

Certificate No. HXXXXX



Certification Date: Jan. 12, 2017

High-Performing Home Certificate

123 Lake Tree Lane, Crozet, VA 22932

Silver

This home's high-performing asset specifications can be found in the Pearl Certification Report and Appraisal Institute's *Residential Green and Energy Efficient Addendum* that accompany this certificate.

W. Casey Murphy
Pearl VP of Quality Management
888-557-5543

Reliable Heating & Air

Certifying Contractor: Jeremy Queen
www.reliableair.com
770-594-9969

123 Lake Tree Lane
Crozet, VA 22932

Silver/Gold/Platinum Home
Certificate No. HXXXXX



Pearl Home Certification Report



What You Need to Know

This [YEAR] home has been improved through a number of high-performing features.

The following features are energy efficient: [Asset #1], [Asset #2], and [Asset #3]. Its [Asset #4] is also better than the average home.

This home will be healthier, more comfortable, cleaner and quieter, and cost less to operate, than most [STATE] homes.



This Pearl Silver home has verified high-performing assets for a number of features that enhance the quality of life for its owners. Pearl Silver Certified: it's what value *feels* like.

Certification Level



Silver

867 Points Earned



Building Shell:
220 / 300 points



Heating and Cooling
251 / 360 points

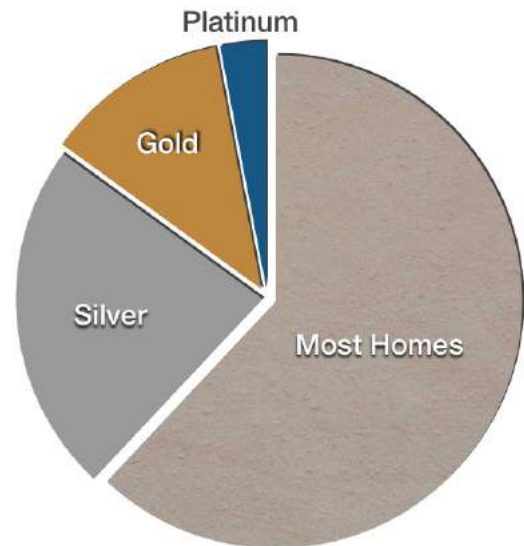


Baseload:
173 / 240 points



Home Management:
227 / 300 points

U.S. Homes Eligible For Pearl Certification Levels



What You Need to Know

This [YEAR] home has a number upgraded features compared to similar homes.

The following features are energy efficient: [Asset #1], [Asset #2], and [Asset #3]. Its [Asset #4] is also better than the average home.

This home will be healthier, more comfortable, cleaner and quieter, and cost less to operate, than most [STATE] homes.



This Pearl Silver home has verified high-performing assets for a number of features that enhance the quality of life for its owners. Pearl Silver Certified: it's what value *feels* like.

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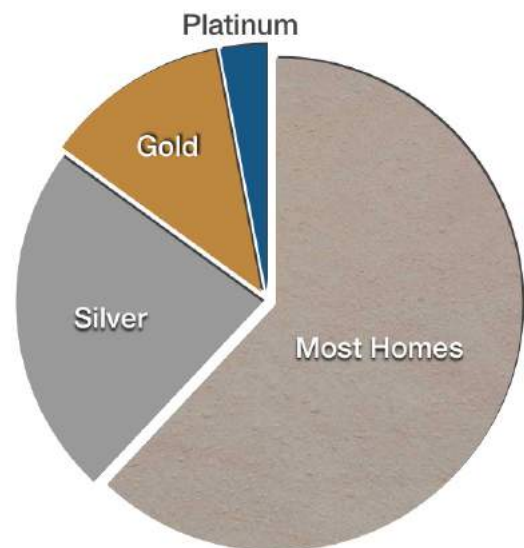


Baseload:
173 / 240 points



Home Management:
227 / 300 points

U.S. Homes Eligible For Pearl Certification Levels



This home has the following third-party (or independent) certifications or ratings: [NAME OF THIRD PARTY PROGRAM]. Further details are provided in this report.

Special Performance Features of This Home

Information below based on [state] data from the National Renewable Energy Lab.



Attic Insulation Top 10% of All Homes

This home's attic is well-insulated with R-49 insulation. That means lower utility bills and greater comfort - particularly in second floor rooms. Good attic insulation also protects against excessive heat loss in winter that can cause roof damage from snow melt.



