



# 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
	<b>Total with crawl space</b>	<b>\$3820</b>
	<b>Total with slab</b>	<b>\$2320</b>

# 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