installation methods
- 3. Typical modification, repair, upgrade and retrofit methods and materials
- 4. Relationship between mechanical systems and ventilation systems
- 5. Typical defects (e.g., improper termination, plastic dryer ducts)
- 6. Common safety issues (e.g., fire hazards, blockages/obstructions)

B. Indoor Air Management Systems (e.g., heat recovery ventilators, make-up air)

- 1. Common types, materials and terminology
- 2. Applicable construction standards and installation methods
- 3. Typical modification, repair, upgrade and retrofit methods and materials
- 4. Typical defects (e.g., inoperative, no bypass ducting, separated ducts)



TASK 10: Identify and inspect **plumbing and fuel distribution systems** to assess defects and issues that may affect people or the performance of the building. (6%)

Knowledge

A. Water Supply Distribution System

- 1. Common types, materials and terminology
- 2. Applicable construction standards and installation methods
- 3. Typical modification, repair, upgrade and retrofit methods and materials
- 4. Typical defects (e.g., cross-connection, dissimilar metals, obsolete materials)
- Common water pressure/functional flow problems that affect water distribution system performance (e.g., hard water build-up, galvanized piping, pressure reducing valves)

B. Fixtures and Faucets

- 1. Common types, materials and terminology
- 2. Applicable construction standards and installation methods
- 3. Typical modification, repair, upgrade and retrofit methods and materials
- 4. Typical defects (e.g., leaks, fixture attachment)
- 5. Common safety issues (e.g., absence of anti-scald valve, hot/cold reverse)

C. Drain, Waste and Vent Systems

- 1. Common types, materials and terminology
- 2. Applicable construction standards and installation methods
- 3. Typical modification, repair, upgrade and retrofit methods and materials (e.g., joining different piping materials, sizing)
- 4. Principles and usage of traps and vents
- 5. Differences between public and private disposal systems
- 6. Typical defects (e.g., deterioration, inadequate venting, improper slope)

D. Water Heating Systems

- 1. Common types, materials and terminology
- 2. Applicable construction standards and installation methods
- 3. Accessory items (e.g., seismic restraints, expansion tanks, recirculation systems)
- 4. Connections to and controls for energy source
- 5. Combustion air requirements
- 6. Condensate control and disposal
- 7. Typical defects (e.g., vent/flue issues, fuel connection defects, temperature pressure relief valve defects)
- 8. Common safety issues (e.g., lack of temperature/pressure relief valve, missing or improperly connected vents)

E. Fuel Storage and Fuel Distribution Systems

- 1. Common types, materials and terminology
- 2. Applicable construction standards and installation methods
- 3. Typical defects (e.g., missing piping supports, missing shut-off, leaking storage tank)
- 4. Common safety issues (e.g., gas leaks, lack of protective barriers, bonding)



F. Sump Pumps, Sewage Ejector Pumps, Related Valves and Piping

- 1. Common types, materials and terminology
- 2. Applicable construction standards and installation methods
- 3. Pump and discharge locations
- 4. Typical defects (e.g., inoperative sump pump, broken/missing lid, missing check valve)

TASK 11: Identify and inspect **interior components** to assess defects and issues that may affect people or the performance of the building. (4%)

Knowledge

- A. Walls, Ceiling, Floors, Doors and Windows and Other Interior System Components
 - 1. Common types, materials and terminology
 - 2. Applicable construction standards and installation methods
 - 3. Typical defects in interior surfaces caused by defects in other systems (e.g., structural movement, moisture stains)
 - 4. Typical defects in interior surfaces NOT caused by other systems (e.g., defective operation of doors and windows, damage, absence of safety glazing)

B. Steps, Stairways, Landings and Railings

- 1. Common types, materials and terminology
- 2. Applicable construction standards and installation methods
- 3. Typical defects (e.g., improper riser height or tread depth, baluster spacing, loose/missing guards)
- 4. Common safety issues (e.g., loose treads, loose/missing handrails, insufficient head clearance)

C. Installed Countertops and Cabinets

- 1. Common types, materials and terminology
- 2. Applicable construction standards and installation methods
- 3. Typical defects (e.g., missing knobs, damaged surfaces, loose doors/drawers)
- 4. Common safety issues (e.g., improperly secured cabinets and countertops, unsecured islands)

D. Installed Kitchen Appliances

- 1. Applicable construction standards, installation methods and terminology
- 2. Basic operation using normal controls
- 3. Typical defects (e. g., inoperative burner, incorrectly installed dishwasher drain loop, disposer/disposal wiring connection issues)
- 4. Common safety issues (e.g., missing anti-tip bracket, combustible clearances, lack of dedicated circuit)

E. Smart Home Technology

- 1. Emerging smart home technologies, applications, terminology and operations (e.g., electrical, plumbing, and HVAC)
- 2. Common defects and potential issues (e.g., improper installation, obsolete devices)
- 3. Considerations and limitations related to inspecting homes with smart technology



TASK 12: Identify and inspect **fireplaces**, **fuel-burning appliances and their chimney and vent systems** to assess defects and issues that may affect people or the performance of the building. (6%)

