DOE Zero Energy Ready Home





Sales Training

SAM RASHKIN

Chief Architect
Building Technologies Office

A Word About Training



- Context
- Concepts
- Skills
- Tools
- Practice

A Word About Four Levels of Skill



- Level 1: Unconsciously Incompetent
- Level 2: Consciously Incompetent
- Level 3: Consciously Competent
- Level 4: Unconsciously Competent

Context: Hard Trends Pointing to Zero



Context: Hard Trends Pointing to Zero			
Concepts	Skills	Tools	Practice
Knowledge Matters	Product Expertise	Building America Solution Center	Customized Field Kits for Your Home/Models



Context: Hard Trends Pointing to Zero

Concepts	Skills	Tools	Practice
Knowledge Matters	Product Expertise	Building America Solution Center	Customized Field Kits for Your Home/Models
Words Matter	Translate Jargon into Value	Building Science Translator	Power Word Fact Sheets for Your Home/ Models



Context: Hard Trends Pointing to Zero

$lue{lue}$			
Concepts	Skills	Tools	Practice
Knowledge Matters	Product Expertise	Building America Solution Center	Customized Field Kits for Your Home/Models
Words Matter	Translate Jargon into Value	Building Science Translator	Power Word Fact Sheets for Your Home/ Models
Questions Matter	Uncover Needs	Value Questions	Role Play with Colleagues



Concepts	Skills	Tools	Practice
Knowledge Matters	Product Expertise	Building America Solution Center	Customized Field Kits for Your Home/Models
Words Matter	Translate Jargon into Value	Building Science Translator	Power Word Fact Sheets for Your Home/ Models
Questions Matter	Uncover Needs	Value Questions	Role Play with Colleagues
Clarity Matters	Create Contrast	Comparison Bars/ Experiences	Point-of-Sale Comparison Bars, Experiences

Context: Hard Trends Pointing to Zero			
Concepts	Skills	Tools	Practice
Knowledge Matters	Product Expertise	Building America Solution Center	Customize Field Kits for Your Home/Models
Words Matter	Translate Jargon into Value	Building Science Translator	Power Word Fact Sheets for Your Home/ Models
Questions Matter	Uncover Needs	Value Questions	Role Play with Colleagues
Clarity Matters	Create Contrast	Comparison Bars/ Experiences	Point-of-Sale Comparison Bars, Experiences
Process	Translate Relevant Value	5-Sten Process	Role-Play with

5-Step Process

Matters

Relevant Value

in ≤45 Seconds

Colleagues



Context: Hard Trends Pointing to Zero

Predicting the Visible Future



"You can predict the future accurately."

All you have to do is leave out the parts you could be wrong about."

"The key... is knowing how to distinguish a soft trend from a hard trend...

It's knowing how to recognize certainty."

Daniel Burrus, "Flash Foresight"



Risk Management Differentiation Opportunity Innovation Imperative



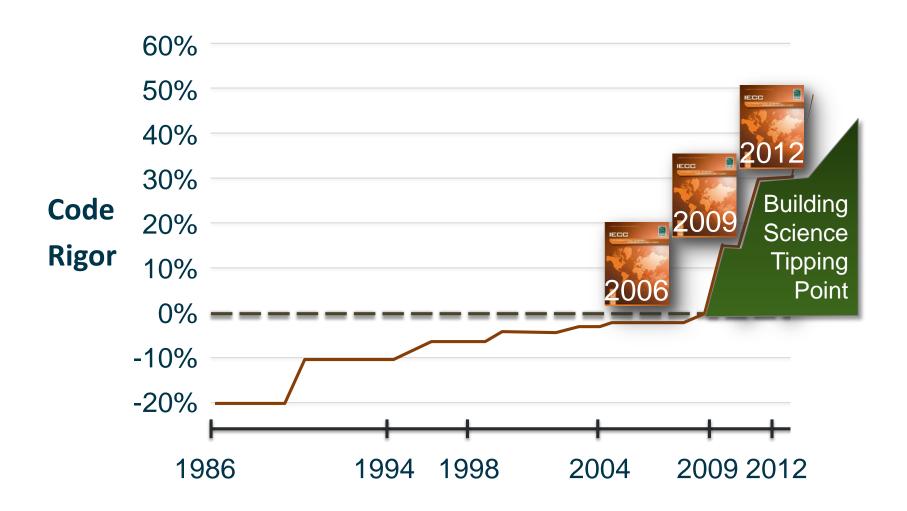
Performance Risk Driver



Performance

Differentiation

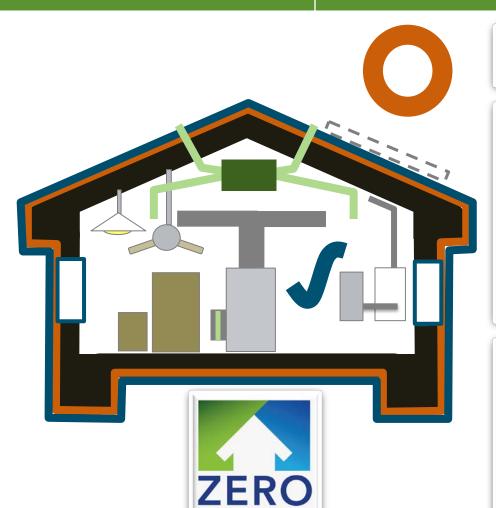
Innovation



Risk

Differentiation

Innovation



Advanced Enclosure

Risk Management:

Optimized Comfort System
Complete Water Protection
Comprehensive IAQ System

Differentiation:

