HVAC Contractor Credentialing for ENERGY STAR® Certified New Homes

An Overview of Advanced Energy’s Approach
Quality Installations Deliver Your Equipment’s Full Potential, Many Installations Do Not

- Incorrect Refrigerant Charge + Low Airflow + Incorrect Sizing + Duct Leakage
- Incorrect Sizing + Duct Leakage
- Duct Leakage
- Installed to ENERGY STAR Guidelines
Applied Research - ¼ Million Homes

Standard Built

ENERGY STAR

SystemVision

Environments for Living
WELCOME TO ADVANCED ENERGY’S HVAC CONTRACTOR CREDENTIALING PROGRAM!

We believe that People + Purpose + Process = Profits

And in the residential industry, we believe that collaborating and supporting contractors in the field allows us all to have more impact by being more efficient, effective and economical with all work.

In Advanced Energy’s HVAC Credentialing Program for ENERGY STAR New Homes, we provide:

- Best-in-class ENERGY STAR training to your company’s staff and subcontractors
- On-demand technical resources that support profitable and quality installations
- Friendly and expert technical assistance via phone, email and on-site
- Quality assurance services that meet the ENERGY STAR program’s requirements while maximizing profits

We look forward to being of service to you and hope you take advantage of the resources and support we offer to help you be more successful.

www.advancedenergy.org/HVAC
People + Purpose + Process = Profits

**Internal & External**
- Respect:
  - Employees
  - Customers
  - Funders
  - Trade Partners
  - Suppliers

**Effective & Efficient**
- Execution:
  - Easy to work with
  - Effective
  - Efficient
  - Economical

**ROI**
- Result:
  - Return on investment
  - Cost competitive
  - Trusted resource
House as a System

- Effective Insulation
- High Performance Windows
- Tight Construction and Ducts
- Effective Products
- Efficient HVAC Equipment
HVAC contractors fear the telephone call. To quote Bruce Manclark:

“Contractors size by the telephone method.”

Advanced Energy wants to talk to contractors!

Speak to a person with HVAC knowledge and experience meeting ENERGY STAR program requirements!
Lessons Learned

Jobs Review Sample

- 72% Submissions Complete
- 28% Submissions Incomplete

- 62% Fail
- 38% Pass

Submissions Complete
Design Failures

- 30% Outdoor Design Temp.
- 22% Indoor design Temp.
- 23% Ventilation Documentation
Start Up Failures

- 43% Airflow
- 21% Refrigerant Calculations
- 21% Balance Report
- 14% Electrical
Advanced Energy HVAC Job Review Process

1. **Design**
   - Hold pre-construction kickoff meeting.
   - Review design portion of checklist with rater.
   - Submit job files to Advanced Energy. Incorporate install read review into design.

2. **Installation**
   - Advanced Energy install ready job review.

3. **Start-up**
   - Submit job files to Advanced Energy.
   - Incorporate Advanced Energy job complete review into future design, install and startup plans.

4. **Final Review**
   - Advanced Energy job complete & job review.
   - Rater coordinates ENERGY STAR® certification process.

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Benefits of Working with Advanced Energy
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Frequently Asked Questions

What are the heat pump and air conditioner equipment sizing requirements?
How do I properly size furnaces?
When should I install an ENERGY STAR qualified dehumidifier?
Who should I consult about installation CODES questions?
Where are approved locations to take static pressure measurements?
What is room pressure balancing?
Why is room pressure balancing important?
How should I design my system so it performs properly on the room pressure balancing test?
What should I do if the system designs changes?
Am I required to install air balancing dampers in ENERGY STAR homes?
What should I do if I request or are required to have a site visit from the Advanced Energy’s HVAC Program?
What if I decline the site visit?
When is the best time to get involved in an ENERGY STAR project?
Can you remind me what documents need to be submitted at the design phase in order for each house to be an ENERGY STAR home and in the HVAC Program?
What are some general guidelines for rough-in?
What are some general guidelines for trim-out?
What are some general guidelines for duct testing?
Should I submit my design files before installing the system?
Can a Habitat for Humanity affiliate without a licensed HVAC Contractor on staff or on the job become credentialed through Advanced Energy’s HVAC program?
What options does my company have to keep the costs of air flow testing low on ENERGY STAR Certified New Homes program jobs?
What air flow measuring devices can be used on ENERGY STAR Certified New Homes program jobs?
Latest Efforts

• Updating
  – Training Materials to Rev. 08
  – Exam
  – FAQs and Resources
Questions?

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