Knowledge

A. Solid Fuel-burning (e.g., wood, pellet, coal) Fireplaces and Appliances

- 1. Common types, materials (manufactured, masonry) and terminology
- 2. Common solid fuel chimney, vent connector, vent types, materials and terminology
- 3. Common masonry fireplace types, masonry flues, materials, applications, terminology and installation methods
- 4. Chimney foundation, height, clearance requirements and terminations
- 5. Applicable construction standards and installation methods
- 6. Fuel types, combustion characteristics and combustion air requirements
- 7. Operation of equipment, components and accessories
- 8. Typical defects (e.g., hearth defects, clearance requirements, smoke chamber and damper/flue issues)
- 9. Common safety issues (e.g., creosote buildup, lack of spark arrestors, damaged firebox)

B. Gas and Liquid Fuel-burning (e.g., natural gas, propane) Fireplaces and Appliances

- 1. Common types, materials (vented, direct vent, unvented) and terminology
- 2. Common gas and liquid fuel chimneys, vent connectors, vent types, materials and terminology
- 3. Common masonry and manufactured fireplace types, flues, materials, applications, terminology and installation methods
- 4. Chimney height, clearance requirements and terminations
- 5. Applicable construction standards and installation methods
- 6. Fuel types, combustion characteristics and combustion air requirements
- 7. Operation of equipment, components and accessories
- 8. Typical defects (e.g., improper clearance, lack of fuel shut-off, soot stains at exterior)
- 9. Common safety issues (e.g., missing/damaged damper stop, incomplete combustion, improper venting)

TASK 13: Identify and inspect common **life safety equipment and systems** to assess defects and issues that may affect people or the performance of the building. (6%)

Knowledge

- 1. Egress requirements (e.g., window security bar release, basement windows and doors, sill height)
- 2. Applicable fire/safety and occupancy separation requirements (e.g., fire separation walls and ceilings, fire-rated doors and penetrations)
- 3. Smoke alarm and carbon monoxide alarm placement
- 4. Fire suppression/sprinkler systems defects (e.g., painted or blocked sprinkler heads, low pressure)



DOMAIN 2: ANALYSIS OF FINDINGS AND REPORTING (20%)

TASK 1: Inform the client of what was inspected, the methodologies used, and describe building systems and components by their distinguishing characteristics (e.g., purpose, type, size, location). (4%)

Knowledge

- 1. Minimum and critical information required in inspection report
- 2. The type of systems and the location of system components
- 3. Common methods used to inspect particular components (e.g., walk on roof, observe attic or crawl space from hatch)
- 4. Common and emerging test instruments and their proper use (e.g., moisture meters, carbon monoxide meters, infrared cameras)

TASK 2: Describe the limitations in the inspection report to inform the client what was NOT inspected and why. (4%)

Knowledge

- 1. Common limitations (e.g., environmental factors, inspection safety limitations, inaccessible areas or components)
- 2. Limitations of a visual inspection
- 3. Limitations of inspection due to presence of smart and emerging technology

TASK 3: Describe systems and components inspected that are not functioning properly or are defective. (6%)

Knowledge

- 1. Expected service life of building and mechanical components.
- 2. Common indicators of potential failure (e.g., rust and corrosion, excessive or unusual noise/vibration, lack of routine maintenance)
- 3. Common defects and their descriptions
- 4. Common safety issues
- 5. Implications of what might occur if identified defects are not repaired

TASK 4: Describe systems and components in need of further evaluation or action. (6%)

Knowledge

- 1. Qualified professional or tradesperson required to complete repairs or perform further evaluations
- 2. Relationships between components in the building
- 3. Life-threatening safety hazards that warrant immediate action (e.g., gas leak, carbon monoxide accumulation, exposed energized wires)



DOMAIN 3: PROFESSIONAL RESPONSIBILITIES (10%)

TASK 1: Discuss the elements of and obtain a written pre-inspection agreement (e.g., scope, limitations, terms of services) with the client or client's representative to establish the rights and responsibilities of the inspector and client. (5%)

Knowledge

- 1. Purpose of a pre-inspection agreement
- 2. Typical elements of a pre-inspection agreement (e.g., exclusions and limitations, limits of liability, dispute resolution)
- 3. Considerations related to privacy
- 4. Timing of delivery and signing of pre-inspection agreement

TASK 2: Maintain quality, integrity and objectivity of the inspection process. (5%)

Knowledge

- 1. Fundamental legal concepts (e.g., contractual responsibility, negligence, applicable governing regulations)
- 2. Conflicts of interest (e.g., inspector interest in the property, third-party stakeholders with financial interest in the outcome of the inspection)
- 3. Types and purpose of financial protection (e.g., general liability, errors and omissions insurance warranties)
- 4. Protection of the client's interest (e.g., privacy of information, presence of cameras or listening devices, report confidentiality)

REFERENCES

This is a list of published sources used in generating the questions on the National Home Inspector Examination. However, EBPHI does not imply that study of all or only these materials will ensure passing the examination. There are many training providers and other valuable publications relevant to home inspection, nor can the value of field experience be discounted.

National Home Inspector Examination® Mechanical Systems & NHIE Content Manual, 2019 <u>https://nationalhomeinspectorexam.org/books/</u>

National Home Inspector Examination® Structural Systems & Business Manual 2019 <u>https://nationalhomeinspectorexam.org/books/</u>

International Residential Code (IRC) for One – and Two – Family Dwellings, 2021. https://codes.iccsafe.org/content/IRC2021P2

NFPA 101, Life Safety Code Handbook, 2021 https://www.nfpa.org/Codes-and-Standards/All-Codes-and-Standards/Handbooks

NFPA 70, National Electrical Code (NEC), 2023. https://catalog.nfpa.org/NFPA-70-National-Electrical-Code-NEC-Softbound-P1194.aspx?icid=D531

