

# Energy Auditor – 2018 PILOT

**CERTIFICATION SCHEME HANDBOOK** 



#### **Notice**

Anyone interested in becoming BPI certified as an Energy Auditor, will need to know the scope of the certification and all requirements.

This certification scheme handbook outlines the knowledge, skills and abilities needed for individuals to be certified as an Energy Auditor.

Information in this scheme handbook represents the policies at the date of publication for the BPI Energy Auditor certification. Information in this scheme handbook supersedes information contained in any previous published documents.

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#### **Acknowledgements**

The Building Performance Institute, Inc. would like to thank those who support the BPI national expansion and all of the dedicated professionals who have participated in the development of this document.

#### **Disclaimer**

Eligibility standards, exam content, exam standards, fees, and guidelines are subject to change. BPI will keep the most up-to-date version of this document posted at <a href="www.bpi.org">www.bpi.org</a>. Prior to participating in any available service through BPI, check to ensure that you have based your decision to proceed on the most up-to-date information available. BPI reserves the right to modify documents prior to accepting any application.

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#### 1. About BPI

Founded in 1993, the Building Performance Institute (BPI) is the nation's premier certification and standard-setting organization for home performance professionals. BPI is accredited by the American National Standards Institute, Inc. (ANSI) as a developer of American National Standards and as a certifying body for personnel credentials. BPI develops the technical standards for home energy audits and for energy efficiency, health, and safety improvements. From these standards, BPI develops rigorous online and field exams resulting in one of BPI's 14 professional certifications. BPI understands the importance of impartiality in carrying out its certification activities, manages conflict of interest and ensures the objectivity of its certification activities.

BPI also offers 3 programs (<u>BPI GoldStar Contractor</u> for companies, <u>Rating Program</u> for raters, and <u>BPI Product Listing</u> for manufacturers) and one certificate (<u>Building Science Principles</u>). BPI Certified Professionals hold over 18,000 active certifications supported by 130 BPI Test Centers and 340 Proctors. BPI has BPI Goldstar Contractors across the country.

BPI is a 501(c)3 corporation registered in the state of New York. The corporation was incorporated on January 18, 1996 and the corporation number is 14-1789014. The objective of the corporation is to provide credentialing for individuals and corporations involved in the residential retrofit industry. BPI is headquartered in Malta, NY.

#### 2. BPI Certification Schemes

BPI offers individual certification in a number of areas in the residential retrofit industry.

The certification schemes are developed and then reviewed on an on-going basis by scheme committees made up of subject matter experts (SMEs) – individuals with the credentials and experience within the industry. The scheme committee review statistics, industry changes and current certification scheme requirements on a regular basis.

Industry input on each certification scheme is encouraged. The scheme committee members will seek input from external sources including, but not limited to:

- industry associations
- professional groups
- government agencies
- consumer/owner advocacy groups

The pilot certification outlined in this scheme handbook is for energy auditors who are involved in the retrofit of existing residential buildings. For a full listing of certifications, see the <a href="https://www.bpi.org">www.bpi.org</a> website.

For individuals to become BPI Energy Auditor (EA) certified, successful completion of a multiple-choice exam to confirm the candidate's knowledge and skills and a practicum evaluation is required to confirm the candidate's abilities.

To be certified by BPI, the candidate is not required by BPI to undergo any specific training, whether that would be on-site job training or classroom training, however, prerequisite criteria must be met. BPI

does not approve any training programs. It is up to the individual to decide what training they want to take and where to take it, as it is solely their decision.

The requirements for this certification will be reviewed every five years and modified as required by the scheme committee with input from the residential retrofit industry. Modifications to the certification scheme will be made by BPI on the basis of the non-compliance cases, feedback from industry and technical changes to materials, components, systems, building codes or other relevant items.

# 3. Outline of the Energy Auditor Certification

This pilot certification scheme handbook outlines the knowledge, skills and abilities requirements for the EA certification.

The scheme defines the scope of the EA certification as the following; an energy auditor is a residential energy efficiency professional who evaluates the energy efficiency, health and safety of a home, and conducts field measurements to identify areas for savings. The energy auditor produces this information as a report and makes recommendations to the customer. A committee of SMEs considered to be experts in the field created the EA Job Task Analysis (JTA).

This document is intended to include all of the tasks an energy auditor may perform, as well as the knowledge, skills, and abilities required to do these tasks.

Please note that certification is not a license to practice. All Certified Professionals must comply with applicable federal, state and local laws and regulations governing the profession.

# 4. Preparing for the EA Pilot Exam(s)

There are prerequisites that must be submitted and approved before challenging the pilot exam(s). If successful on the pilot exams, it will lead to certification. Before you register for the exam:

- Download the latest version of the BPI EA Pilot scheme handbook from www.bpi.org
- Read and understand all information contained in the BPI EA Pilot scheme handbook
- Refer to the Job Task Analysis section contained in the BPI EA Pilot scheme handbook to be sure that you understand and can perform the tasks required for this certification
- Obtain reference materials for the pilot multiple-choice and/or field exams and study well in advance of taking the exam
- Download the Application for BPI Energy Auditor Certification-Pilot Program from <u>www.bpi.org</u> and submit to <u>Pilot@bpi.org</u>. Application processing could take several weeks before a candidate will receive a 2018 EA pilot approval letter to take the exam. It is recommended that a candidate submit their application at least thirty (30) days prior to their preferred exam date. Please do <u>NOT</u> schedule your exam date(s) until you receive your 2018 EA pilot approval letter from BPI.
- Refer to the chart on the next page for your specific certification scenario (new, renewal, etc.) as well as the flowcharts available from the Department of Energy's Weatherization Assistance Program in the <u>Updated Home Energy Professional Quality Control Inspector and Energy Auditor Certifications: What You Need to Know</u>

	Existing EA Certification	Existing Quality Control Inspector (QCI) Certification	Updated (New) EA Certification	Updated (New) QCI Certification	
During exam pilot study (Aug – Sept 2018)	<ul> <li>Pilot Period</li> <li>Certifications that expire Apr 1, 2018 – Dec 31, 2018, are extended to Feb 28, 2019. Beginning March 1<sup>st</sup>, 2019, you must have recertified in order maintain your certification.</li> <li>You cannot cross match old and new certification exams to acquire new certification and/or recertify. (EXCEPTION)</li> <li>Recertifying EA's and QCI's that do not meet the cut score of the pilot can recertify using the existing exams (including using CEU's) or retake the new exams once offered.</li> <li>Pilot exam takers must wait until the end of the pilot study period for pass/fail results.</li> <li>In all instances candidates must refer to the appropriate certification scheme handbook (existing or pilot).</li> </ul>				
Obtaining Certification for the First Time	Must apply, meet EA prerequisites, and pass both EA written and EA field exam.	Must apply, meet QCI prerequisites, and pass both QCI written and QCI field exam.	Must apply, meet EA prerequisites. Pass both EA written and EA field exam. EXCEPTION: Holders of existing QCI certification only need to pass the Pilot EA field exam.	Must apply, meet prerequisites, pass QCI written exam.	
Candidate renewing EA or QCI certification with at least 24 qualifying CEU's. See exception of CEUs for Pilot Exam. Certification will remain valid for 3 years from recertification date.	Must pass the EA field exam.	Must pass the QCI field exam.	Must apply, meet EA prerequisites and pass written and EA fields exam (See EA Certification Scheme Handbook: Pilot Phase) Candidates participating in pilot cannot submit Continuing Education Units (CEUs) and must take the online and field exam.	Must apply, meet prerequisites, pass QCI written exam (See QCI Certification Scheme Handbook: Pilot Phase) Candidates participating in pilot cannot submit CEUs and must take the online exam.	
Candidate Renewing Certification with less than 24 qualifying CEU's. Certification will remain valid for 3 years from recertification date.	Must pass the EA written and field exams.	Must pass the QCI written and field exams.	Must apply, meet EA prerequisites (See EA Certification Scheme Handbook: Pilot Phase) and pass EA written and field exam.	Must apply, meet prerequisites (See QCI Certification Scheme Handbook: Pilot Phase), pass QCI written exam.	
October 1, 2018 thru Feb 28, 2019	Post-Pilot Study Period - Prior to New Certifications Being Offered  During this timeframe the pilot exam is closed, candidates cannot certify to the pilot certifications.  If you are considering obtaining an EA and/or QCI certification you can still take the existing certification exams.  If you are wanting to recertify during this timeframe you can still recertify using the existing certification exams.  In all instances candidates must refer to the appropriate existing certification scheme handbook.				
Beginning March 1 <sup>st</sup> 2019	<ul> <li>Only the Updated (New) EA and QCI Certifications Available</li> <li>Only the updated Energy Auditor and Quality Control Inspector exams will be available to new or renewing candidates.</li> <li>In all instances candidates must refer to the appropriate certification scheme handbook.</li> <li>If you are recertifying an existing EA certification qualifying CEUs obtained under previous certification can be applied only to the Energy Auditor Certification.</li> <li>If you are recertifying the QCI certification you must start from the beginning under the new prerequisite and exam formats and new required qualifying CEUs specific to the QCI certification.</li> <li>Again, in all instances candidates must refer to the appropriate certification scheme handbook.</li> </ul>				

