DOE Zero Energy Ready Home





How to Upserve Your High-Performance Builders Sam Bowles

DOE Zero Energy Ready Home

Chrissi Antonopoulos

PNNL



Five Key Consumer Experiences





What builders expect from HERS raters

Building science experts

Advise, not just critique

Provide evidence

Credibility

How raters can exceed expectations

Back your builder

Provide marketing assistance

Turn lower HERS into higher \$\$\$

Effectively communicate value

Insulation Institute: Guide to Understanding What Builders Want From HERS Raters, 2016

The Informed Buyer



The Informed Buyer



...will know more about

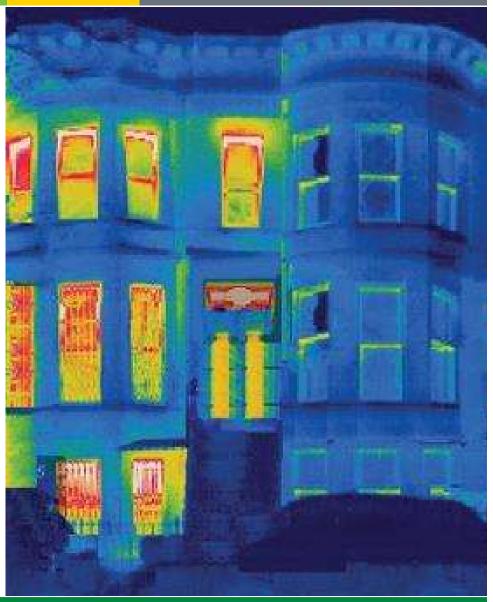
Thermal Defects





...will know more about

Advanced Windows



...will know more about

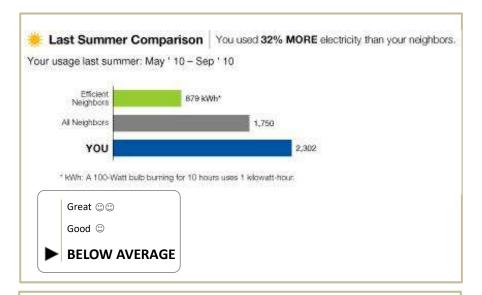
Moisture Risks

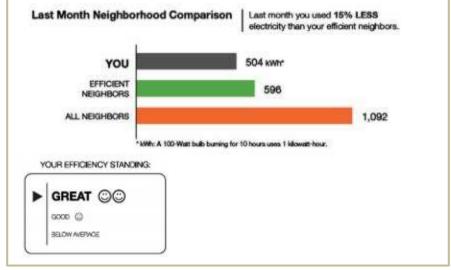




...will know more about

Energy Efficiency

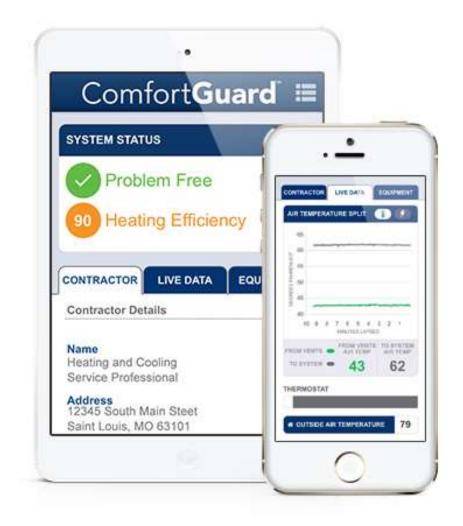






...will know more about

Ensured Comfort





...will know more about

Health Risks





...will know more about

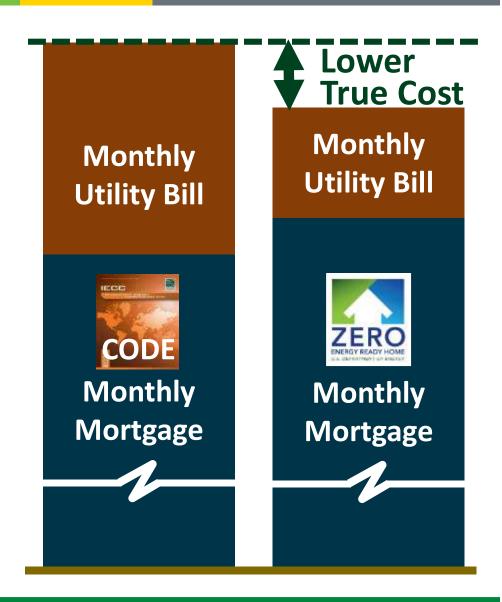
Trusted Performance





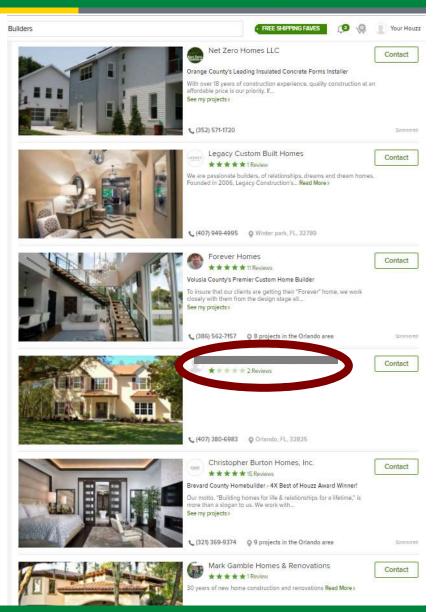
...will know more about

True Cost



ENERGY Energy Efficiency & Renewable Energy

Better
Home
Experience



Zero Communication Challenge



How do consumers decide?







v1 & v2

v3













2012







Effective Communication





Communication Strategy



- Simple Core Message
- Showcase Better Experience
- Trust with Voice of Authority
- Clarity with Contrast

Simple Core Message

Simple: Consumer Video



Home » Residential Buildings » Zero Energy Ready Home » DOE Tour of Zero

Are you ready for a home that lives, works, and lasts better? The home of the future - a better home - is available today. Take a virtual tour of homes that are so energy efficient a renewable energy system can offset all or most of their annual energy consumption. These award-winning homes are independently certified to meet DOE Zero Energy Ready Home guidelines and constructed by a select group of top builders. Zero Energy Ready Home is part of the U.S. Department of Energy's Better Buildings initiative. Better Buildings aims to make commercial, industrial, public, and residential buildings 20 percent more energy efficient over the next decade.





Largest Purchase of a Lifetime







- \$10,000's Savings
- Cozy Indoors
- Total Comfort
- Healthy Living
- Peace-of-Mind
- Quality Assurance
- Future Ready



Live Better... Visit the Zero Energy Ready Home Website

https://energy.gov/eere/buildings/zero-energy-ready-home-homebuyers

Showcase Experiences

Showcase: Housing Innovation Awards



Housing Innovation Awards Feeds 'Tour of Zero'



