

# Building America Building Science Translator

February 2015

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# **Building America Building Science Translator**

**Prepared for  
The U.S. Department of Energy's Building America Program  
Office of Energy Efficiency and Renewable Energy**

**Prepared by  
Sam Rashkin, U.S. Department of Energy Building Technologies Office  
Lindsay Parker, Energetics, Inc.**

**February 2015**

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# 1 Background

Housing industry leaders today are successfully building and selling high-performance new and existing homes. This includes DOE Zero Energy Ready Home (formerly DOE Challenge Home), ENERGY STAR Certified Homes, numerous green building programs, and performance-focused remodeling projects through Home Performance with ENERGY STAR. However, many stakeholders 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. While there are a myriad of activities educating key transaction players, Building America and DOE Zero Energy Ready Home believe that we need to more effectively communicate the value of high-performance homes. This begins by using terminology for high-performance measures that consistently convey the improved consumer experience, rather than the engineering function. This is an important and powerful first step which is fully under our control, particularly if we facilitate a collective impact process engaging all stakeholders to develop and embrace this new language of ‘value’.

The goal of this Building Science Translator is to begin this process by providing a new glossary of ‘Power Words’ that can be used across the industry to consistently reinforce the value of high-performance homes. This includes applying this new language consistently to all consumer-facing materials used by government programs and industry alike.

## 2 Terminology Strategy

### Glossary Goals:

- **Consistency of Language** – terminology is used consistently throughout glossary
- **Effectiveness of Language** – terminology addresses consumer experience vs. technical function
- **Inclusiveness of Language** – terminology addresses all critical high-performance home measures

### High-Performance Definition:

The combination of *Energy Efficiency* above code, standard, or business-as-usual, ensured *Quality Installation*, and product *Performance* that meets or exceeds consumer expectations:

$$\text{High-Performance} = \text{Energy Efficiency} + \text{Quality Installation} + \text{Performance}$$

### Promote consistent terminology for quality in related industries (e.g., coordinate with RESNET, BPI, ACCA, etc.):

#### Energy Efficiency:

- High-Efficiency = minimum 15% above existing code, standard, or business-as-usual
- Ultra-Efficient = minimum 50% above existing code, standard, or business as usual
- If not calibrated, just use ‘Energy Saving \_\_\_\_\_’ (e.g., if talking about SIP technology in general, just use ‘Energy Saving SIP Construction’.

#### Examples:

- ‘High-Efficiency’ Insulation = minimum 2012 IECC for most of U.S which is ~15% more efficient than 2009 IECC.
- Ultra-Efficient Insulation = 50% minimum above 2009 IECC
- ‘High-Efficiency’ Window = ENERGY STAR Window minimum which is ~15% above standard window or ~R-3
- Ultra-Efficient Window = R-5 Window or better
- High-Efficient Appliance = ENERGY STAR Qualified Appliance where labeled or equivalent
- Ultra-Efficient Appliance = ENERGY STAR Most Efficient where labeled or equivalent

#### Quality Installation:

Installation practices that meet or exceed manufacturer specifications and industry standards

$$\text{Quality Installation Terminology} = \text{Professionally installed}$$

## HVAC Systems and Components:

- HVAC System = Comfort System
- HVAC Equipment = Comfort Equipment
- HVAC Ducts = Comfort Delivery System [analogy: lungs of home]
- HVAC terminals = Comfort Outlets
- HVAC pressure balancing = Comfort Balancing
- HVAC transfer grill or jump duct = Comfort Vent
- HVAC thermostat = Comfort Control

## Zero Energy Ready Home Definition:

A high-performance home so energy efficient, all or most annual energy consumption can be offset with renewable energy.

## Alternate Options:

Terminology will typically have alternate options that address different performance attributes. This will allow the same measure to be listed multiple times in marketing material for optimum linkage to all improved consumer experiences.

### **Alternate Options Example: High Performance Window System**

- Comfort – Enhanced Comfort Window System
- Efficiency – High Efficiency (e.g., R-3) or Ultra-Efficient (e.g., R-5) Window System
- Healthful – Quiet Window System
- Advanced Technology – Advanced Window System Technology
- Quality – Professionally Installed Window System
- Durability – Enhanced Durability Window System