Optimized Enclosure
Efficient Components
Solar Ready Construction



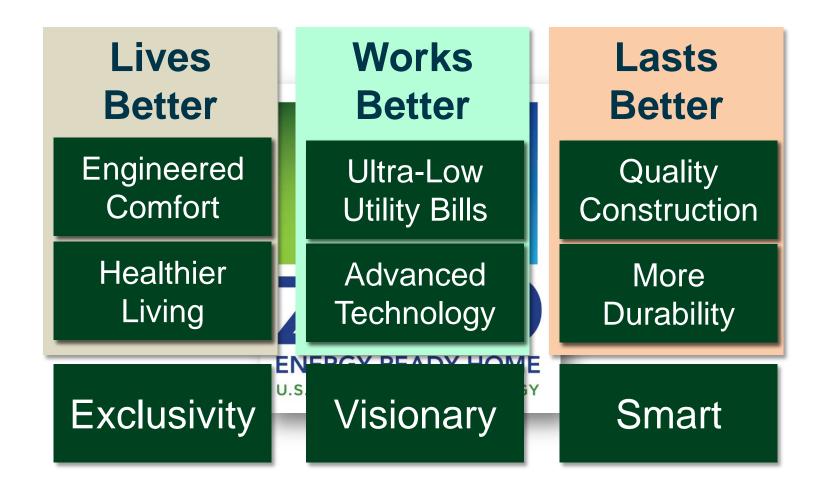
Zero Energy Ready Home Value



Risk

Differentiation

Innovation



More Informed Consumers



Risk

Differentiation

Innovation

Information
Asymmetry:
Caveat
Emptor
Information
Parity:
Caveat
Venditor

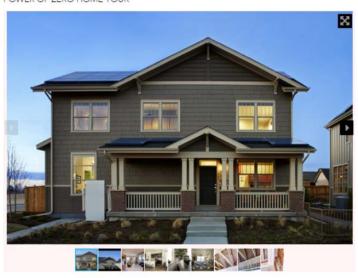


DOE Marketing Zero





POWER OF ZERO HOME TOUR





"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



· High-efficiency HVAC, appliances. and lighting to save energy and water

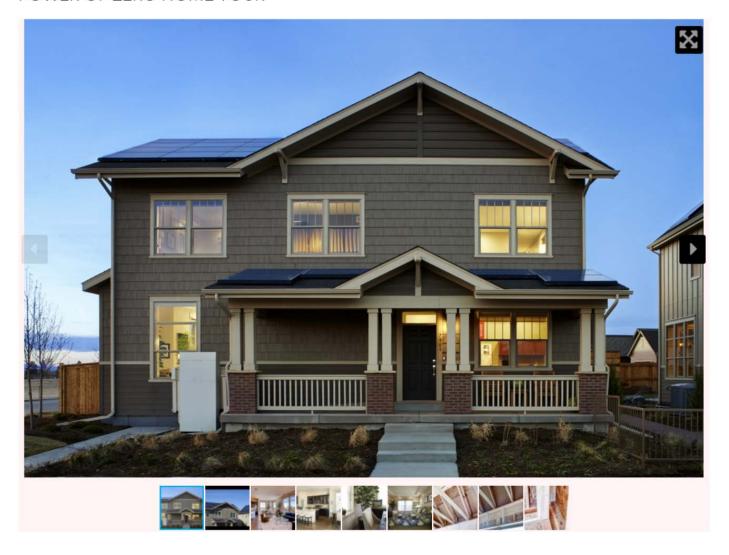
Read more



ENERGY



POWER OF ZERO HOME TOUR





New Town Builders

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

"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 homeowners



- High-performance insulation system for enhanced quiet and comfort
- · Comprehensive draft protection
- Fresh air system for cleaner, healthier indoor air
- High-efficiency HVAC, appliances, and lighting to save energy and water

Read more.





BUILDER PROFILE

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

Newtownbuilders.com Rater: EnergyLogic, Inc., Peter Oberhammer, www.rrglogic.com

FEATURED HOME/DEVELOPMENT:

Project Data:

- · Name: The ArtiZEN Plan
- Location: Deriver, CO
- Layout: 3 bedrooms, 2.5 baths, 2 floors
 Conditioned Space: 2 fl5 ft²
- Climate Zone: IECC 58, cold
- Completion: September 2013
 Category: Production

Modeled Performance Data:

- HERS Index: without PV 38, with PV -3
 Protected Annual Littity Costs without
- Projected Annual Utility Costs: without PV \$1,414, with PV \$5
- Projected Annual Energy Cost Savings (compared to a home built to the 2009 IECC): without PV \$493, with PV \$1,902
 Builder's Added Cost Over 2009 IECC:
- without PV \$22,000, with PV 35,000
- Annual Energy Savings: without PV 48.5 MMBtu/yr, 2,588 kWh, 203 therms; with PV 8 MMBtu/yr, 14,476 kWh, 203 therms

New Town Builders has committed to a new way of building. The Denver area production builder hopes to convert all of its product lines to zero energy-ready construction by the end of next year.

"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 34 homes in the next phase of Solaris will be certified. All of the homes come with at least a 2.75-kW photovoltaic system on the roof. In phase 2 the goal is to install 5-kW systems and homebuyers 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.

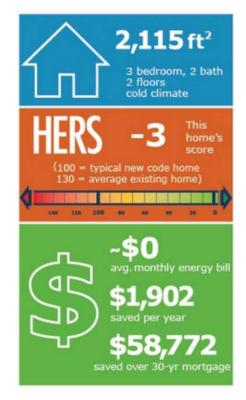
In New Town's Z.E.N. (Zero Energy Now) community, which has 30 homes at or near completion and 33 more homes scheduled for a second phase, all of the homes are true zero energy. New Town is in the planning stages on two additional projects—Hyland Village, a development of 75 single-family detached homes,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



The U.S. Department of Energy invites home builders across the country to meet the extraordinary levels of excellence and quality specified in DOE's Zero Energy Ready Home program (formerly known as Challenge Home). Every DOE Zero Energy Ready Home starts with ENERGY STAR Certified Homes Version 5.0 for an energy-efficient home built on a solid foundation of building science research. Advanced technologies are designed in to give you superior construction, durability, and comfort, healthy indoor air, high-performance HYAC, lighting, and appliances; and solar-ready components for low or no utility bills in a quality home that will last for generations to come.





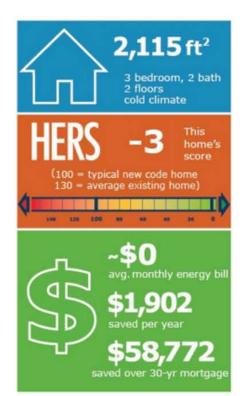








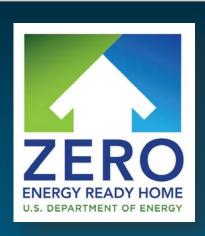
More ...





Message (Call to Action):

[Company Name] is proud to work with the U.S. DOE bringing innovation to American Homes. The Home of The Future is Here Today. Visit the DOE Power of Zero Home Tour: www.energy.gov/tour-zero



National Campaign Partners:

- Manufacturers
- Associations
- NGO's
- Financial Institutions



Knowledge Matters



"When the consumer knows more than the sales person, things usually don't go well."

"Knowledge breeds enthusiasm and earns trust."

"People buy on emotion, and justify with the facts."

World-Class Expert Guidance...

Building America Solution Center

BASC.energy.gov



...At Your Fingertips

What is BASC?



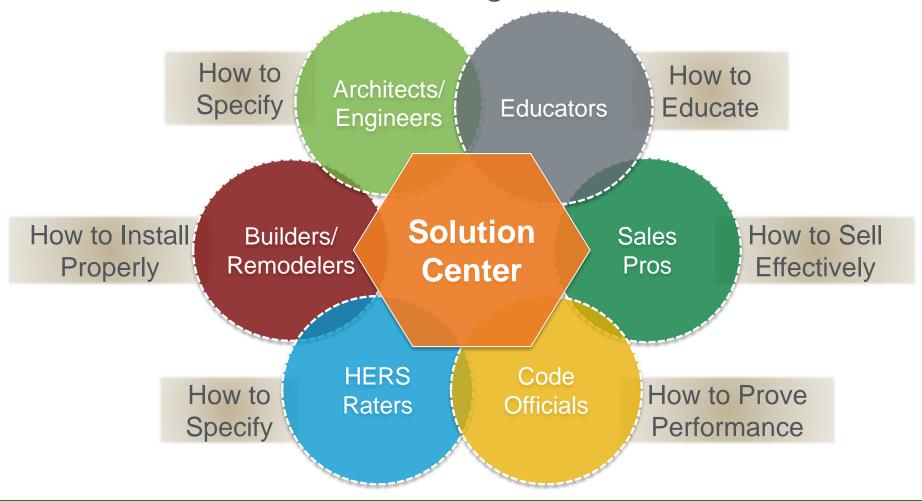
- □ Online/Mobile App Tool
- ☐ Fast, Free and Reliable Knowledge.
- ☐ Quick Access to Program Content:
 - Zero Energy Ready Home
 - ENERGY STAR Certified Homes
 - Indoor AirPLUS
 - Water Sense programs
- World-Class Expert Guidance:
 - Specify
 - Install
 - Precedence
 - Sales

How is BASC Content Provided?



- □ Guides Heart of BASC
 - Nine Critical Topics
 - 150 Measures and Growing
 - Guidance for Specifying, Installing, Precedence, Sales
- □ Browser
 - Images
 - CAD Files
 - Case Studies
- Reference Material
 - Building Science Principles (coming)
 - Unabridged Research Reports
 - 30% Solutions

Over 150,000 Unique Visitors/Year and Growing! Over 2,000 Registered Users



How Much BASC Content?