# 4.1 Prerequisites

All items below are required prior to taking the multiple-choice and/or field certification exams:

#### **Experience**:

Minimum of 1,000 hours of relevant experience, during which the candidate has accomplished one or more of the following roles within the last three (3) years:

- Field / technical position within the home performance or related field, OR
- Performing audits in a building science trade

#### **Energy Modeling:**

In the past five (5) years:

- Candidate must have completed (with proof) ten (10) energy models that comply with the specifications identified in <u>ANSI/BPI-1100-T-2014 Home Energy Auditing Standard</u>, Section 2.2 for energy audit reports and also include an analysis of the savings to investment ratio or simple pay back of measure installations, **OR**
- Candidate must have successfully completed (with proof) training in energy modeling. The
  training must include an end of course assessment of which the candidate must provide
  proof of a passing score.

#### **Additional Requirements:**

Candidate must obtain a minimum of **20 points** from any combination of activities below within the last three (3) years:

- Building Trades Experience (framing, roofing, drywall, siding, etc.) <u>maximum of 10 points</u>
  - 5 points for each 1,000 hours
- Training from industry specific training center (training whose content aligns with the content
  of the job task analysis for the certification); maximum of 10 points
  - 5 points for every 40 hours
- Related industry certifications [Residential Energy Services Network (RESNET), BPI, North American Technician Excellence (NATE), Environmental Protection Agency (EPA)]. Other certifications also considered through application; maximum of 10 points
  - 5 points per certification

Candidates for certification must bring the approval letter sent by BPI to the Test Center where the pilot exam(s) will be administered as proof of meeting the new 2018 prerequisite criteria. Candidates will not be permitted to take any exam(s) without providing the approval letter to the Test Center.

# 4.2 Special Testing Accommodations

Candidates in need of special testing accommodations, such as a language barrier, or arrangements for persons with disabilities, should submit the appropriate forms as noted in Appendix (D and E).

It is highly recommended that you submit your request for accommodation at least thirty (30) days prior to your preferred exam date.

# 4.3 Proof of Identity

Candidates must provide valid photo identification prior to taking the pilot exam(s). Please make sure that when registering for the pilot exam(s), the name used is the same that is listed on the valid photo ID.

Examples of acceptable forms of photo ID are:

- driver's license
- state issued photo ID
- passport
- military identification
- employee identification card

### 4.4 Certification Fees and Scheduling

The fees for the pilot exams are as follows:

- \$250 for the online exam
- \$700 for the field exam

These pilot exams are provided through BPI Test Centers. Please reach out to a local BPI Test Center for scheduling details of exams, as they will vary from Test Center to Test Center. To locate a BPI Test Center, please go to the BPI website (<a href="www.bpi.org">www.bpi.org</a>) and select **Locator** from the top of the page.

BPI does not set schedules for its Test Centers, nor does BPI collect the exam fees.

# 4.5 Field Testing Environment

In order to ensure fairness in testing, each field exam must be conducted at a BPI pre-approved test site that incorporates the minimum criteria listed below. Field exams conducted at a site that does not meet these minimum criteria will be void. While it is the proctor's responsibility to find a suitable test site, the candidate should also be aware of these requirements to avoid potential testing issues.

- At minimum one atmospherically vented combustion appliance
- A test site capable of supporting blower door testing and diagnostics
- Must NOT be a potentially hazardous environment (including but not limited to asbestos like material, mold and mildew in excess of 10 square feet of surface area, etc.)
- A ducted distribution system
- Must contain ductwork

- Forced Air Furnace
- Gas Domestic Hot Water (DHW)
- Gas line (natural gas or propane)
- Vented clothes dryer
- At least one door and window
- Refrigerator, dishwasher, or dehumidifier with accessible manufacturer's data plate
- Gas range
- Accessible attic with at least some form of attic ventilation (gable, soffit, ridge, etc)
- bathroom exhaust fan
- someone available to conduct a short interview with
- Home must have had work completed from a comprehensive workscope

Please be aware that during the performance exam, the proctor may ask questions in relation to line items on the field exam form for clarification purposes only. Proctors should not be asking any other type of questions, and are NOT permitted to ask questions unrelated to, or above and beyond the scope of the line items on the field exam form. If a candidate feels that they were asked questions that were inappropriate, please complete the <a href="Complaint Form">Complaint Form</a> located at <a href="www.bpi.org">www.bpi.org</a>.

# 5. Multiple-choice Exams - PILOT

For the Energy Auditor certification, a multiple-choice test instrument has been developed by BPI in conjunction with the Department of Energy and the National Renewable Energy Laboratory in order to ensure competency in the critical tasks defined by industry experts.

The multiple-choice exam is comprised of one hundred (100) questions to cover knowledge and skills. There will be up to fifteen (15) additional questions on the exam that you will not be scored on. These items will also go through the cut score study to be used as "back up" questions in the case of poorly performing questions in the future. You will receive an additional thirty (30) minutes to answer these questions and will be timed at three (3) hours (3 hours). The multiple-choice exam consists of multiple versions.

**Note:** The passing score for the multiple-choice exams will be determined by a Cut Score Study conducted after the pilot period ends. Candidates who take the pilot exams will be contacted with the results of their exam after the cut score study has been completed. **No exam results will be given before that time.** 

This exam is a closed-book exam; with the exception of BPI Standards and the Standard Work Specifications (SWS), which are available online via the testing site at the time of the exam (no marked copies of the standards will be permitted during the multiple-choice exam). Any papers used to take notes, create diagrams, or record diagnostic results (scrap paper) may not leave the testing environment. All papers must be handed to the proctor to be destroyed.

Future discussion or disclosure of the content of the exam, orally or in writing, or by any other means, is prohibited. Theft or attempted theft of exam items is punishable to the fullest extent of the law. Candidates will be observed at all times by a BPI approved Proctor while taking the exam. This includes direct observation by the BPI approved Proctor, as well as audio and video recording of the

exam. The participation in irregular behavior during the exam may result in the invalidation of the results of the exam, termination of status, civil liability, criminal prosecution, or other appropriate sanctions.

# 6. Practicum (Field) Evaluation (Abilities) – PILOT

A practical evaluation to determine the candidates' abilities has been developed by BPI in conjunction with the Department of Energy and the National Renewable Energy Laboratory in order to ensure competency in the critical tasks defined by industry experts. This will provide documented evidence that the candidates have the appropriate abilities.

The practicum evaluation exam is constructed where candidates are requested to perform a task. Their abilities are then evaluated based on a predetermined set of criteria.

The candidates will follow the outline in the Ability sections of the Job Task Analysis section in this document.

The time length for the practicum evaluation for abilities may vary in length due to pilot conditions. This exam is an open-book exam (the only reference not permitted is assistance). Any papers used to take notes, create diagrams, or record diagnostic results (scrap paper) may not leave the testing environment. All papers must be handed to the proctor to be destroyed.

The practicum evaluation is administered through BPI Test Centers at various locations across the United States. Please go to the BPI website (<a href="www.bpi.org">www.bpi.org</a>) and select **Locator** at the top of the page to find a BPI Test Center near you.

# 7. Job Task Analysis

The Knowledge, Skills, and Abilities required for this exam are below.

