

*Air Conditioning Contractors of America (ACCA)*

# ***A Contractor's Perspective on the QI Program***

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ACEEE / CEE Market  
Transformation Symposium

Washington, DC  
31 March 2009

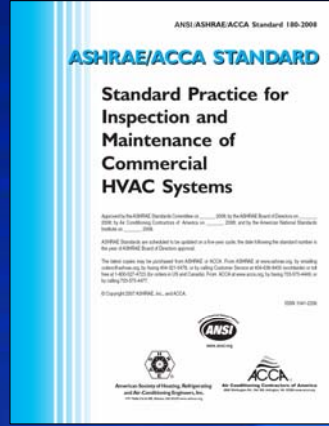
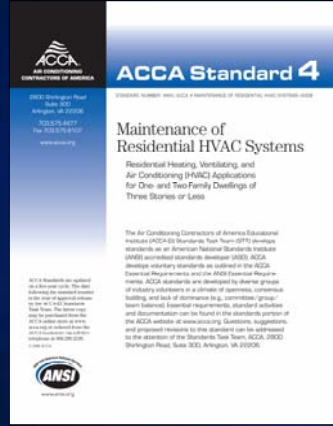
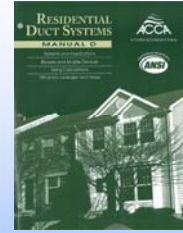
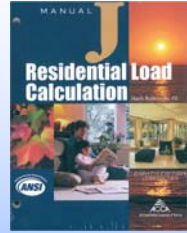
# The Air Conditioning Contractors of America (ACCA)

The only nationwide association representing the technical, educational, and policy interests of U.S. businesses that design, install and maintain indoor environmental systems

# ACCA's Quality Initiative

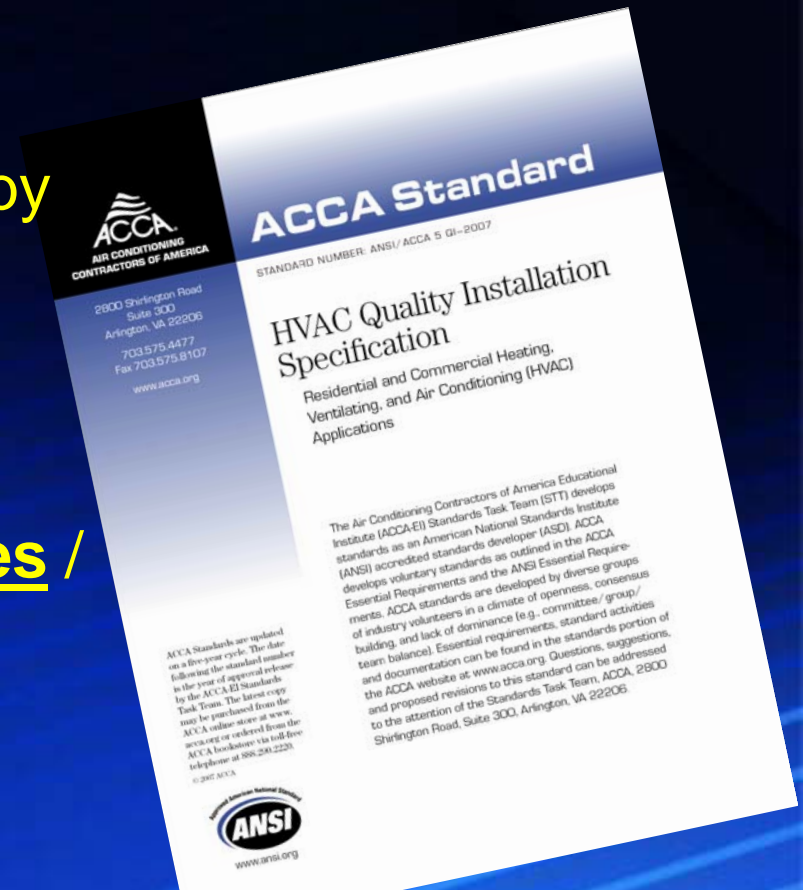
## National Standards

- Manual J<sup>®</sup>
- Manual D<sup>®</sup>
- Manual S<sup>®</sup>
- HVAC Quality Installation
- HVAC Quality Maintenance
- HVAC Quality Restoration
- HVAC QI Verification Protocols



# Benefits of the HVAC QI Standard ...

- Establishes a quality benchmark (“bar”)
- Enables consistent messaging by stakeholders
- Helps professionals meet market requirements
- Meets building owner’s objectives / needs
- Supports energy efficiency objectives



*Upshot: Customers enjoy comfortable, healthy, energy efficient homes! – what they paid for!*



# *QI/vp Establishes how 3<sup>rd</sup>-Party Verifiers Ensure the QI Requirements are Met*

## *Design Aspects*

- Load Calc
- Equip Capacity Selection
- Matched Systems (ARI / GAMA)

## *Installation Aspects*

- Airflow across Coil
- Refrigerant Charge
- Electrical Requirements
- System Controls
- On-rate (fuel-fired)
- Venting