Website



10X DOE HOUSING INNOVATION AWARD WINNER 2018 ENERGY STAR PARTNER OF THE YEAR







10X DOE HOUSING INNOVATION AWARD WINNER 2018 ENERGY STAR PARTNER OF THE YEAR

ABOUT US



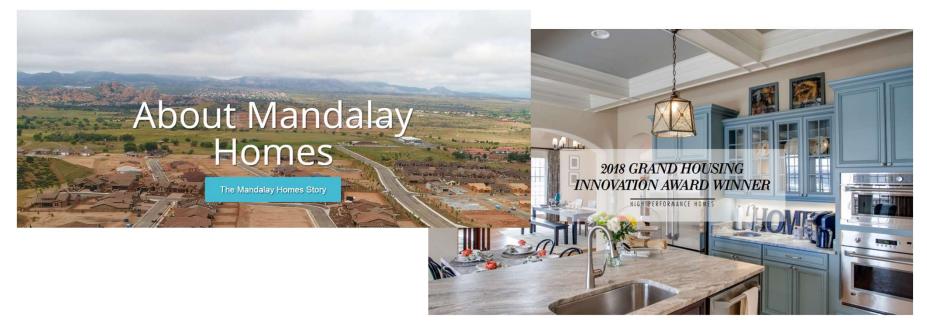
ANDALAY HOMES

COMMUNITIES

HOME FINDER

MOVE IN READY

CONTACT US



Listings



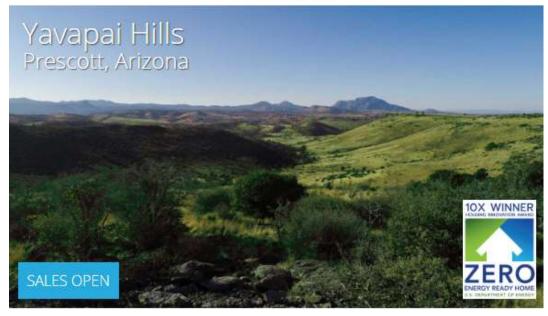
Elements Income Qualified Rowhomes at Stapleton

Starting at \$215,900

2 - 3 Bedrooms | 2 Car Garage | 1.5 - 2.5 Bathrooms | 1,213 - 1,330 Square Feet

Community Details

PLEASE NOTE: THESE ARE INCOME RESTRICTED ROWHOMES. Elements Rowhomes are subject the Denver Inclusionary Housing guidelines which include a deed restriction. Purchasers must mee minimum income and cannot exceed the maximum allowable income for their household size. You ralso demonstrate that your new housing payment (a combination of the mortgage, interest, taxes, insurance, and HOA dues) will not exceed 30% of your total household monthly gross income. The Elements Collection will offer high-quality affordable townhomes in Stapleton's Beeler Park and Northfield neighborhoods. Each home will have great proximity to shopping, dining and entertainm well as access to incredible schools, pools and the other amenities that foster a strong community (lifestyle for its residents. These homes will offer two and three-bedroom floorplans ranging between and 1,330 square feet and have a starting price point of \$215,900. Each home will offer the comfort a energy efficiency that Thrive is known for, including their trademark double walls, solar panels and care one energy ready features.



Case Studies

ENERGY Energy Efficiency & Renewable Energy





- Layout: 5 bdrm, 4 bath, 2 fl + bsmt,
- Climate: IECC 5A, cold
- Completed: February 2016
- Category: custom spec

MODELED PERFORMANCE DATA

- HERS Index: without PV 38, with
- **Projected Annual Energy Costs:** without PV \$1,650, with PV \$NA
- **Projected Annual Energy Cost Savings:** (vs typical new homes) without PV \$1,150, with PV \$NA
- Annual Energy Savings: without PV 4,400 kWh, 960 therms; with PV NA

CONTACT

Rick Thompson 630-254-9745 rick@mybrightleafhome.com



KEY FEATURE

- Walls: Staggered 2x4s 12" cellulose, 1/2" coated OSB, openings get flexible flashi
- · Roof: 24" o.c. engineered 24" overhangs, 30-lb felt,
- · Attic: Vented: all top plates foamed, 16"
- . Foundation: Basement; exterior 3" rigid XPS plus dimpled plastic drain mat, 2" XPS under slab, 10-mil vapor barrier.
- Windows: Vinyl-frame triple-pane, argon fill, low-e, U=0.22-0.18, SHGC=0.24.
- . Air Sealing: 1.1 ACH 50.
- · Ventilation: Air-cycler-controlled fresh air intake balanced to timered exhaust fans.
- . HVAC: 96% AFUE gas furnace, 14 SEER AC. Ducts un-insulated, in conditioned space.
- Hot Water: Tankless gas, 0.97 EF.
- . Lighting: 97% LED.
- Appliances: ENERGY STAR dishwasher, refrigerator, clothes washer, ceiling fans.
- Water Conservation: 100% WaterSense fixtures; compact plumbing layout.
- Energy Management System: None.
- . Other: No-/low-VOC primer, paint, cabinets, flooring. Pre-wired for electric car charger. Weather-resistant fiber cement siding, structural roof truss connector screws, oversized foundation bolt washers. Graded for positive slope on all sides.



