



# Retrofit Installer Technician

CERTIFICATION SCHEME HANDBOOK



## **Notice**

A person, who is considering becoming certified as a Retrofit Installer Technician, needs to know what the scope of the certification is and what the requirements to become certified are.

This certification scheme handbook outlines the knowledge, skills and abilities needed for installers to be certified as a Retrofit Installer Technician.

Information in this handbook represents the policies at the date of publication for BPI Retrofit Installer Technician certification. Information in this handbook supersedes information contained in any previous published documents.

© 2017 Building Performance Institute, Inc. All Rights Reserved.

## **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 [www.bpi.org](http://www.bpi.org). 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.

## Table of Contents

Table of Contents.....	i
1. About BPI.....	1
2. BPI Certification Schemes.....	1
3. Outline of the Retrofit Installer Technician Certification.....	2
4. Multiple Choice Exams.....	2
5. Practicum (Field) Evaluation (Abilities).....	3
6. Exam Retake Policy.....	3
7. Examination Security.....	3
8. Functions and Tasks.....	3
9. Retrofit Installer Technician Exam Blueprint (multiple-choice).....	14
10. Retrofit Installer Technician Exam Blueprint (field).....	15
11. Standards of Reference.....	16
12. Preparing for Certification.....	16
13. Granting.....	18
14. Maintaining Your Certification.....	19
15. Recertification.....	19
16. Surveillance.....	19
17. File Review.....	20
18. Corrective / Preventative Action.....	20
19. Withdrawal of Certification.....	20
20. Appeal Procedure.....	20
21. Complaints.....	22
Appendix A – Code of Conduct.....	23
Appendix B – Code of Ethics.....	25
Appendix C – BPI Certification Agreement.....	27
Appendix D – Candidates with Special Testing Accommodations.....	30
Appendix E – Language Barrier Testing Accommodations.....	31
Appendix F – Continuing Education Units (CEUs) for HEP Certifications.....	32
Terms and Definitions.....	36

## 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 written and field exams resulting in one of BPI's 14 professional certifications.

BPI also offers 3 programs ([BPI GoldStar Contractor](#) for companies, [Rating Program](#) for raters, and [BPI Product Listing](#) for manufacturers) and one certificate ([Building Science Principles](#)). 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 – 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 certification outlined in this handbook is for retrofit installer technicians who are involved in the retrofit of existing residential buildings. For a full listing of certifications, see the [www.bpi.org](http://www.bpi.org) website.

For individuals to become BPI 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 Retrofit Installer Technician Certification**

This certification scheme handbook outlines the knowledge, skills and abilities requirements for Retrofit Installer Technicians.

This scheme defines a Retrofit Installer Technician as the following; A Retrofit Installer Technician is an energy efficiency professional who installs energy efficiency upgrades in single-family homes, and small multi-family housing (2-4 units). A committee of subject matter experts (SMEs) considered to be experts in the field created the Retrofit Installer Technician Job Task Analysis (JTA).

This document is intended to include all of the tasks a Retrofit Installer Technician 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 persons must comply with applicable federal, state and local laws and regulations governing the profession.

### **4. Multiple Choice Exams**

For this certification, a multiple-choice test instrument will be administered in order to ensure competency in the critical tasks defined by BPI.

The multiple-choice exam is comprised of one hundred (100) questions to cover knowledge and skills and will be timed at two (2) hours (2 hrs). The multiple-choice exam consists of multiple versions, each determined to have its own minimum passing score through psychometric analysis and the Modified Angoff standard-setting procedure. The results page during the online exam session will indicate whether a candidate was successful or not based on the version they were administered.

You may take the written exam up to six (6) times in a one-year period, beginning after the first attempt. There is a cost for each test. BPI permits twelve (12) months to complete the certification process from the time a candidate takes the first exam. Candidates who do not complete the certification process within one year must retake the online and field exams.

This exam is a closed-book exam with the exception of BPI Standards available to view online via the testing site (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 Test Center Proctor while taking the exam. This includes direct observation by the examiner as well as audio and video recording of your examination. Their participation in irregular behavior during the exam may result in the invalidation of the results of their examination, termination of their status, civil liability, criminal prosecution, or other appropriate sanctions.

## 5. Practicum (Field) Evaluation (Abilities)

A practical evaluation to determine the candidates' abilities has been developed by BPI in order to ensure competency in the critical tasks defined by BPI. 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. The candidates are provided direction and given the proper tools and equipment to undertake completing the task. Their abilities are then evaluated based on a predetermined set of criteria.

The candidates will follow the instructions outlined in the abilities section of the functions and tasks outlined in this document.

The practicum evaluation consists of 7 distinct props that candidates will complete work on. 3 of the props will be depressurized by approximately 75 Pa by the proctor. Any sign of smoke movement within the prop will indicate a failure on the prop, however, not necessarily on the entire exam.

The time limit for the practicum evaluation is 4 hours (4 hrs). 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 passing mark on tasks is 87%.

You may take the field exam up to six (6) times in a one-year period, beginning after the first attempt. There is a cost for each test. BPI permits twelve (12) months to complete the certification process from the time a candidate takes the first exam. Candidates who do not complete the certification process within one year must retake the online and field exams.

The practicum evaluation will be administered at various locations across the United States as determined by the locations of the various BPI Test Centers.

## 6. Exam Retake Policy

Once an exam is completed, candidates must wait a minimum of one hundred sixty-eight (168) hours [seven (7) twenty-four (24) hour days] before a retake exam may be attempted.

## 7. Examination Security

Examinations are highly confidential materials. Any attempts to willfully compromise the integrity of the examination, the examination 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.