## *Duct Distribution Aspects*

- Duct Leakage
- Airflow Balance

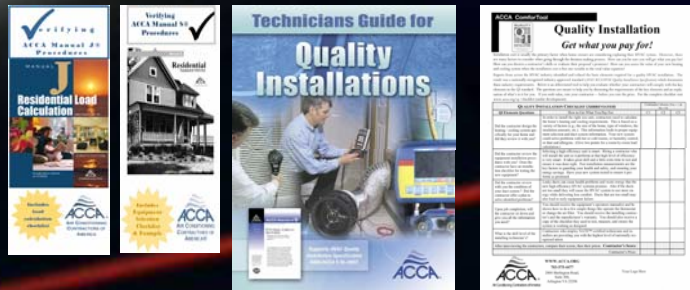
## *Doc. / Education Aspects*

- System Documentation
- Owner Education

***Well recognized practices that professional contractors embrace when delivering quality installations***

# Progress to "Re-establishing the Bar"

... QI / QM / QR / QIV ...

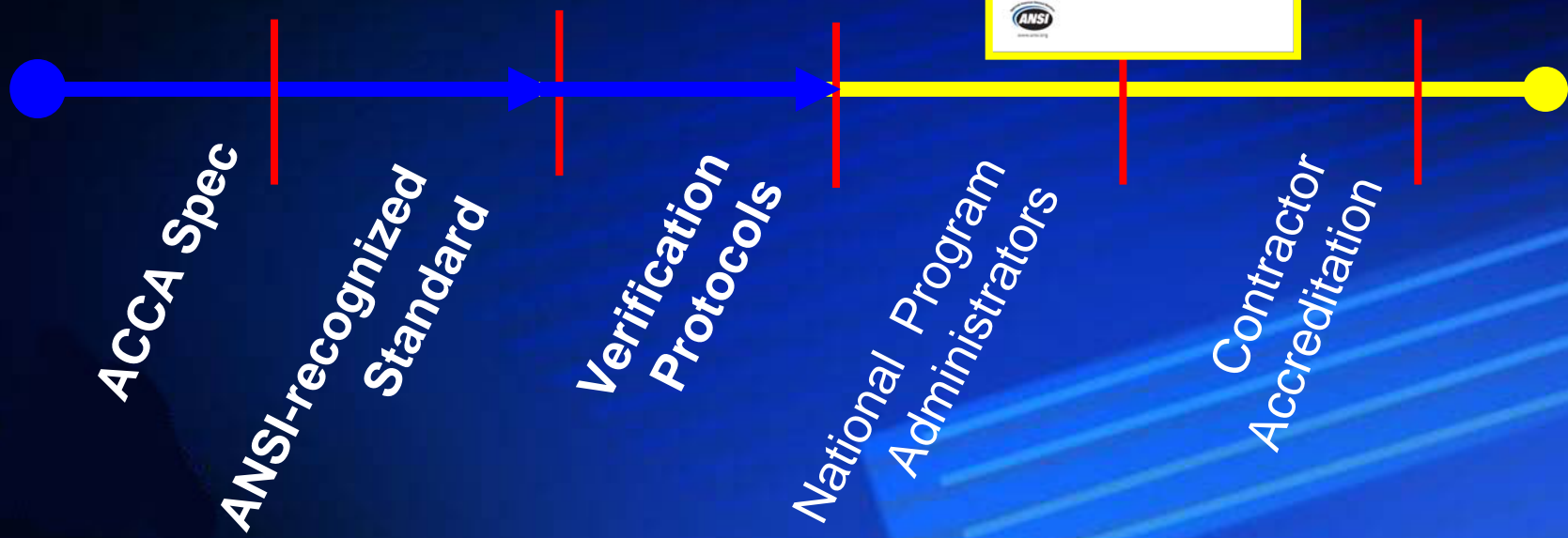


Supporting documents

ANSI-recognized  
Feb 2009



ANSI Standards



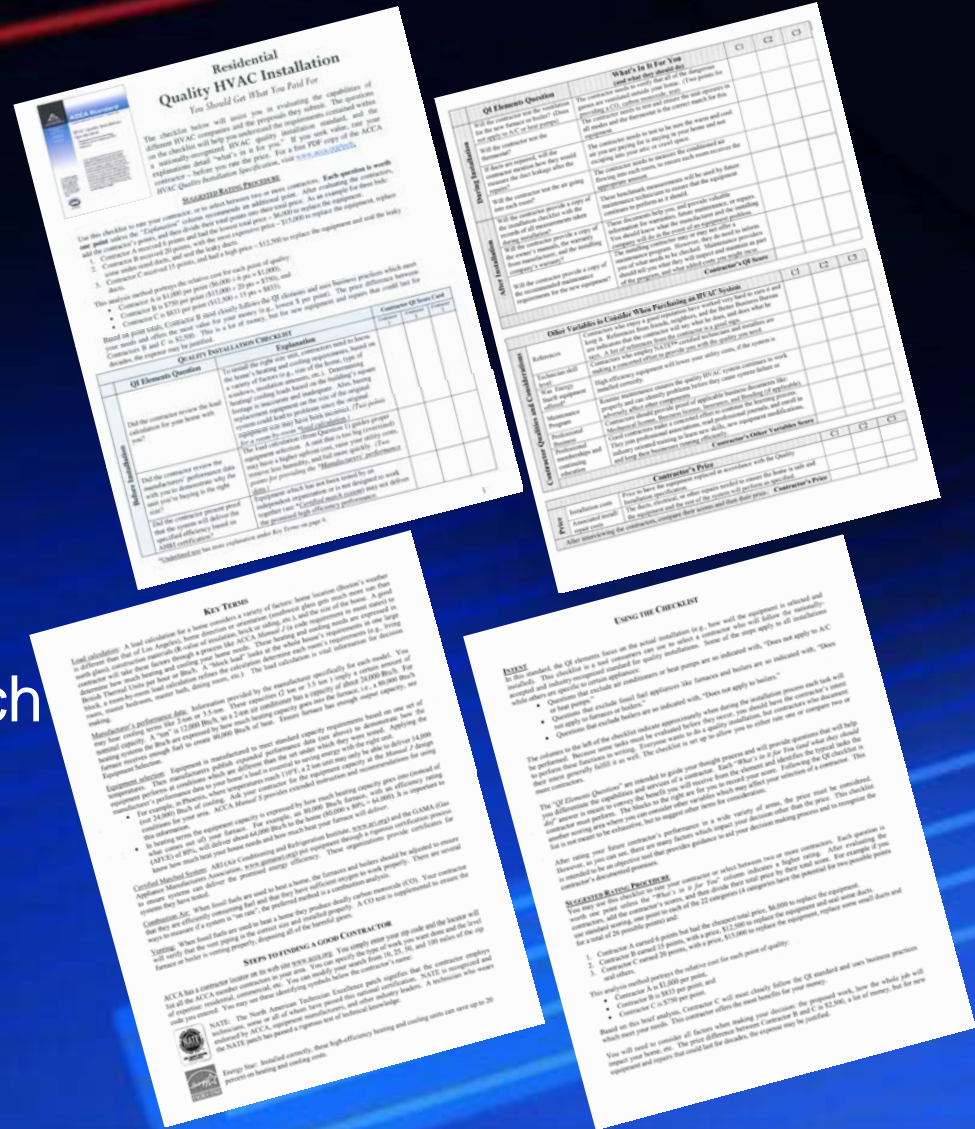


# Supporting Tools for ACCA QI

## • Consumer Checklist

- Residential and Commercial
- Guided tour of QI
- Offers questions for potential contractors
- Explains benefits of each QI element
- Free at

[www.acca.org/quality](http://www.acca.org/quality)



# ACCA Quality Star (pending)

- Operates Business as a Business
- Sound Sales & Technician Practices
- Achieves Customer Satisfaction

*There are certain contractor attributes and minimum business practices that are necessary to enable and maintain quality HVAC installations by installing and servicing technicians.*

*The ACCA QualityStar attributes focus on the “business side of things” as an indicator that an HVAC contractor is positioned to properly support its technicians in designing, installing, and servicing quality systems.*

# The Quality Initiative – QI & QIvp – Meets Stakeholder Needs

**Contractors** – to demonstrate their ability to install residential and commercial HVAC systems that maximize occupant comfort, deliver “green” solutions, and provide energy savings to consumers.

**Equipment manufacturers** – to highlight and encourage quality installation practices, resulting in better equipment performance and durability.

**Building owners/operators and homeowners** – to identify quality contractor practices and to ensure that quality installations are received.