**Table 1. High-Performance Thermal Enclosure**

Building Science Measure	New Building Science Terminology	Alternate Terms					
		Lives Better		Works Better		Lasts Better	
		Engineered 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 Window System	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 Durability 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
Sealed and Flashed Window	Professionally-Installed Window	Draft-Free Window Installation	Moisture Managed Window Installation	Energy Saving Window Installation	Advanced Window Installation	Professionally-Installed Window	Weather-Protected Window Installation
High-Performance Insulation System	High-Performance Insulation System	Enhanced Comfort Insulation System	Enhanced Quiet Insulation System	High-Efficiency or Ultra-Efficient Insulation System	Advanced Insulation System	Professionally-Installed Insulation System	Next-Gen Insulation System
High-R Insulation	High-Efficiency or Ultra-Efficient Insulation	Enhanced Comfort Insulation	Enhanced Quiet Insulation	High-Efficiency or Ultra-Efficient Insulation	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 Insulation	Advanced Wall Insulation		
High-R Floor Insulation	High-Efficiency or Ultra-Efficient Floor Insulation	Enhanced Comfort Floor Insulation	Enhanced Quiet Floor Insulation	High-Efficiency or Ultra-Efficient Floor Insulation	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 Ultra-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 Comfort 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 Draft Barrier	Air Contaminant Barrier	Energy Saving Air Barrier	Advanced Air Barrier Technology	Professionally-Installed Draft Barrier	Moisture Control Air Barrier



Table 1. High-Performance Thermal Enclosure (cont.)

Building Science Measure	New Building Science Terminology	Alternate Terms					
		Lives Better		Works Better		Lasts Better	
		Engineered Comfort	Healthful Environment	Ultra-Efficient	Advanced Technology	Quality Built	Enhanced Durability
High-Performance Thermal Enclosure (continued)							
Reduced Thermal Bridging	Continuous Thermal Blanket Construction	Continuous Thermal Blanket Construction	Continuous Sound Barrier Construction	Energy Saving Thermal Blanket	Advanced Thermal Blanket Technology	Professionally-Installed Thermal Blanket	
Raised Heel Truss	Energy Saving Attic Perimeter Insulation	Attic Comfort Perimeter		Energy Saving Attic Perimeter Insulation	Advanced Attic Framing Technology		
Slab Edge Insulation	High-Efficiency Slab Edge	Slab Comfort Edge	Moisture Managed Slab Edge	Energy Saving Slab Edge	Advanced Slab Edge Technology		
Exterior Insulation Sheathing	Continuous Exterior Thermal Blanket	Continuous Exterior Thermal Blanket	Quiet Wall/Roof	Energy Saving Wall Blanket	Advanced Wall Blanket Technology		Moisture Control Insulation Blanket
Structural Insulated Panels (SIPs)	SIP Thermal Blanket	SIP Thermal Blanket	Quiet SIP Construction	Energy Saving SIP Construction	Advanced SIP Technology	SIP Precision Construction System	Moisture Control SIP Construction
Insulated Concrete Forms (ICFs)	ICF Thermal Blanket	ICF Thermal Blanket	Quiet ICF Wall	Energy Saving ICF Wall	Advanced ICF Technology	ICF Precision Wall System	Moisture Control ICF Wall Disaster Resistant ICF Wall
Double-Wall Framing	Double-Wall Thermal Blanket	Double Wall Thermal Blanket	Quiet Double-Wall Construction	Energy Saving Double-Wall	Advanced Double-Wall Technology		
Advanced Wall Framing	High-Efficiency Advanced Framing	Enhanced Comfort Wall Framing	Quiet Advanced Wall Framing	Energy Saving Advanced Framing	Advanced Wall Framing Technology		
Reduced Wall Framing	High-Efficiency Wall Framing	Comfort Wall Framing	Quiet Wall Framing	Energy Saving Wall Framing	Advanced Wall Framing		
2-Stud Corner w/Drywall Clips	High-Efficiency Corner Framing	Comfort Corner Framing	Quiet Corner Framing	High-Efficiency Corner Framing	Advanced Corner Framing	Crack-Resistant Corners	
Adv. Int./Ext. Wall Intersections	High-Efficiency Wall Intersections	Comfort Wall Intersections	Quiet Wall Intersections	High-Efficiency Wall Intersections	Advanced Wall Intersection Framing	Crack-Resistant Corners	
Insulated Headers	High-Efficiency Window Framing	Comfort Window Framing	Quiet Window Framing	High-Efficiency Window Framing	Advanced Window Framing		
Tight Air Sealed Home	Comprehensive Draft Protection	Comprehensive Draft Protection	Air Contaminant Sealing	Comprehensive Energy Seal	Advanced Home Sealing Technology		Moisture Sealed Construction
Radiant Barrier	Sun Barrier	Attic Comfort Shield		Sun Barrier	Sun Barrier Technology		