Air Sealing 2x Better Than Homes of Similar Age and Size

This home's air tightness has been tested using special diagnostic equipment. A well-sealed home will have greater comfort, lower energy bills, better humidity control and less dust. A well-sealed home combined with proper ventilation will have improved air quality.



Windows Better than the Average Home

Double-pane windows like the ones in this home are better insulated, and they are better at stopping heat transfer than single-pane windows or double pane metal or wood frame windows. This results in a more comfortable home in the summer and winter, and lower energy bills!



Heating Equipment Better than the Average Home

This home's heating equipment is very efficient, with an especially efficient motor and gas valve that maximizes comfort and minimizes costs to operate. The furnace also has a safer venting system, preventing dangerous combustion gases from entering into living spaces.



Cooling Equipment Better than the Average Home

This home's central air conditioner is efficient, meeting the newest Federal standards that went into effect in 2016.



Water Heater Very Efficient!

Water heating accounts for about 18% of a home's energy use. This home has an exceptionally efficient water heater, offering significant savings. The water heater also has a safer venting system, preventing dangerous combustion gases from entering into living spaces.

Special Performance Features of This Home

Information below based on [state] data from the National Renewable Energy Lab.



Dishwasher ENERGY STAR for savings

ENERGY STAR certified dishwashers use advanced technology to get your dishes clean while using less water and energy. Dishwashers that have earned the ENERGY STAR are, on average, about 5 percent more energy efficient and 15 percent more water efficient than standard models.



Clothes Washer ENERGY STAR for savings

ENERGY STAR certified clothes washers use about 25% less energy and 40% less water than regular washers.



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Certified on January 19, 2017
Pearl Silver Certificate | Pearl Score: 867

About Pearl Certification

Pearl Certification is a national firm that provides third-party certification of **high-performing homes**: homes with “performance assets” that make them healthy, safe, comfortable, energy and water efficient.

Pearl’s certification system enables home buyers to see and understand the value of a home’s high-performing assets when the home is sold. Research from across the U.S. shows that third-party home performance certifications like Pearl’s add an average of 4% to the sale price of high-performing homes, compared to similar homes lacking these assets.

Pearl was founded by nationally recognized experts in the fields of energy efficiency and

residential contracting. Pearl’s co-founders have created and run award-winning energy efficiency programs, led the development of national data standards, and co-authored a guide on energy efficiency policy for the U.S. Department of Energy.

Pearl is the only private certification firm to sponsor the U.S. Department of Energy’s prestigious Home Performance with ENERGY STAR program.

The Science Behind Pearl Certification

Pearl’s certification system is based on building science. It was developed in consultation with national experts on energy efficiency and home performance, and with technical assistance from the National Renewable Energy Laboratory (NREL). This system is approved for use in the Department of Energy’s Home Performance with ENERGY STAR program.

Pearl’s certification system takes into account how well an asset like insulation or a cooling system was installed. It also takes into account tools that allow a homeowner to view, understand, and improve their home’s performance.

For more information on Pearl’s certification, please email us at: info@pearlcertification.com, or visit our website at www.pearlcertification.com

PEARL’S PARTNERS

Pearl works in partnership with the U.S. Department of Energy and many of the nation’s leading real estate, appraisal, contracting, and building science organizations.



OVERVIEW OF PEARL CERTIFICATION SYSTEM

Pearl certifies a home's performance assets, such as insulation, heating and cooling, lighting, and appliances. Each asset receives a credit value, according to how much it contributes to making the home healthy, comfortable and energy efficient.

Building Shell

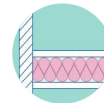
A building shell consists of all the parts of the home that separate its inside from the outside. The roof, exterior walls, windows, doors, and basement or crawlspace are all part of the building shell. These building shell keeps air that has been heated or cooled to the temperature you want from in your home.



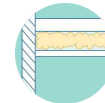
Attic



Wall



Floors & Foundation



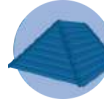
Rim Joist



Attic Hatch Insulation



Windows



Roofs



Doors



Air Sealing

Heating and Cooling

A home's heating and cooling systems include furnaces, air conditioners, and heat pumps. This equipment heats and cools air, water, or steam. The ducts or pipes that circulate the air, water or steam through the home are also a part of the heating and cooling system.