- ☐ 160+ Full Guides
- ☐ 1,300+ Images
- ☐ 115+ CAD drawings
- □ 175+ Proven Performance Case Studies
- □ 375+ Peer-Reviewed References and

Resources

And growing...

BASC Program Guidance



This presentation focuses on the Building America Solution Center features that will help you build Zero Energy Ready Homes. The Solution Center supports many programs:







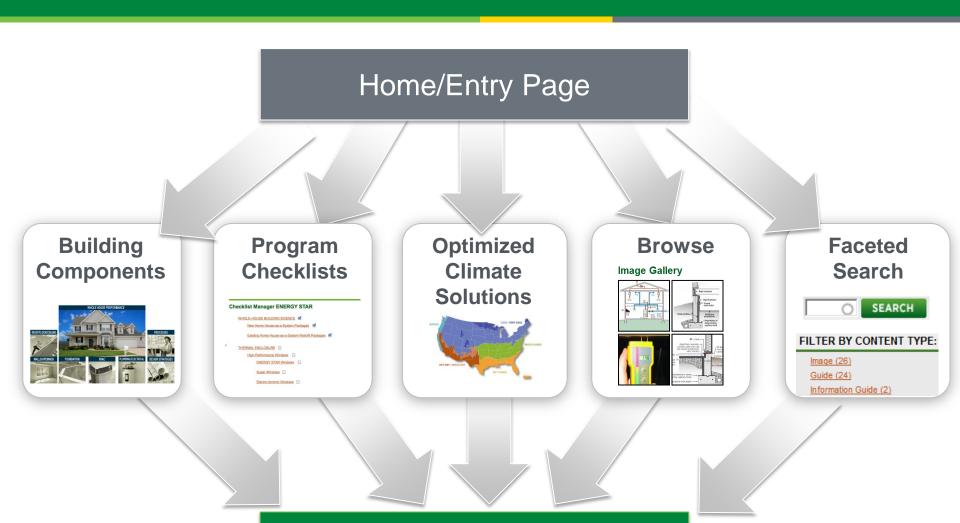






Variety of Tools to Access Content





Content

Homepage





Building America Solution Center

Log In Register

Enter your keywon

SEARCH

Solution Center Home

Help

FIND YOUR TOPIC BY:

Building Components

Guides A-Z

ENERGY STAR Certified Homes

Zero Energy Ready Home

FIND RESOURCES:

References and Resources

CAD Files

Image Gallery

Case Studies

Optimized Climate Solutions

FIND PUBLICATIONS:

Building Science Publications

The Building America Solution Center provides access to expert information on hundreds of high-performance construction topics, including air sealing and insulation, HVAC components, windows, indoor air quality, and much more. Click on the links below to explore the Solution Center.









As a community driven tool, we welcome your <u>comments</u> on how to continuously improve the Solution Center. If you are interested in submitting content, please become a <u>registered user</u> and see the <u>criteria for submissions</u>.

THANK YOU! Li Ling Young for providing substantive comments on window flashing leading to improvements to Solution Center content.

RECENTLY ADDED/UPDATED GUIDES

Ventilation Air Inlet Locations
Last Updated: January 6, 2015

Reduce Pest Intrusion

Last Updated: January 5, 2015

Air Sealing Attached Garage

Last Updated: December 29, 2014

More Guides →

RECENTLY ADDED CONTENT

Right – Apply sealant around penetrations through foundation walls and along foundation wall seams Image Posted: January, 2015

<u>Evaluation of Ventilation Strategies in New</u> <u>Construction Multifamily Buildings</u>

Reference Posted: January, 2015

Code Notes: Whole-House Mechanical Ventilation

Reference Posted: January, 2015



Contact Us Web Site Policies U.S. Department of Energy USA.gov

https://basc.energy.gov

Zero Energy Ready Homes Checklist





Building America Solution Center

Log In Register Enter your keywon

SEARCH

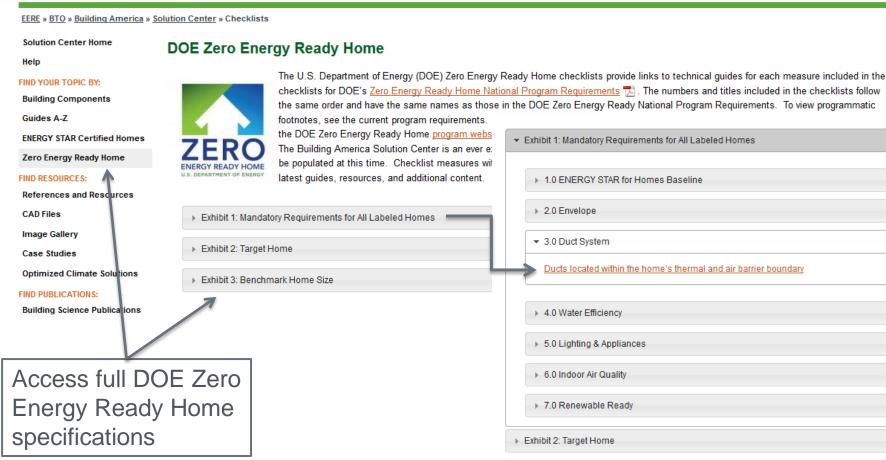


 Exhibit 1: Mandatory Requirements for All Labeled Homes ▶ 1.0 ENERGY STAR for Homes Baseline ▶ 2.0 Envelope 3.0 Duct System Ducts located within the home's thermal and air barrier boundary 4.0 Water Efficiency 5.0 Lighting & Appliances ▶ 6.0 Indoor Air Quality 7.0 Renewable Ready Exhibit 2: Target Home Exhibit 3: Benchmark Home Size

Access Guides Directly from Checklist



Building America Solution Center

Log In Register Enter your keywon SEARCH

EERE » BTO » Building America » Solution Center » Exhibit 1: Mandatory Requirements for All Labeled Homes

Solution Center Home

FIND YOUR TOPIC BY:

Building Components

Guides A-Z

Help

ENERGY STAR Certified Homes

Zero Energy Ready Home

FIND RESOURCES:

References and Resources

CAD Files

Image Gallery Case Studies

Optimized Climate Solutions

FIND PUBLICATIONS:

Building Science Publications

Ducts located within the home's thermal and air barrier boundary

There are several possible methods for locating the home's HVAC system within the home's thermal air barrier boundary. See the DOE Zero Energy Ready Home National Program Requirements for exceptions and alternative compliance paths.

The following Solution Center guides provide more information about these measures:

Ducts Buried in Attic Insulation and Encapsulated

This guide describes approaches to buryng and encapsulating ducts in unconditioned attics to increase the overall R-value of duct insulation.

Encapsulated Ducts

Guide that illustrates how and when to encapsulate ductwork in unconditioned attics, increases the R-value of duct insulation, mitigating condensation issues and reducing air leakage

Ducts Buried in Attic Insulation

This guides describes buried ducts in loose-fill attic insulation, a method that can only be used in dry climates.

Unvented Attic Insulation

Guide describing methods for insulating an unvented attic along the roof line.

Unvented Crawlspaces and Conditioned Basements

Guide describing methods for insulating an unvented crawlspace or conditioned basement with rigid foam on the interior side of the walls to provide an insulated space for HVAC equipment.

Application of Spray Foam Insulation Under Plywood and OSB Roof Sheathing

Guide describing a method for insulating an unvented attic by spraying foam insulation along the underside of the roof deck.

