2022 Guide

New Homes Offering

focus on energy®

Partnering with Wisconsin utilities

New Homes Offering Mission

To help builders and homebuyers build the most energy-efficient, safe, comfortable, durable, and highest-quality homes they can afford.

Eligibility

Any single-family home built in Wisconsin receiving natural gas and/or electricity from a utility participating in FOCUS ON ENERGY® is eligible. Homes may be stand-alone or part of a multi-unit building three stories or less and must meet the requirements of the Wisconsin Administrative Code, section 320.04 (6) note 2. Homes must also meet all applicable requirements contained within this document. Townhomes, duplexes, or row houses that fall under the current Wisconsin Commercial Building Code, are not eligible.

Building Performance Consultant Partnership

Participating builders must establish a partnership with a Building Performance Consultant (BPC). Both parties must complete a Trade Ally Application in order to participate and receive incentive payments. A signed and completed W-9 form is also required.

Apply online: **focusonenergy.com/trade-allies/complete-ta-application**

BPC Accreditation

BPCs associated with the Program must be Residential Energy Services Network (RESNET®) certified or possess an approved equivalent.

Computer Modeling

BPCs must use the Wisconsin version of REM/Rate energy modeling software to calculate each home's estimated energy savings. REM/Rate can also be used to demonstrate current Uniform Dwelling Code (UDC) compliance and provide the documentation required for the Internal Revenue Service's Energy-Efficient Home Tax Credit*.

* Subject to change without notice. See IRS Form 8908.

Site Visit Protocol

Why are site visits important?

Verification

Ensures your homes meet the Offering's energy efficiency targets.

Differentiate Your Business

Provides proof builders associated with the New Homes Offering build more energy-efficient, safe, comfortable, durable, and high-quality homes.

Added Value

Reduces the likelihood of customer callbacks when all recommended best practices are incorporated.

A minimum of two site visits are required for each Focus on Energy Certified New Home.

Initial Site Visit

Framing and Insulation Review

The BPC reviews the framing for potential air bypasses, insulation installation, and ensures the home is on track to meet all energy efficiency requirements and recommendations. Upon completion, the BPC submits a report to the builder indicating their findings.

Final Site Visit

Performance Testing

- **Blower Door Test:** A blower door test is conducted to determine the home's air tightness. Refer to Recommended Best Practice 1 on page 5.
- **Ventilation Capacity Testing:** All ventilation equipment should be tested to ensure it functions properly. Refer to Recommended Best Practices 6, 7, and 8 on pages 5 and 6 for additional information.

Eligibility Requirements

Builders who construct homes between 25% and 29.9% more efficient than code will receive the benefits of certification but will not receive a financial incentive. Homes 30% or more energy efficient than code are eligible to receive financial incentives per Tables 1 and 2 below.

The performance level is based on the home's estimated annual energy consumption, compared to the same home if it were built to current Wisconsin UDC. Incentives are awarded to the builder of the home only. Incentives are available on a first-come, first-served basis and amounts are subject to change.

Homeowner Eligibility: Homeowners are eligible to receive performance incentives only if they served as the general contractor—meaning they hired and managed the subcontractors who built their home.

Table 1 • Eligibility Incentive Types

Energy Supply Types	A	B
Home receives natural gas and electricity from a utility participating in Focus on Energy.	✓	
Home receives natural gas only from a utility participating in Focus on Energy.	✓	
Home receives electricity only from a participating utility and electricity is the primary space heating fuel. Excludes electric resistance space heating.	✓	
Home receives natural gas and electricity from a utility participating in Focus on Energy, but natural gas is not used as the primary space heating fuel.		✓
Home receives electricity only from a utility participating in Focus on Energy and propane is the primary space heating fuel.		✓

Table 2 • Eligibility Incentive Requirements[2]

Percentage Above Code Levels	Average Incentives	
	A	B
Level 1: 25 – 29.9% better than current Wisconsin UDC	$0	$0
Level 2: 30 – 34.9% better than current Wisconsin UDC	$500[1]	$350
Level 3: 35 – 39.9% better than current Wisconsin UDC	$1,000[1]	$550
Level 4: 40 – 100% better than current Wisconsin UDC	$1,800[1]	$1,000

1. Average incentive includes the per level fixed incentive amount, plus an additional incentive for each unit of energy (MMBtu) saved.
2. Incentives are capped at $4,000 per home, not including bonus incentives.

2022 Incentive Structure

Standard Incentives

The 2022 Incentive structure incorporates a "fixed" payment per home, plus an additional variable payment per unit of energy saved (MMBtu). The variable payment is calculated by multiplying the MMBtu by the amounts shown below - $15, $30, and $40.

Level 1: 25–29.9% More Efficient Than Code

- No incentive offered

Level 2: 30–34.9% More Efficient Than Code

- $150 fixed payment + $15 Per MMBtu Saved[1]

Level 3: 35–39.9% More Efficient Than Code

- $200 fixed payment + $30 Per MMBtu Saved[1]

Level 4: 40–100% More Efficient Than Code

- $200 fixed payment + $40 Per MMBtu Saved[1]

1. The MMBtu savings is calculated by energy modeling software.

Heat Pump Water Heater

Bonus Incentives

Focus on Energy offers bonus incentives for adding any or all of the equipment below. Incorporating any or all of the bonus incentives can significantly increase incentive amounts. The bonus incentives are additive to the amounts shown in Table 2.