## 8. Functions and Tasks

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

- Knowledge, typically shown on written or verbal test

- Skill, typically shown on written test, diagram, or interactive tool
- Ability, typically demonstrated on prop or in house

<b>DOMAIN 1: Maintain Safety</b>	
<b><i>Task 1: Follow work rules of jurisdiction having authority</i></b>	
<b>Ability to:</b>	
•	Read or hear safety documents
•	Implement safety procedures
•	Report safety concerns and violations
•	Wear safety equipment
•	Attend safety meetings/trainings
•	Request safety training
•	Install safety guards
<b>Knowledge of:</b>	
•	Installation procedures
•	Manufacturer's specifications
•	OSHA
•	Safety systems
<b><i>Task 2: Handle materials/equipment according to manufacturer specifications</i></b>	
<b>Ability to:</b>	
•	Read or hear manufacturer's specifications/Material Safety Data Sheets (MSDS)
•	Store and maintain materials/equipment according to manufacturer's specs/MSDS
<b>Knowledge of:</b>	
•	Manufacturer's specifications
<b><i>Task 3: Handle tools according to manufacturer specifications</i></b>	
<b>Ability to:</b>	
•	Read or hear manufacturer's specifications
•	Store and maintain tools according to manufacturer's specs
<b>Knowledge of:</b>	
•	Manufacturer's specifications
<b>DOMAIN 2: Prepare for the job (before arriving at the job site)</b>	
<b><i>Task 1: Attend Training</i></b>	
<b>Ability to:</b>	
•	Participate in training
•	Identify your strengths and weaknesses
•	Modify installation practice based on training
•	Sign in to training
<b>Knowledge of:</b>	
•	Existing practice
•	Safety procedures
<b><i>Task 2: Gather materials and supplies</i></b>	
<b>Ability to:</b>	
•	Review list of materials
•	Compare materials to work scope
•	Verify and protect condition of materials
•	Organize materials (put in truck, pull from truck, etc.)
•	Report missing or deficient material
<b>Knowledge of:</b>	
•	Compatibility
•	Materials handling
•	Materials
•	Materials limits

•	MSDS
•	Physical limits of materials
•	Work scope
<b>Task 3: Gather tools</b>	
<b>Ability to:</b>	
•	Review tool list
•	Compare tools to work scope
•	Verify and protect tools condition
•	Load/unload tools
•	Report missing or deficient tool
•	Modify tools for specific job requirements (change bits/blades)
<b>Knowledge of:</b>	
•	Work scope
•	Manufacturer's specifications
•	Materials handling
•	Lifting safety
•	Normal tool operations
<b>DOMAIN 3: Prepare and maintain tools and materials on-site</b>	
<b>Task 1: Set up tools</b>	
<b>Ability to:</b>	
•	Unload tools from vehicle
•	Connect attachments
•	Plug in tools
•	Verify operational status
•	Perform routine maintenance
•	Report deficiencies
<b>Knowledge of:</b>	
•	Carrying techniques
•	Double insulated tools
•	Electrical safety
•	GFCI
•	Lifting techniques
•	Manufacturer's specifications
•	Normal operations
•	Tool recognition
•	Work scope
<b>Task 2: Set up materials</b>	
<b>Ability to:</b>	
•	Unload materials from vehicle
•	Organize materials
•	Confirm materials match work specification
•	Maintain integrity of materials
•	Report deficiencies
<b>Knowledge of:</b>	
•	Job site
•	Lifting techniques
•	Materials
•	Materials limits and characteristics
•	Work scope



<b>DOMAIN 4: Prepare and maintain job site</b>	
<b><i>Task 1: Attend job site safety meeting</i></b>	
<b>Ability to:</b>	
•	Attend
•	Participate
•	Sign in
<b><i>Task 2: Implement safety protocol (rigging, ventilation, blocking)</i></b>	
<b>Ability to:</b>	
•	Set up safety masking and drop cloths
•	Set up ventilation in confined spaces
•	Set up task lighting
•	Hook up to fall protection
•	Put on Personal Protective Equipment (PPE)
•	Set up ladders, scaffolding, climbing equipment
•	Lock out/tag out
•	Inspect work area for hazards
•	Report work area hazards
<b>Knowledge of:</b>	
•	Combustibles
•	Confined spaces
•	Electrical safety
•	EPA lead safety
•	Equipment operation
•	Fall protection
•	Fit test
•	Hazard recognition
•	Lanyards
•	Local codes
•	Manufacturer's specifications
•	Materials
•	OSHA
•	Personal Protection
•	Safety protocols
•	Ventilation systems and requirements
•	Work scope
<b><i>Task 3: Use protective barriers (drop cloths)</i></b>	
<b>Ability to:</b>	
•	Move furniture (confirm permission)
•	Cover furniture/storage areas/clothes in closets
•	Protect furniture
•	Protect floors
•	Follow safe practices, including lead safe practices (EPA)
•	Place drop cloths, tack mats
•	Use designated facilities (eating, bathroom, smoke break)
<b>Knowledge of:</b>	
•	Adjacent characteristics
•	Electronics
•	EPA lead safety
•	Flooring characteristics
•	Lifting techniques
•	Materials characteristics

•	Safe practices
•	Work scope
<b>Task 4: Report pre-existing conditions (that are not in scope)</b>	
<b>Ability to:</b>	
•	Identify pre-existing conditions (aesthetic/structural)
•	Report pre-existing conditions
•	Report difficult to access places (excessive customer stuff, customer behavior issues)
<b>Knowledge of:</b>	
•	General construction
•	Work scope
<b>Task 5: Protect exterior environment</b>	
<b>Ability to:</b>	
•	Control dust and debris created by equipment from construction activities
•	Protect landscaping (covering, using limiting stakes)
•	Check for oil leaks
•	Report mishaps (spills, cracks)
<b>Knowledge of:</b>	
•	Work scope
•	Retaining walls
•	General landscape knowledge
•	Containment requirements
<b>DOMAIN 5: Implement work scope</b>	
<b>Task 1: Locate specific work areas</b>	
<b>Ability to:</b>	
•	Review the work scope
•	Walk the job
•	Find mechanicals
<b>Knowledge of:</b>	
•	General construction
•	General mechanical knowledge
•	Job site specifics
•	Work scope
<b>Task 2: Verify access to work areas</b>	
<b>Ability to:</b>	
•	Confirm approval for start of work
•	Work with crew chief to get access to areas (move personal belongings, get into crawl space, etc.)
•	Remove obstructions for start of work
<b>Knowledge of:</b>	
•	Work scope
•	General construction
•	Job site
•	Lifting safety
<b>Task 3a: Install air sealing measures</b>	
<b>Ability to:</b>	
•	Identify leaks and bypasses
•	Select materials
•	Look for fire code violations
•	Block large openings
•	Hand seal gaps and cracks
•	Check the seal is complete