Each checklist item will provide program information and direct access to guides containing specific technical information

Guide Tabs



Ducts Buried in Attic Insulation

Please Register or Login to Provide Feedback.

Print this page Scope Description Ensuring Success Climate Training CAD Compliance More Info. More Info. Case Studies Building America Top Innovations 2013 Profile: Buried and Encapsulated Ducts Author(s): PNNL Organization(s): PNNL Publication Date: September, 2013 Case study providing information about buried and encapsulated ducts. Technology Solutions Case Study: Buried and Encapsulated Ducts, Jacksonville, Florida 📆 Author(s): CARB Organization(s): CARB Publication Date: November, 2013 Case study exploring how using buried and/or encapsulated ducts can reduce duct thermal losses in existing homes. References and Resources* 2008 Building Energy Efficiency Standards: Residential Compliance Manual Author(s): California Energy Commission Organization(s): California Energy Commission Publication Date: January, 2008

Each Guide contains:

- Scope of work
- Description (how to install)
- Ensuring Success (safety, planning)
- Climate specific information
- Training (images, presentations, videos)
- CAD drawings
- Compliance information
- External resources and case studies

Code establishing a baseline for energy efficiency by setting performance standards for the building envelope (defined as the boundary that separates heated/cooled air from unconditioned, outside air).

2009 IECC-International Energy Conservation Code

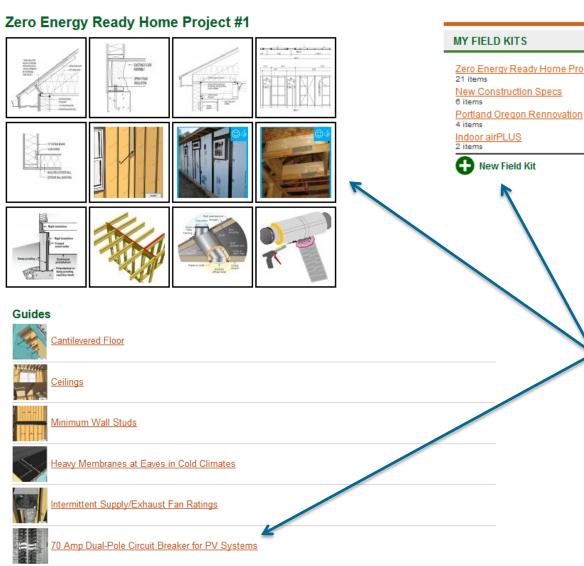
Author(s): ICC

Organization(s): ICC
Publication Date: January, 2009

Document intended to help owners, designers, builders, inspectors, examiners, and energy consultants

comply with and enforce California's 2008 energy efficiency standards for low-rise residential buildings.

Customizable Field Kits



Zero Energy Ready Home Project #1

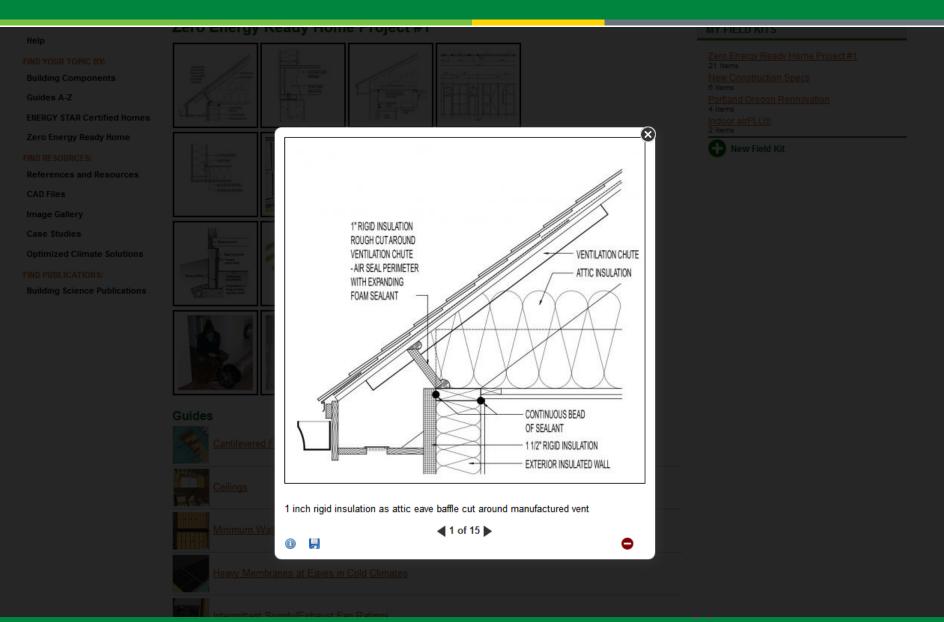
New Field Kit

Use the My Field Kits tool to customize your Solution Center content by creating folders for:

- Guides
- **Images**
- **CAD Files**

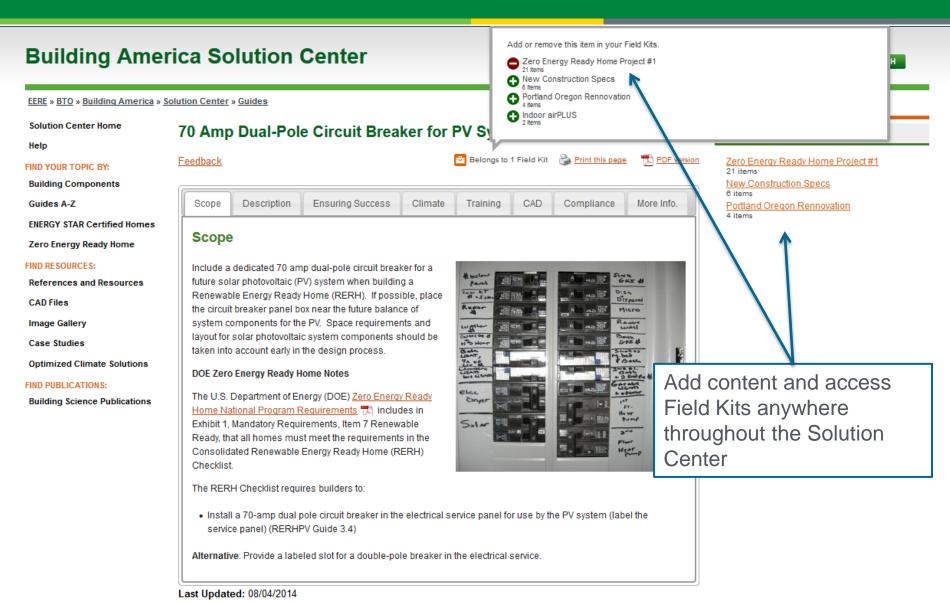
Access Media Directly from Field Kits





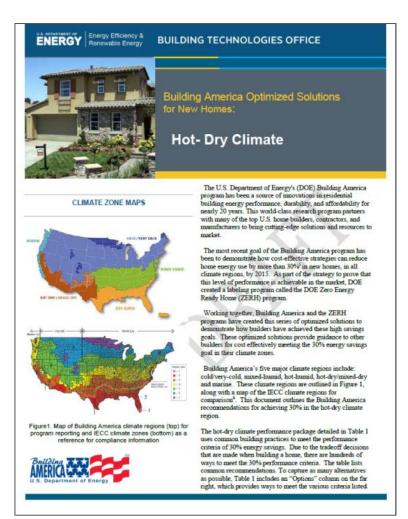
Add Any Guide to Field Kits





Optimized Climate Solutions





- ➤ Building America and the Zero Energy Ready Home Program created recommended measure packages used by builders to meet or exceed the 2009 IECC by 30% in all climate zones.
- This content is now a standalone tool in the Solution Center.
- ➤ Each climate zone page includes direct access to proven performance case studies.
- PDF documents are also available.