Cooling



Heating



Heat Pump



Distribution System

Baseload

A home's baseload includes all the devices that run year-round, not just in the heating or cooling season. Water heaters, refrigerators, clothes washers, and plug-in devices like TVs, toasters, and hair dryers all contribute to the home's baseload.



Clothes Dryer



Dish Washer



Clothes Washer



Refrigerators



Lighting



Water Heating System



Ventilation

Home Management

A home's management assets include "smart" devices that control heating and cooling systems, lighting, and other devices; dashboards that provide information about energy use; and inventories and plans for improving the home's performance assets.



Controls



Planning

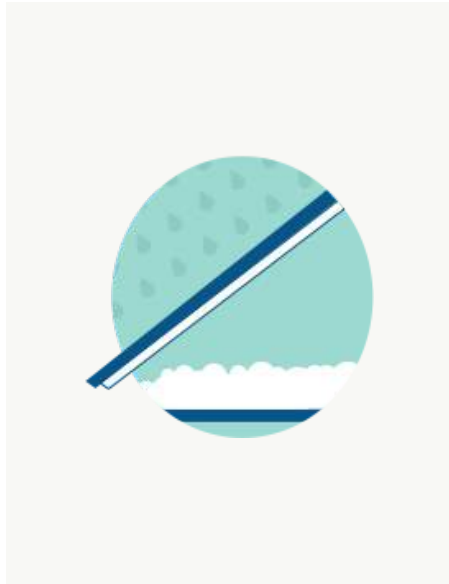
HOME ASSET DETAILS

Building Shell



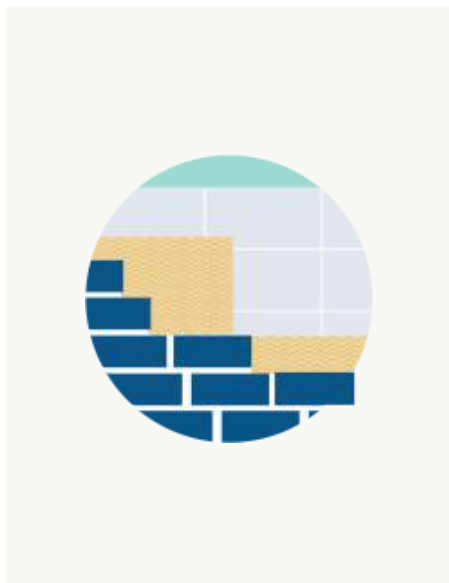
Platinum Level: **250**
This Home:
Average Home: **150**

Attic / Roof Insulation



Asset Name	R-49
Attic Hatch	R-10 or higher
R-Value	R-49
Insulation Type	Fiberglass
Installation Quality	Grade I

Wall Insulation



Asset Name	Floor over garage
R-Value	R-32
Insulation Type	Cellulose
Installation Quality	Grade I

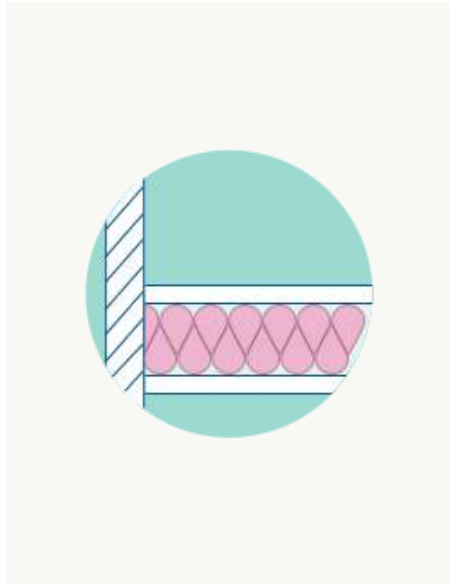
HOME ASSET DETAILS

Building Shell



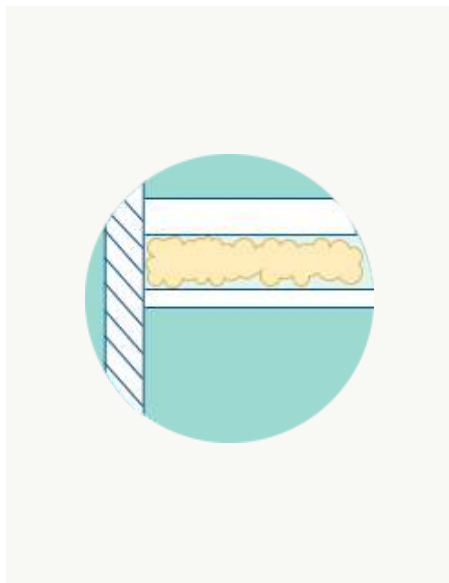
Platinum Level: **250**
This Home:
Average Home: **150**