<b>Knowledge of:</b>	
•	Clearances
•	Fire code
•	Framing components
•	How to operate a blower
•	How to utilize tracer gas
•	Leak site
•	Material capability (e.g., temperature limits, width of span sealant)
•	Material durability
•	Material strength
•	Penetrations
•	Tolerances
<b><i>Task 3b: Install loose fill insulation</i></b>	
<b>Ability to:</b>	
•	Confirm air sealing is complete
•	Confirm exhaust fans are ducted to outside and insulated
•	Confirm HVAC duct work is intact, sealed, supported and insulated
•	Confirm clearance to combustibles
•	Confirm clearance to electrical
•	Install baffles, blocking, platforms, and insulation dams
•	Install vertical insulation (6-sided boxes, kneewalls)
•	Install horizontal insulation
•	Compare material use to coverage required (bags consumed)
<b>Knowledge of:</b>	
•	Clearance
•	Combustibles
•	Component analysis
•	Coverage charts
•	Depth markers
•	Duct requirements
•	General carpentry
•	How to draw a floor plan
•	How to operate a blower
•	Insulation requirements
•	Manufacturer's specifications for installations
•	Materials
•	Rigid board types
•	R-values
•	Termination requirements
•	Thermal barriers
<b><i>Task 3c: Install or patch moisture barriers</i></b>	
<b>Ability to:</b>	
•	Confirm positive drainage, or notify of stop work items
•	Remove all organic/inorganic materials
•	Install moisture barrier and seal joints and seams
•	Verify flashing is installed
•	Identify and locate moisture sources
•	Report bulk moisture concerns
<b>Knowledge of:</b>	
•	Flashing locations
•	Grading issues

•	Gravity
•	Installation standards
•	Materials
•	Moisture problems
•	Moisture symptoms
•	Roof slope changes
•	Where to look for moisture
<b><i>Task 3d: Rough in mechanical ventilation systems</i></b>	
<b>Ability to:</b>	
•	Uncrate equipment
•	Remove old equipment
•	Cut openings in building
•	Install venting system and vent terminations
•	Install, air seal, and insulate duct
•	Identify when installation is complete
<b>Knowledge of:</b>	
•	Building science basics
•	Equipment disconnects
•	Equipment installation requirements
•	Equipment shut offs
•	Framing basics
•	Hand tool safety
•	How to read installation instructions and standards
•	Manufacturer's specifications
•	Penetration locations and water proofing
•	Protection of materials
•	Use of power tools
<b><i>Task 3e: Identify mechanical systems</i></b>	
<b>Ability to:</b>	
•	Uncrate equipment
•	Assist in removal of old equipment
•	Identify electrical components
•	Identify plumbing components
•	Identify fuel system components
•	Rough in openings in building
•	Repair, air seal, and insulate ducted distribution systems
•	Identify when installation is complete
•	Assist in installation of combustion vent system exhaust
•	Clean/replace air filters
<b>Knowledge of:</b>	
•	Asbestos hazards
•	Basic equipment requirements
•	Basic mechanical code requirements
•	Cavity protection
•	Duct installation and sealing requirements
•	Duct systems and air flow basics
•	Electrical disconnects and fuel shut-offs
•	Electrical circuit testers
•	Framing basics
•	General carpentry
•	Insulation

•	Mastics and duct-sealing materials
•	Penetration locations
•	Protection of installed insulation
•	Protection of materials
•	Sheet metal basics
•	Slope required for drainage/venting
•	Temperature of space
•	Use of power tools
•	Utility knife safety
•	Vent, fuel, and condensate piping
<b>Task 3f: Identify combustion appliance safety hazards</b>	
<b>Ability to:</b>	
•	Identify primary safety issues – ambient CO (gas leaks, system damage)
•	Assist with interim combustion safety checks
•	Assist with set-up for natural and worst-case depressurization
•	Report findings
<b>Knowledge of:</b>	
•	Combustion appliance exhaust venting systems
•	Combustion appliance safety testing
•	Draft testing basics
•	Natural vs. worst-case conditions
•	Safety protocols
•	Use of tools
•	Ventilation systems
<b>Task 3g: Install dense pack insulation</b>	
<b>Ability to:</b>	
•	Fine tune machine for application (density)
•	Locate drill points
•	Confirm building component integrity
•	Get access to all building cavities, locate all horizontal blocks
•	Check for hazards
•	Fill first cavity and confirm density stops air leakage
•	Readjust machine
•	Fill all cavities
•	Compare material use to coverage required (bags consumed)
•	Plug hole, patch weather barrier, put siding back, seal openings, caulk joints
<b>Knowledge of:</b>	
•	Basic math skills
•	Blower door testing
•	Building structures
•	Dense pack procedures
•	Drill points
•	Equipment
•	Framing
•	General carpentry
•	Hazards
•	How to probe
•	Limitations of components
•	Materials
•	Smoke testing
•	Strength of components

