Outline

1. Why Build Zero Energy Ready?
2. Selling DOE Zero Energy Ready Homes
3. Technical Specs
4. Partnerships
New Risk Reality

Energy Code Rigor

Goal

Risk Driver

Insulation System
  More
  Quality Install
  Complete

Windows

Air Sealing

Advanced Enclosure

More Rigorous Codes/HERS
Risk 1: Ensured Comfort

- Advanced Enclosure
- Ultra-Low HVAC Loads
- Optimized Low-Load Comfort System

Right Sizing/Variable Speed
Proper Installation
Complete Tested
Risk 2: Moisture Management Strategy

- Advanced Enclosure
- More Wetting Risk
- Comprehensive Water Protection

Roofs
Walls/Openings
Site/Foundation Materials
Risk 3: Ensured IAQ Strategy

Advanced Enclosure → More IAQ Risk → Comprehensive IAQ System

Source Control
Fresh Air System
High-Capture Filtration
Differentiation Opportunity 1: Obsolescence

Insulation System

More+
Quality Install
Complete

Windows+
Air Sealing+

Advanced Enclosure
Optimized Enclosure
House of the Future
Differentiation Opportunity 2:
Zero Energy Ready

- Optimized Enclosure
- Ultra-Low HVAC Loads
- Energy Efficient Components
- Solar Ready
What is a Zero Energy Ready Home

Risk Man:
Low-Loads
Less Drying
Less Fresh Air

Differentiation:
Future Ready
Health Ready
Advanced Tech
Zero Ready

Optimized Enclosure System
Optimized Comfort System
Water Protection System
Complete IAQ System
Efficient Comps System
Solar Ready System
How is a Zero Energy Ready Home Defined

Risk Man:
Low-Loads
Less Drying
Less Fresh Air

Differentiation:
Future Ready
Health Ready
Advanced Tech
Zero Ready

high-performance home, so energy efficient,
all or most annual energy consumption
can be offset by renewable energy.
Why ‘0’ Sells Better
Clarity depends on **contrast**.

We often understand something better when we see it in comparison with something else than when we see it in isolation.
Homes to the Power of ZERO

A Symbol of Excellence

- HEALTHFUL ENVIRONMENT
- COMFORT PLUS
- ADVANCED TECHNOLOGY
- ULTRA EFFICIENT
- QUALITY BUILT
- DURABILITY

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.

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

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.

503 221-4567
NewTown@net.com
123 Main Street, Denver, CO 34567
Homes to the Power of ZERO

A Symbol of Excellence

HEALTHFUL ENVIRONMENT

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.

303 221-4667
NewTown@net.com
123 Main Street, Denver, CO 34567
The Power of Contrast

HEALTHFUL ENVIRONMENT

KEY
- DOE Zero Energy Ready Home
- ENERGY STAR 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 qualified homes. Actual performance may vary.
Contrast: New vs. Obsolescence
“Our daughter couldn’t breathe without discomfort for years. Within two months of moving into our new Cobblestone Home we threw away the inhaler. That was priceless!”
Charley and Mary Jones, KB homeowner
“You feel like you’re wrapped in a 100 wool blankets. It’s so warm, you would never know it was below zero degrees the last two weeks here.”
Why ‘0’ Differentiates Better
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
Lots of Trusted Label Choices…

You Are Here

You Are Here

You Are Here
Differentiate with ZERH ‘Brand’

Independent Voice of Authority vs. “Trust me.”
Differentiate with ZERH ‘Brand’
Differentiate with Multiple ‘Brands’
Differentiate with Value Message

Lives Better

HEALTHFUL ENVIRONMENT

Every DOE Zero Energy Ready Home has a comprehensive package of measures to minimize dangerous pollutants, 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 temperature, low-humidity, and quiet in every room on every floor.

KEY

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

Works Better

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 world-class 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.

KEY

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

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.

KEY

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

This label indicates relative performance of the DOE Zero Energy Ready Home in existing homes (built between 1965 and 2000) and ENERGY STAR Certified Homes. Actual performance may vary.

CALL US AT:

303-231-4567

NewTown@net.com

Back Cover
Differentiate with Awards
Differentiate with Awards

Michigan’s Most Respected Builder

CONTACTUS

Sales: (989) 692-0210
Office: (989) 692-0140
Fax: (989) 692-0142

Design Studio Address:
5474 Garfield Rd
Suite 2
Saginaw, MI 48603
MAP

Mailing Address:
P.O. Box 604
Freeland, MI 48623
EMAIL
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 name> 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 homes of the future because they live, work, and last better with incredibly low or no energy costs. And what’s exciting for American homeowners, they are available today thanks to leading builders across the country.”