- Knowledge, typically shown on online or verbal exam
- Skill, typically shown on online exam, diagram, or interactive tool
- Ability, typically demonstrated on prop or in house

	DOMAIN 1: Collection of Visual, Material, Dimensional and Appliance Information about the Building for an Energy Audit
	Task 1: Document energy consumption
Ab	pility to:
•	Obtain 12 months of client utility bills
•	Obtain annual fuel delivery information (oil, propane, etc.)
Kr	nowledge of:
•	How to access utility information
•	Utility bill components
	Task 2: Document the building history
Ab	pility to:
•	Determine the age of the original structure
•	Determine the age of any additions or improvements
•	Determine if the building has any historical significance

#### Knowledge of:

Where to access property records

#### Task 3: Conduct a physical/visual inspection

#### Ability to:

- Identify holes, chimneys, gutters, vent pipes, soffits, fascia, peeling paint, foundation integrity, areas of infiltration and exfiltration, exhaust fan penetrations, accesses, crawl spaces, roof vents, land grading, shading, orientation of the building, and anomalies
- Identify pest/vermin infestations, evidence of leaking or water damage, and structural damage
- Identify hidden rooms or spaces
- Identify the exterior materials (e.g., vinyl, brick)
- Identify issues that would interfere with or prevent tests
- Identify potentially hazardous materials in the building
- Detect abnormalities by using all senses (e.g., unusual odors, sounds)
- Identify health and safety issues (e.g., clutter, bleach stored next to a furnace, asbestos-containing materials)
- Perform visual inspection of a vented combustion appliance venting configuration
- Identify a combustion appliance zone (CAZ)
- Visually inspect adjacent and/or connected buildings for issues that impact or could be impacted by the audited building
- Determine applicable codes and standards (e.g., ICC, NFPA)

#### Knowledge of:

- General construction
- Combustion appliance venting procedures
- Issues that pose a health and/or safety risk (e.g., clutter, bleach stored next to a furnace, animal feces, asbestos-containing materials, hazardous materials)
- Situations that pose a health and/or safety risk
- Sources of moisture
- The Occupational Safety and Health Administration (OSHA) safe work practices (e.g., confined spaces)

#### Task 4: Collect health and safety data

#### Ability to:

- Locate existing smoke/carbon monoxide alarms
- Determine age and functionality of smoke/carbon monoxide alarms
- Determine if smoke/carbon monoxide alarms are hardwired or battery-powered
- Verify that a clothes dryer is properly vented to the exterior
- Verify that all exhaust fans are properly vented to the exterior
- Identify any existence of hazardous materials/conditions
- Identify knob-and-tube wiring
- Identify moisture issues (e.g., standing water, condensation, plumbing leaks, mold)
- Identify potential electrical hazards (e.g., frayed wiring, open junction boxes, overloaded circuits)
- Identify suspected asbestos-containing materials
- Identify potential lead-based paint hazards
- Identify vented and unvented combustion appliances
- Identify a properly operating backdraft damper
- Identify conditions that promote radon infiltration
- Identify other potential indoor air quality hazards (e.g., volatile organic compounds)

Kn	Knowledge of:			
•	Proper locations for smoke/carbon monoxide alarms			
•	Venting requirements for appliances			
•	Conditions that signify or promote moisture problems			
•	Domestic water heater safety			
•	Electrical hazards			
•	Hazardous materials			
•	Heating system safety			
•	How to determine if knob-and-tube wiring is active			
•	Issues and hazards associated with asbestos-containing materials			
•	Issues and hazards associated with lead-based paint			
•	Manufactured home water heater regulations			
•	Rules and regulations pertaining to lead and asbestos-containing materials			
<u>.</u>	Smoke/carbon monoxide alarm operations			
<u> </u>				
Λh	Task 5: Collect appliance and base load information oility to:			
•	Collect household appliance tag data (e.g., refrigerator, dishwasher, dehumidifier)			
•	Collect heating/cooling appliance tag data and documentation			
•	Determine combustion appliance zone (CAZ) volume			
•	Identify appliance energy source(s)			
•	Collect water fixture flow rates			
<u>.</u>	Identify other components related to the Heating Ventilation and Air Conditioning (HVAC)			
•	appliances (e.g., expansion tanks, fill valves, remote compressors, smart thermostats)			
•	Identify other components related to the domestic water heater appliance (storage tanks, mixing			
	valves, etc.)			
•	Identify safety features related to the HVAC and domestic water heater appliances			
•	Collect lighting data (e.g., type, fixtures, wattage, usage)			
•	Identify the number of occupants			
•	Determine client energy usage habits (e.g., Audio/Visual, computers)			
•	Look for additional usage sources (e.g., hot tubs, pool pumps, pool heaters, fish ponds, fountains)			
•	Collect electrical service information (e.g., size, brand)			
•	Identify base loads			
Kn	nowledge of:			
•	Various appliance types and energy sources			
•	Codes and standards adopted by the authority having jurisdiction (e.g., National Fire Protection			
	Agency (NFPA) 54)			
•	Domestic water heater components and operation			
•	Heating/cooling system operations			
•	Safety issues associated with domestic water heaters			
•	Water fixture operations and flow rates			
•	Domestic hot water heating technologies			
•	How occupant behavior affects energy consumption			
•	The definition of base load			
•	Utility bill analysis, including base load calculation			
	Task 6: Identify a conditioned building enclosure			
Ab	Ability to:			
•	Identify and record pertinent building dimensional data			
•	Determine conditioned, unconditioned, and unintentionally conditioned spaces			
•	Assess alignment of thermal and pressure boundaries			
<u> </u>				

Pressure boundary identification Thermal boundary identification Various building components Proper pressure and thermal boundary alignment  Task 7: Collect mechanical ventilation data  Ability to: Collect tag data for exhaust fans Determine the volume of the affected space Determine the type of control Determine the type of control Determine the condition of the ventilation ductwork/piping (e.g., pitch, insulation, size, material, elbows, length of run, terminations)  Knowledge of: Controls and motors Types of ventilation Ventilation ductwork Ventilation ductwork Ventilation ductwork Ventilation standards and codes of authority having jurisdiction  Task 8: Identify building insulation (attic, walls, and foundation/subspace)  Ability to: Identify insulation (e.g., thickness) Identify insulation condition and coverage Identify presence and placement of vapor retarder Identify the location of insulation (e.g., exposure, aligned with pressure and thermal boundaries Knowledge of: Building science Insulation R-values Effective R-values Effective R-values Effective R-values Effective R-values Effective R-values General thermography principles  Task 9: Collect attic data  Ability to: Identify tatic components (e.g., drop soffit, rafters, joists) Determine existing ventilation type and size (e.g., soffit, ridge, power ventilators) Identify bypasses between attic and conditioned space Identify types and point(s) of access Identify types and point(s) of access Identify types and point(s) of access Identify potential electrical hazards	Kn	nowledge of:
Thermal boundary identification Various building components Proper pressure and thermal boundary alignment  Task 7: Collect mechanical ventilation data  Ability to: Determine the volume of the affected space Determine the type of control Determine the condition of the ventilation ductwork/piping (e.g., pitch, insulation, size, material, elbows, length of run, terminations)  Knowledge of: Controls and motors Types of ventilation Ventilation ductwork Ventilation ductwork Ventilation ductwork Ventilation standards and codes of authority having jurisdiction  Task 8: Identify building insulation (attic, walls, and foundation/subspace)  Ability to: Identify insulation (e.g., thickness) Identify presence and placement of vapor retarder Identify the location of insulation (e.g., exposure, aligned with pressure and thermal boundaries  Knowledge of: Building science Insulation R-values Effective R-values Effective R-values Effective R-values Effective R-values Effective R-values General thermography principles  Task 9: Collect attic data  Ability to: Identify heat sources (e.g., recessed lights, chimneys, flues, furnaces) Identify heat sources (e.g., recessed lights, chimneys, flues, furnaces) Identify sources/signs of water damage Identify types and point(s) of access Identify types and point(s) of access Identify types and point(s) of access Identify potential electrical hazards	•	
Various building components Proper pressure and thermal boundary alignment  Task 7: Collect mechanical ventilation data  Ability to: Collect tag data for exhaust fans Determine the volume of the affected space Determine the type of control Determine the condition of the ventilation ductwork/piping (e.g., pitch, insulation, size, material, elbows, length of run, terminations)  Knowledge of: Controls and motors Types of ventilation Ventilation ductwork Ventilation standards and codes of authority having jurisdiction  Task 8: Identify building insulation (attic, walls, and foundation/subspace)  Ability to: Identify insulation type Measure insulation (e.g., thickness) Identify presence and placement of vapor retarder Identify the location of insulation (e.g., exposure, aligned with pressure and thermal boundaries Knowledge of: Building science Insulation R-values Effective R-values Effective R-values Effective R-values Effective R-values Effective R-values Insulation placement OSHA safety requirements General thermography principles  Task 9: Collect attic data  Ability to: Identify tatic components (e.g., drop soffit, rafters, joists) Determine existing ventilation type and size (e.g., soffit, ridge, power ventilators) Identify the eat sources (e.g., recessed lights, chimneys, flues, furnaces) Identify types and point(s) of access Identify types and point(s) of access Identify types and point(s) of access	•	•
Proper pressure and thermal boundary alignment  Task 7: Collect mechanical ventilation data  Ability to:  Collect tag data for exhaust fans  Determine the volume of the affected space  Determine the type of control  Determine the condition of the ventilation ductwork/piping (e.g., pitch, insulation, size, material, elbows, length of run, terminations)  Knowledge of:  Controls and motors  Types of ventilation  Ventilation ductwork  Ventilation ductwork  Ventilation standards and codes of authority having jurisdiction  Task 8: Identify building insulation (attic, walls, and foundation/subspace)  Ability to:  Identify insulation type  Measure insulation (e.g., thickness)  Identify insulation condition and coverage  Identify presence and placement of vapor retarder  Identify the location of insulation (e.g., exposure, aligned with pressure and thermal boundaries Knowledge of:  Building science  Insulation effectiveness  Insulation Placement  OSHA safety requirements  General thermography principles  Task 9: Collect attic data  Ability to:  Identify attic components (e.g., drop soffit, rafters, joists)  Determine existing ventilation type and size (e.g., soffit, ridge, power ventilators)  Identify beat sources (e.g., recessed lights, chimneys, flues, furnaces)  Identify types and point(s) of access  Identify types and point(s) of access  Identify types and point(s) of access  Identify potential electrical hazards	•	,
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7 1	•	
Identity pool verimin intestations	•	Identify pest/vermin infestations
Recognize potential structural integrity issues	•	, ,
Identify a whole-house fan	•	u i
Determine attic uses	•	
Note the existence and effectiveness of radiant barriers	•	Note the existence and effectiveness of radiant barriers
Identify the existence of baffles	•	Identify the existence of baffles
Knowledge of:	Kn	lowledge of:
Attic components	•	Attic components