•	Testing procedures
•	Velocity of materials
<b>Task 3h: Install windows and doors</b>	
<b>Ability to:</b>	
•	Install windows and doors
•	Remove old windows and doors
•	Check and install waterproofing, flashing
•	Install air barrier and ensure drainage
•	Verify air tightness and drainage
<b>Knowledge of:</b>	
•	1/16 inch accuracy
•	Air
•	Basic math skills
•	Building techniques
•	Building codes
•	Building practices
•	Building science
•	Drainage planes
•	EPA lead safety
•	Fasteners
•	Flashing techniques
•	General carpentry
•	Manufacturer's specifications
•	Materials
•	Pressure
•	Quality installations
•	Vapor barriers
•	Window and door types
<b>Task 3i: Identify electrical installation needs (rough-in, fans)</b>	
<b>Ability to:</b>	
•	Resolve hazards
•	Seal penetrations and replace insulation
<b>Knowledge of:</b>	
•	Appliance requirements
•	Building codes
•	Building science
•	Clearances
•	Efficiency
•	Fire code
•	Local codes
•	Manufacturer's specifications
•	Materials
•	NEC
•	Potential damage
•	Trade-specific knowledge
<b>Task 3j: Identify plumbing installation needs</b>	
<b>Ability to:</b>	
•	Remove old equipment
•	Resolve hazards
•	Seal penetrations and replace insulation
•	Check for draft

•	Install simple efficiency measures (low-flow fixtures, pipe wrap insulation)
<b>Knowledge of:</b>	
•	Asbestos
•	Basic carpentry
•	BPI combustion safety
•	Building codes
•	Building science
•	Combustible clearances
•	Domestic water heaters
•	Drainage
•	Fuel gas code
•	Gas fitting
•	Gas fitting code
•	Gaskets
•	Grading
•	Interior finish
•	Local hazards
•	Manufacturer's specifications
•	Materials
•	Pipe insulation
•	Smooth wrench surfaces
•	Tapes
•	Temperature requirements
•	Venting
•	Vermin hazards
<b><i>Task 3k: Identify /Install roofing and flashing installation needs</i></b>	
<b>Ability to:</b>	
•	Identify leak sources
•	Repair leak source
•	Remove roofing system
•	Insulate roof deck
•	Install attic ventilation
•	Flash new penetrations
<b>Knowledge of:</b>	
•	Building science
•	Carpentry
•	Clearances
•	Debris control
•	Drainage
•	Drainage plane
•	Fall protection
•	Fasteners
•	Flashing
•	General carpentry
•	Gravity
•	Local building codes
•	Manufacturer's specifications
•	Materials
•	Math skills
•	Product installations
•	Roofing systems

•	Tools
<b>Task 4: Clean as you go (organize)</b>	
<b>Ability to:</b>	
•	Return tools to central area
•	Pick up material drops
•	Return belongings
•	Clean work area
<b>Knowledge of:</b>	
•	Disposable materials
•	Dust containment
•	EPA lead safety
•	Materials MSDS
•	Safety knowledge
•	Safety requirements
•	Solvents
•	Tool inventory
•	Tool safety
<b>Task 5: Address deviations from work scope</b>	
<b>Ability to:</b>	
•	Identify deviation
•	Report deviation
•	Request direction for modified work scope
•	Implement modified work scope
<b>Knowledge of:</b>	
•	Work scope
<b>DOMAIN 6: Wrap up</b>	
<b>Task 1: Pick up tools and materials</b>	
<b>Ability to:</b>	
•	Inventory tools and materials used
•	Clean tools and materials
•	Store tools and materials
•	Report lost or broken items
<b>Knowledge of:</b>	
•	Basic math skills
•	Manufacturer's specifications
•	Materials
•	Solvents
•	Tool safety
•	Value of materials
<b>Task 2: Clean up and close out</b>	
<b>Ability to:</b>	
•	Break down barriers
•	Pick up protective barriers
•	Contain hazardous materials
•	Contain and dispose of materials and waste
•	Dust, vacuum, mop, scrub, rake
•	Restore occupant belongings
•	Participate in final walk through inside and outside, including restoring mechanical systems
•	Report to crew chief for final inspection
<b>Knowledge of:</b>	
•	Disposal procedures



•	EPA Lead safety
•	Hazardous materials
•	Local codes
•	Local facilities
•	MSDS
•	Safe lifting practices
•	Safety procedures
•	Work scope
<b>Task 3: Participate in crew debriefing (after action review, post construction job review)</b>	
<b>Ability to:</b>	
•	Attend meeting
•	Report deficient knowledge (more instruction for installer)
•	Report what went well and what went wrong
•	Discuss homeowner concerns, complaints, and compliments
•	Offer additional safety suggestions
<b>Knowledge of:</b>	
•	Safety procedures
•	Work scope

## 9. Retrofit Installer Technician Exam Blueprint (multiple-choice)

Duties and Tasks	
<b>A</b>	<b>Maintain safety</b>
1	Code of Conduct
2	Professionalism skills
3	Follow work rules of jurisdiction having authority
4	Handle materials / equipment according to manufacturer's specifications
5	Handle tools according to manufacturer's specifications
<b>B</b>	<b>Prepare for the job (before arriving to job site)</b>
1	Attend training
2	Gather materials and supplies
3	Gather tools
<b>C</b>	<b>Prepare and maintain tools and materials on-site</b>
1	Set up tools
2	Set up materials
<b>D</b>	<b>Prepare and maintain job site</b>
1	Attend job site safety meeting
2	Implement safety protocol (rigging, ventilation, blocking)
3	Use protective barriers (drop cloths)
4	Report pre-existing conditions (that are not in scope)
5	Protect exterior environment
<b>E</b>	<b>Implement work scope</b>
1	Locate specific work areas
2	Verify access to work areas
3a	Install air sealing measures
3b	Install loose fill insulation
3c	Install or patch moisture barriers
3d	Rough in mechanical ventilation systems
3e	Identify mechanical systems
3f	Identify combustion appliance safety hazards
3g	Install dense pack insulation

	3h	Install windows and doors
	3i	Install electrical (rough-in, fans)
	3j	Identify plumbing installation needs
	3k	Install roofing and flashing
	4	Clean as you go (organize)
	5	Address deviations from work scope
<b>F</b>		<b>Wrap-up</b>
	1	Pick up tools and materials
	2	Clean up and close out
	3	Participate in crew debriefing (after action review, post construction job review)

