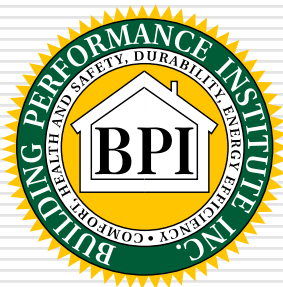


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# How BPI Certification Helps Build a Green Collar Work Force

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# What is Home Performance?

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The systematic approach to improving the comfort, health, safety, energy efficiency and durability of your customers' homes.



# Drivers for Home Performance

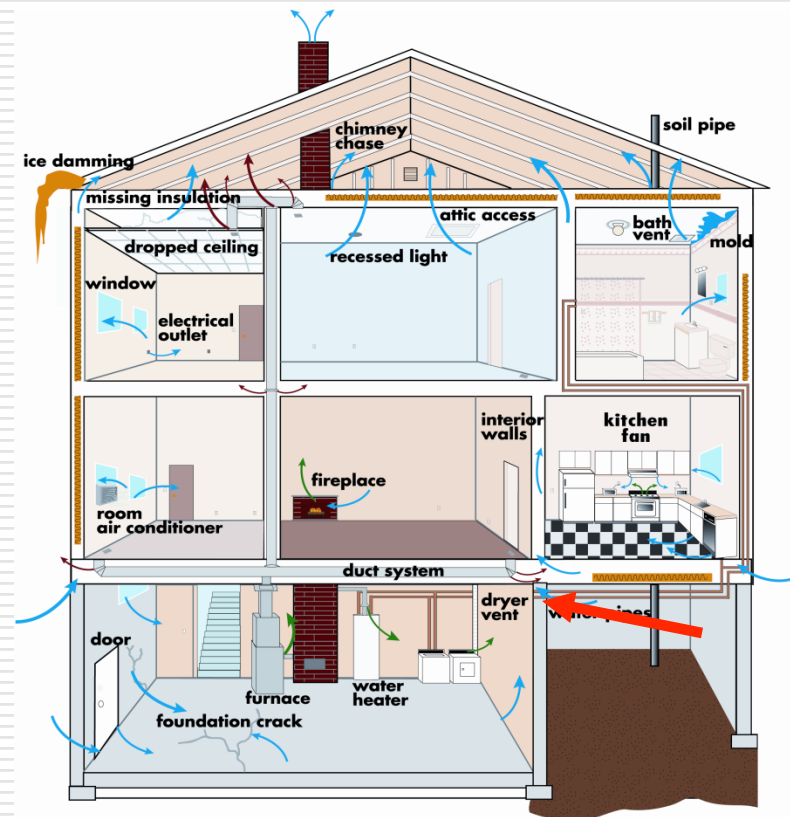
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- Dust and Allergies
- Comfort Issues (Drafts, Hot or Cold Rooms)
- High Utility Bills
- Hazardous Materials (Asbestos, etc.)
- Moisture (wet basements, mold, etc.)
- Climate Change (i.e., carbon footprint)



# Typical home...full of systems...

- ❑ Drainage system
- ❑ Foundation system
- ❑ Flooring system
- ❑ Wall system
- ❑ Ceiling system
- ❑ Roof system
- ❑ Heating system
- ❑ Air conditioning system
- ❑ Ventilation & IAQ systems
- ❑ Moisture control systems
- ❑ Distribution system
- ❑ Exhaust systems
- ❑ Plumbing systems in/out
- ❑ Electric, Appliance & Lighting systems
- ❑ Energy management system



Key Question: Do you know where your fresh air comes from?