General construction terms Infiltration points Required clearance to combustibles Potential safety hazards in an attic (e.g., electrical hazards, nails, rafters, heat exposure) Signs of water damage Signs of pest/vermin infestations General thermography principles Ventilation requirements OSHA safety requirements (e.g., ladder usage, confined spaces) Task 10: Collect wall data **Ability to:** Identify wall types and components (e.g., interior, exterior) Identify framing method Identify wall orientation Identify sources and signs of any water damage Identify infiltration points Identify signs of pest/vermin infestation Identify upper stories Identify wall exposure Knowledge of: General construction **Building** science Infiltration points Typical wall framing and components Issues unique to framing methods (e.g., use of upper story band joists, angle bracing in post and beam framing) General thermography principles Task 11: Collect window and door data Ability to: Identify window type (e.g., jalousie, awning, single-hung, double-hung) Identify window frame material Identify window glazing type (e.g., reflective, low-E) Identify exterior shading Identify window operation/leakiness Identify window orientation Identify general window conditions Identify door type and swing Identify condition of a door, including hardware, door sweep, seals, and operation Determine thermal characteristics of a door Knowledge of: Environmental Protection Agency (EPA) safety requirements Historical preservation requirements Window construction, components, and nomenclature Door components, hardware, and nomenclature Door construction Door operation and adjustments Task 12: Collect foundation/subspace data Ability to: Identify foundation/subspace types (e.g., crawl space, basement, slab)

	Identify foundation metarials		
•	Identify foundation materials  Identify infiltration points		
•	, i		
<u>.</u>	Identify sources and signs of moisture		
•	Identify points of access Identify potential electrical hazards		
•	· ·		
-	Identify signs of pest/vermin infestations		
•	Recognize potential structural integrity issues		
1/10	Identify special equipment (e.g., sump pumps)		
Nn	owledge of:		
•	Building science		
•	Codes and standards adopted by the authority having jurisdiction		
•	Crawl space ventilation requirements		
•	Foundation construction materials and methods		
•	OSHA safety requirements		
•	Signs of structural hazards on foundations		
ΛL	Task 13: Collect roof data		
AD	ility to:		
<u>:</u>	Identify roof types (e.g., parapet, mansard, gambrel, gable)  Identify roof conditions		
<u>.</u>	Identify roof color		
<u>.</u>	Identify roofing materials (e.g., underlayment, membrane, shingle, metal)		
<u>:</u>	Identify roof penetrations		
÷	, i		
<u>.</u>	Identify roof debris (e.g., garbage, old air conditioners)  Identify the presence and condition of roof drainage		
-	• • •		
•	Determine the flashing condition		
•	Identify type and location of roof access  Identify roof exposure and orientation		
<u>:</u>			
-	Identify roof insulation (e.g., flat roof with no cavity and with rigid insulation)  Determine roof pitch		
V n	owledge of:		
NII	Insulation materials and methods		
÷	OSHA safety requirements		
•	Roofing construction methods		
<u> </u>	Roofing materials		
	DOMAIN 2: Diagnostic Testing of the Dwelling Unit for an Energy Audit		
۸h	Task 1: Prepare the dwelling unit for the test(s) ility to:		
AD	Determine the test(s) to be performed (e.g., blower door test, duct leakage test, combustion safety		
	testing)		
•	Prepare the building and equipment for testing based upon industry protocols		
Kn	owledge of:		
•	Building diagnostic testing		
•	Building science		
•	Test protocols		
	Task 2: Test the electric appliances		
Ab	Ability to:		
•	Inspect appliances for test accessibility		
•	Follow the manufacturer's guidelines for operation of the watt-hour meter		
•	Interpret data from a watt-hour meter		
	1		

•	Access wattage usage data in an up-to-date industry-accepted resource
Kr	nowledge of:
•	Electric appliance metering
•	Electric appliance safety
	Task 3: Conduct indoor air quality tests
	bility to:
•	Measure levels of targeted indoor air pollutants (e.g., carbon monoxide, combustible gases)
•	Determine if the reading exceeds any applicable action levels
•	Identify need for further testing
	nowledge of:
•	Carbon monoxide exposure symptoms
•	Industry standards relative to air quality (e.g., American Society of Heating, Refrigeration, and Air-Conditioning Engineers (ASHRAE), EPA, The National Institute for Occupational Safety and Health (NIOSH), OSHA)
•	Effect of relative humidity on indoor air quality
•	Source control of pollutants
	Task 4: Determine the safety and efficiency of combustion appliances
Ab	pility to:
•	Visually inspect the fuel supply lines
•	Test for leakage in the fuel supply pipes (e.g., confirm with bubble solution)
•	Perform combustion safety tests (e.g., combustion appliance zone [CAZ] depressurization test,
	carbon monoxide test)
•	Conduct combustion efficiency tests (e.g., oxygen, stack temperature, steady-state efficiency
<b>K</b> r	[SSE]) nowledge of:
•	Building science
•	Codes and standards adopted by the authority having jurisdiction
•	Combustion efficiency test procedures (e.g., oxygen, stack temperature, steady-state efficiency [SSE])
•	Fuel line leak testing techniques
<u> </u>	Heating system type (e.g., forced air heater, hydronic heater, steam heater, unit heater, space
•	heater)
•	Annual fuel utilization efficiency (AFUE) versus steady-state efficiency (SSE)
•	Combustion safety test procedures
•	Venting types, materials, methods, and safety issues (e.g., venting categories, NFPA)
•	Greatest depressurization achievable (i.e., worst case)
	Task 5: Determine air leakage of the building envelope
Ab	pility to:
•	Perform blower door tests
•	Follow industry protocol for conducting blower door tests
•	Perform zone pressure diagnostics (ZPD)
•	Perform pressure pan tests
•	Locate points of infiltration/exfiltration
•	Identify air leakage locations based on infrared images
Kr	nowledge of:
•	Advanced blower door diagnostics (e.g., zone pressure diagnostics, pressure pans)

Blower door assembly and operation

Blower door testing procedures (e.g., pressurization, depressurization)

## Task 6: Determine the performance of HVAC distribution Ability to: Perform HVAC distribution tests Perform a forced air system distribution leakage test Measure room temperatures Measure the temperatures of the hydronic radiators Measure air flow (e.g., cubic feet per minute [CFM]) Measure temperature rise across heat exchangers/cooling coils Measure static pressure Inspect hydronic distribution (e.g., high, low, valves) Measure room pressure differences for forced air systems Measure mechanical ventilation flow rates (e.g., exhaust fans, supply fans, balanced ventilation) Knowledge of: **HVAC** distribution testing protocols **HVAC** terminology Manufacturer's specifications Distribution system design and materials Forced air systems Hydronic distribution Mechanical ventilation systems (e.g., exhaust, supply, balanced) **DOMAIN 3: Evaluation of Collected Energy Audit Data to Determine the Scope of** Work Task 1: Evaluate the health and safety data Ability to: Determine if there are potential health and safety concerns Determine if health and safety issues can be addressed through an energy efficiency measure Determine the repair options Knowledge of: Special circumstances (e.g., mold, lead, asbestos-containing materials, radon) Construction repair methods Task 2: Evaluate the durability/structural integrity of the building Ability to: Determine if there are potential durability/structural integrity issues Determine if the potential durability/structural integrity issues can be addressed through an energy efficiency measure Determine if further evaluation is recommended Knowledge of: **Building science** Task 3: Evaluate the HVAC system Ability to: Evaluate the HVAC system for health and safety concerns (e.g., suspected asbestos-containing materials) Evaluate HVAC sizing for potential replacement or upgrades (e.g., post shell retrofit) Evaluate the distribution (e.g., add trunk lines, radiators, to rooms as needed) Evaluate fuel switching options Evaluate the need to clean and tune versus replace Evaluate the need for and supply of combustion air Evaluate the HVAC system for other issues that lead to replacement or upgrades (e.g., condition, age, efficiency)