## 10. Retrofit Installer Technician Exam Blueprint (field)

<b>A</b>		<b>Maintain Safety</b>
	2	Handle materials/equipment according to manufacturer specifications
	3	Handle tools according to manufacturer specifications
<b>C</b>		<b>Prepare and maintain tools and materials on-site</b>
	1	Set up tools
	2	Set up materials
<b>D</b>		<b>Prepare and maintain job site</b>
	2	Implement safety protocol (rigging, ventilation, blocking)
	3	Use protective barriers (drop cloths)
	5	Protect exterior environment
<b>E</b>		<b>Implement Work Scope</b>
	1	Locate specific work areas
	2	Verify access to work areas
	3a	Install air sealing measures
	3b	Install loose fill insulation
	3c	Install or patch moisture barriers
	3d	Rough in mechanical ventilation systems
	3g	Install dense pack insulation
	3h	Install windows and doors
	4	Clean as you go (organize)
	5	Address deviations from work scope
<b>F</b>		<b>Wrap-up</b>
	1	Pick-up tools and materials
	2	Clean up and close out

## 11. 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.

- BPI – Building Analyst Professional
- ASHRAE 62.2-2010
- Standard Work Specification (SWS) – <https://sws.nrel.gov/>

## 12. Preparing for Certification

There are prerequisites to take this exam or become certified. Before you register for the examination:

- Download the latest version of this handbook from [www.bpi.org](http://www.bpi.org)
- Read all information contained in this handbook in its entirety
- Refer to the Knowledge, Skills, and Abilities contained in this handbook to be sure that you understand and are capable of performing the critical tasks required of a certified retrofit installer technician
- Obtain any reference materials required for the multiple choice or field tests and study these references well in advance of taking the examination
- Download the latest application from [www.bpi.org](http://www.bpi.org) and submit to [HEPCertification@bpi.org](mailto:HEPCertification@bpi.org). *Application processing could take several weeks before a candidate will receive an approval letter to take the exam. It is recommended that a candidate submit their application at least thirty (30) days prior to the scheduled exam date.*

### 12.1 Prerequisites

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

- Education: GED/high school diploma **OR** equivalent education from another country **OR** state career readiness certificate (with a minimum score of 3 in each work key) **OR** additional points explained below
- If you have a GED/high school diploma or equivalent from another country **OR** a state career readiness certificate, you must obtain a minimum of **35 points** from any combination of activities below.
- If you do not have a GED/high school diploma or equivalent from another country **OR** a state career readiness certificate, you must obtain a minimum of **50 points** from any combination of activities below:
  - Industry specific experience (in energy efficiency and renewable energy – installing windows, doors, heating systems, insulation, air sealing, etc.); **maximum of 30 points**
    - **10 points** for each 500 hours
  - Building experience (framing, roofing, drywall, siding, etc.); **maximum of 10 points**

---

<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).

- **5 points** for each 1,000 hours
- Training from industry specific training center (training whose content can be matched against and aligns with the content of the job task analysis for the certification); **maximum of 10 points**
  - **5 points** for every 16 hours
- Industry certifications (RESNET, BPI, NATE, EPA) other certifications also considered; **maximum of 10 points**
  - **5 points** per certification

Candidates for certification must bring the approval letter sent by BPI to the Test Center who will be administering the exams as proof of meeting the prerequisite criteria. **Candidates will not be permitted to take any exam(s) without providing the approval letter to the Test Center.**

## 12.2 Special Testing Accommodations

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

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

## 12.3 Proof of Identity

Candidates must show photo identification prior to taking the exam. Please note that photo ID cannot be expired. Be sure to register with the exact same name that will be presented as identification at the exam location or you will not be allowed to take the exam.

Examples of acceptable forms of photo ID are:

- driver's license
- passport
- military identification
- employee identification card

## 12.4 Certification Fees and Scheduling

Candidates take this examination through BPI Test Centers. Test Center fees and dates the exams are available vary from Test Center to Test Center. BPI does not set these prices or times nor does BPI collect the examination fees. When attempting certification through a Test Center contact the Test Center for Test Center fees and scheduling details of examinations. To locate a Test Center please go to our website ([www.bpi.org](http://www.bpi.org)) and select BPI Test Centers under the 'Locator' tab at the top of the page.

## 12.5 Field Testing Environment

In order to ensure fairness in testing each field examinations must be conducted at a site that incorporates the minimum criteria listed below. Field examinations 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 site the candidate should also be aware to avoid potential testing issues.

Field exams for the Retrofit Installer Technician are conducted in a controlled lab environment. Candidates for this certification will perform the knowledge, skills and abilities on standard props developed and approved by BPI.

Please be aware that during the performance exam the proctor may ask questions in relation to the line item on the field examination form for clarification purposes only. Proctors should not be asking any other type of question and are NOT permitted to ask questions unrelated to or above and beyond the line items on the field examination form. If you feel that you have been asked questions which are inappropriate, please complete the "[Complaint Form](#)" located at [www.bpi.org](http://www.bpi.org).

## 13. Granting

The certification prerequisites must be met as well as successful scores on the multiple choice and practical examinations to receive certification.

### 13.1 Notification of Test Results and Certification

When test results are processed the candidate is automatically notified by email that their test results are ready to view. To view the test results the candidate must log in to the Candidate Account.

When the individual has achieved certification, an automatic email is sent to the candidate stating that certification has been awarded. Once this notification is sent a temporary certificate can be downloaded and printed from the Candidate Account. BPI will also provide the individual with a packet containing a congratulatory letter on achieving certification, a certificate of certification and a photo identification card. These certification packets typically arrive thirty (30) days after exam is received by BPI although times may vary.

The certificate and the photo identification card shall expire in three (3) years from the date of last qualifying exam.