**HVAC trainers** – to assist in the ongoing development of appropriate course curricula and training programs.

**Utilities/Efficiency Program Administrators** – to best integrate the QI requirements into their incentive programs, reduce CO2 emissions and improve grid reliability during extreme usage periods.

# Building Owner Benefits

- **Enhanced HVAC system energy efficiency**
- **Reduced expenses**
  - Equipment and distribution system “right-sized”
  - Increased equipment life, reduced equipment O&M
  - Increased durability of the related building systems
- **Improved customer comfort**
  - Better thermal environment
  - Improved IAQ
  - Reduced noise and vibration
- **Reliable system operation**
  - Extended care: fewer failures during seasonal peaks
  - Increased safeness of operating equipment
  - Installed to exceed code

# Contractor Benefits

- **Enhanced recognition / reputation within the HVAC community**
  - High industry standards translates to new client opportunities.
  - Quality (observance of “best practices”) reduces client turnover and generates new client opportunities.
  - Improved marketing/sales position in a competitive industry, especially when discerning clients seek quality.
  - Peer respect/recognition is an intangible asset.
- **Higher margin upscale work, avoid problems that come from low-bid work.**
- **Demonstrate “standard of care” in case of a legal actions**

# Contractor Benefits, cont.

- **Improved employee development and enhanced productivity.**
  - Helps contractors identify desirable workforce skills
  - Exposes shortcomings that the contractor may not have known about
- **Observance of proper methods and procedures reduces call backs and warranty costs.**
  - Defined quality leads to reduced installation defects
  - Improved productivity

**Questions**

**????**

**Answers**