Table 2. High-Performance HVAC System

Building Science Measure	New Building Science Terminology	Alternate Terms					
		Lives Better		Works Better		Lasts Better	
		Engineered Comfort	Healthful Environment	Ultra-Efficient	Advanced Technology	Quality Built	Enhanced Durability
High-Performance HVAC System	High-Performance Comfort System	Optimized Comfort System	Healthful Comfort System	High-Efficiency Comfort System	Advanced Comfort System Technology	Professionally Installed Comfort System	Low Maintenance Comfort System
High-Efficiency HVAC Equipment	High-Efficiency or Ultra-Efficient Comfort Equipment			High-Efficiency or Ultra-Efficient Comfort Equipment	Advanced Comfort Technology		Durable Comfort System
High-Efficiency Heat Pump/AC	High-Efficiency or Ultra-Efficient Heat Pump/ AC		Combustion-Free Space Heating	High-Efficiency or Ultra-Efficient Heat Pump/ AC	Advanced Heat Pump/AC		
Air Source Heat Pump/AC	High-Efficiency or Ultra-Efficient Heat Pump/ AC		Combustion-Free Space Heating	High-Efficiency or Ultra-Efficient Heat Pump/ AC	Advanced Heat Pump/AC		
Geothermal Heat Pump	High-Efficiency or Ultra-Efficient Geo Heat Pump		Combustion-Free Space Heating	High-Efficiency or Ultra-Efficient Geo Heat Pump	Advanced Geo Heat Pump		
Ductless Mini-Split Heat Pump	High-Efficiency or Ultra-Efficient Ductless Heat Pump		Combustion-Free Space Heating	High-Efficiency or Ultra-Efficient Ductless Heat Pump	Advanced Ductless Heat Pump		
High-Efficiency Gas Furnace	High-Efficiency Gas Furnace		Combustion Exhaust Controlled Gas Furnace	High-Efficiency Gas Furnace	Advanced Gas Furnace		
High-Efficiency Gas Boiler	High-Efficiency Gas Boiler		Combustion-Exhaust Controlled Gas Boiler	High-Efficiency Gas Boiler	Advanced Gas Boiler		
High-Efficiency Oil Boiler	High-Efficiency Oil Boiler			High-Efficiency Oil Boiler	Advanced Oil Boiler		
Variable Speed HVAC System	Advanced Comfort Flow Technology	Precision-Flow Comfort System		Ultra-Efficient Comfort Flow System	Variable Speed Comfort Flow Technology		
Two-Speed HVAC System	Dual-Speed Comfort Flow Technology	Dual-Speed Comfort System		High-Efficiency Comfort Flow System	Dual-Speed Comfort Flow Technology		
Night-Time Mech. Ventilation Cooling	Advanced Fresh Air Cooling Technology	Fresh Air Cooling System		Advanced Fresh Air Cooling Technology	Advanced Fresh Air Cooling Technology		
High-Efficiency Integrated Equipment	High-Efficiency Multi-Function Heating		Combustion-Safe Multi-Function Heating (gas only)	High-Efficiency Multi-Function Heating	Advanced Multi-Function Heating Technology		

Table 2. High-Performance HVAC System (cont.)

Building Science Measure	New Building Science Terminology	Alternate Terms					
		Lives Better		Works Better		Lasts Better	
		Engineered Comfort	Healthful Environment	Ultra-Efficient	Advanced Technology	Quality Built	Enhanced Durability
High-Performance HVAC System (cont.)							
HVAC Quality Installation	Professionally-Installed Comfort System	Performance Assured Comfort System	Humidity-Managed Comfort System	Energy Saving Comfort System Installation	Advanced Comfort System Installation	Professionally Installed Comfort System	Moisture-Managed Comfort System
Proper Sizing HVAC System	Right-Sized Comfort System	Optimum-Sized Comfort System		Energy Saving Comfort System Sizing		Right-Sized Comfort System	Extended-Life Comfort System
Heating/ Cooling Equipment Sizing	Right-Sized Comfort Equipment	Optimum-Sized Comfort Equipment		Energy Saving Comfort Equipment Sizing		Right-Sized Comfort Equipment	Extended-Life Comfort Equipment
Duct Distribution Sizing	Right-Sized Comfort Delivery System	Optimum-Sized Comfort Delivery System		Energy Saving Comfort Delivery System Sizing		Right-Sized Comfort Delivery System	
Duct Terminal Sizing	Right-Sized Comfort Outlets	Optimum-Sized Comfort Outlets		Energy Saving Comfort Outlets		Right-Sized Comfort Outlets	
Quality Duct Installation	Professionally-Installed Comfort Delivery System	Optimum-Flow Comfort Delivery System		Energy Saving Comfort Delivery System Installation		Professionally Installed Comfort Delivery System	
Proper Duct Installation	Professionally-Installed Comfort Delivery Ducts	Optimum-Flow Comfort Delivery Duct Installation		Energy Saving Comfort Delivery Duct Installation		Professionally-Installed Comfort Delivery Ducts	
Tight Duct Sealing	Professionally-Sealed Comfort Delivery System	Optimum-Flow Comfort Delivery Duct Sealing	Contaminant Sealed Comfort Delivery System	Energy Saving Comfort Delivery Duct Sealing		Professionally-Sealed Comfort Delivery Ducts	Moisture Control Duct Sealing
High-R Duct Insulation	Energy Saving Comfort Delivery System Insulation			Energy Saving Comfort Delivery System Insulation			
Pressure Balancing Bedrooms	Comfort Balanced Rooms	Comfort Balanced Rooms					Moisture Control Comfort Balancing
Ducted Returns	Comfort System Return Ducts	Comfort System Return Ducts					Moisture Control Comfort Balancing
Transfer Grills	Comfort Vent	Comfort Vent					Moisture Control Comfort Balancing
Jump Ducts							
HVAC Controls/ Programmable Thermostat	Advanced Comfort Control Technology			Energy Saving Comfort Control System	Advanced Comfort Control Technology		