Optimized Climate Solutions



Building America Solution Center

EERE » BTO » Building America » Solution Center

Solution Center Home

Help

FIND YOUR TOPIC BY:

Building Components

Guides A-Z

ENERGY STAR Certified Homes

Zero Energy Ready Home

FIND RESOURCES:

References and Resources

CAD Files

Image Gallery

Case Studies

Optimized Climate Solutions

FIND PUBLICATIONS:

Building Science Publications

Optimized Climate Solutions

The Building America Program, funded by the D the next level of cost effective energy performand roughly consistent with the 2009 International Experformance is achievable and market viable, DO Home (ZERH). The climate-specific guidance in information on optimized solutions that meet or

Use the interactive map below to find climate-sp Homes. For more information about climate des Regions by County 📆 .



Hot-Dry/Mixed-Dry

This Building America Optimized Solution describes a set of building practices necessary to achieve the next step in energy performance for new homes (approximately 30% energy savings above the B10_Benchmark - roughly consistent with the 2009 International Energy Conservation Code). This package of measures meets and exceeds DOE's Zero Energy Ready Home (ZERH) program requirements and was selected for its performance in the following areas:

- Energy Savings
- Affordability
- Buildability
- Durability
 Healthy Indoor Environment

Energy Savings

The high performance builders profiled in the case studies found below the interactive box show just a few examples of the hundreds of ways a builder can meet the premium levels of energy savings Building America strives for, while qualifying for the ZERH. Print the Optimized Solution for the Hot-Dry/Mixed-Dry Climate ...

HVAC System

Energy Savings

Efficient Components

 Average New Home (IECC 2009)

■ EnergyStar V3

Thermal Enclosure



s for New ceed the dy Home

ENERGY READY HOME

Use the new Optimized Climate Solutions tool to access building packages designed to achieve 30% energy savings by climate zone

Solutions Mobile Application





Access your Building America Field Kits remotely using the new "Solutions" mobile application for Android and iOS. Access the iOS app through the Apple store, and use the link below for the Android app.



In the Pipeline...

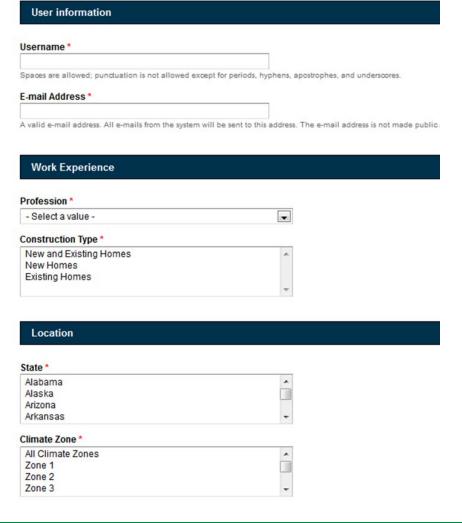


- Building Science Translator Sales Tool
 - New vocabulary replaces technical jargon with terms based on enhanced consumer experience [Later in 'Words Matter module]
 - Stronger consumer sales messaging
 - Customizable point-of-sale content
 - Sales content can be added to Field Kits
- ☐ Existing Home Upgrade Content
- □ Homepage Re-design

Become part of the Solution Center



- > Register to customize content
- > Provide feedback on content
- > Submit content



Request new password

User account

Create new account

Log in



Access the Building America Solution Center at:

http://basc.energy.gov

Also accessible through the Building America Website at:

http://www.buildingamerica.gov

'Knowledge Matters' Practice



- Register as a BASC User.
- Compile a list of home performance measures for each specific home or model to be sold.
- Create a 'My Field Kit' for each home or model, and populate with 'BASC Guides' for each measure.
- Print Guides and compile in a binder or save them in a digital format.
- Study the package of measure Guides every week until you achieve Level 4 knowledge on your product.



Words Matter



Sales Rules



"Words Matter... they matter a lot"





It's really difficult to sell...

Patagonian Toothfish





It's much easier to sell an...

Chilean Sea Bass





It's difficult to rally public opinion against an...

Estate Tax





It's much easier to rally public opinion against a...

Death Tax





It's really difficult to sell an...

Energy Audit





It's much easier to sell an...



It's really difficult to sell a...

Transfer Grill





It's much easier to sell a...

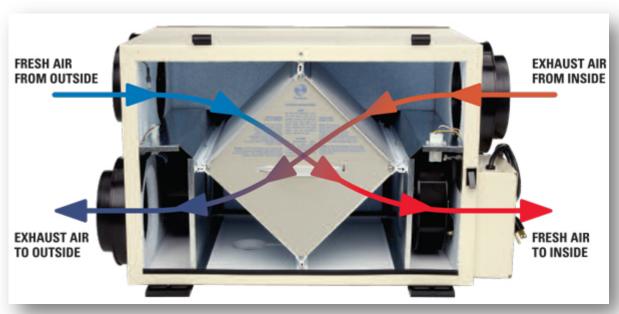
Comfort Vent





It's really difficult to sell a...

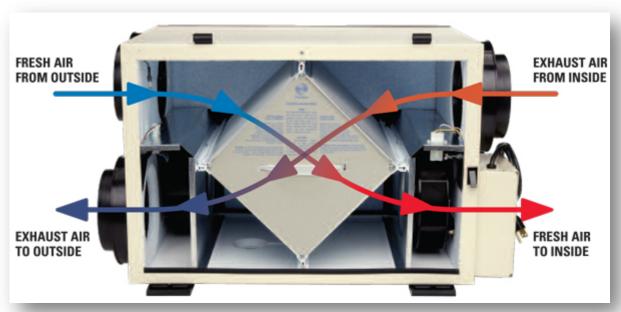
Ventilation System





It's much easier to sell a...

Fresh-Air System





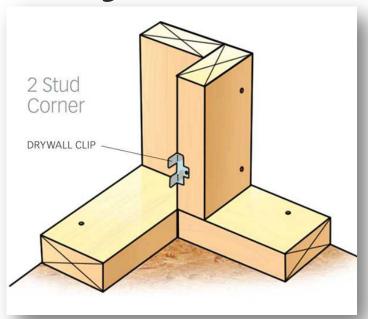
DOE CH Student Design Competition

Bldg. Sci. Education Task Force

Building Science Translator

It's really difficult to sell a...

2-Stud Corner with Drywall Clip







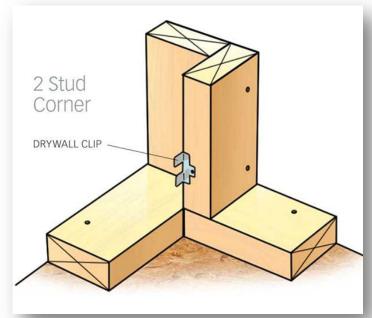
DOE CH Student
Design Competition

Bldg. Sci. Education
Task Force

Building Science Translator

It's much easier to sell a...

Crack-Resistant Corner 2 Stud



Power Words Summary:

It's hard to sell the...

Technical Function

Power Words Summary:

It's much easier to set the...

Customer Experience

Power Words Summary:



It's difference between...