For more information on the DOE Zero Energy Ready Home program, go to http://energy.gov/eere/buildings/zeroenergy-ready-home or scan the QR code.













Sales Centers/Models



Social Media



Recognition in the Field of Sustainable Building and Design



Genesee Park Net Zero | 2018 Builder's Choice & Custom Home Design Award

Dwell Development receives 2018 Builder's Choice & Custom Home Design Award. This year's design awards jury—Donald Locco of Washington, D.C.-based Donald Locco Architects, Meg Graham of Superkül in Tronto, and Peter Rose of Boston-based Peter Rose + Partners—Favored projects that express a return to simplicity. These homes, ranging from custom dwellings that respect the heritage of the landscape they occupy.

Read more



HOUSING INNOVATION AWARD

WINNER 2018

2018 IIS Department of Energy Housing

s Housing Innovation
rk project from the U.S.
IDCE Housing Innovation
in's leading builders who
meowner experience to
I Zero Energy Ready
t of Energy gave Dwell
novation Awards in the



October

Dwell Development's Emerald S residence certified under the Zin Seattle and the 10th residence world. The Zero Energy program world's most energy efficient be both commercial and residenti the programs most notable pro-Center—the greenest commercial center—the greenest commercial programs most notable pro-

Read more





A few more photos from the U.S. Department of Energy's Housing Innovation Awards earlier this month.

Still feeling so honored to be named the Grand Winner in the Custom Spec category!









Like Page

ZERH Grand Award Winner 2018



Showcase: Tour of Zero



Home » Residential Buildings » Zero Energy Ready Home » DOE Tour of Zero

Are you ready for a home that lives, works, and lasts better? The home of the future - a better home - is available today. Take a virtual tour of homes that are so energy efficient a renewable energy system can offset all or most of their annual energy consumption. These award-winning homes are independently certified to meet DOE Zero Energy Ready Home guidelines and constructed by a select group of top builders. Zero Energy Ready Home is part of the U.S. Department of Energy's Better Buildings initiative. Better Buildings aims to make commercial, industrial, public, and residential buildings 20 percent more energy efficient over the next decade.



The Home of the Future ... Today

The Home of the Future Today Video (Text Version)

Show 25 V

Tour of Zero



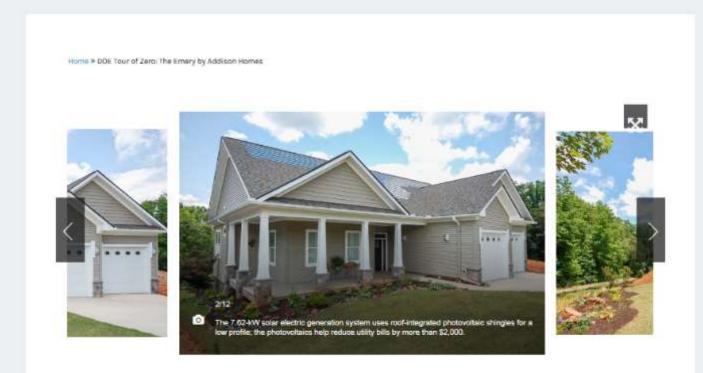
Showing 1 to 13 of 13 entries (filter	ed from 123 total entries)		Show 25 entries		
TOUR THESE HOMES	BUILDER	LOCATION	HIA WINNER	CLIMATE ZO	
Air Park Drive	Addison Homes	Greer, SC	2016 HM	MIXED-HUM	
Cobbler Lane	Addison Homes	Greer, SC	2015	MIXED-HUMI	
Invision Zero Home	Addison Homes	Greer, SC	2016	MIXED-HUMI	
The Emery	Addison Homes	Greer, SC	2016	MIXED-HUMI	
Friendly Home	Ferguson Design & Construction Inc.	Sagaponack, NY	2013	MIXED-HUMI	
Friendly Home Julia Plan	Habitat for Humanity of Catawba Valley	Hickory, NC	2016	MIXED-HUMI	
e Villas at Rocketts Landing	Health E Community Enterprises of Virginia	Williamsburg, VA	2016	MIXED-HUMI	
Euclid Avenue	Heirloom Design Build	Atlanta, GA	2015	MIXED-HUMI	
High-Performance Bungalow	Imery & Co.	Athens, GA	2016	MIXED-HUMI	
EXIT-0 House	John Hubert Associates	Wyncote, PA	2014	MIXED-HUMI	
Charlottesville Infill	Promethean Homes	Steeles Tavern, VA	2014	MIXED-HUMI	
First DOE Zero Energy Ready Manufactured Home	Southern Energy Homes	Russellville, AL	2014	MIXED-HUMI	
Proud Green Home	The Imery Group	Athens, GA	2014	MIXED-HUMI	