Floor and Foundation Insulation



Asset Name	R-49
Attic Hatch	R-10 or higher
R-Value	R-49
Insulation Type	Fiberglass
Installation Quality	Grade I

Rim Joist Insulation



Asset Name	Floor over garage
R-Value	R-32
Insulation Type	Cellulose
Installation Quality	Grade I

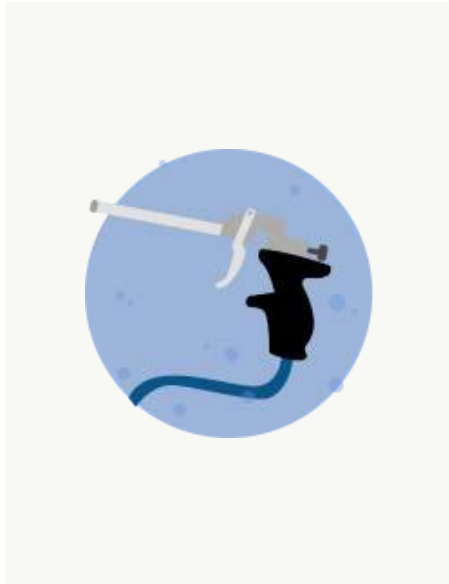
HOME ASSET DETAILS

Building Shell



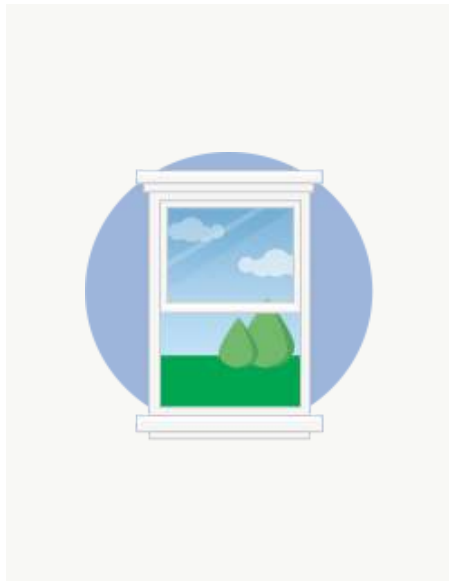
Platinum Level: **250**
This Home:
Average Home: **150**

Air Leakage Management



Asset Name	R-49
Attic Hatch	R-10 or higher
R-Value	R-49
Insulation Type	Fiberglass
Installation Quality	Grade I

Windows, Doors. and Skylights



Asset Name	Floor over garage
R-Value	R-32
Insulation Type	Cellulose
Installation Quality	Grade I

HOME ASSET DETAILS

Heating & Cooling



Platinum Level: **250**
This Home:
Average Home: **150**

Heat Pump



System Type	Gas Furnace
AFUE	95
% Heating / Cooling Load	100%
Motor	Full ECM
Gas Valve	Multistage
Maintenance Contract	Yes
ENERGY STAR	Yes

Heating Equipment



System Type	Central Air Conditioner
SEER	14
% Heating/Cooling Load	100%
Maintenance Contract	Yes

HOME ASSET DETAILS

Heating & Cooling



Platinum Level: **250**
This Home:
Average Home: **150**

Cooling Equipment



System Type	Gas Furnace
AFUE	95
% Heating/Cooling Load	100%
Motor	Full ECM
Gas Valve	Multistage
Maintenance Contract	Yes
ENERGY STAR	Yes

Distribution System



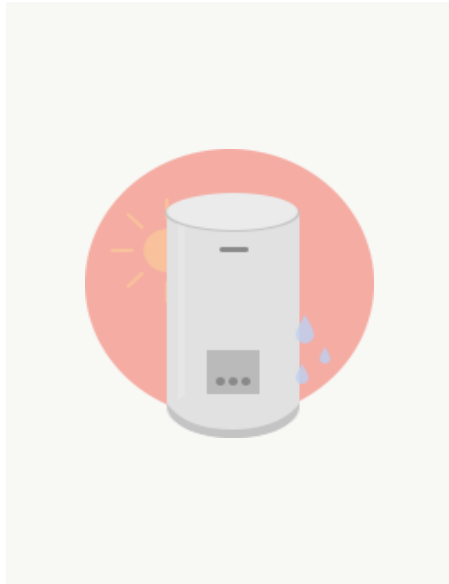
System Type	Central Air Conditioner
SEER	14
% Heating / Cooling Load	100% / 100%
Maintenance Contract	Yes