- “Housing Innovation Award winners such as <Partner Name who has won HIA> are 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.
Differentiate with Tour of Zero

POWER OF ZERO HOME TOUR
Differentiate with Tour of Zero

New Town Builders
The ArtiZEN Plan
Denver, CO
303-707-4400
Newtownbuilders.com

Zero Energy Ready Home
U.S. Department of Energy

Key Features:
- High-performance insulation system
- Advanced quiet and comfort system for cleaner, healthier HVAC, appliances, and lighting
- Lightweight concrete and water ready mix

Consumer Experience:
Click

New Town Builders
The ArtiZEN Plan
Denver, CO

Zero Energy Ready Home
U.S. Department of Energy

Builder Profile:
New Town Builders, Denver, CO
Bill Rectanus
brectanus@newtownbuilders.com
303-707-4400
Newtownbuilders.com

Featured Home/Development:
Project Data:
- Name: The ArtiZEN Plan
- Location: Denver, CO
- Limited: 3 bedrooms, 2 baths, 2 floors
- Conditioned Space: 2,300 sq ft
- Climate: Denver, R-78 rated
- Completion: September 2013
- Category: Production

Modeling Performance Data:
- HERS Index: 6
- Projected Utility Costs: $1,414 with PV, $5,064 without PV
- Projected Annual Energy Costs:
  - 2029: $15,900
  - 2030: $15,900
- Annual Energy Savings:
  - Without PV: $14,016
  - With PV: $8,700

"Now that we've lived in a DOE Zero Energy Ready Home, we couldn't imagine living anywhere else. It's so quiet and comfortable. We love our new home!"
- New Town homeowner

"Our goal is to be 100% U.S. Department of Energy (DOE) Zero Energy Ready certified on all of our single-family homes," said Bill Rectanus, vice president of New Town Builders, which plans to build 150 single-family homes in the Denver metro area next year.

The builder constructed its first home to DOE’s Zero Energy Ready Home Program criteria in 2013 and has been gradually moving toward certification across the board since then. New Town was in the process of building 29 homes in its Solaris community when it learned about the DOE program. Most of the 29 homes in the first phase of Solaris are certified and all homes in the next phase of Solaris will be certified. All of the homes come with at least a 1.75-kW photovoltaic system on the roof. Phase 2 is to install 5-kW systems and homeowners will have the option to add more PV to achieve a true net zero energy home, a home that produces as much power as it uses in a year.

In New Town’s Z.E.N. (Zero EnergyNow) community, which has 30 homes at or near completion and 33 more homes scheduled for a second phase, all of the homes are true zero energy. New Town is in the planning stages on two additional projects—Hyland Village, a development of 75 single-family detached homes, and Perren’s Row, a development of 26 attached homes. Both communities will be 100% DOE Zero Energy Ready.
Differentiate with Tour of Zero
Differentiate with Tour of Zero

Click
Differentiate with Tour of Zero

National Campaign:

Call to Action:
Inspire American consumers to visit the future of housing available today with Zero Energy Ready Homes.

Campaign Partners:
- Manufacturers
- Associations
- Efficiency Programs
- Financial Institutions

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

energy.gov/zero-energy-home-tour

Take the zero energy ready home tour.
Technical Specifications
What is a Zero Energy Ready Home

**Risk Man:**
- Low-Loads
- Less Drying
- Less Fresh Air

**Differentiation:**
- Future Ready
- Health Ready
- Advanced Tech
- Zero Ready

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**System Components:**
- Optimized Enclosure System
- Optimized Comfort System
- Water Protection System
- Complete IAQ System
- Efficient Comps System
- Solar Ready System
Technical Specifications…
- How Heavy is the Lift?

• ENERGY STAR Certified Homes v3
  • Advanced Windows
  • Air-Tight Construction
  • 2012/15 IECC Insulation
  • Energy Efficient Components
• Efficient Hot Water Distribution
• Optimized Duct System
• Indoor Air Quality (passive radon mitigation)
  • Renewable Ready Construction (PV-Ready ONLY)
  • Efficiency Threshold (HERS Index)

• Core Plumbing Layout (wet wall)
• Manifold System
• Demand Pumping/Recirc. System
Partnerships
Stakeholders ZERH Self-Interest

Builders
Raters
Architects
Lenders/Insurers
Utilities

Build.
Manage risk.
Differentiate.
BUILDERS

RATERS

ARCHITECTS

LENDERS/INSURERS

UTILITIES

Supply chain. Consult, model, verify, & submit.
DOE Zero Energy Ready Home Partners

- Builders
- Raters
- Architects
- Lenders/Insurers
- Utilities

Design. Leverage.
Support rationale valuation process.
DOE Zero Energy Ready Home Partners

Builders
Raters
Architects
Lenders/Insurers
Utilities

Leverage as upper-tier. Be Innovation Partners.
Thank You

For More Information:

www.buildings.energy.gov/zero

Email:

zero@newportpartnersllc.com