Previous 1 Next

Tour of Zero



DOE Tour of Zero: The Emery by Addison Homes



"THE DOE ZERO ENERGY READY HOME PROGRAM HAS SET A STANDARD THAT IS TRULY 'BEST IN CLASS' AND IS PULLING OUR INDUSTRY TOWARD A QUALITY REVOLUTION."

Consumer Experience

Tour of Zero



"THE DOE ZERO ENERGY READY HOME PROGRAM HAS SET A STANDARD THAT IS TRULY 'BEST IN CLASS' AND IS PULLING OUR INDUSTRY TOWARD A QUALITY REVOLUTION."

DOE Zero Energy Ready Home: Partner Profile

Partner ID:



Addison Homes, LLC





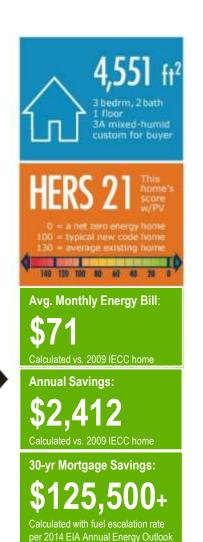








Innovations (Power Words)



Read more.

Marketing Materials



DOE Zero Energy Ready Home Marketing Materials

CERTIFICATION LOGO (PDF A, JPG, EPS)

PARTNER LOGO (PDF A, JPG, EPS)

LOGO USE GUIDELINES A

POINT OF SALE FACT SHEET A

CUSTOM POINT OF SALE FACT SHEET A

BROCHURE A

CUSTOM BROCHURE

DROP-IN MESSAGING

TAKE THE TOUR WEB BUTTON

TAKE THE TOUR WEB BUTTON (SMALL SIZE)

PARTNER-BRANDED WEB BUTTON - HORIZONTAL 🚇

PARTNER-BRANDED WEB BUTTON - VERTICAL A

HOMEOWNER MANUAL A

Add this ZERH video to your website:



<iframe width="560" height="315" src="https://www.youtube.com/embed/sp6eJELZ ACI?rel=0" frameborder="0" allowfullscreen> </iframe>

Download Video

Right-click > Save Link As



Trusted Voice of Authority

Voice of Authority



Nearly 1 in 3 consumers indicated they

do not trust

home building and real estate companies.

Source: The business of Trust – The Most Trusted Builders in America, Lifestory Research, January 2013

Certification & Partner Logo



Brand yourself as a leader!