HOME ASSET DETAILS
Baseload



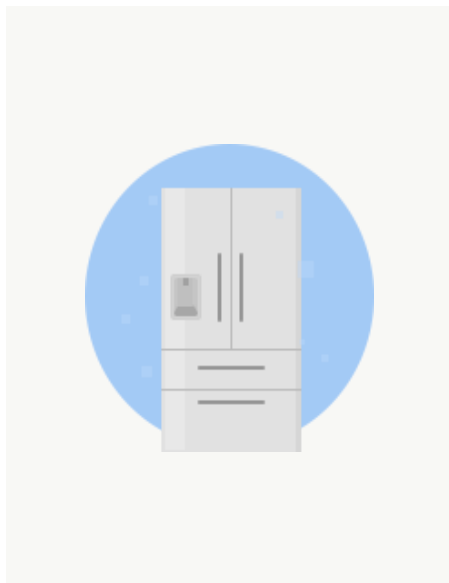
Platinum Level: **250**
This Home:
Average Home: **150**

Water Heater



Type	Tank / Storage
Energy Factor	.67

Refrigerator



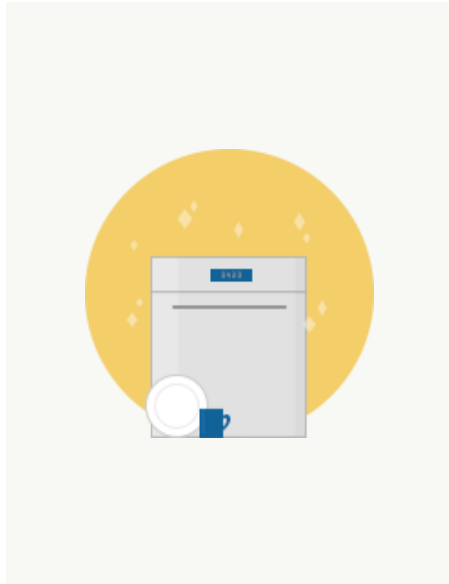
ENERGY STAR	Yes

HOME ASSET DETAILS
Baseload



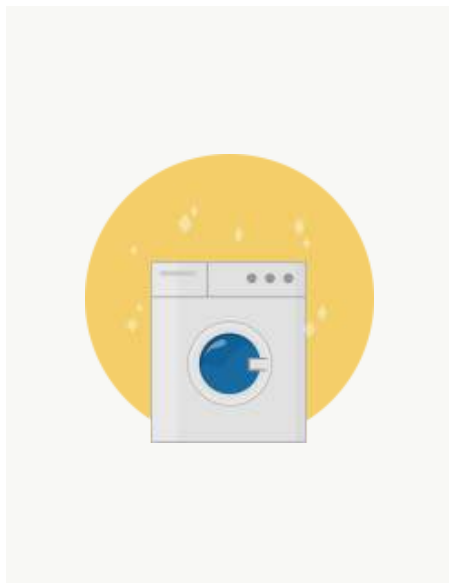
Platinum Level: **250**
This Home:
Average Home: **150**