**Table 2. High-Performance HVAC System (cont.)**

Building Science Measure	New Building Science Terminology	Alternate Terms					
		Lives Better		Works Better		Lasts Better	
		Engineered Comfort	Healthful Environment	Ultra-Efficient	Advanced Technology	Quality Built	Enhanced Durability
HVAC System Quality Installation (cont.)							
HVAC Ducts In Conditioned Space	Interior Comfort Delivery System	Interior Comfort Delivery System		Energy Saving Interior Comfort Delivery System	Advanced Interior Comfort Delivery System		
HVAC Ducts in Unvented Attics	Interior Comfort Delivery System	Interior Comfort Deliver System		Energy Saving Interior Comfort Delivery System	Advanced Interior Comfort Delivery System		
HVAC Ducts in Unvented Basement/Crawl Space	Interior Comfort Delivery System	Interior Comfort Deliver System		Energy Saving Interior Comfort Delivery System	Advanced Interior Comfort Delivery System		
HVAC Ducts in Dropped Ceilings	Interior Comfort Delivery System	Interior Comfort Deliver System		Energy Saving Interior Comfort Delivery System	Advanced Interior Comfort Delivery System		
HVAC Ducts in Raised Ceiling Sections	Interior Comfort Delivery System	Interior Comfort Deliver System		Energy Saving Interior Comfort Delivery System	Advanced Interior Comfort Delivery System		
HVAC Ducts in Interstitial Floor Framing	Interior Comfort Delivery System	Interior Comfort Deliver System		Energy Saving Interior Comfort Delivery System	Advanced Interior Comfort Delivery System		
Vented Attics with Buried HVAC Ducts	Comfort Delivery System Buried in Insulation	Comfort Delivery System Buried in Insulation		Energy Saving Buried Comfort Delivery System	Comfort Delivery System Buried in Insulation		
HVAC System Diagnostics (New or Existing Homes)	Certified Comfort System	Certified Comfort System				Advanced Comfort System Diagnostics	
Whole-House Dehumidification	Whole-House Humidity Control	Whole-House Humidity Control	Whole-House Humidity Control		Advanced Humidity Control Technology		
HVAC w/Integrated Dehumidification	Comfort System with Humidity Control	Comfort System with Humidity Control	Comfort System with Humidity Control		Advanced Humidity Control Technology		
Whole-House Dehumidification	Whole-House Humidity Control	Whole-House Humidity Control	Whole-House Humidity Control		Advanced Humidity Control Technology		

Table 3. Efficient Components

Building Science Measure	New Building Science Terminology	Alternate Terms					
		Lives Better		Works Better		Lasts Better	
		Engineered Comfort	Healthful Environment	Ultra-Efficient	Advanced Technology	Quality Built	Enhanced Durability
Efficient Components	High-Efficiency or Ultra-Efficient Components			High-Efficiency or Ultra-Efficient Components	Advanced Technology Components		
High-Efficiency Water Heating	High-Efficiency Water Heater			High-Efficiency Water Heater	Advanced Water Heating Technology		
High-Efficiency Storage Water Heater	High-Efficiency Water Heater			High-Efficiency Water Heater	Advanced Water Heater		
Gas Storage Water Heater	High-Efficiency Gas Water Heater			High-Efficiency Gas Water Heater	Advanced Gas Water Heater		
Heat Pump Water Heater	High-Efficiency Heat Pump Water Heater	Comfort-Enhanced Water Heating (warm climates only)	Combustion-Free Water Heating	High-Efficiency Heat Pump Water Heater	Advanced Heat Pump Water Heater		
Instantaneous Gas Water Heater (elec. not eff. so excluded)	High-Efficiency Endless Hot Water Heater	Endless Hot Water Technology		High-Efficiency Endless Hot Water Heater	Advanced Endless Hot Water Heater		
Solar Hot Water	Solar Hot Water System			Solar Hot Water System	Advanced Solar Hot Water Heater		
High-Efficiency Appliances	High-Efficiency or Ultra-Efficient Appliances			High-Efficiency or Ultra-Efficient Appliances	Advanced Appliance Technology		
High-Efficiency Refrigerator	High-Efficiency or Ultra-Efficient Refrigerator			High-Efficiency or Ultra-Efficient Refrigerator	Advanced Refrigerator		
High-Efficiency Dishwasher	High-Efficiency Dishwasher,		Water Saving Dishwasher	High-Efficiency Dishwasher	Advanced Dishwasher		
High-Efficiency Clothes Washer	High-Efficiency Clothes Washer		Water Saving Clothes Washer	High-Efficiency Clothes Washer	Advanced Clothes Washer		Reduced Ware Clothes Washer
High-Efficiency Clothes Dryer	High-Efficiency Clothes Dryer			High-Efficiency Clothes Dryer			
Heat Pump Clothes Dryer	Ultra-Efficient Heat Pump Clothes Dryer		Exhaust-Free Clothes Dryer	Ultra-Efficient Heat Pump Clothes Dryer	Advanced Clothes Dryer Technology		
Condensing Clothes Dryer	Ultra-Efficient Condensing Clothes Dryer		Exhaust-Free Clothes Dryer	Ultra-Efficient Condensing Clothes Dryer	Advanced Clothes Dryer Technology		