Where to use:

- Certified Homes
- Websites
- Social Media
- Signage
- Marketing Materials

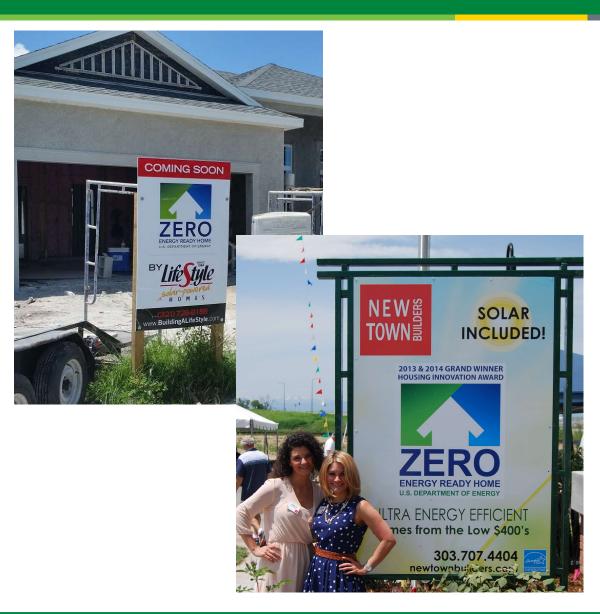


Certification & Partner Logo



Certification & Partner Logo







Tour of Zero Web Buttons





is partnering with the U.S. Department of Energy to bring homes of the future to families today.

Insight Homes

Take the zero energy ready home tour.

energy.gov/zero-energy-home-tour



Link to your homes on the Tour of Zero!





Trust Matters! Backed by DOE

Where to use:

- Website
- Social Media
- Press Releases
- Promotional Materials
- All Communications



Translating Value With Trust: ZERH Drop-in Messaging





Drop-In Messaging

As a registered DOE Zero Energy Ready Home partner, enjoy access to the following pre-approved messages for insertion into your promotional materials. Simply insert your company name and use the message as it appears below.

- According to the U.S. Department of Energy, <Partner Name> is in a select group of top builders
 in the nation who have certified one or more homes that meet or exceed Zero Energy Ready
 Home guidelines for excellence in performance and energy efficiency.
- As a committed DOE partner who provides certified Zero Energy Ready Homes, Partner names
 is in the top one percent of builders in the country meeting the extraordinary levels of
 excellence in energy and performance specified in the national program requirements.
- As a Zero Energy Ready Home Partner, Partner Name offers high performance homes that are
 so energy efficient, all or most of their annual energy consumption can be offset with renewable
 energy.
- <Partner name> builds homes certified to rigorous DOE Zero Energy Ready Home National Guidelines that are at least 40%-50% more energy efficient than a typical new home.
- · Healthful environment:

According to the U.S. Department of Energy (DOE), every certified Zero Energy Ready Home has a comprehensive package of measures to help minimize dangerous pollutants, provide continuous fresh air, and effectively filter the air you breathe.

Comfort Plus:

According to the U.S. Department of Energy (DOE), every certified Zero Energy Ready Home features high-efficiency insulation, windows, air sealing and space conditioning systems that help surround you with even temperatures, low-humidity, and quiet in every room on every floor.

Advanced Technology:

According to the U.S. Department of Energy (DOE), every certified Zero Energy Ready Home features advanced technologies and practices recommended by leading housing experts from DOE's world-class research program, Building America.

Ultra efficient:

According to the U.S. Department of Energy (DOE), every certified Zero Energy Ready Home is so energy efficient a small solar electric system can easily offset most, or all, of its annual energy consumption. This is why it is called as Zero Energy Ready Home.

· Quality Built:

According to the U.S. Department of Energy (DOE), every certified Zero Energy Ready Home features high-efficiency appliances and equipment that are often associated with better quality construction. In addition, overall quality is enhanced with rigorous inspections, diagnostics, and checklists enforced by independent verifiers.

Durability:

According to the U.S. Department of Energy (DOE), every certified Zero Energy Ready Home features advanced levels of energy savings, comfort, health, durability, quality and future performance that can be expected to stand the test of time and help enhance future value.