The photo identification certification card shall contain, but is not limited to:

- name of the certified candidate
- candidate's identification number
- BPI's name and logo
- reference to a certification scheme (name of certification)
- date when certification expires

### 13.2 Time Limits for Completing Certification

BPI permits twelve (12) months to complete the certification process from the time a candidate takes the first exam. Candidates who do not complete the certification process within one year must retake the online and field exams.

### 13.3 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 your information.

## 14. Maintaining Your Certification

The Retrofit Installer Technician certification is valid for three (3) years. While there are no annual fees to maintain your certification you will be subject to surveillance as outlined in this document.

## 15. Recertification

The certified Retrofit Installer Technician will be required to renew their certification every three (3) years. The candidate will receive a courtesy email notification at 120, 90, 60 and 30 days reminding them their certification will expire. Candidates will be allowed to start the recertification process six (6) months prior to expiration. If recertification is completed more than six (6) months in advance the expiration date will change to the date of last exam.

Candidates may bypass the written exam for recertification if they accumulate 30 or more qualifying\* CEUs over the three-year period. Candidates who meet the CEU requirement will only need to take the field examination that is current at the time of recertification. If the CEU requirement is not met, the candidate must retake the written and field examination to become recertified.

\*Qualifying CEUs are defined as any educational trainings/sessions as described in Appendix F of this document (that align with the Functions and Task (knowledge, skills and abilities) section in the certification scheme handbooks.

As part of the recertification process BPI will review the certified Retrofit Installer Technician's file for any open complaints.

The recertification requirements for certified Retrofit Installer Technicians must be completed prior to re-issuance of the certification. Should there be any open complaints at the time of expiration BPI will not award recertification.

The certification of the individual shall be withdrawn or revoked due to the certified person's negligent refusal to follow the certification scheme requirements.

**\*Any attempt at recertification that is unsuccessful will end the current certification and all CEUs previously earned will become invalid for that designation. (e.g. if an attempt at the RIT field exam for recertification is unsuccessful, that will end the current RIT certification immediately, and any CEUs earned toward that RIT certification will become invalid, thus requiring the RIT online exam.)**

## 16. Surveillance

Surveillance of the certified person is established to ensure compliance to the Policies and Procedures for which the certification was granted. The certification of the individual shall be withdrawn or revoked due to certified person's negligent refusal to follow the certification scheme requirements or failure to take appropriate corrective action as dictated by BPI.

## 17. File Review

The certification department shall conduct a file review of certified persons that have complaints filed against them. The review of the certified person's file activities includes confirmation that any complaints against the certified person have been resolved.

## 18. Corrective / Preventative Action

The corrective / preventative action shall include one of the following:

**Level One:** This corrective action shall be taken when the infraction is minor in nature. A written warning shall be sent to the certified person about the infraction along with the required corrective action. This written warning shall become part of the record in the person's file.

**Level Two:** This corrective action shall be taken when the infraction requiring proof of corrective action. A written warning is sent to the certified person about the infraction. The person is required to submit proof of correction in writing that the infraction has been corrected. The warning and the written response will become part of the record in the person's file.

## 19. Withdrawal of Certification

Should the certified Retrofit Installer Technician not maintain certification or not submit requested proof of corrective action 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 Retrofit Installer Technician's record and provide a written statement in regards to steps that will be taken in order for the certification to 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.

Reasons for withdrawal of a Retrofit Installer Technician's certification by BPI include, but are not limited to:

- Failure of either examination upon recertification.
- Failure to take steps to submit requested proof of corrective action.

BPI shall be notified immediately if a certified individual may not be able to or is no longer able to fulfill the requirements of the certification.

## 20. Appeal Procedure

Candidates who wish to file an appeal of a decision on certification, against the results of an exam, or regarding the suspension of a certification, must do so in writing.

### Appeal Process for Exam Review

To contest the results of an exam, the candidate must follow the procedures, below:

1. A request for review must be made within thirty (30) business days from the date of the exam results. The request for review should be made, in writing, through the BPI website, or sent via registered mail, or email, to the Manager of Certifications Operations at BPI.

From the BPI website ([www.bpi.org](http://www.bpi.org)), under “Contact Us” select the Complaint Form and choose Exam Grade Appeal from the dropdown menu.

To send via registered mail, send requests for review to:

Building Performance Institute, Inc.  
Attn: Appeals  
107 Hermes Road, Suite 210  
Malta, NY 12020

To send via email, send requests to: [complaints@bpi.org](mailto:complaints@bpi.org)

2. The request for review must specifically state the reasons why the candidate believes the initial decision should be modified or overturned and provide information on the issue, or provide a specific reference where required procedures have not been followed.
3. The review will be carried out by the Quality Assurance (QA) Department. Review results will be forwarded to a Director, who will provide a decision, in writing, within thirty (30) business days of receiving the written determination of the reviewer.
4. If a Director concludes that the actions taken are valid, the candidate will be notified of the decision, in writing. The candidate will receive a letter by email, courier or registered mail. The candidate is deemed to have received the notice of the written review decision seven (7) business days after the notice is sent.

### **Appeal Process for Suspension of Certification**

For a review of suspension or withdrawal of certification, the candidate must follow the procedures, below:

1. A request for review must be made within thirty (30) business days of the notice of suspension or withdrawal of certification from the date of the exam results. The request for review must be made, in writing, through the BPI website, as noted above, or sent via registered mail or email to BPI at the addresses listed above.
2. The request for review must specifically state the reasons why the candidate believes the initial decision should be modified or overturned, and provide new information on the issue or provide a specific reference where required procedures have not been followed.
3. The review will be carried out by the QA Department. The QA Department will forward the results to a Director, with a request to provide a decision, in writing, within thirty (30) business days of receiving the written request for review.
4. If a Director concludes that the actions taken are valid, the candidate will be notified of the conclusion, in writing. The candidate will receive a letter by email, courier or registered mail. The candidate is deemed to have received the notice of the written review decision seven (7) business days after the notice is sent.