Table 3. Efficient Components (cont.)

Building Science Measure	New Building Science Terminology	Alternate Terms					
		Lives Better		Works Better		Lasts Better	
		Engineered Comfort	Healthful Environment	Ultra-Efficient	Advanced Technology	Quality Built	Enhanced Durability
Efficient Components (cont.)							
High-Efficiency Lighting	Advanced Lighting Technology			High-Efficiency or Ultra-Efficient Lighting	Advanced Lighting Technology		Low-Maintenance Lighting
Compact Fluorescent Lighting	Advanced Lighting Technology	Cool Lighting		High-Efficiency Lighting	Advanced Lighting Technology		Low-Maintenance Lighting
Solid State Lighting	Advanced Solid State Lighting Technology	Cool Lighting	Mercury-Free Solid State Lighting	Ultra-Efficient Solid State Lighting	Advanced Solid State Lighting Technology		Ultra-Low-Maintenance Lighting
High-Efficiency Fans	High-Efficiency Fans	Quiet Fans		High-Efficiency Fans	Advanced Fan Technology		
High-Efficiency Bathroom Fans	High-Efficiency Bath Fan	Quiet Bath Fan		High-Efficiency Bath Fan	Advanced Bath Fan Technology		
High-Efficiency Range Hood/Downdraft	High-Efficiency Range Hood/Downdraft	Quiet Range Hood/Downdraft	High-Capture Range Hood/Downdraft (only if specified)	High-Efficiency Range Hood/Downdraft	Advanced Range Hood/Downdraft Technology		
High-Efficiency Ceiling Fans	High-Efficiency Ceiling Fans	Enhanced Air Flow Ceiling Fans		High-Efficiency Ceiling Fans	Advanced Ceiling Fan Technology		
Quality Installed Exhaust Fans	Professionally Installed Exhaust Fans		Ensured Flow Exhaust Fans	Energy Saving Exhaust Fan Installation		Professionally Installed Exhaust Fans	
Quality Installed Bath Fan	Professionally Installed Bath Fan		Ensured Odor Removal Bath Fan	Energy Saving Bath Fan Installation		Professionally Installed Bath Fan	
Quality Installed Range Hood	Professionally Installed Range Hood/Downdraft		Ensured Exhaust Removal Range Hood/Downdraft			Professionally Installed Range Hood/Downdraft	
High-Performance Pool Pump System	High-Performance Pool Pump System			High-Performance Pool Pump System	Advanced Pool Pump System		
High-Efficient Pool Pump	Ultra-Efficient Pool Pump			Ultra-Efficient Pool Pump	Advanced Pool Pump Technology		
Quality Pool Pump Installation	Professionally-Installed Pool Pump System			Ultra-Efficient Pool Pump Installation	Advanced Pool Pump Installation	Professionally-Installed Pool Pump	

Table 4. Indoor Environment System

Building Science Measure	New Building Science Terminology	Alternate Terms					
		Lives Better		Works Better		Lasts Better	
		Engineered Comfort	Healthful Environment	Ultra-Efficient	Advanced Technology	Quality Built	Enhanced Durability
Indoor Environment System	Whole-House Health Protection System		Whole-House Health Protection System				
Pollutant Source Control	Contaminant Resistant Home		Contaminant Resistant Home				
Radon Resistant Construction	Radon Resistant Home		Radon Resistant Home				
Biological Contaminant Control	Pest Resistant Home		Pest Resistant Home				
Sealed Construction	Bug Resistant Home Sealing		Bug Resistant Home Sealing				
Corrosion-Proof Screened Vents	Rodent Resistant Vent Screens		Rodent Resistant Vent Screens				
Termite Shield	Termite Detection System		Termite Detection System				Termite Detection System
No Formaldehyde Pressed Wood	Certified Formaldehyde-Free Board Products		Certified Formaldehyde-Free Board Products				
Low/No VOC Paints and Finishes	Certified Low/No VOC Finishes		Certified Low/No VOC Finishes				
Low/No VOC Carpets/Pads	Certified Low/No VOC Carpets		Certified Low/No VOC Carpets				
Direct/Power Vent Water Heater	Combustion Exhaust Controlled Water Heater		Combustion Exhaust Controlled Water Heater				
Direct/Power Vent Furnace	Combustion Exhaust Controlled Furnace		Combustion Exhaust Controlled Furnace				
Direct/Power Vent Boiler	Combustion Exhaust Controlled Boiler		Combustion Exhaust Controlled Boiler				
Proper Ventilated Fireplaces	Ventilated Fireplace		Ventilated Fireplace				
Air Sealed Attached Garage	Air Sealed Attached Garage		Air Sealed Attached Garage				