- Samuel Rashkin, Chief Architect for DOE Building Technologies Office, said "Zero Energy Ready
 Homes like those constructed by <Partner Name> are the home of the future because they live,
 work, and last better with incredibly low or no energy costs. And what's exciting for American
 homebuyers, they are available today thanks to leading builders across the country."
- "Housing Innovation Award winners such as Pare leading a major housing industry transformation to zero energy ready homes. This level of performance is the home of the future because it improves the way Americans live by substantially reducing or eliminating utility bills, ensuring engineered comfort way beyond traditional homes, protecting health with a comprehensive package of indoor air quality measures, and helping maximize the largest investment of a lifetime," said Sam Rashkin, Chief Architect at the U.S. Department of Energy's Building Technologies Office.

Drop In Messaging



thorn

Design & Build with Mantell-Hecathorn Builders

PERSONAL ATTENTION TO DETAIL,

ONE HOME AT A TIME SINCE 1975

ortfolio

Energy Efficient Living

Awards & Press

Contact Us

home | energy efficient living

Energy Efficient Living



We are leaders in certified ENERGYSTAR and DOE Zero Energy Ready Custom Homes

"Zero Energy Ready homes are the future of US housing, and innovators like Mantell-Hecathorn Builders are leading the way for the entire industry. Zero Energy Ready homes provide a vastly superior homeowner experience at a lower ownership cost - and an experience that all Americans should want in their next home."

- Sam Rashkin, Chief Architect for the US Department of Energy Building Technologies Office

"Zero Energy Ready homes are the future of US housing, and innovators like Mantell-Hecathorn Builders are leading the way for the entire industry. Zero Energy Ready homes provide a vastly superior homeowner experience at a lower ownership cost - and an experience that all Americans should want in their next home."

Clarity with Contrast



Promote the ZERH Advantage!

Where to use:

- Promotional Events
- Home Tours
- Sales Materials



Point of Sale Fact Sheet & Consumer Brochure



Homes to the Power of **ZERO**



What is the DOE Zero Energy Ready Home™ Label?

It is a Symbol of Excellence for energy savings, comfort, health, quality, and durability met by a select group of leading builders meeting U.S. Department of Energy Guidelines.

What is a Zero Energy Ready Home?

It is a high-performance home so energy efficient, all or most annual energy consumption can be offset with renewable energy. In other words, it is the Home of the Future.

A Symbol of Excellence



This graphic comparison chart demonstrates relative performance of this DOE Zero Energy Ready Home to existing homes (built between 1990 and 2010) and ENERGY STAR Certified Homes. Actual performance may vary.



Addison Homes

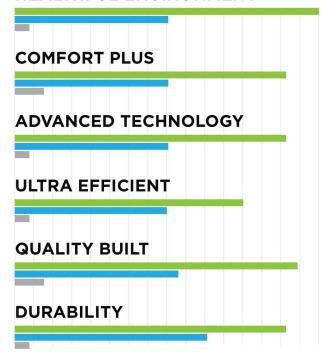
DOE Zero Energy Ready Home Partner



(864) 848-2667 www.addison-homes.com 16 PARKWAY COMMONS WAY, SC 29650

A Symbol of Excellence

HEALTHFUL ENVIRONMENT

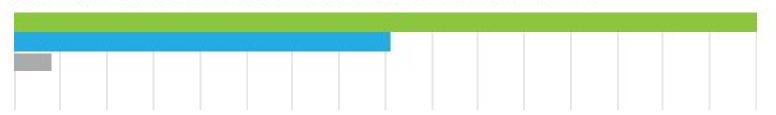


DOE Zero Energy ReadyHomeENERGY STAR Certified HomeExisting Home

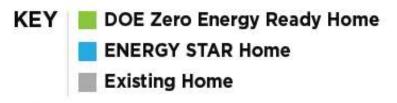
Translating Value With Clarity: ZERH Comparison Bars



HEALTHFUL ENVIRONMENT







This label indicates relative performance of this DOE Zero Energy Ready Home to existing homes (built between 1990 and 2010) and ENERGY STAR qualified homes. Actual performance may vary.



Point of Sale Fact Sheet & **Consumer Brochure**







A comfortable and healthful home.