## 21. Complaints

If you would like to file a complaint concerning any aspect of the certification or testing process, work performed by other BPI certified individuals, or any other BPI related concerns, please use the complaint form in the sub menu under 'Contact Us' on the top of the page at [www.bpi.org](http://www.bpi.org) or email [complaints@bpi.org](mailto:complaints@bpi.org).

All complaints must be submitted in writing.

## Appendix A – 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 examination, including (but not limited to) copying examination materials, causing a disruption in the testing area, and failure to abide by reasonable test 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.

This Code of Ethics for Retrofit Installer Technicians 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 Retrofit Installer Technicians to earn fair compensation for their services. BPI's goal is to promote the professionalism of Retrofit Installer Technicians' work products and thereby to enhance their quality.

<b>I. Avoiding Conflicts of Interest</b>
A. Installers shall not participate in professional activities involving a conflict of interest. A conflict of interest occurs when an installer 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. Installers 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. Installers shall not accept any form of compensation for recommending products or services to clients or other parties.
D. When asked for professional recommendations, installers 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.
<b>II. Professionalism and Integrity</b>
A. Installers shall comply with all safety-related regulations, warnings, and instructions set forth by local, state, or federal organizations and other recognized safety organizations.
B. Installers shall report to all appropriate parties any safety and security concerns directly related to any work performed by any previous or other current installers.
C. Installers shall perform work based on best practices and standards in the field, using diagnostic and testing visual inspection within their areas of education, training, and expertise.
D. The installer shall employ building science best practices to improve safety, comfort, durability, indoor air quality, and energy efficiency.
<b>III. Representation of the Installer Profession and Self-Representation</b>
A. Installers shall neither misrepresent nor knowingly deceive others concerning their experience and capabilities.
B. Installers shall neither misrepresent nor misuse their certification.
C. Installers shall not engage in any conduct that is detrimental to the reputation or the best interests of the Retrofit Installer Technician Certification, the profession, or the industry as a whole.

D. Installers shall act professionally at all times and in the best interests of the client and employer. Installers shall not act in any way that denies or impedes competent, timely, and professional service to the client or employer.

E. Installers shall not willfully damage, or by negligence or indifference allow to be damaged, any property belonging to clients or employers. Installers 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. Installers shall not betray the trust that property owners and employers have placed in them by inviting them to work in their homes and businesses.

#### IV. Maintaining Confidentiality

A. Installers 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. Installers shall 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. Installers 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 installer's certification.

B. Installers have the right to appeal any disciplinary decisions to the certifying body.

## Appendix C – BPI Certification Agreement

### BPI Certification Agreement

Retrofit Installer Technician 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.
- l. 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 examination 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 examination. 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 examinations 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](#)
- [Provider Application for Special Testing Accommodations](#)
- Clinical evaluation on official letterhead (letter or detailed report)

If the links above do not work please navigate to [www.bpi.org](http://www.bpi.org) and select ‘Applications’ under the Documents tab at the top of the page

Please submit the forms at least 2 weeks in advance of 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 testing center.

## Appendix E – Language Barrier Testing Accommodations

### Language Barrier Testing Accommodations

If you have difficulty in comprehending the language of the test, 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 a written or practical 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.

#### **Written Examinations:**

Exam times will be doubled.

#### **Practical Examinations:**

Exam times will be doubled.

- [Candidate Application for Language Barrier Testing Accommodations](#)

*If the link above does not work, please navigate to [www.bpi.org](http://www.bpi.org) and select 'Applications' under the Documents tab at the top of the page*

Please submit the form at least 2 weeks in advance of 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 testing center.

## Appendix F – Continuing Education Units (CEUs) for HEP Certifications

Continuing Education Units (CEUs) are an integral aspect of BPI's certifications. Continuing education permits BPI certified professionals to keep up with a quickly changing industry and bypass most written exams when renewing their certification(s). Continuing education improves a certified professional's knowledge and ability to properly diagnose a home and recommend improvements.

BPI CEU Providers are existing BPI Test Centers or outside organizations who provide relevant continuing education and submit their courses to BPI for review for BPI Continuing Education Units (CEUs). Certified candidates can search for opportunities for CEUs in their candidate account or by going to the bpi website at [http://www.bpi.org/schedules\\_candidate.aspx](http://www.bpi.org/schedules_candidate.aspx). BPI does not endorse the content, instructor or guarantee quality of the course or instruction.

As an option to bypass the online testing at the time of recertification, candidates may have collected CEUs and applied them as described in Section 15 of this document. Active CEU values apply to a candidate's certification(s) at the time of renewal. The required number of CEUs used to bypass online testing will not increase when renewing multiple certifications at the same time. Acquiring CEUs is an option for recertification and is not mandatory.

### **CEUs - Self-Attesting**

BPI Certified Professionals that are self-attesting to CEUs for certification renewal must submit proof (certificates of completion must include course name, date and organization) through the [CEU Portal](#) no less than thirty (30) days prior to the certification expiration date. CEUs submitted less than thirty (30) days prior could result in those CEUs not being applied toward a candidate's recertification. If you attended a BPI preapproved class that is not showing in your candidate account, please contact the presenter directly. Proof of attendance for BPI pre-approved courses must be submitted by the presenter. The candidate is responsible for ensuring that all CEU submissions are credited in their individual BPI candidate account as there are no extensions given.

