



System Vision 2015 and Beyond

System Vision for New Homes 2016

Why upgrade?

- Keeping up with code
 - In 2012, NC adopted a new residential building code.
 - 2015 IECC coming next...
- Align with green building programs
- Reassess the value of the program
 - Healthy, Safe, Comfortable, Durable, Energy Efficient and Environmentally Responsible
 - Incorporate lessons learned

What's New?

- Improve building exterior (insulation/air sealing)
- Focus on quality design and installations (HVAC)
- Moisture in crawl spaces
- Contractor QC (reducing re-inspections)
- Proactive monitoring of guarantee

What's Easier?

- Removed radiant barrier requirement
- Increased tolerance for room air flows and pressure balancing

Review the Standards

New SV Upgrade vs. Code

| Region | Foundation | Htg Savings | Clg Savings | Overall |
|--------|------------|-------------|-------------|---------|
| CZ3 | Slab | 29.6% | 18.3% | 8.7% |
| CZ3 | Crawl | 24.6% | 14.8% | 5.6% |
| CZ4 | Slab | 34.0% | 15.4% | 8.9% |
| CZ4 | Crawl | 24.7% | 14.0% | 6.9% |
| CZ5 | Slab | 27.9% | 8.8% | 8.2% |
| CZ5 | Crawl | 28.5% | 6.3% | 8.3% |

| Standard | Upgrade Item | Estimate |
|------------|---|---------------|
| 1.1 | Proper blocking and building air tightness | \$300 |
| 2.3 | Closed crawl* | \$1,500 |
| 3.1 | Raised heel trusses | \$250 |
| 3.3 | R-25 Attic Access | \$50 |
| 3.4 | Insulation compliant with 2015 IECC | \$900 |
| 4.3 | Proper duct sealing | \$50 |
| 4.6 | Balancing | \$50 |
| 4.8 | Ventilation compliant with ASHRAE 62.2 | \$450 |
| 4.9 – 4.10 | Spot ventilation (kitchen and bath exhaust) | \$70 |
| 5.1 | Pressure balance and relief (\$200 if jumper ducts) | \$100 |
| 6.3 | Upgraded water efficiency fixtures | \$50 |
| 7.1 | ESTAR appliances | \$50 |
| | | |
| | Total with crawl space | \$3820 |
| | Total with slab | \$2320 |

TIMELINE

| March-2015 | April-2015 | May-2015 | June-2015 | July-2015 | August-2015 | September-2015 | October-2015 |
|--|------------|----------|-----------|---|-------------|----------------|--|
| NCHFA classroom trainings for program administrators | | | | | | | |
| | | | | Required Advanced Energy Field trainings for construction staff | | | |
| | | | | | | | All homes with first inspection after October 1 must comply with SystemVision 2016 Standards |

System Vision for Existing Homes

Background

- Home Performance with ENERGY STAR
 - Pilot Program
 - SFR Program
- Increase in loan pool members doing rehab

Basic Process

- Sign agreement
- Conduct assessment
- AE approves SOW
- Sign up homeowner for data collection
- Retrofit work
- AE performs Test-Out
- Certification, Invoicing, Grant

Assessor Requirements

- Experience with existing home retrofit
- Preference for BPI or HERS Rater Certification
- Understanding of combustion safety
- Field training with AE

Standards Review

TIMELINE

| March-2015 | April-2015 | May-2015 | June-2015 | July-2015 | August-2015 | September-2015 |
|--|--|--|-----------|-----------|-------------|----------------|
| NCHFA classroom trainings for program administrators | | | | | | |
| | Advanced Energy Field trainings for construction staff | | | | | |
| | | Begin conducting assessments on eligible homes | | | | |

Post-Training Action Items

- Share information with Construction Manager
 - SystemVision 2016 – for New Homes
 - SystemVision for Existing Homes
- Contact Maria if interested in SV for Existing Homes program and if you have an idea for a good field training house.

Maria Mauceri

SystemVision Program Manager
mmauceri@advancedenergy.org
919-857-9053