Table 4. Indoor Environment System (cont.)

Building Science Measure	New Building Science Terminology	Alternate Terms					
		Lives Better		Works Better		Lasts Better	
		Engineered Comfort	Healthful Environment	Ultra-Efficient	Advanced Technology	Quality Built	Enhanced Durability
Indoor Environment System (cont.)							
Dilution - Whole-House Ventilation	Fresh Air System		Fresh Air System		Advanced Fresh Air Technology		
Supply-Only Ventilation	Fresh Air Supply System		Fresh Air Supply System		Fresh Air Supply Technology		
Exhaust-Only Ventilation	Fresh Air Exhaust System		Fresh Air Exhaust System		Fresh Air Exhaust Technology		
Balanced Ventilation	Fresh Air Balanced System		Fresh Air Balanced System		Fresh Air Balanced Technology		
Properly Installed Whole-House Ventilation	Professionally-Installed Fresh Air System		Assured Fresh Air System Installation			Professionally-Installed Fresh Air System	
Dilution – Spot Ventilation	Odor and Moisture Exhaust Fans		Odor and Moisture Exhaust Fans		Advanced Odor and Moisture Exhaust Technology		
Kitchen Exhaust Fan	Kitchen Odor and Moisture Control Fan		Kitchen Odor and Moisture Control Fan		Advanced Kitchen Exhaust Technology		
Bathroom Exhaust Fan	Bathroom Odor and Moisture Control Fan		Bathroom Odor and Moisture Control Fan		Advanced Bathroom Exhaust Technology		
Garage Ventilation Fan	Garage Exhaust Fan		Garage Exhaust Fan		Advanced Garage Exhaust Technology		
Filtration	High-Capture Filtration Technology		High-Capture Filtration Technology		High-Capture Filtration Technology		
High-MERV Filter	High Capture Filter		High Capture Filter		High-Capture Filter Technology		
Proper Installation of Filter	Professionally-Installed Filtration		Professionally-Installed Filtration			Professionally-Installed Filtration	



Table 5. Water Management

Building Science Measure	New Building Science Terminology	Alternate Terms					
		Lives Better		Works Better		Lasts Better	
		Engineered Comfort	Healthful Environment	Ultra-Efficient	Advanced Technology	Quality Built	Enhanced Durability
Water Management	Whole-House Water Protection System	Moisture Managed Construction	Dry-by-Design Construction			Professionally Installed Water Protection	Whole-House Water Protection System
Water Managed Foundation	Foundation Water Barrier System	Dry-by-Design Foundation	Dry-by-Design Foundation		Foundation Water Barrier System	Professionally Installed Foundation Water Barrier	Foundation Water Barrier System
Foundation Wall Water/Damp-Proofing	Foundation Wall Water Barrier	Dry-by-Design Foundation Wall	Dry-by-Design Foundation Wall		Foundation Wall Water Barrier Technology	Professionally Installed Foundation Water Barrier	Foundation Wall Water Barrier
Foundation Capillary Break over Aggregate	Foundation Floor Water Barrier	Dry-by-Design Foundation Floor	Dry-by-Design Foundation Floor		Foundation Floor Water Barrier Technology	Professionally Installed Slab Water Protection	Slab Water Barrier
Drainage Tile Wrapped in Fabric Filter	Anti-Clog Foundation Drain	Dry-By-Design Foundation Drainage	Dry-by-Design Foundation Drainage		Anti-Clog Foundation Drain Technology	Professionally Installed Foundation Drainage	Anti-Clog Foundation Drain
Water Managed Walls	Wall Moisture Control System	Dry-by-Design Walls	Dry-by-Design Walls		Moisture Managed Wall Technology	Professionally Installed Wall Water Protection	Wall Moisture Control System
Continuous/Sealed Weather Resistant Barrier	Wall Water Barrier	Dry-by-Design Wall Construction	Dry-by-Design Wall Construction		Wall Water Barrier Technology	Professionally Installed Wall Water Barrier	Wall Water Barrier
Pan Flashing (doors/windows)	Window/Door Water Barrier	Dry-by-Design Windows and Doors	Dry-by-Design Windows and Doors		Window/Door Water Barrier Technology	Professionally Installed Window/Door Water Barrier	Window/Door Water Barrier
Water Managed Roof Assembly	Roof Water Barrier System	Dry-by-Design Roof	Dry-by-Design Roof		Roof Water Barrier Technology	Professionally Installed Roof Water Barrier	Roof Water Barrier System
Kick-Out Flashing, Step Flashing	Roof-Wall Water Deflector	Dry-by-Design Roof-Wall Intersection	Dry-by-Design Roof-Wall Intersection		Roof-Wall Intersection Water Protection Technology	Professionally Installed Roof/Wall Water Deflector	Roof-Wall Water Deflector
Heavy Membrane Valley/Eave	Roof Water Barrier	Dry-by-Design Roof Water Barrier	Dry-by-Design Roof Water Barrier		Roof Water Barrier Technology	Professionally Installed Roof Water Barrier	Roof Water Barrier
Water Managed Building Materials	Interior Moisture Control Materials	Dry-by-Design Materials	Dry-by-Design Materials		Interior Moisture Control Technology	Professionally Installed Interior Water Protection	Interior Moisture Control Materials