- **98% AFUE Furnace[2]**
  - $150 Additional Incentive Payment
    - 1-2% increase in the More Efficient than Code value
    - 1-2 MMBtu savings increase
- **Heat Pump Water Heater**
  - $200 Additional Incentive Payment
    - 7-9% increase in the More Efficient than Code value
    - 5-15 MMBtu savings increase
- **R-5 Above Grade All Exterior Continuous Insulation[2]**
  - $400 Additional Incentive Payment
    - 3-4% increase in the More Efficient than Code value
    - 5-7 MMBtu savings increase

2. Cannot be used if propane or other fuel source is the primary space heating fuel.

Best Practices for Building a New Home

Focus on Energy recommends following these best practices when looking to build a more comfortable, energy-efficient, high-quality home.

Note: When Wisconsin UDC requirements exceed New Homes Offering Recommended Best Practices, UDC requirements shall prevail.

Best Practice 1: Air Tightness

Building air tightness plays a significant role in residential energy efficiency. Air tightness not only reduces heating and cooling energy consumption, but also provides draft-free comfort and contributes to overall building durability. An air tightness value equal to or less than 0.20 cubic feet per minute (CFM) is highly recommended.

Verification: Blower door test during the final site visit.

Best Practice 2: Sealed Sump Pump Basin

To eliminate the likelihood of soil gas and moisture infiltration, all sump pump basins should have an air-tight cover with all piping and electrical penetrations sealed. Recommended methods for air sealing a sump pump basin cover include a manufactured air-tight sump pump basin cover or a custom-fit cover caulked in place.

Best Practice 3: Sealed Plumbing Rough-In

An unsealed plumbing rough-in in the slab may allow unwanted moisture and soil gases to enter the home. It is recommended plumbing rough-ins be completely air sealed. Rigid code-approved material, such as foil faced THERMAX™ sheathing or pressure-treated wood cut to fit and caulked in place, are suitable methods of air sealing.

Best Practice 4: Full Coverage Foundation Insulation

To reduce heat loss and increase comfort, the entire foundation wall surface should be insulated. The insulation can be located on the interior, exterior, or a combination of both. It is also recommended brick ledges and exposed foundation walls located inside an attached garage, such as along stairways, also be insulated.

Best Practice 5: Slab-On-Grade Thermal Isolation

A thermal break between the slab in the conditioned space of the home and an attached garage reduces heat loss and increases comfort inside the home.

Best Practice 6: Whole-House Ventilation

In a more air-tight home indoor air quality becomes more important, therefore, a mechanical ventilation system ducted to the outdoors meeting the American Society of Heating, Refrigeration and Air-conditioning Engineers (ASHRAE) 62.2-2010 is highly recommended.

- When the tested air tightness value is at or below 0.15 CFM50 per sq. ft. of building shell area, a balanced ventilation system is highly recommended such as a Heat or Energy Recovery Ventilation system.
- An appropriately sized bathroom exhaust fan can be used to satisfy the whole-house ventilation recommendation. If this is the chosen method of whole-house ventilation, the control device or switch operating the fan must meet RESNET requirements.

Best Practice 7: Spot Ventilation for Bathrooms with a Tub or Shower

Excess moisture can lead to mold, mildew, or rot, and should be removed from the home at its source. An exhaust ventilation system ducted to the outdoors is highly recommended in any bathroom with a tub or shower. The exhaust fan should have a minimum tested value of 20 CFM continuous flow, with 50 CFM intermittent "boost" capability.

Best Practice 8: Spot Ventilation for Gas and Electric Ranges

Cooking can lead to excess moisture and odors in the kitchen which should be removed from the home at their source. The following ventilation options are highly recommended:

- Gas cooktops: A range hood or microwave exhaust system ducted to the outdoors above the cooktop with a minimum rated flow of 100 CFM.
- Electric cooktops: A range hood or microwave exhaust system ducted to the outdoors above the cooktop with a minimum rated flow of 100 CFM, or a central system ducted to the outdoors with a minimum tested flow of 20 CFM continuous air flow with a pick-up and control switch located in the kitchen.
- Cooktops with downdraft ventilation with a minimum rated flow of 100 CFM.

Best Practice 9: Space Heating and Water Heating System Design

Combustion safety and indoor air quality are vitally important. Therefore, the following are highly recommended:

- Any fuel-burning, forced-air space heating system should be closed combustion design with the piping for the combustion and exhaust air connected directly to the outdoors.
- Any boiler should be either closed combustion or power vent design.
- Any natural gas or liquid propane water heating system should meet one of the following criteria:
    - Power vent design with the piping for the exhaust air connected directly to the outdoors.
    - Direct vent design (i.e., pipe within a pipe) with the piping for exhaust and combustion air connected directly to the outdoors.
- In the absence of Time of Use or Load Management utility offerings, electric resistance water heaters are not recommended.
- Heat Pump Water Heaters are highly recommended.

Best Practice 10: Hearth Products

Combustion safety and indoor air quality is also important when hearth products are installed in the home. The following recommendations are strongly encouraged:

- Any gas fireplace should be direct-vent design.
- Any solid fuel-burning fireplace or stove should be closed combustion design, with the piping for combustion air connected to the unit per manufacturer recommendations.
- The use of any open-hearth gas or wood fireplace or pellet stove is highly discouraged.

Questions?

Visit **focusonenergy.com/new-home** or Contact Andy Kuc, New Homes Offering Manager

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focusonenergy.com/new-home

REDUCING ENERGY WASTE ACROSS WISCONSIN

FOCUS ON ENERGY® , Wisconsin utilities' statewide program for energy efficiency and renewable energy, helps eligible residents and businesses save energy and money while protecting the environment. Focus on Energy information, resources, and financial incentives help to implement energy efficiency and renewable energy projects that otherwise would not be completed.

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