**\*Any attempt at recertification that is unsuccessful will end the current certification and all CEUs previously earned will become invalid for that designation. (e.g. if an attempt at the EA field exam for recertification is unsuccessful, that will end the current EA certification immediately, and any CEUs earned toward that EA certification will become invalid, thus requiring the EA online exam.)**

### **Categories and Category Definitions**

All material should be considered with the following ratios (number of hours of training to number of CEUs awarded):

Training Hours to CEU Ratio	Categories of CEU Consideration	
1:1	<b>BPI Whole-house Training</b>	Every hour of training earns 1 CEU (dedicated to whole-house applications and interactions and must incorporate 70% of content from the Knowledge, Skills and Abilities in the Scheme Handbook)

2:1	<b>Specialized Software</b>	2 hours of training earns 1 CEU (e.g., trades related software training, such as audit, sizing and infiltration)
2:1	<b>Non Whole-house Training</b>	2 hours of training earns 1 CEU (e.g., any non-building specific training without whole-house application, such as heating plant installation, framing, ventilation and blower door testing)
3.5:1	<b>Building Code Sessions</b>	3.5 hours of training earns 1 CEU (e.g., sessions related to building codes)
4:1	<b>Primary Certification Training</b>	4 hours of training earns 1 CEU (e.g., training designed for preparation of certification)

- **BPI Whole House Training:** Must incorporate 70% of content from BPI's Testing Knowledge Lists. (e.g. exterior/interior Inspection, lighting & appliances, combustion safety, blower door, moisture, air flow, insulation & R value, thermo dynamics-heat transfer, conduction, convection, radiation)
- **Specialized Software:** Training related to software modeling, work scope development, audit, sizing and infiltration.
- **Non Whole House Training:** Any non-building specific training without whole-house application such as heating, plant installation, framing, ventilation, blower door testing, etc.
- **Building Code Sessions:** Sessions related to building codes.
- **Primary Certification Training:** Training designed in preparation for BPI certification.

### Activities and Activity Definitions

Activity	CEU Hours Max	Proof
Technical Conferences	20 CEUs per certification cycle	Proof of attendance/ Certificate of Completion
Classroom Trainings	Unlimited	Proof of attendance/ Certificate of Completion
Webinars	10 CEUs per certification cycle	Certificate of Completion, email from presenter (included must be course name, date, organization, and length)

As Trainer	15 CEUs per certification cycle	Proof from Employer/Self Employed see below
Participation on BPI Committees (i.e., Certification Scheme Committee(s), Subject Matter Experts, Standards Technical Committee, Working Groups)	6 CEUs per certification cycle	Committee roster and active participation in meetings (e.g., voting, attendance records)
Reading Articles	10 CEUs per certification cycle	Certificate of completion including proof of successful quiz. Quiz developed by article publisher and on the article content
Author of Related Published Book	10 CEUs per book with maximum of 20 CEUs per certification cycle	Date, Title and link to published book
Write a Related Educational Article	2 CEUs per article / 10 CEUs per certification cycle	Date, Title and link to article
Presentation of Pre-Reviewed Material	10 CEUs per certification cycle	Details about the course, BPI Approval and times
Online Training	Unlimited	Certificate of completion including proof of a successful quiz. Quiz developed by presenter on course content
<b>*Certification cycle is the time between the date a certification was awarded and the expiration date.</b>		

**Technical Conference:** Specific training sessions at technical conferences that align with BPI Standards and knowledge, skills and abilities (section 8 of this document) will be granted CEU credit(s). Candidates cannot get credit for attending a conference without proof of participation in training sessions.

**Classroom Trainings:** BPI considers classroom trainings to be educational sessions in which the instructor is conducting a program that aligns with BPI Standards and knowledge, skills and abilities (section 8 of this document) in real time; the instructor and students are engaged in the educational program at the same time.

**Webinars:** BPI defines webinars as those in which the instructor and student are separated by location but the instructor is conducting the program which aligns with BPI Standards and Testing Knowledge Lists in real time.

**Trainer:** Credits can be received by an individual who is instructing/teaching any training course that aligns with the BPI Standards and Testing Knowledge Lists.

**Participation on BPI Committees:** Candidate who participates on a BPI committee can receive CEU credit.

**Reading Articles:** Credit will be allowed for Certified Professionals reading any published article(s) that align with BPI Standards and Testing Knowledge Lists and passes a corresponding quiz related to the content of the article. These articles are usually pre-approved.

**Author of Related Published Book:** Credit may be allowed for authorship of published books related to BPI Standards and Testing Knowledge Lists.

**Write a Related Educational Article:** Credit may be allowed for authorship of published articles related to BPI Standards and Testing Knowledge Lists.

**Presentation of Pre-reviewed Material:** BPI considers live presentations to be educational sessions in which the instructor is conducting the program in real time. All material needs to be reviewed and approved prior to presentation.

**Online Sessions:** BPI considers online sessions to be educational sessions that align with BPI Standards and Testing Knowledge Lists that can be accessed at any time and where there is no live instructor. Candidates must pass a corresponding quiz related to the content of the course created by the presenter.

### **Limitation of Repeat Courses**

CEUs will be awarded for activities that Certified Professionals participate in that are the same; however, a candidate will not earn CEUs for the same class taken more than two (2) times within a certification cycle.

### **Quality Assurance**

Any CEUs that are submitted must align with the Knowledge Skills and Abilities listed in the Functions and Tasks (section 8) section of this document. BPI will perform random audits on continuing education units/credits submitted by candidates. This is to ensure CEU Quality Assurance. At its discretion, BPI reserves the right to change the status, revoke or withdraw any certification or CEU submitted based on any form of non-compliance found during a routine audit. Upon a quality assurance audit, CEUs submitted could have a status change (from approved to not approved, etc.) or the number of credits could be changed which could affect recertification. Candidates are responsible for checking their candidate account to make sure they have enough CEU credits.

### **Contact Information**

Questions regarding CEUs can be addressed via email [CEUs@bpi.org](mailto:CEUs@bpi.org) or call 1-877-274-1274 ext. 292.

## Terms and Definitions

**Appeal** – Request by applicant, candidate or certified person 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 Individual** – An individual who successfully passes the BPI written 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, other than an appeal, 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.

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

**Examiner** – Person with relevant technical and personal qualifications, competent to conduct and/or score an exam.

**Essential Learnings** – Comprehensive list of Retrofit Installer Technician functions and tasks as determined by a job task analysis.

**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 person's performance to ensure continued compliance with the certification scheme