•	Identify duct sealing/insulation and pipe insulation opportunities
Kn	owledge of:
•	Air Conditioning Contractors of America (ACCA) manuals
•	Heating/cooling system operations
•	HVAC load calculations
•	HVAC system repair, replacement, or upgrade options
•	Maximum allowable duct leakage
•	Safety requirements (e.g., NFPA, AHJ)
	Task 4: Evaluate the mechanical ventilation
Ab	pility to:
•	Compare measured flow with ventilation requirements
•	Determine the mechanical ventilation needs (e.g., repairs, replacements, additions, make-up air)
•	Determine the type of controls needed
•	Calculate the building ventilation requirements
Kn	owledge of:
•	Ventilation standards (e.g., ASHRAE, AHJ)
•	Mechanical ventilation controls
•	Ventilation strategies
•	Ventilation ducting design
	Task 5: Evaluate energy use
	pility to:
•	Determine if replacements or upgrades will reduce energy consumption
•	Analyze utility bills and fuel usage, and calculate base loads
Kn	lowledge of:
•	Codes and standards adopted by the authority having jurisdiction
•	Components of base loads (e.g., lighting, electronics, domestic hot water, appliances)
•	Base load calculation
•	Base load reduction strategies
A I-	Task 6: Evaluate the foundation/subspace
Ab	Determine if noncine one needed (e.g., plumbing fleers)
•	Determine if repairs are needed (e.g., plumbing, floors)
•	Determine if additional insulation and/or air sealing is needed
•	Determine the proper location for insulation and/or air sealing (e.g., floor, walls, sills, perimeter,
-	cantilever floor)
<u>.</u>	Determine the type of insulation materials to be added
•	Calculate if adequate ventilation exists or should be added
	Determine a moisture management strategy (e.g., site drain, vapor barrier)  owledge of:
•	Building science
<u> </u>	Codes and standards adopted by the authority having jurisdiction
	Foundation construction techniques
•	Foundation crawl space ventilation
•	
•	Foundation/subspace insulation
	Foundation/subspace types  Types and leasting for years barriers
•	Types and locations for vapor barriers
۸ <b>۱</b>	Task 7: Evaluate the walls ility to:
AD	Determine if repairs are needed
<u> </u>	Determine if insulation opportunities exist
<u> </u>	Determine ii insulation opportunities exist

Determine if air sealing opportunities exist Identify the type of insulation materials to be added Determine the square footage of the area to be insulated Determine if the pressure boundary and thermal boundary align Determine if the vapor retarder is appropriately placed Determine if band joists insulation and/or air sealing opportunities exist (i.e., upper stories) Determine the impact of potential health and safety issues (e.g., lead-based paint, asbestoscontaining materials, electrical hazards, moisture) Determine a moisture management strategy (e.g., drainage, flashing) Knowledge of: EPA and Department of Energy lead and asbestos standards Building science Codes and standards adopted by the authority having jurisdiction Insulation types and appropriateness Pressure and thermal boundaries Typical wall structures Vapor retarder in walls Task 8: Evaluate the attic Ability to: Evaluate if repairs are needed Determine if insulation opportunities exist Determine if air sealing opportunities exist Determine if the pressure boundary and thermal boundary align Determine if the vapor retarder is appropriately placed Determine if additional attic ventilation is required Determine if additional access is required Determine the impact of potential health and safety issues (e.g., heat sources, asbestoscontaining materials, electrical hazards, moisture) Knowledge of: Attic construction and materials Attic fire hazards Attic insulation and air sealing strategies Attic ventilation standards **Building science** Codes and standards adopted by the authority having jurisdiction Pressure and thermal boundaries Moisture management Preparation for attic insulation and air sealing Area-weighted average R-value Task 9: Evaluate the doors and windows Ability to: Determine if repairs are needed Evaluate the condition of and/or need for storm doors and windows (e.g., closers) Evaluate door and window components and performance Determine if insulation opportunities exist Determine if air sealing opportunities exist

Determine the impact of potential health and safety issues (e.g., lead-based paint, asbestos-

containing materials, moisture)

Kn	owledge of:
•	Codes and standards adopted by the authority having jurisdiction
•	Building science
•	Framing structures and processes
•	Door types
•	Window components
•	Door and window glazing
•	Window types
	Task 10: Use energy modeling software
Ab	ility to:
•	Determine pertinent modeling data
•	Analyze the output from the software
•	Produce a cost and savings report
	owledge of:
•	Basic construction terms
•	Building science
•	Energy modeling software principles
	Task 11: Generate the recommended work scope
	illity to:
•	Determine the recommended health and safety measures
•	Determine the recommended building durability measures
•	Determine the recommended energy conservation measures
•	Determine the economics of recommended measures (e.g., savings to investment ratio [SIR], return on investment [ROI])
•	Anticipate health and safety impacts from recommended retrofit measures
•	Specify measures to ensure thermal and pressure boundary integrity and alignment
•	Assemble work specifications
Kn	owledge of:
•	Building science
•	Codes and standards adopted by the authority having jurisdiction
•	Construction practices, techniques, and terminology
•	Energy modeling software
•	Cost-benefit analysis
•	Program rules and standards
•	Funding or financing mechanisms for energy efficiency upgrades
Sk	ill in:
•	Cost estimating

# 8. Energy Auditor Exams Blueprint

Domain and Tasks	% Written	% Field
DOMAIN 1: Collection of Visual, Material, Dimensional, and Appliance Information about the Building for an Energy Audit	42.8%	66.7%
Task 1: Document energy consumption	2.2%	N/A
Task 2: Document the building history	3.0%	N/A

Domain and Tasks	% Written	% Field
Task 3: Conduct a physical/visual inspection	4.5%	7.9%
Task 4: Collect health and safety data	4.7%	8.3%
Task 5: Collect appliance and base load information.	3.2%	5.6%
Task 6: Identify a conditioned building enclosure	3.2%	5.6%
Task 7: Collect mechanical ventilation data	3.2%	5.7%
Task 8: Identify building insulation (attic, walls, and foundation/subspace)	3.2%	5.6%
Task 9: Collect attic data	3.8%	6.7%
Task 10: Collect wall data	3.1%	5.5%
Task 11: Collect window and door data	2.5%	4.5%
Task 12: Collect foundation/subspace data	3.5%	6.2%
Task 13: Collect roof data	2.9%	5.2%
DOMAIN 2: Diagnostic Testing of the Dwelling Unit for an Energy Audit	20.8%	33.3%
Task 1: Prepare the dwelling unit for the test(s)	3.9%	6.9%
Task 2: Test the electric appliances	2.1%	N/A
Task 3: Conduct indoor air quality tests	4.5%	8.0%
Task 4: Determine the safety and efficiency of combustion appliances	4.7%	8.3%
Task 5: Determine air leakage of the building envelope	3.0%	5.3%
Task 6: Determine the performance of HVAC distribution	2.7%	4.7%
DOMAIN 3: Evaluation of Collected Energy Audit Data to Determine the Scope of Work	36.4%	N/A
Task 1: Evaluate the health and safety data	4.4%	N/A
Task 2: Evaluate the durability/structural integrity of the building	3.6%	N/A
Task 3: Evaluate the HVAC system	3.5%	N/A
Task 4: Evaluate the mechanical ventilation	3.3%	N/A

Domain and Tasks	% Written	% Field
Task 5: Evaluate energy use	2.4%	N/A
Task 6: Evaluate the foundation/subspace	3.2%	N/A
Task 7: Evaluate the walls	3.4%	N/A
Task 8: Evaluate the attic	3.7%	N/A
Task 9: Evaluate the doors and windows	2.9%	N/A
Task 10: Use energy modeling software	2.5%	N/A
Task 11: Generate the recommended work scope	3.5%	N/A

Note: Percentages were rounded to the nearest tenth of a percent.

#### 9. Standards of Reference

All BPI exams are based on a mixture of industry practices, axiomatic<sup>1</sup> concepts, and major standards of references. No singular source exists that could touch upon every aspect for what is considered testable. Conversely, there is no limit to the potential useful material found in print and online.