HEALTHFUL ENVIRONMENT

Every DOE Zero Energy Ready Home has a comprehensive package of measures to minimize dangerous poliutants, provide continuous fresh air, and effectively filter the air you breathe.

COMFORT PLUS

Superior insulation, windows, air sealing and space conditioning systems included in every DOE Zero Energy Ready Home surround you with even temperatures, low-humidity, and gulet in every room on every floor.

KEY DOE Zero Energy Ready Home ENERGY STAR Certified Home Existing Home



Ultra high tech and energy efficient.

ADVANCED TECHNOLOGY

Every DOE Zero Energy Ready Home begins with solid building science specified by ENERGY STAR for Homes, and then adds advanced technologies and practices from DOE's worldclass research program, Building America.

ULTRA EFFICIENT

Compared to a typical home, an ultra efficient Zero Energy Ready Home is inexpensive to own. In fact, every DOE Zero Energy Ready Home is so energy efficient, a small solar electric system can easily offset most, or all, of your annual energy consumption. We call this Zero Net-Energy Ready.



High quality constructionbullt to last.

QUALITY BUILT

Advanced construction practices and technologies are specified for every DOE Zero Energy Ready Home. Then they are enforced by Independent verifiers with detailed checklists and prescribed diagnostics.

DURABILITY

The advanced levels of energy savings, comfort, health, durability, quality and future performance in every DOE Zero Energy Ready Home provide value that will stand the test of time, and will meet and exceed forthcoming code requirements.

The Future of Housing—Today

Only a select group of the top builders in the country meet the extraordinary levels of excellence and quality specified by U.S. Department of Energy guidelines.



LEARN MORE AT: buildings.energy.gov/zero





A Symbol of Excellence



KEY DOE Zero Energy Ready Home **■ ENERGY STAR Certified Home** Existing Home

This label indicates relative performance of this DOE Zero Energy Ready Home to existing homes (built between 1990 and 2010) and **ENERGY STAR Certified Homes** Actual performance may vary.



LEARN MORE AT: buildings.energy.gov/zerc

Front Cover

Inside Spread

Flap

Back

Point of Sale Fact Sheet & Consumer Brochure





Individual Attribute Fact Sheets



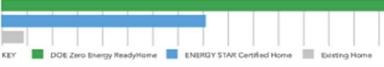
Clarity with Contrast



You Deserve a Healthy Home

Every DOE Zero Energy Ready Home has a comprehensive package of measures to minimize dangerous poliutants, provide continuous fresh air, and effectively filter the air you breathe. Harianducium nonesto velic te lit, sandus. Ximusam qui vel ide delesti nullorpore por min repudam lus, verferrum voluptatur, tet maio. Natus dolorem quidele ssimoluptam quodigendest a l'aige.

Compare the Difference



Powerful Testimonials

"We have shours suffered from al lengies ... no mold, so breathing problems, no fumes and no Holly syss. We are definitely hacory." - Zero Energy Ready Home

"Arsm ad guern reherd." Lam woo lat quis qui cornel besstur. Ire cords provitation, quiam Natus dolorees quidele moluntum."

- Zero Energy Ready Home

"It said it all t would bi by by su et orani re volupta surtatisti ve lit. si vel ide de lesti nu l'orpore por min regudan."

- Zano Emergy Ready Home



Communicating Value Harlanduckum norwato velic te 8t, sandus. Kirsunare qui vel ide delesti nullorpore por min regudam ius, verferrum volugitatur, tet maio. Natus dolorem quidele ssimolugitare quodigendest allaige. Officium quiaspis debitis mi, niatus dolorers. Namusa quia doluptus est por reis regudam lus, verferrurs voluptatur, tet maio-

When can losure Dolor?

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LEARN MORE AT: buildings.energy.gov/zero

Brought to you by:

Social Media





Homeowner Manual





Your Zero Energy Ready Home Story



— BROUGHT TO YOU BY ——

Newport Ventures

(518) 377-9410 - sbowles@newportventures.net

