

# Introduction to the NEW Chapter 7 (*DRAFT*)

## RESNET NATIONAL STANDARD FOR HOME ENERGY AUDITS

# National Standard for Home Energy Audits

- There are 3 categories of existing-home performance assessments defined :
  1. Home Energy Survey
    - a) On-Line Home Energy Survey
    - b) Professional Home Energy Survey
  2. Building Performance Audit
  3. Comprehensive HERS Rating

# Important Distinction

- **Auditor** – for the purpose of this document an “**auditor**” is generic name for either a Home Energy Survey Professional (HESP) or Building Performance Auditor (BPA) and is distinguished from a certified “**Rater**” who may be a HERS Rater or a Comprehensive HERS Rater

# HESPs

- **Home Energy Survey Professional (HESP)** - An individual certified by a Home Energy Audit (HEA) Provider to conduct...
- **Professional Home Energy Survey** - intended to evaluate both the general energy performance of the home and the level of commitment to action on the part of the homeowner.
  - includes data collected for purpose of further analysis and general ID of home performance problems.
  - intent is to refer homeowners to next level of audit if home needs further analysis & owner is motivated to invest in improvements.
- **Home Energy Survey (HES) Software** - computerized procedure approved by RESNET or the U.S. DOE for entering data collected as part of a Professional Home Energy Survey or DOE home energy labeling program and generating a report for the homeowner.
  - HES software does not have the capability of home performance modeling or specific energy savings calculations.

# BPA's

- **Building Performance Auditor (BPA)** - certified by a Home Energy Audit (HEA) Provider to conduct Building Performance Audits. As the house is a system, a BPA is competent in building analysis, envelope/shell evaluation and work scope preparation.
- **Building Performance Audit** - includes the evaluation, diagnosis and testing of an existing-home's performance and the generation of a prioritized work scope for cost-effective energy saving measures and features.
- **Performance Software** – A computerized procedure for conducting an analysis and reporting of proposed energy savings measures and developing an appropriate work scope that is either approved by DOE, accredited by RESNET or specified by a HPwES sponsor or similar program.

# Included in a Building Performance Audit

- Based on Procedures Defined in Chapter 8
  - Evaluate building shell air leakage
  - Evaluate duct leakage
  - Determine any Zonal Pressure Differences
  - Determine Worst-Case Depressurization & Back-drafting Potential for Combustion Appliances
  - Perform Carbon Monoxide Testing
  - Prepare a Detailed Retrofit Work Scope
  - Optional Thermal Imaging

# CHERS Raters

- ***Comprehensive HERS Rater (CHERS Rater)*** – certified by an accredited **HERS Provider** to perform a comprehensive analysis, HERS Rating and work scope
  - CHERS Rater also qualified to perform HERS Ratings on new homes.
  - A HERS Rater is qualified to perform ratings on both new and existing but cannot perform a Comprehensive HERS Rating until completing additional training as required by RESNET.
- ***Comprehensive HERS Rating*** - includes CAZ testing, diagnostic testing and evaluation of the minimum rated features established by RESNET, the preparation of an energy rating according RESNET Standards and a prioritized work scope of cost-effective energy saving measures and features.

# HEA Providers

- **Home Energy Audit (HEA) Provider** - An organization accredited in accordance with Section 703.1.2 of the *Standards* to certify individuals to perform **Home Energy Surveys** and/or **Building Performance Audits**
- The HEA Provider is tasked to maintain the QA of the Home Energy Audit process.
- QA Designee must have either:
  - Certification as a Rating Provider QAD, or
  - Certification as a BPA Trainer (passed the 100 question BPA-Trainer Exam with min score of 90%).

# HEA-Providers

- Prior to certifying a candidate, the HEA Provider must review **at least three probationary** Home Energy Surveys or Building Performance Audits (as applicable) performed by the Auditor **within 12 months**.
- For each Auditor, the HEA Provider's quality assurance designee or his/her delegated individual must **annually evaluate a minimum of 10% of each Auditor's reports**.
- If providing certifications for BPAs, compliance with Section 703.2.5 is also required

# If Providing for BPAs:

The HEA Provider must certify each BPA has successfully:

- **Passed the RESNET BPA online exam**
  - Must pass 50 question BPA exam, min score of 80%
  - Candidates who've previously passed the HESP online exam must pass abbreviated 25 question BPA exam, a min score of 80%
- **Completed 16 hrs of approved training** in Air Leakage & Pressure Diagnostics, CAZ Testing & Work Scope Requirements (includes field training & field proficiency demo)
- **Ongoing Proficiency Testing** - QAD must require Performance Testing Proficiency demonstration at least once every 2 years. Includes proper demo & understanding of:
  - CFM50 Blower Door Test
  - Duct Leakage Test
  - Combustion Appliance Spillage Test under CAZ Worst Case Depressurization conditions.
  - Proficiency based on Performance Standards defined in Chapter 8

# Rating Providers

- Existing accredited HERS Providers must submit to RESNET an addendum to their procedures addressing qualifications and responsibilities related to providing oversight for Comprehensive HERS Raters.
- In addition to the meeting the qualifications for becoming a certified HERS Rater, a **Comprehensive HERS Rater** must be certified by a HERS Rating Provider as having completed 4-hours of work scope training detailing the items in Section 705.2.7 and Chapter 8

# HESP Certification Requirements

- 16 hours of RESNET approved training in
  - Building Science
  - Energy Principles
  - Building Envelope Fundamentals
- Pass 2-hour, 50 question multiple choice RESNET HESP Exam (passing score of 75%)
- Sign with an accredited Home Energy Audit Provider