# BPI's Role in Home Performance Contracting

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- ❑ Support the growth of a Home Performance contracting industry
- ❑ Support the transition of general and specialized trade contractors to home performance contracting
- ❑ Maintain national standards overseeing home performance contracting
- ❑ Provide a distinct brand value through an accreditation of home performance contractors coupled with independent, third party quality assurance
- ❑ Provide a series of professional certifications for the home performance trades



# What is BPI Certification?

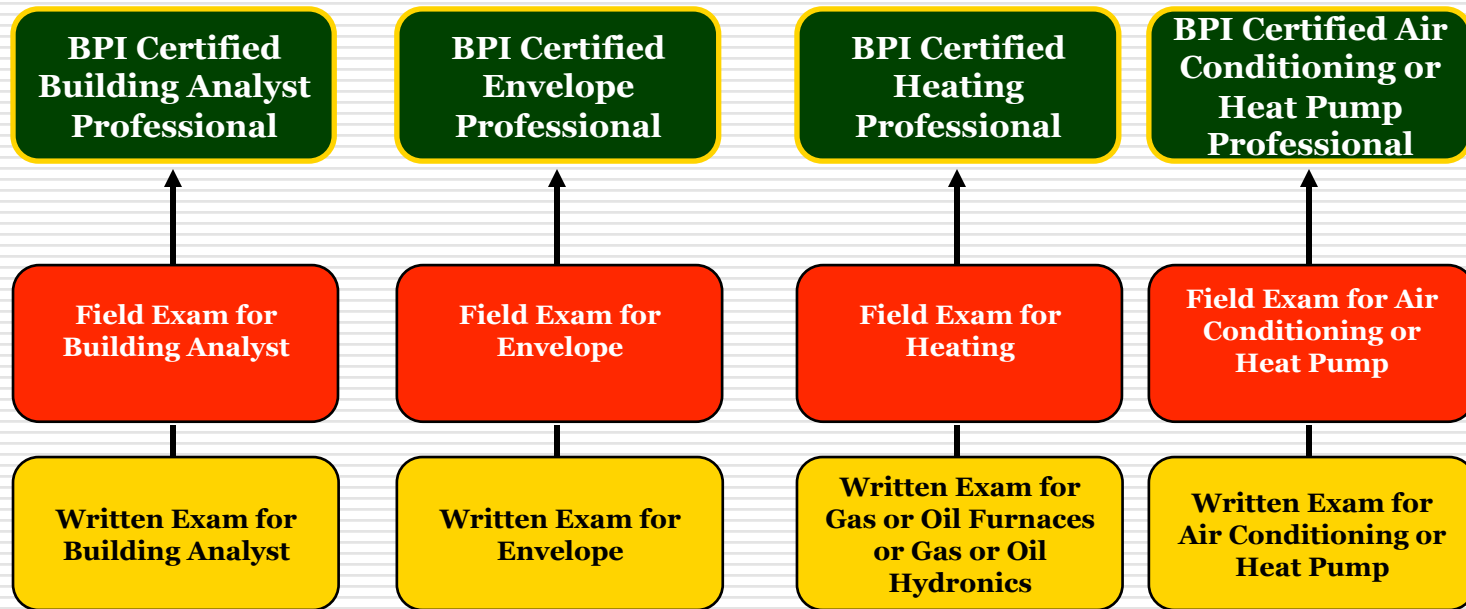
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A professional credential awarded by BPI to individuals who pass both a written and field practical test in their specialty area and agree to follow BPI's policies and procedures regarding certification.



# BPI Certification Model

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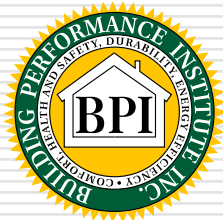


# Building Science in BPI Exams

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First time candidates in any BPI certification category take a 100 question exam. 50 of these questions relate to basic building science fundamentals (as described below) and 50 relate to the specialty area of the exam. Subsequent certifications only require the 50 question specialty exams and do not repeat the building science questions.

- Introduction to Building Science Principles
- Introduction to Building Construction
- Introduction to Basic Construction Math
- Introduction to Basic Measurement & Verification
- Professional Ethics & Conduct
- Introduction to BPI Standards
- Introduction to Tools & Equipment
- Introduction to Project Specifications
- Introduction to Installation, Operation, Maintenance Knowledge



# BPI Building Analyst Professional

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This certification is intended for those who conduct home performance evaluations and perform certain measurement and verification services with related analysis. This person can specify, sell, manage, or otherwise coordinate building performance work.