Dishwasher



Type	Tank / Storage
Energy Factor	.67

Clothes Washer



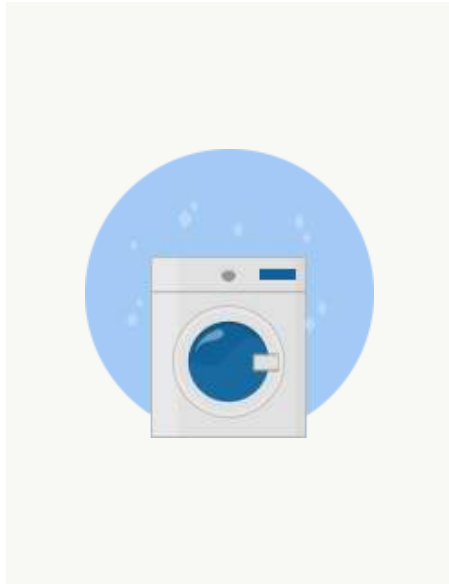
ENERGY STAR	Yes

HOME ASSET DETAILS
Baseload



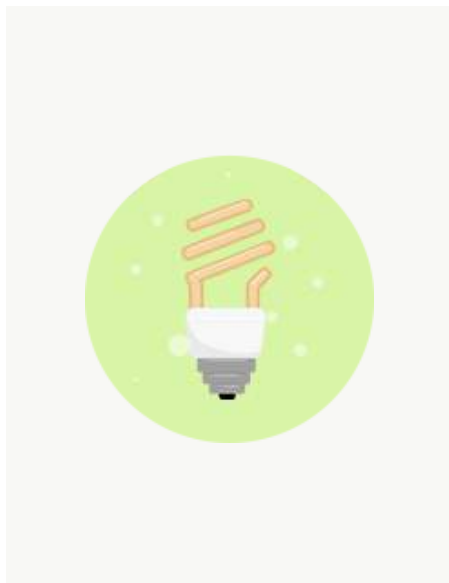
Platinum Level: **250**
This Home:
Average Home: **150**

Clothes Dryer



Type	Tank / Storage
Energy Factor	.67

Lighting



ENERGY STAR	Yes



123 Lake Tree Lane
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Pearl Silver Certificate | Pearl Score: 867


HOME ASSET DETAILS

Baseload



Platinum Level: **250**
This Home:
Average Home: **150**

Healthy Air

	Type	Tank / Storage
	Energy Factor	.67



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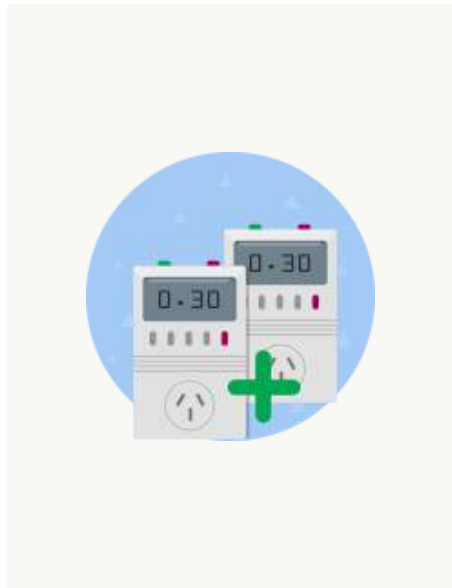
HOME ASSET DETAILS

Home Management



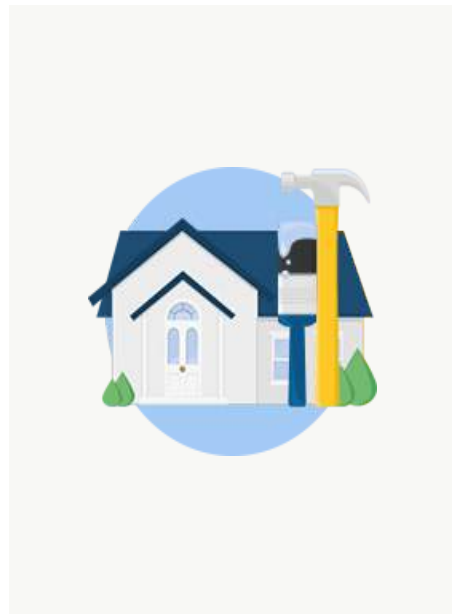
Platinum Level: **250**
This Home:
Average Home: **150**

Energy Management



Type	Programmable

Planning



My Home Profile Issued	Available in mid-2017
Comprehensive Home Energy Inventory	Yes
Improvement Plan	Yes
Maintenance Plan	Yes



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HOME ASSET DETAILS

Home Management



Platinum Level: **250**
This Home:
Average Home: **150**

This home will have a “My Home Profile” account. This account gives the owner a tool to understand, manage, maintain, and improve the home’s performance.

The “My Home Profile” account access is expected in mid-2017.

Homeowners wanting to make smart home improvements that can add value to their property use Pearl’s certification for guidance. Descriptions of upgrades relevant to this home can be found in its My Home Profile, as well as general information on expense and complexity. Suggested improvements lower energy or water costs, and increase comfort and indoor air quality. Homeowners may also

choose to work with a Pearl Network Contractor who can create a Home Improvement Plan with more specific advice on what home performance assets should be considered for upgrade or replacement.