Technical Jargon

and a

Language of 'Value'

HVAC System = Comfort System = Heating + Cooling + RH Control

- HVAC System = Comfort System
- HVAC Equipment = Comfort Equipment
- HVAC Ducts = Comfort Delivery System
- HVAC Terminals = Comfort Outlets
- HVAC Pressure Balancing = Comfort Balancing
- HVAC Transfer Grill = Comfort Vent
- HVAC Thermostat = Comfort Control System

High-Performance = Enhanced Efficiency + Ensured Quality Installation

- High-Performance Window
- High-Performance Insulation
- High-Performance Comfort System



Enhanced Efficiency: High-Efficiency = ~15% > code/standard Ultra-Efficient = ~50% > code/standard

- High-Efficiency vs. Ultra-Efficient Insulation
- High-Efficiency vs. Ultra-Efficient Window
- High-Efficiency vs. Ultra-Efficient Refrigerator



Ensured Quality Installation = Professionally Installed =

compliant with industry and manufacturer standards

- Professionally-Installed Insulation
- Professionally-Installed Window
- Professionally-Installed Comfort System
- Professionally-Installed Comfort Delivery System

Alternate Terms:

Develop alternate terms for each measure that speak to multitude of consumer experiences to enhance ability to communicate value.

Low-E Window Becomes:

- Efficiency: High- or Ultra-Efficient Window
- Comfort: Enhanced Comfort Window
- Healthful Environment: Quiet Window
- Advanced: Advanced Window Technology
- Durability: Sun Protection Window

Building Science Translator



'Race to Zero'

Guidelines

Translator

Building America Building Science Translator – Page 1a

Building Science Measure	New Building Science Terminology	Alternate Terms					
		Lives States		Works Better		Lasts Better	
		Engineere Comfort	Healthful Environment	Ultra-Efficient	Advanced Technology	Quality Built	Enhanced Durability
High-Performance Thermal Enclosure	High-Performance Thermal Enclosure	Enhanced Comfort Enclosure	Moisture Managed Enclosure	High-Efficiency Enclosure	Advanced Enclosure Technology	Professionally- Installed Thermal Enclosure	Low-Maintenance Enclosure
High-Performance	High-Performance Window System	Enhanced Comfort Window System	Quiet Window System	High-Efficiency or Ultra-Efficient Window System	Advanced Window System Technology	Professionally- Installed Window System	Enhanced Durabilit Window System
High-R Window	High-Efficiency Window	Enhanced Comfort Window	Quiet Window	High-Efficiency or Ultra-Efficient Window	Advanced Window Technology		Sun Protection Window
Window	Professionally- Installed Window	Installation	Window Installation	Window Installation	Advanced Window Installation	Professionally- Installed Window	Weather-Protected Window Installatio
High-Performance Insulation System	High-Performance Insulation System	Enhanced Comfort Insulation System	Enhanced Quiet Insulation System	High-Efficiency or Ultra-Efficient Isulation System	Advanced Insulation System	Professionally- Installed Insulation System	Next-Gen Insulatio System
High-R Insulation	High-Efficiency or Ultra-Efficient Insulation	Enhanced Comfort Insulation	Enhanced Quiet Insulation	High-Efficiency or Utra-Efficient In ulation	Advanced Insulation Technology		
High-R Wall Insulation	High-Efficiency or Ultra-Efficient Wall Insulation	Enhanced Comfort Wall Insulation	Enhanced Quiet Wall Insulation	High-Efficiency or Ultra-Efficient Wall Instalation	Advanced Wall Insulation		
High-R Floor Insulation	High-Efficiency or Ultra-Efficient Floor Insulation	Enhanced Comfort Floor Insulation	Enhanced Quiet Floor Insulation	Hig -Efficiency or Ult a-Efficient Floor Instilation	Advanced Floor Insulation		
High-R Attic Insulation	High-Efficiency or Ultra-Efficient Attic Insulation	Enhanced Comfort Attic Insulation	Enhanced Quiet Ceiling Insulation	High-Efficiency or Itra-Efficient Attic Insulation	Advanced Attic Insulation		
High-R Foundation Insulation	High-Efficiency or Ultra-Efficient Foundation Insulation	Enhanced Comfort Foundation Insulation	Enhanced Quiet Foundation Insulation	High-Efficiency or Ultra-Efficient Foundation Insulation	Advanced Foundation Insulation		
Insulation Quality Installation	Premium-Installed Insulation	Enhanced Comf Insulation Installation	Enhanced Quiet Insulation Installation	Energy Saving Insulation Installation	Advanced Insulation Installation Practices	Professionally- Installed Insulation	Moisture Control Insulation Installation
Fully Aligned Air Barriers	Whole-House Draft Barrier	Whole-House raft Barrier	Air Contaminant Barrier	Evergy Saving Air Barrier	Advanced Air Barrier Technology	Professionally- Installed Draft Barrier	Moisture Control / Barrier



Garson Homes Healthful Environment





Fresh Air:

- Supply Fresh Air System
- Odor and Moisture Control Fans
- High-Capture Filtration Technology

Quiet:

- Quiet Window Technology
- Quiet Wall Technology

Moisture Control:

- Dry-by-Design Construction
- Moisture Control System Whole House
- Moisture Controlled Comfort System
- Moisture Controlled Windows
- Moisture Controlled Lower Level

Pest Control:

- Bug Control Barrier
- Pest Screened Home

Outdoor Contaminant Control:

- Contaminant Sealed Construction
- Contaminant Sealed Comfort Delivery
- Dust and Pollen Barrier
- Radon Controlled Home

Chemical Control:

- · Formaldehyde Controlled Home
- VOC Controlled Home

Fume Control:

- Carbon Monoxide Controlled Equipment
- Carbon Monoxide Controlled Fireplace
- · Fume Controlled Garage

BASC Sales Tool Coming Soon





Building America Solution Center

Log In Register SEARCH

Solution Center Home

Help

FIND YOUR TOPIC BY:

Building Components

Guides A-Z

ENERGY STAR

Zero Energy Ready Home

FIND RESOURCES:

References and Resources

CAD Files

Image Gallery

Case Studies

Building Science Translator

FIND PUBLICATIONS:

Building Science Publications

Transfer Grills

Power Word landing page with intro text and any other description desired. Power Word slide will display on the page, within the BASC interface. The PDF/Print option will be available, along with Field Kit functionality

Feedback





12 items

12 items

New Field Kit

North Portland Residential

General Air Sealing Guidance

San Francisco Challenge Home Project #1

MY FIELD KITS

BUILDING SCIENCE-TO-SALES TRANSLATOR

Transfer Grill = Comfort Vent



Most new homes only have a central return. When doors are closed, conditioned bedroom air cannot flow adequately to the central return which can block air flow from the ducts. This can compromise comfort and pressurize the room so warm humid air is driven into wall assemblies for added risk of moisture damage. Transfer Grills are a throughwall vent sized to allow adequate flow of air to the hallway central return while also including baffles for sound and visual privacy.

RELATED BUILDING SCIENCE MEASURES

- 7 Jump Duct
- Pressure Balancing
- 7 HVAC Room-by-Room Return Ducts

COMFORT VENT SALES MESSAGE



Comfort vents at each bedroom ensure a continuous flow of heating and cooling even when the doors are closed. What this means to you is that you will no longer have to compromise comfort when you keep your bedroom doors closed. Wouldn't you agree bedroom doors shouldn't have to kept open to maintain comfort?

Building Science Translator Homepage





Building America Solution Center

Log In Register SEARCH

Solution Center Home

Help

FIND YOUR TOPIC BY:

Building Components

Guides A-Z

ENERGY STAR

Zero Energy Ready Home

FIND RESOURCES:

References and Resources

CAD Files

Image Gallery

Case Studies

Building Science Translator

FIND PUBLICATIONS:

Building Science Publications

Building Science Translator



Housing industry leaders today are successfully building and selling highperformance new and existing homes. This includes DOE Challenge Home, ENERGY STAR for Homes, numerous green building programs, and performance-focused remodeling projects through Home Performance with ENERGY STAR contractors. However, many are frustrated that the transaction process fails to recognize the value associated with lower cost of ownership, greater comfort, improved health, ensured combustion safety, and more durability.