- Use of Introductory Building Science Principles
- Use of Introductory Building Construction Skills
- Use of Introductory Construction Math Skills
- Use of Introductory Measurement & Verification Skills
- Use of BPI Standards
- Use of Tools & Equipment
- Use of Project Specifications



# BPI Envelope Professional (FORMERLY SHELL SPEC.)

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This certification is intended for those who install, operate, maintain and verify the performance of envelope systems and their interaction with other building systems from a building science perspective.

- Installation and Repair of Envelope Systems
- Optimization of Envelope Systems
- Planned Maintenance of Envelope Systems
- Measurement & Verification of Envelope Systems
- Interaction of Envelope Systems with other building systems

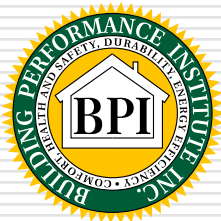


# BPI A/C or Heat Pump Professional

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This certification is intended for those who install, service, optimize, maintain and verify the performance of refrigerant based mechanical systems and their interaction with other building systems from a building science perspective.

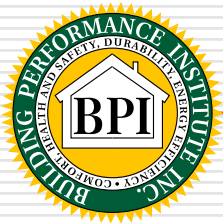
- Installation and Repair of Heat Pump or Air Conditioning Systems
- Optimization of Heat Pump or Air Conditioning Systems
- Planned Maintenance of Heat Pump or Air Conditioning Systems
- Measurement & Verification of Heat Pump or A/C Systems
- Interaction of Heat Pump or A/C Systems with other building systems



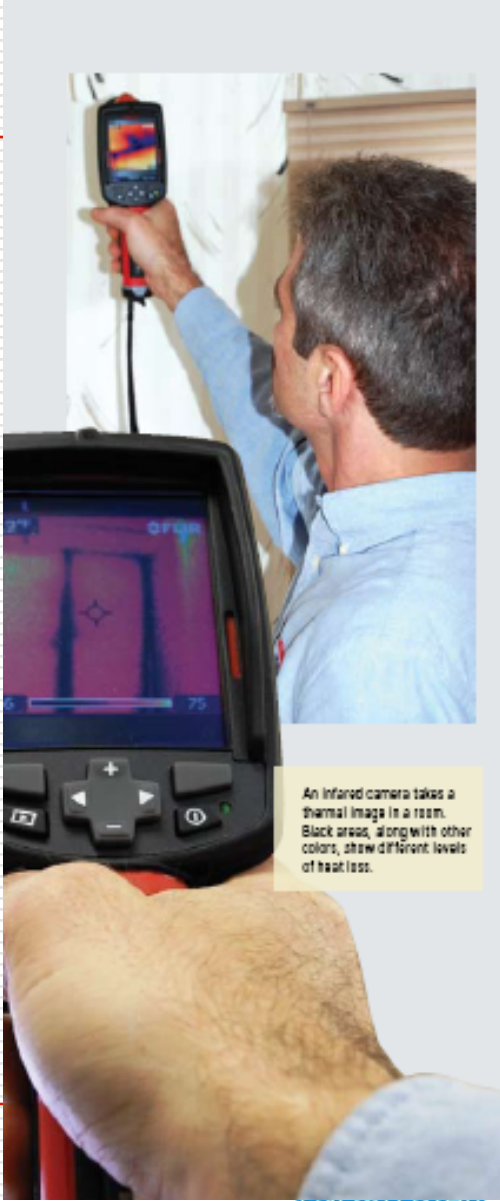
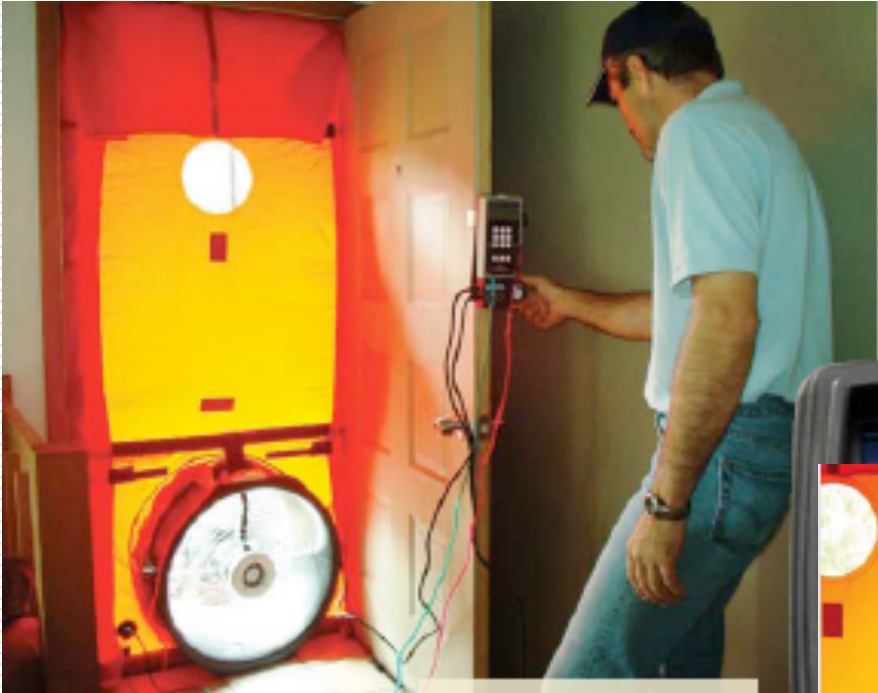
# Testing In