- ANSI American National Standards Institute
  - ANSI / ACCA Standard 5 HVAC Quality Installation Specification
  - o ANSI / NFPA 70- National Electrical Code
  - ANSI / ASHRAE Standard 111 Measurement, Testing, Adjusting, and Balancing of Building HVAC Systems
- ASHRAE American Society of Heating, Refrigerating and Air-Conditioning Engineers
  - ASHRAE 62.1 Ventilation for Acceptable Indoor Air Quality
  - ASHRAE 62.2 Ventilation and Acceptable Indoor Air Quality in Low-Rise Residential Buildings
  - ASHRAE 90.1 Energy Standard for Buildings Except Low-Rise Residential Buildings
  - ASHRAE 90.2 Energy-Efficient Design of Low-Rise Residential Buildings
- ASTM ASTM International
  - ASTM E84 Standard Test Method for Surface Burning Characteristics of Building Materials
  - ASTM E1186 Standard Practices for Air Leakage Site Detection in Building Envelopes and Air Barrier Systems
- BPI Building Performance Institute
  - o ANSI/BPI-1100-T-2014 Home Energy Auditing Standard
  - ANSI/BPI-1200-S-2017 Standard Practice for Basic Analysis of Buildings

<sup>&</sup>lt;sup>1</sup> An axiomatic concept is something implicit that requires no proof or explanation (e.g. – the sum of 2 and 2 is 4, or gravity states that if you drop something, it will fall to a lower level).

- NFPA National Fire Protection Association
  - NFPA 31 Standard for the Installation of Oil-Burning Equipment
  - NFPA 54 National Fuel Gas Code
  - NFPA 70 National Electrical Code
  - NFPA 275 Standard Method of Fire Tests for the Evaluation of Thermal Barriers
- OSHA U.S Occupational Safety and Health Administration
  - OSHA 1926 Safety and Health Regulations for Construction
  - Standard Work Specification (SWS) <a href="https://sws.nrel.gov">https://sws.nrel.gov</a>

# 10. Exam Security

Exams are highly confidential materials. Any attempts to willfully compromise the integrity of the exam, the exam process, or the certification process shall be taken seriously; offenders may be prosecuted to the fullest extent of the law. In addition, any certification credential may be revoked immediately if a breach is proven to have been made by a certified individual.

# 11. Granting

In order to receive EA certification, the candidate must meet all prerequisite requirements, as well as successfully complete both the multiple-choice (online) and practical (field) exams. No exam results or certifications will be awarded until after the pilot closes and the cut score has been set. Candidates will be contacted with their results.

# 11.1 Confidentiality of Information

BPI and BPI Test Centers shall adhere to all policies and procedures regarding candidate confidentiality and shall not release any information regarding any candidate or Certified Professional without obtaining prior written permission. Forms for this purpose are provided as part of the application. This disclosure form is intended to assist BPI and the BPI Test Center to protect the candidate's or Certified Professional's information.

#### 12. Surveillance

Surveillance of the Certified Professional is established to ensure compliance to the policies and procedures for which the certification was granted. The certification of the individual may be withdrawn or revoked due to Certified Professional's negligent refusal to follow the certification scheme requirements or failure to take appropriate corrective action as required by BPI.

#### 13. File Review

The Certification Department will conduct a file review of Certified Professionals that have complaints filed against them. The review of the Certified Professional's file activities includes confirmation that any complaints against the Certified Professional have been resolved.

#### 14. Corrective / Preventative Action

The corrective / preventative action shall include one of the following and is determined on a case by case basis at the discretion of BPI:

**Level One:** A corrective action will be given when the infraction is considered minor in nature. A written warning shall be sent to the Certified Professional about the nature of the infraction along with the required corrective action. The written warning shall become part of the Certified Professional's record.

**Level Two:** A corrective action will be given when the infraction is considered major in nature and requires proof. A written warning is sent to the Certified Professional about the infraction. The Certified Professional is required to submit proof, in writing, that the infraction has been corrected. The written warning and response will become part of the Certified Professional's record.

#### 15. Withdrawal of Certification

Should the BPI certified Energy Auditor not maintain certification by not being able to fulfill the obligation of the certification due to illness, disability, change of profession, etc., the certification will be withdrawn at the request of the Certified Professional. BPI must be notified immediately if a Certified Professional may not be able to, or is no longer able to, fulfill the requirements of the certification.

BPI reserves the right, on a case by case basis, to withdraw a person's BPI Certification(s) at its discretion. Reasons for withdrawal of a BPI Certification include, but are not limited to:

- Failure to take steps to submit the requested information of a corrective action as outlined in Section 15
- Failure to follow the BPI Energy Auditor Code of Ethics and/or Code of Conduct
- Failure to follow BPI Standards that align with the certification's JTA's, when applicable

In the event the BPI Energy Auditor certification is withdrawn; the BPI Manager of Client Relations will review the Certified Professional's record and send confirmation of the withdrawal within thirty (30) days and provide a written statement in regard to steps that must be taken if the candidate requests the certification be reinstated.

Use of the BPI logo or brand and representation of being BPI certified must cease immediately if a certification is withdrawn, revoked, or expired.

# 16. Complaints

BPI recognizes that there are two main types of complaints that may be brought to its attention:

- Complaints regarding BPI and/or its related vendor organization (administrative, testing, Test Center, proctor, etc.)
- Complaints regarding BPI Certified Professionals or organizations with BPI Certified Professionals on staff

#### **Complaints Process**

To file a complaint, the individual must follow the procedures, below:

- Individuals who wish to file a complaint pertaining to any aspect of the certification or testing process, work performed by other BPI Certified Professionals, or any other BPI related concerns, please follow the procedures below:
  - Submit the Complaint Form via the <u>BPI website</u>,
  - b. Send a letter via registered mail to: Building Performance Institute, Inc. Attn: Complaints 107 Hermes Road, Suite 210 Malta, NY 12020
  - c. Send an email to Complaints@bpi.org
- 2. The request for review must provide specific details for the complaint and any type of documented information that pertains to the situation.
- 3. The review will be carried out on a case by case basis by the Quality Assurance (QA)

  Department. Review results will be forwarded to the Director, who will provide the decision to
  the complainant, via email, within thirty to forty (30 40) days of receiving the complaint.

#### 17. Comments

Submit any comments regarding the pilot exams or processes to Pilot@bpi.org.

# Appendix A - Code of Conduct

By obtaining the Energy Auditor Certification, you are agreeing to the terms and conditions of BPI's Code of Conduct.

#### 1. Code of Conduct

Certification may be denied, suspended, or revoked, if an individual is not in compliance with this Code of Conduct. Grounds for disciplinary action include (but are not limited to):

- 1. An irregular event in connection with an exam, including (but not limited to) copying exam materials, causing a disruption in the testing area, and failure to abide by reasonable exam administration rules;
- 2. Taking the exam for any purpose other than that of becoming certified in the technical area referenced in the title of the exam;
- 3. Disclosing, publishing, reproducing, summarizing, paraphrasing, or transmitting any portion of the exam in any form or by any means, verbal, written, electronic or mechanical, without the prior expressed written permission;
- 4. Providing fraudulent or misleading information;
- 5. Failure to pay fees when due;
- 6. Unauthorized possession or misuse of certifications;
- 7. Misrepresentation of certification status:
- 8. Failure to provide requested information in a timely manner;
- 9. Impairment of professional performance because of habitual use of alcohol, drugs, or other substance, or any physical or mental condition;
- 10. Gross or repeated negligence or malpractice in professional work;
- 11. Failure to maintain a current professional credential as required by the jurisdiction in which the individual practices (this may include a license, certificate, or registration);
- 12. The conviction of, plea of guilty to, or plea to a felony or misdemeanor related to public safety or the building industry;
- 13. Disciplinary action by a licensing board related to a building industry; and
- 14. Other failure to maintain continuous compliance with the certification standards, policies, and procedures related to your certification.

#### 2. Disciplinary Actions

The following disciplinary actions may be taken as a result of non-compliance with this Code of Conduct:

- Denial or suspension of eligibility;
- Denial of certification;
- Revocation of certification;
- Non-renewal of certification;
- Suspension of certification;
- Reprimand; or
- Other corrective action.

# **Appendix B – Code of Ethics**

The Building Performance Institute, Inc. (BPI) is committed to promoting the highest level of professionalism, integrity, and ability available in the residential contracting certification industry. By obtaining the Energy Auditor Certification, you are agreeing to the terms and conditions of BPI's Code of Ethics.

This Code of Ethics for Energy Auditors is designed to foster trust and mutual respect among individuals working in the industry as well as the public at large; it is intended to increase the esteem of the credentials and of the individuals who have earned them. This Code does not discourage healthy competition within the industry. BPI considers industry relationships critical to the industry's success. This Code is also not intended to limit the ability of energy auditors to earn fair compensation for their services. BPI's goal is to promote the professionalism of energy auditors' work products and thereby to enhance their quality.