# BPA Certification Requirements

- 16 hours of RESNET approved training in
  - Building Science
  - Energy Principles
  - Building Envelope Fundamentals
- 10 hours of RESNET approved training in
  - Air Leakage & Building Pressurization Diagnostics
    - (at least 4 in the field)
- 6 hours of RESNET approved training in
  - Combustion Appliance Zone (CAZ) diagnostics
    - (at least 2 in the field)
- 4 hours of RESNET approved training in
  - Work Scope Requirements and Development
- Pass 2-hour, 50 question multiple choice BPA Exam (passing score of 80%)
- Sign with an accredited Home Energy Audit Provider

# HERS RATER Certification Requirements

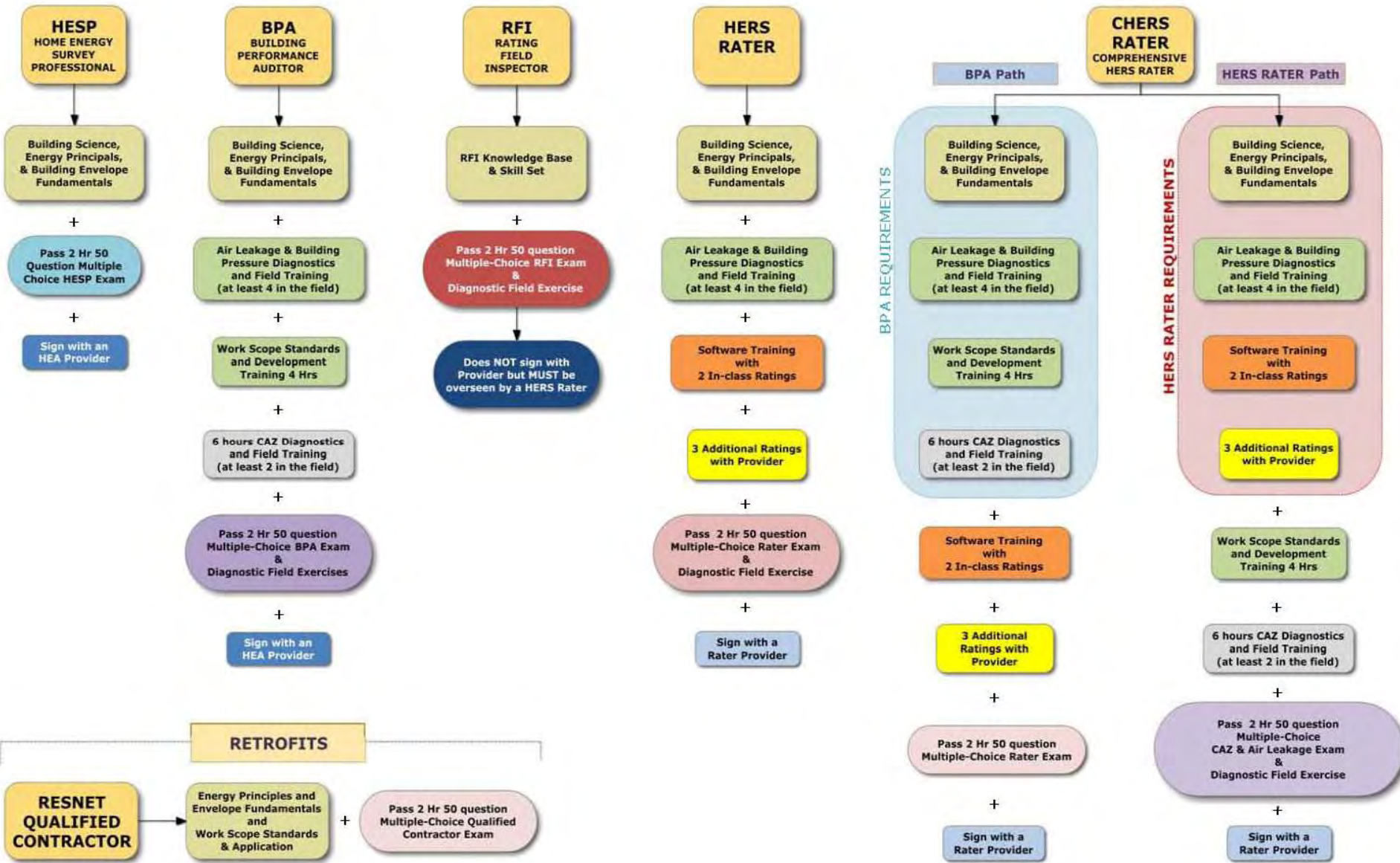
**NOTHING  
HAS  
CHANGED!**

# CHERS Rater Certification Requirements

- Same as a HERS Rater **PLUS**
  - 6 hours of RESNET approved training in
    - Combustion Appliance Zone (CAZ) diagnostics
      - (at least 2 in the field)
  - 4 hours of RESNET approved training in
    - Work Scope Requirements and Development
  - Pass CAZ and Work Scope Exam

# HEA-Training Providers Must

- Submit for approval, copies of the HESP & BPA course presentation materials, manuals, course handouts & any other training materials
- Submit for approval all policies, standards, guidelines & procedures to be used by the HEA-Training Provider
- Only utilize RESNET Certified BPA-Trainers who have at a minimum been certified by RESNET as having passed the 100-question BPA Trainer's Exam with a min score of 90%.



***“When the music changes,  
so does the dance”***



Meeting the Challenges of a New Day