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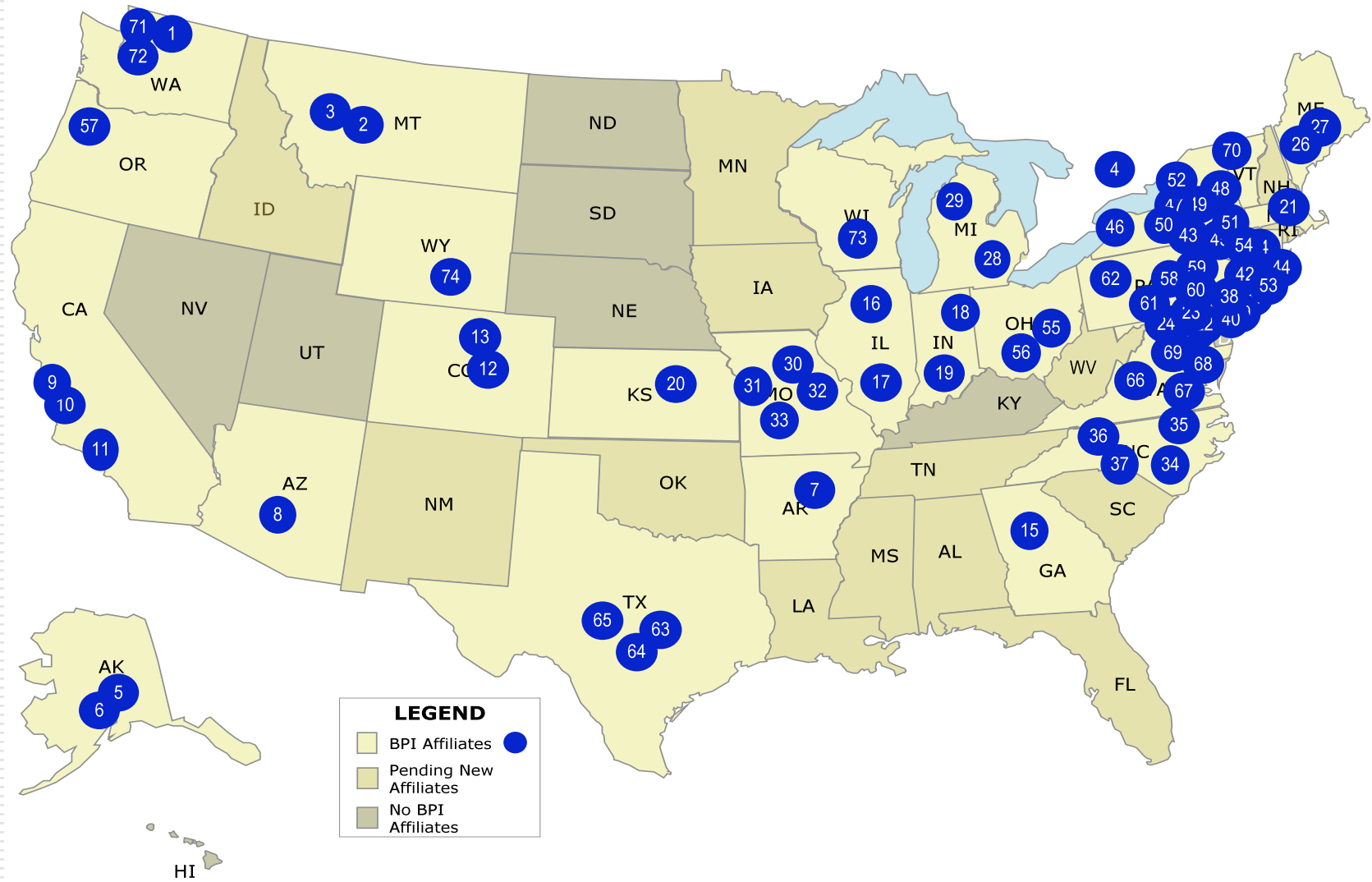
Home Performance  
begins with a testing in  
procedure that is defined  
in the BPI Standards.