#### I. Avoiding Conflicts of Interest

- A. Energy auditors shall not participate in professional activities involving a conflict of interest. A conflict of interest occurs when an energy auditor is inappropriately motivated by any financial, personal, or professional purpose other than the fulfillment of work orders. Work order fulfillment means the delivery of paid professional services, as specified, that skillfully, completely, and usefully meet the client's or employer's stated needs and desires, in compliance with all applicable codes, regulations, and standards.
- B. Energy auditors shall avoid, whenever possible, even the appearance of a conflict of interest and shall disclose all potentially questionable associations and relationships in advance to any stakeholder with a legitimate right to be informed of them.
- C. Energy auditors shall not accept any form of compensation for recommending products or services to clients or other parties.
- D. When asked for professional recommendations, energy auditors shall direct the client to the official sources for up-to-date lists of Certified Professionals and accredited contracting companies before making any personal referrals. Personal referrals and recommendations are acceptable provided that they do not violate any article within this Code of Ethics.

#### II. Professionalism and Integrity

- A. Energy auditors shall comply with all safety-related regulations, warnings, and instructions set forth by local, state, or federal organizations and other recognized safety organizations.
- B. Energy auditors shall report to all appropriate parties any safety and security concerns directly related to any work performed by any previous or other current contractors or employees. Energy auditors shall report any additional safety and security concerns to the client.
- C. Energy auditors shall guide or perform work based on best practices and standards in the field, using diagnostics, testing and visual inspection within their areas of education, training, and expertise.
- D. Energy auditors shall provide professional services that effectively guide their clients to reduce energy consumption, improve health and safety, and increase the lifespan of the building while also improving the quality of life and comfort for building occupants.
- E. Energy auditors shall help their clients to evaluate the costs and benefits of available energy efficiency options in a way that promotes the clients' best interests, in full compliance with applicable codes, standards, and regulations.

#### III. Representation of the Energy Auditor Profession and Self-Representation

- A. Energy auditors shall neither misrepresent nor knowingly deceive others concerning their experience and capabilities.
- B. Energy auditors shall neither misrepresent nor misuse their certification.
- C. Energy auditors shall not engage in any conduct that is detrimental to the reputation or the best interests of the Energy Auditor Certification, the profession, or the industry as a whole.
- D. Energy auditors shall act professionally at all times and in the best interests of the client and employer. Energy auditors shall not act in any way that denies or impedes competent, timely, and professional service to the client or employer.
- E. Energy auditors shall not willfully damage, or by negligence or indifference allow to be damaged, any property belonging to clients or employers. Energy auditors shall take reasonable means to protect the owner's health, safety, property, and possessions and also to prevent the undue loss, theft, waste, and dissipation of the owner's funds, resources, and supplies.
- F. Energy auditors shall not betray the trust that property owners and employers have placed in them by inviting them to work in their homes and businesses.
- G. Energy auditors shall ensure that any individuals working under their supervision will act in a professional manner, in compliance with all applicable laws, regulations, and standards, and in compliance with all articles specified by this Code of Ethics.

#### IV. Maintaining Confidentiality

- A. Energy auditors shall not discuss or disclose to third parties any confidential information about properties, employers, and clients, unless required by court order to do so. Confidential information is defined here as names, addresses, phone numbers, financial data, personal details, vulnerabilities, defects, measurements, diagrams, blueprints, photographs, recordings, electronic versions, and other descriptions or representations that only the employers or clients have a right and a need to know about and disseminate.
- B. Energy auditors must not, without permission, disclose private, confidential information about any client or employer for the use or interests of any third parties whose services and opinions have not been explicitly requested by the client or employer. Energy auditors may discreetly discuss their own work and working conditions with their family and associates, but not in any way that violates the privacy of the employers, clients, and relevant family members.

#### V. Disciplinary Actions and Appeal

- A. Violation of any article of this Code of Ethics could result in disciplinary actions including the revocation of the Energy Auditor Certification.
- B. Energy auditors have the right to appeal any disciplinary decisions to the certifying body.

# Appendix C - BPI Certification Agreement

#### **BPI Certification Agreement**

Energy Auditor applicants will be required to accept BPI's Candidate Certification Agreement before beginning your exam. Make sure to read and be familiar with this agreement before you take your exam.

BY SIGNING YOU ARE AGREEING TO THE TERMS AND CONDITIONS OF THIS CANDIDATE CERTIFICATION AGREEMENT. CANDIDATE OR CERTIFIED INDIVIDUAL MAY TAKE THE EXAM ONLY IF CANDIDATE OR CERTIFIED INDIVIDUAL AGREES TO THE TERMS AND CONDITIONS OF THIS AGREEMENT. IF CANDIDATE OR CERTIFIED INDIVIDUAL DOES NOT AGREE TO THE TERMS AND CONDITIONS, CANDIDATE OR CERTIFIED INDIVIDUAL SHALL SELECT "NO, I DO NOT AGREE" BELOW AND WILL NOT BE ALLOWED TO TAKE THE EXAM.

BPI and Candidate or certified individual hereby agree that the terms and conditions of the Agreement shall govern Candidate or certified individual's participation in BPI's Certification Exam and BPI's Certification.

#### 1. CERTIFICATION

- a. The Candidate or certified individual must:
  - meet the prerequisites
  - pay the applicable exam fees;
  - accept the terms and conditions of this Agreement before completing the Exam;
  - pass the exam(s)
  - keep contact information up to date
- b. Modification to Certification Requirements. BPI's Director level staff may expand or reduce the title or scope of the desired certification or withdraw the certification.
- c. Termination. Candidate or certified individual may terminate this Agreement at any time upon written notice to BPI. The Certification or certified individual is valid for a period of three (3) years after the date of passing the last qualifying exam. If the candidate or certified individual chooses to terminate this agreement prior to the expiration date of their certification, the certification, including all related material, must be surrendered and will be void. Upon termination of this Agreement and after the expiration of the Certification, all rights related to the Candidate's Certification, including all rights to use the Certification and the Logo, will immediately terminate.

#### 2. COMPLIANCE WITH TESTING REGULATIONS

Candidate or certified individual agrees to comply with all testing regulations required by BPI and/or its Test Centers and testing centers.

- d. No Cheating. Candidate or certified individual agrees that all answers submitted in completing the Exam and are entirely their own. Candidate or certified individual will neither: (i) provide nor accept improper assistance; nor (ii) use unauthorized materials in attempting to satisfy Certification Requirements.
- e. No Misconduct. Candidate or certified individual agrees not to (i) falsify his or her identity or impersonate another individual; (ii) forge the Certification, Exam score reports, identification cards or any other Exam records; (iii) engage in fraudulent conduct or misrepresent him or herself as Certified when he or she has not successfully met the applicable Certification Requirements; (iv) misuse or disclose username and/or password or any other Certification identities; and/or (v) engage in any other misconduct that could be considered by BPI, in its sole discretion, as compromising the integrity, security or confidentiality of the Exam or the Certification.
- f. No Disclosure. Candidate or certified individual understands and agrees that the Exam is BPI's confidential and proprietary information. Candidate or certified individual agrees to maintain the confidentiality of the Exam and not disclose, whether verbally, in writing or in any media, the contents of the Exam or any part of the Certification. Further, Candidate or certified individual agrees not to request any other individual to disclose the Exam or any part thereof to the Candidate or certified individual.

g. No Misuse of the Exam. Candidate or certified individual agrees not to copy, publish, offer to sell, sell, publicly perform or display, distribute in any way or otherwise transfer, modify, make derivative works thereof, reverse engineer, decompile, disassemble or translate the Exam or part thereof.

#### 3. BPI ACTION FOR NON-COMPLIANCE

h. Candidate or certified individual understands and agrees that, if for any reason and at its sole discretion, BPI believes the Candidate or certified individual violated the terms of this agreement or the criteria against which the competence of a person is evaluated in accordance with the scheme of the certification. BPI has the right to deny Candidate or certified individual any further participation in the Exam, cancel a passed Exam result, remove the Candidate or certified individual's certified status and any other rights previously conferred on the Candidate by BPI, and to permanently bar Candidate or certified individual from any further participation in BPI's Certification.

#### 4. WITHDRAWAL OF CERTIFICATION

i. Should the certified individual not maintain or not continue to prove their competence for this certification to the satisfaction of BPI, the certification will be withdrawn. In the event the certification is withdrawn, the BPI certification operations manager will review the certified individual's record and provide a written statement in regards to steps that will be taken in order for the certification to be reinstated.