Engineered Comfort	
Healthful Environment	
Ultra-Efficient	
Advanced Technology	
Quality Built	
Enhanced Durability	

FILTER BY BUILDING SCIENCE MEASURE

Thermal Enclosure

High-Performance HVAC System

Efficient Components

Indoor Environment System

Water Management

Disaster Resistance

Water Efficiency

Passive Solar

Solar Ready Home

Whole-House Solutions

Home Commissioning

ogy

le House

stem



Garson Homes Enhanced Durability





System

n System

Blanket

ion Water

rrier









ow-Maintenance Enclosure

- **Enhanced Durability Window System**
- Sun Protection Window Glazing
- **Next-Gen Insulation System**
- Moisture Control Air Barrier
- Moisture Control Insulation Blanket
- Moisture Sealed Construction

Whole-House Water Protection

- Foundation Water Barrier System
- Anti-Clog Foundation Drain
- Wall Water Barrier System
- Window Water Barrier
- Roof Water Barrier System
- Interior Moisture Control Materials

Low-Maintenance Comfort System

- Extended-Life Comfort System
- Moisture Control Duct Sealing
- Moisture Control Comfort Balancing

Enhanced Durability Components

- Ultra-Low Maintenance Lighting
- Reduced Ware Clothes Washer

Disaster Resistant Home

- Wind Resistant Home
- Hurricane Resistant Home
- Termite Detection System
- Termite Resistant Home

logy

iter Barrier ater Barrier

Delivery Ducts nostics

Fans lood

ir System

ology

ogy ology

ology

ump chnology

nology ts

Controls

ans

ans

logy

tures

chnology

ating

struction

ket

sulation

er Heating

on

/stem

Sizing

System

System

System

ing

later

nt

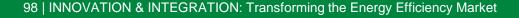
System

elivery

on

auipment replace

mart imgation control recinio 0qV



'Words Matter' Practice



- Get List of Measures for your Home/Model
- Find Building Science Translator Glossary on Zero Energy Ready Home web site
- Print out Glossary
- Highlight all measures from Home/Model in the Glossary
- Prepare Value Sheets Manually for Home/Model
- Study Glossary and learn 'Power Words'
- Practice replacing technical jargon with 'Power Words' every week until Level 4 skill.
- Take BASC Sales Tool training in June



Questions Matter



"90/10 Sales Rule:

"You need to be listening 90% of the time and talking 10%."

Uncovering Needs/Commonalities



Ask more Questions...

Ask: "Is it OK if I ask you a few questions so I can..."

Learn to Listen more...

Ask Follow-up Questions to Solve the Mystery...

Emotions of what they value most How they live in their home

Questions Need to be...

Easy to answer **Interesting** to the customer **Encouraging** to talk – about

problems, desires

Sample 'Starter' Questions



- What do you like least living in your existing home or apartment?
- What do you like most living in your existing home or apartment?
- Why are you shopping for a new home?
- How do you envision living in your next new home?
- Do you have any concerns or special needs for any family members selecting a new home?
- Do you have any 'must-have' features?

'Questions Matter' Practice



- Practice developing questions that can uncover your homebuyers needs.
- Find a practice partner at your company who you don't know very well.
- Set up situation where partner is hypothetically looking for a new home and practice asking questions to uncover needs.
- Based on response to questions, identify up to three critical needs matched to ZERH value.
- Practice every week until Level 4 skill.



Clarity Matters

Clarity Requires a Clear Definition



A Zero Energy Ready Home is a...

High-performance

home, so

energy efficient,

all or most annual energy consumption can be offset by renewable energy.

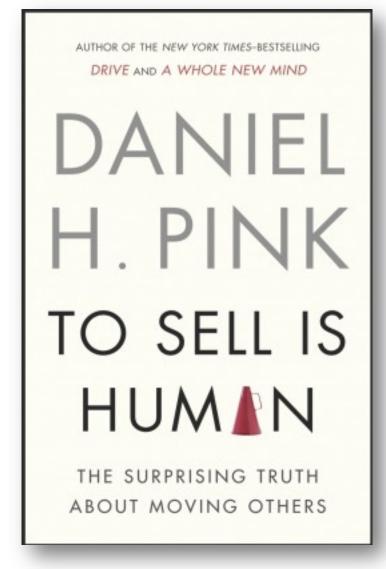


"A Confused Consumer Never Closes."

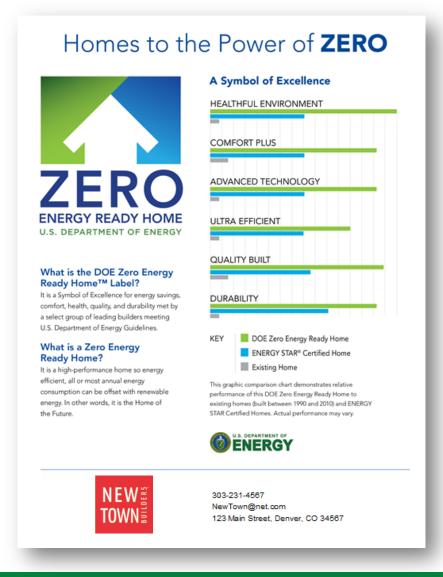
"Clarity depends on contrast."

We often understand something better when we see it in comparison with something else than when we see it in isolation."

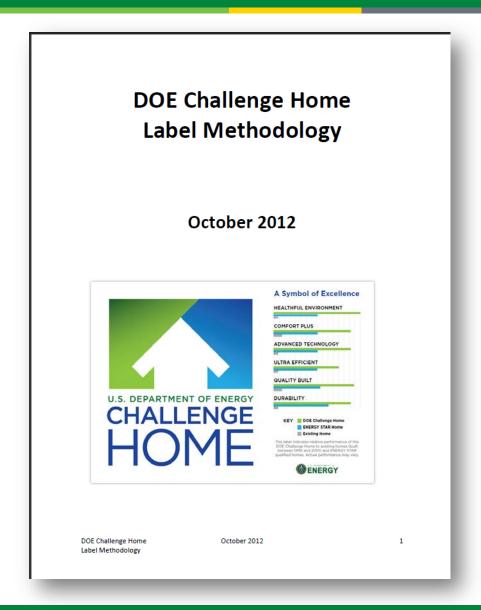
Reading Assignment



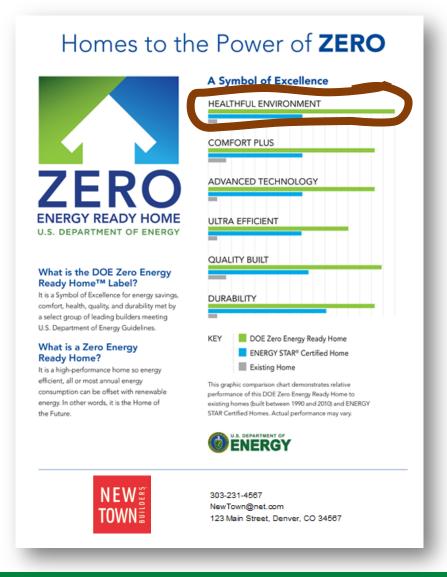
Point-of-Sale Contrast Tool



Contrast Tool Transparency



Point-of-Sale Contrast Tool



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.



Consistent Clarity: ZERH Brochure ENERGY





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 temperatures, 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 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.