Table 6. Disaster Resistance

Building Science Measure	New Building Science Terminology	Alternate Terms					
		Lives Better		Works Better		Lasts Better	
		Engineered Comfort	Healthful Environment	Ultra-Efficient	Advanced Technology	Quality Built	Enhanced Durability
Disaster Resistance	Disaster Resistant Home	Peace-of-Mind Disaster Protection			Advanced Disaster Protection System	Disaster Protection System	Disaster Resistant Home
Severe Weather Resistant Home	Severe Weather Resistant Home				Advanced Severe Weather Protection	Severe Weather Protection System	Severe Storm Resistant Home
Wind Resistant Home	Wind Resistant Home				Advanced Wind Protection	Wind Protection System	Wind Resistant Home
Hurricane Resistant Home	Hurricane Resistant Home				Advanced Hurricane Protection	Hurricane Protection System	Hurricane Resistant Home
Tornado/Hail Resistant Home	Tornado/Hail Resistant Home				Advanced Tornado/Hail Protection	Tornado/Hail Protection System	Tornado/Hail Resistant Home
Severe Winter Storm Resist. Home	Winter Storm Resistant Home				Advanced Winter Storm Protection	Winter Storm Protection System	Winter Storm Resistant Home
Natural Event Resistant Home	Natural Event Resistant Home				Advanced Natural Event Protection	Natural Event Protection System	Natural Event Resistant Home
Flood Resistant Home	Flood Resistant Home				Advanced Flood Protection	Flood Protection System	Flood Resistant Home
Wildfire Resistant Home	Wildfire Resistant Home				Advanced Wildfire Protection	Wildfire Protection System	Wildfire Resistant Home
Earthquake Resistant Home	Earthquake Resistant Home				Advanced Earthquake Protection	Earthquake Protection System	Earthquake Resistant Home
Pest Resistant Home	Pest Resistant Home				Advanced Pest Protection	Pest Protection System	Pest Resistant Home
Termite Resistant Home	Termite Resistant Home				Advanced Termite Protection	Termite Protection System	Termite Resistant Home
Integrated Pest Man. Home	Whole-House Pest Resistance System				Advanced Pest Control Technology	Integrated Pest Management System	Pest Resistant System
Disaster Resilience	Disaster Resilient Home				Advanced Disaster Resilience Technology	Disaster Resilience System	Disaster Resilient Home

Table 7. Water Efficiency

Building Science Measure	New Building Science Terminology	Alternate Terms					
		Lives Better		Works Better		Lasts Better	
		Engineered Comfort	Healthful Environment	Ultra-Efficient	Advanced Technology	Quality Built	Enhanced Durability
Water Efficiency	Water Saving System			Water Saving System	Water Saving Technology		
Water Efficient Indoor	Water Saving Home			Water Saving Home	Water Saving Home Technology		
Low Flow Fixtures	Water Saving Fixtures			Water Saving Fixtures	Water Saving Fixture Technology		
Water Efficient Appliances	Water Saving Appliances			Water Saving Appliances	Water Saving Appliance Technology		
Efficient Hot Water Distribution	On-Demand Hot Water	On-Demand Hot Water		Water and Energy Saving Hot Water Distribution	On-Demand Hot Water Technology		
Core Plumbing	On-Demand Hot Water Plumbing	On-Demand Hot Water Plumbing		Water and Energy Saving Hot Water Distribution	On-Demand Hot Water Technology		
Manifold Plumbing	On-Demand Hot Water Plumbing	On-Demand Hot Water Plumbing		Water and Energy Saving Hot Water Distribution	On-Demand Hot Water Technology		
Demand Pumping System	On-Demand Hot Water Pump	On-Demand Hot Water Pump		Water and Energy Saving Hot Water Distribution	On-Demand Hot Water Technology		
Efficient Outdoor Landscaping	Water Saving Landscaping			Water Saving Landscaping	Water Saving Landscaping Technology		
Efficient Landscape Design	Water Saving Landscape Design			Water Saving Landscape Design			
Efficient Landscape Irrigation	Water Saving Irrigation			Water Saving Irrigation	Water Saving Irrigation Technology		
Water Neutral Home (reclaims as much as it uses for irrigation)	Zero-Water Irrigation			Zero-Water Irrigation	Zero-Water Irrigation Technology		