Reasons for withdrawal of an individual's certification by BPI include, but are not limited to:

- Failure of the multiple-choice test instrument.
- Failure of field evaluation.
- Verification of a complaint by building owner or the owner's representative for failure to meet installation requirements and then not correcting the deficiency.
- Failure to take steps to correct improper practices.
- j. If the certified individual may not be able or is no longer able to fulfill the requirements of the certification the certified individual must notify BPI immediately and surrender all certification documents, such as BPI ID Card and BPI Certificate to BPI, and cease using any logo or marketing materials.

#### 5. REPRESENTATIONS AND WARRANTIES

- k. By the Candidate or certified individual. Candidate or certified individual represents and warrants that: (i) Candidate or certified individual will refrain from any conduct that may harm the goodwill and reputation of BPI or its products and (ii) Candidate or certified individual shall not make any representation, warranty or promise on behalf of or binding upon BPI and (iii) Candidate or certified individual shall not make claims regarding certification outside of the intended scope of the appropriate certification.
- Candidate or certified individual agrees to not use the certificate in a manner that is misleading or unwarranted.

#### 6. INDEMNIFICATION

m. Candidate or certified individual agrees to indemnify, defend and hold BPI harmless against any losses, liabilities, damages, claims and expenses (including attorneys' fees and court costs) arising out of any claims or suits, whatever their nature and however arising, in whole or in part, which may be brought or made against BPI, or its Test Centers, officers, employees or assigns, in connection with: (i) any personal injury, property damage or other claims which are caused, directly or indirectly by any negligent act, omission, illegal or willful misconduct by the Candidate or certified individual, (ii) Candidate or certified individual's use or misuse of the Certification and/or the Logo; (iv) Candidate or certified individual's use or misuse of BPI' confidential information; and/or (v) Candidate or certified individual's breach of any obligations or warranties under this Agreement.

#### 7. LIMITATION OF LIABILITY

n. Damages. BPI shall not be liable for any indirect, incidental, special, punitive, or consequential damages or any loss of profits, revenue, or data. BPI's liability for direct damages, whether in contract, tort or otherwise, shall be limited to the fees paid to BPI under this Agreement.

#### 8. CONFIDENTIALITY UNDERTAKING

- o. By signing this Agreement, Candidate or certified individual agrees to all terms and conditions herein
- p. Candidate agrees (i) to hold Confidential Information in confidence and take all reasonable precautions to protect it, (ii) not to, directly or indirectly, use Confidential Information at any time during the certification procedure, the performance of the Exam and thereafter, and (iii) not to, directly or indirectly, disclose, publish, reproduce or transmit any Confidential Information completely or in part to any third party, in any form, including but not limited to verbal, written, electronic or any other means for any purpose without the prior express written permission of BPI.

q. BPI retains all rights, title and interest in and to all information, content and data contained in the Exam and all copyrights, patent rights, trademark rights and other proprietary rights thereto provided by BPI under the certification procedure and Exam.

Upon any breach by the Candidate or certified individual of the confidentiality undertaking in the Candidate Certification Agreement, BPI may automatically and without notice withdraw Candidate's Certification. Further, BPI is entitled to pursuing any other available remedy for unauthorized disclosure or for breach of the confidentiality undertaking in said Agreement.

## Appendix D - Candidates with Special Testing Accommodations

#### **Candidates with Special Testing Accommodations**

The Americans with Disabilities (ADA) Act provides comprehensive civil rights protection for qualified individuals with disabilities. An individual with a disability is a person who: (1) has a physical impairment or a mental impairment that substantially limits a major life activity, (2) has a record of such impairment, or (3) is regarded as having such an impairment.

The ADA does not specifically name all of the impairments that are covered. If you have a disability, you have the right to inquire and receive information about testing accommodations.

"Testing Accommodation" means an adjustment to or modification of the standard testing conditions that eases the impact of the applicant's disability on the exam process without altering the nature of the exam.

As an applicant claiming a disability that requires testing accommodations, the applicant must properly complete the Special Testing Accommodation form. The burden of proof is on the applicant to establish the existence of a disability protected the Americans with Disabilities Act, as well as to establish the need for testing accommodations. Each application is evaluated on a case by case basis.

Qualified individuals with disabilities are required to request accommodations every time they plan to take the exam. It is in the candidate's best interests to provide recent and appropriate documentation, which clearly defines the extent and impact of the impairment(s) upon current levels of academic and physical functioning.

- Request for accommodations and appropriate supporting documentation, which when completed, should provide evidence of a substantial limitation to physical or academic functioning.
- Clinical evaluations and exams of the candidate that have resulted in a diagnosis of a physical or mental
  impairment must have been performed by a licensed/certified or otherwise qualified professional with
  credentials appropriate to diagnose a candidate's disability consistent with the provisions of the ADA.
   Details about the professional's area of specialization and professional credentials must be provided.
- Documentation must be submitted on official letterhead from a licensed or qualified professional who
  examined the candidate and diagnosed a physical or mental impairment. Depending on the disability and
  written evaluation, documentation may include a letter from a physician or a detailed report.
- Document must be no more than 3 years old.
- Documentation for all disabilities should describe the extent of the disability and recommended accommodations.

A diagnosis of Attention Deficit Disorder (ADD) or Attention Deficit Hyperactivity Disorder (ADHD) must be supported by a current (administered within the past three years) comprehensive evaluation and relevant neuropsychological or psychoeducational assessment batteries. The report must include documented information that the patient meets criteria for long standing history, impairment, and pervasiveness. The report must include specific diagnosis of ADHD based on the DSM-IV diagnostic criteria.

- Candidate Application for Special Testing Accommodations, or go to www.bpi.org
- <u>Provider Application for Special Testing Accommodations</u>, or go to <u>www.bpi.org</u>
- Clinical evaluation on official letterhead (letter or detailed report)

Please submit the forms at least 2 weeks prior to your scheduled exam.

Once these forms have been reviewed the applicant will receive notification of approval or denial from BPI. If approved, you must bring the approval notice with you to the BPI Test Center.

# **Appendix E – Language Barrier Testing Accommodations**

#### **Language Barrier Testing Accommodations**

If you have difficulty in comprehending the language of the exam, you have the right to inquire in advance of testing whether any accommodations may be available to you. BPI shall allow the candidate, at his or her expense, to have an interpreter present at either online or field exam, provided that the interpreter is a bona fide interpreter that is engaged in that profession and that is pre-approved by BPI.

BPI Standard Testing Accommodations for candidates with a language barrier.

#### **Online Exams:**

Exam times will be doubled.

#### Field Exams:

Exam times will be doubled.

• Candidate Application for Language Barrier Testing Accommodations, or go to www.bpi.org

Please submit the form at least 2 weeks prior to your scheduled exam.

Once the form has been reviewed, the applicant will receive notification of approval or denial from BPI. If approved, you must bring the approval notice with you to the BPI Test Center.

#### **Terms and Definitions**

**Appeal –** Request by applicant, candidate or Certified Professional for reconsideration of any adverse decision made by the certification body related to her/his desired certification status.

**Candidate** – Applicant who has fulfilled specified prerequisites, allowing his/her participation in the certification process.

**Certified Professional –** An individual who successfully passes the BPI online and field exam requirements for certification.

**Certification Process** – All activities by which a certification body establishes that a person fulfills specified competence requirements, including application, evaluation, decision on certification, surveillance and recertification, use of certificates and logos/marks.

**Certification Scheme –** Specific certification requirements related to specified categories of persons to which the same particular standards and rules, and the same procedures apply.

**Certification System –** Set of procedures and resources for carrying out the certification process as per a certification scheme, leading to the issue of a certificate of competence, including maintenance.

**Competence –** Demonstrated ability to apply knowledge and/or skills and, where relevant, demonstrated personal attributes, as defined in the certification scheme.

**Complaint –** Conformity assessment request by any organization or individual to a certification body, for corrective action relating to the activities of that body or to those of any of its customers.

**Evaluation –** Process that assesses a person's fulfillment of the requirements of the scheme, leading to a decision on certification.

**Exam –** Mechanism that is part of the evaluation, which measures a candidate's competence by one or more means such as online, oral, practical and observational.

**Essential Learnings –** Comprehensive list of Energy Auditor functions and tasks as determined by a job task analysis.

**Proctor** – Person with relevant technical and personal qualifications, competent to conduct and/or score an exam; an individual approved to administer BPI certification exams.

**Qualification –** Demonstration of personal attributes, education, training and/or work experience.

**Recertification** – Process of confirming conformity with current certification requirements.

**Scheme Committee –** Group of people chosen by the certification body to provide input, recommendations, guidance and review of a certification scheme.

**Surveillance –** Periodic monitoring during the period of certification of a Certified Professional's performance to ensure continued compliance with the certification scheme

**Test Center** – An organization with a legal agreement between itself and BPI; authorized to give BPI certification exams.