LEARN MORE AT: buildings.energy.gov/zero

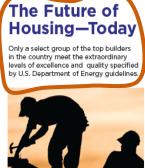


Lasts Better

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.

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.



LEARN MORE AT: buildings.energy.gov/zero





A Symbol of Excellence

HEALTHFUL ENVIRONMENT

COMFORT PLUS

ADVANCED TECHNOLOGY

ULTRA EFFICIENT

QUALITY BUILT

DURABILITY

KEY DOE Zero Energy Ready Home ■ ENERGY STAR Certifled 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 Certifled Homes. Actual performance may vary.



Front Cover

Inside Spread

Flap

Call us at:

303-231-4567

NewTown@net.com

Back Cover

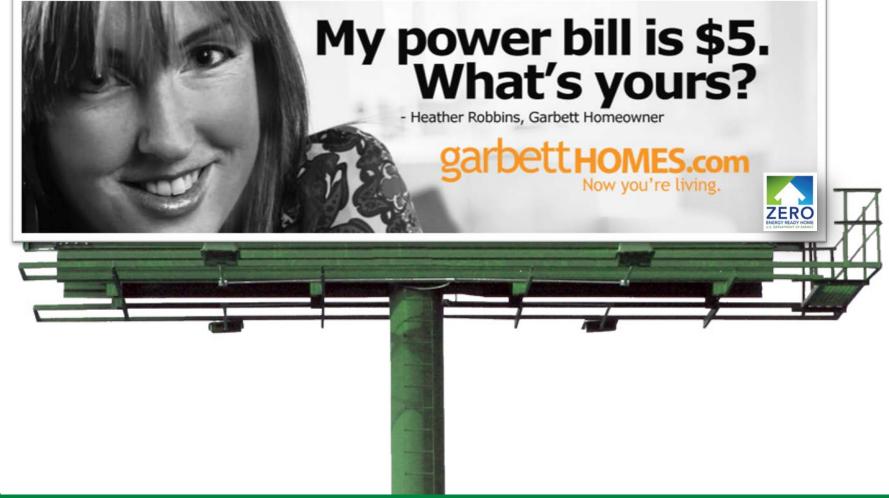
Sales Rules



"People retain 10% of what they hear, And 90% of what they experience."

Experiences Matter...

Experiences That Dramatize Contrast Matter More.



de young properties.





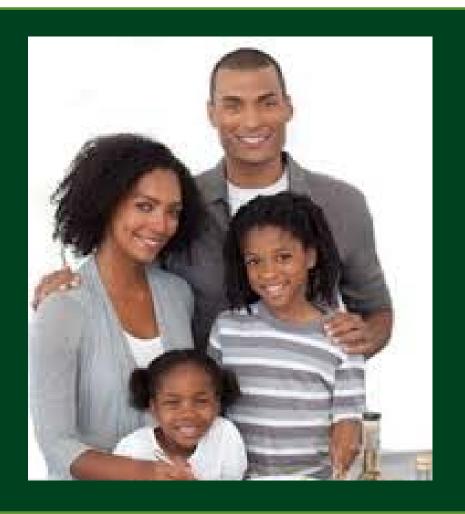
Contrast: Inhaler vs. No Inhaler



"Our daughter couldn't breathe without discomfort for years. Within two months of moving into our new KB Home

we threw away the inhaler.
That was priceless!"

Charley and Mary Jones, KB homeowner





Contrast: Air Flow vs. No Air Flow





Contrast: New vs. Obsolescence







Contrast: Indoor vs. Outdoor Comfort ENERGY





Them

VS.

Us

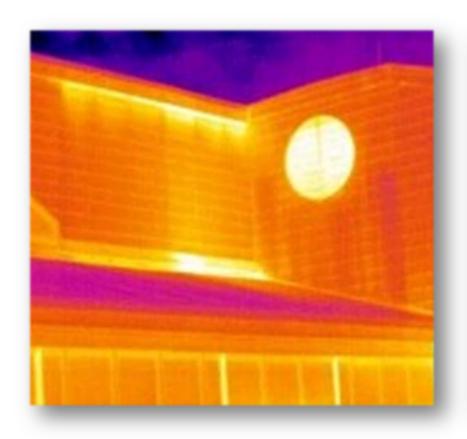
Contrast: Cooling Duct in Oven







Contrast: Excessive vs. No Defects



-10 C 9 C 8C

Used Homes

Our New Homes

Contrast: Good vs. Bad Protection **ENERGY**



Brand 'X'
Water Protection



Advanced Water Protection

Contrast: Dry vs. Wet Basement





Contrast: Ours vs. Them



Garson Homes Enhanced Durability





System

n System

Blanket

ion Water

rrier





sulation

struction

ket





ow-Maintenance Enclosure

- Enhanced Durability Window System
- Sun Protection Window Glazing
- **Next-Gen Insulation System**
- Moisture Control Air Barrier
- Moisture Control Insulation Blanket
- Moisture Sealed Construction

Whole-House Water Protection

- Foundation Water Barrier System
- Anti-Clog Foundation Drain
- Wall Water Barrier System
- Window Water Barrier
- Roof Water Barrier System
- Interior Moisture Control Materials

Low-Maintenance Comfort System

- Extended-Life Comfort System
- Moisture Control Duct Sealing
- Moisture Control Comfort Balancing

Enhanced Durability Components

- Ultra-Low Maintenance Lighting
- Reduced Ware Clothes Washer

Disaster Resistant Home

- Wind Resistant Home
- Hurricane Resistant Home
- Termite Detection System
- Termite Resistant Home

iter Barrier ater Barrier

Delivery Ducts nostics

Fans lood

ir System

mart imgation control recinio 0gV

ology

logy ogy ology

> ology ump

chnology nology

ts ating

Controls

ans

ans

logy

tures

chnology

/stem Sizing

System

on

System System

ing

later

er Heating

nt System le House stem

ogy

on

elivery

auipment replace

'Clarity Matters' Practice



- Prepare ZERH point-of-sale fact sheet for your home or models.
- Practice presenting comparison bars clearly and succinctly with colleague, family or friends every week until Level 4 skill.
- Develop POS 'experiences' for key measures.
- Practice presenting experiences every week until Level 4 skill.



Process Matters

Sales Rules



"When there's a performance problem, it's typically not because people don't fail... it's because process fails."

5-Step, 45 Second Sales Process





How many features/benefits can the typical buyer hear?

'Process Matters' Practice



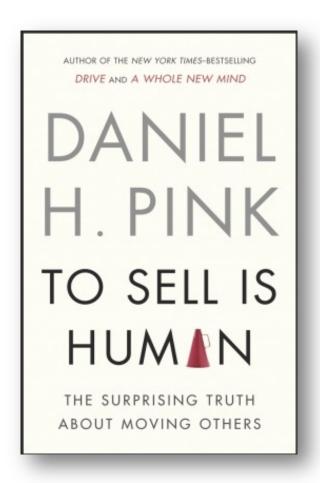
- Find a practice partner at your company.
- Set up practice where partner is hypothetically looking for a new home and practice asking questions to uncover needs.
- Based on response to questions, identify three to five critical needs matched to ZERH value.
- Deliver five-step, 45-second sales presentation using power words, knowledge and experiences.
- Make sure to finish with 'mini-close' question.
- Practice every week until Level 4 skill.



The Future of Sales

Upserving vs. Upselling





Two questions at the core of genuine service:

- 1. If the person you're selling to agrees to buy, will his or her life improve?
- 2. When you interaction is over, will the world be a better place than when you began?

Thank You



For More Information:

www.buildings.energy.gov/zero/

e-mail Contact:

doechallengehome@newportpartnersllc.com