For more information on Pearl’s certification, email at: info@pearlcertification.com, or visit our website:

HOME ASSET DETAILS

Third Party Programs

ENERGY STAR Verified HVAC Installation (ESVI) Program

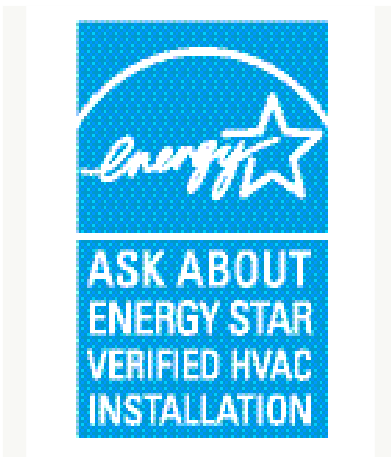


Certifying Organization	Southface
Program Version	v1.0
Certificate/Job Number	170125-2
System Location	Second Floor
System Description	2.5 ton 16 SEER AC System with ComfortGuard Monitoring System

ESVI is a national program overseen by local sponsors. The program is for existing homes and verifies that heating and/or cooling improvements are made according to quality installation standards.

Some or all of this home’s asset have been improved through the ESVI program.

ENERGY STAR Verified HVAC Installation (ESVI) Program



Certifying Organization	Southface
Program Version	v1.0
Certificate/Job Number	170125-2
System Location	Second Floor
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Some or all of this home’s asset have been improved through the ESVI program.

HOME ASSET DETAILS

Third Party Programs

Home Performance with ENERGY STAR (HPwES) Program



Certifying Organization	Pepco
Program Version	v1.5
Certificate/Job Number	170125-1

HPwES is a national program overseen by local sponsors. The program is for existing homes and requires that a comprehensive energy assessment is performed.

Some or all of this home's asset have been improved through the HPwES program.

Home Performance with ENERGY STAR (HPwES) Program



Certifying Organization	Pepco
Program Version	v1.5
Certificate/Job Number	170125-1

HPwES is a national program overseen by local sponsors. The program is for existing homes and requires that a comprehensive energy assessment is performed.

Some or all of this home's asset have been improved through the HPwES program.

HOME ASSET DETAILS

Third Party Programs

ENERGY STAR Certified Homes (ESCH) Program



Builder	Superior Builders
Verified By	ABC Raters
Oversight Organization	BGE
Date	4/21/2011
Version	2.5

ENERGY STAR Certified Homes is a national program overseen by RESNET and frequently sponsored by a local utility. The program is for new homes, which are labeled after completion.

This home earned the label when it was originally built.

Home Performance with ENERGY STAR (HPwES) Program



Builder	Superior Builders
Verified By	ABC Raters
Oversight Organization	BGE
Date	4/21/2011
Version	2.5


HPwES is a national program overseen by local sponsors for existing homes. It requires a comprehensive energy assessment and that installations are performed by an approved program contractor.

Some or all of this home's asset have been improved through the HPwES program.

HOME ASSET DETAILS

Third Party Programs

Home Energy Rating Score (HERS)

	Builder	Superior Builders
	Verified By	ABC Raters
	Oversight Organization	RESNET
	Date	4/21/2011
	Score	45

The HERS Index uses energy modeling to project a home's energy efficiency. The HERS Index is most often used in new home construction and is often used in conjunction with the ENERGY STAR Certified Homes program.

The home was rated and earned a HERS Index Score.



Appendix A: Appraisal Institute's Green and Energy Efficiency Appraisal Addendum

Instructions to homeowner or listing agent:

High-performance features can add significant value to a home. Recent studies have indicated that improvements such as air sealing and insulation, high efficiency heating and cooling systems, and other "green" and energy efficient features can add 3-9% onto a home's value, if verified by a third party.

A home may be appraised for different reasons:

- Mortgage refinance
- To discontinue mortgage insurance - if the home's value has increased enough, the homeowner may have sufficient equity in the home to no longer need insurance
- Immediately prior to selling a home to assist in pricing the home
- As part of the home sale process to meet the buyer's lending requirements

Pearl Certification has an AI REPORTS® License Agreement with the Appraisal Institute.

The following appendix can be provided to an appraiser to assist him or her in valuing the home. As stated in the Addendum:

"The objective of this Addendum is to standardize the communication of the high performing features of residential properties. Identifying the features not found on the 1004 form provides a basis for comparable selection and analysis of the features. Builders, contractors, homeowners, and third party verifiers are encouraged to complete this Addendum and present to appraisers, agents, lenders, and homeowners."

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