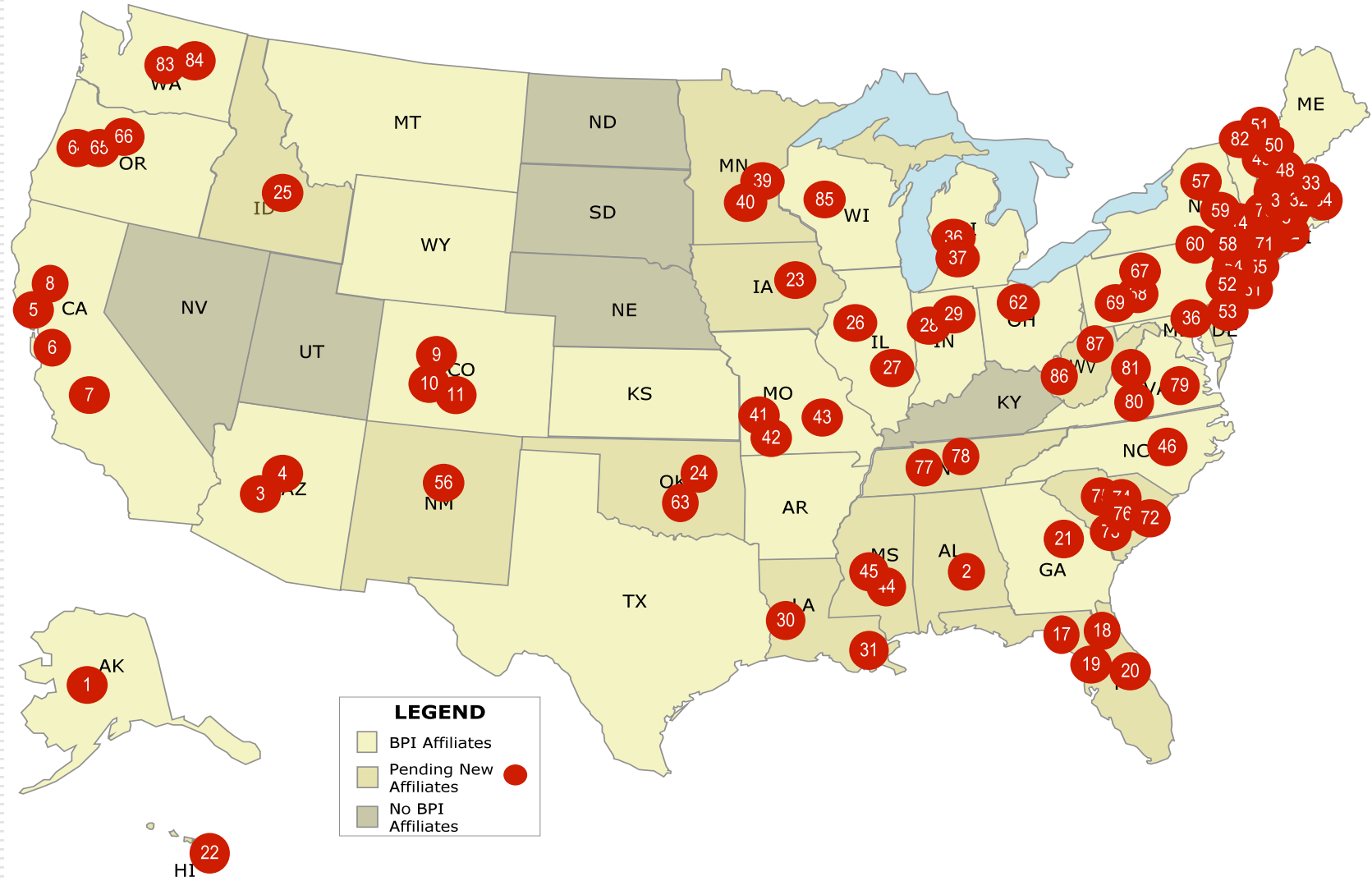
# Tools of the Trade



# BPI Training Affiliate Locations in North America



# Pending BPI Training Affiliate Locations in North America



# BPI and Weatherization

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States that mandate BPI certification for WX staff:

- New York, New Jersey, Ohio, Indiana, Washington

States that are working toward mandating BPI certification for WX staff:

- Virginia, North Carolina, and South Carolina

BPI as a method of qualifying workers in their program(each state operates a little different):

- Massachusetts, New Hampshire, Delaware, Connecticut, and Rhode Island



# BPI Installer Cert

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This certification is intended for those who are new to the field, have little experience (although it is not limited to this type of person) with the house as a system and will be doing the hands on insulating and airsealing. It is still in the development phase but we should have more information soon.

- Testing
  - No written test
  - Hands on application on a prop with the ability to test how well the insulation / air sealing was installed



# BPI and HERS

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## Differences:

BPI is more focused on a prescriptive approach using diagnostics that lead to the discovered deficiencies being fixed – the goal being what is good for that home is done to that home, including Health and Safety items that usually have little to no ‘payback’.

## Joint Certification:

- Would allow for a HERS index rating as well as the prescriptive approach and work scope.
- In the final stages as both technical committees are in the process of reviewing the proposed standard
- Testing
  - Someone with both certifications already go through an administrative process
  - Those with one or the other would take a section of the exam



# Curriculum - Licensing

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NYSERDA (New York State Energy Research and Development Authority)

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Lori Clark

PSD (Performance Systems Development)

[cmetcalfe@psdconsulting.com](mailto:cmetcalfe@psdconsulting.com)

Conrad Metalfe



# Find Out More

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Locate an affiliate (and a training resource):

<http://bpi.org/content/affiliates/find.php>

Curriculum licensing information, recognized training (CEU), locate an affiliate and more:

<http://www.bpi.org/content/contractors/training.php>

Review BPI's Policies and Procedures (find applications for affiliation, certification, and accreditation and more):

[www.bpi.org](http://www.bpi.org) – bottom of the home page