Table 8. Passive Solar Home; Table 9. Solar Ready Home; Table 10. Whole-House Solutions

Building Science Measure	New Building Science Terminology	Alternate Terms					
		Lives Better		Works Better		Lasts Better	
		Engineered Comfort	Healthful Environment	Ultra-Efficient	Advanced Technology	Quality Built	Enhanced Durability
Passive Solar Home	Natural Comfort Home	Natural Comfort Home		Energy Saving Natural Comfort Home	Natural Comfort Technology		Low-Maintenance Natural Comfort
Proper Solar Orientation	Natural Comfort Orientation	Natural Comfort Orientation		Energy Saving Natural Comfort Orientation			
Solar Shaded Windows (Overhangs)	Solar Window Shading	Solar Window Shading		Energy Saving Solar Window Shading	Solar Window Shading Technology		
Daylighting	Natural Daylight Home	Natural Daylight Home	Natural Daylight Home	Energy Saving Natural Daylight Home	Natural Daylight Technology		
Thermal Mass	Natural Comfort Balancing System	Natural Comfort Balancing System		Energy Saving Natural Comfort Balancing	Natural Comfort Balancing Technology		
Natural Ventilation Cooling	Fresh Air Cooling	Fresh Air Cooling		Energy Saving Fresh Air Cooling	Fresh Air Cooling Technology		
Cool Roof	Cool Roofing			Energy Saving Cool Roofing	Cool Roofing Technology		
Solar Ready Home	Solar Ready Home				Solar Ready Home		
Solar Electric Ready Home	Solar Electric Ready Home				Solar Electric Ready Home		
Solar DHW Ready Home	Solar Hot Water Ready Home				Solar Hot Water Ready Home		
Whole-House Solutions							
High-Performance Home	High-Performance Home	Enhanced Comfort Home	Enhanced Health Home	High-Efficiency Home	High-Performance Home	Professionally Constructed High Performance Home	Enhanced Durability Home
Whole-House Energy Retrofit	High-Efficiency Retrofit	Enhanced Comfort Retrofit	Enhanced Health Retrofit	High-Efficiency Retrofit	Advanced Energy Retrofit Technology	Professionally-Installed Energy Retrofit	Enhanced Durability Energy Retrofit
Deep Energy Retrofit	Ultra-Efficient Deep Energy Retrofit	Optimized Home Comfort Retrofit	Enhanced Health Home Retrofit	Ultra-Efficient Deep Energy Retrofit	Advanced Deep Energy Retrofit Technology	Professionally-Installed Deep Energy Retrofit	Enhanced Durability Deep Energy Retrofit
Net-Zero Energy Home	Zero Energy Ready Home (ZERH)	Engineered Comfort Home	Healthful Environment Home	Ultra-Efficient Home	Advanced Technology Home	Quality Built Home	Enhanced Durability Home

Table 11. Home Commissioning (HC)

Building Science Measure	New Building Science Terminology	Alternate Terms					
		Lives Better		Works Better		Lasts Better	
		Engineered Comfort	Healthful Environment	Ultra-Efficient	Advanced Technology	Quality Built	Enhanced Durability
Home Commissioning (HC)	Home Performance Assessment					Home Performance Assessment	
Home Energy Rating System (HERS)	Home Energy Rating System (HERS)				Advanced Home Energy Assessment	Home Energy Rating System (HERS)	
Energy Audit (e.g., Home Energy Score)	Home Performance Check-up				Advanced Home Performance Diagnostics	Home Performance Check-up	
Home Diagnostics	Home Performance Testing				Advanced Home Performance Diagnostics	Home Performance Testing	
Blower Door Test	Draft Control Test				Advanced Draft Detection Diagnostics	Draft Control Test	
Duct Leakage Test	Comfort Delivery Test				Advanced Comfort Delivery Diagnostics	Comfort Delivery System Test	
Combustion Appliance Zone (CAZ) Test	Combustion Safe Equipment Test				Advanced Combustion Safety Diagnostics	Combustion Safe Equipment Test	
Infrared Camera Inspections	Home Thermal Imaging Scan				Advanced Thermal Imaging Diagnostics	Home Thermal Imaging Scan	



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DOE/EE-1188 • February 2015