

Certificate No. DH-000000

Certified Date: Aug. 20, 2024



HIGH-PERFORMING HOME CERTIFICATION

Silver

101 W MAIN ST,
CHARLOTTESVILLE, VA 22902



This home has met Pearl Certification's
nationally recognized performance standards
for whole-house energy efficiency.

Casey Murphy

W. Casey Murphy
Senior VP of Quality and Standards

pearlcertification.com

Dear Sally,

Congratulations on your installation with Main Street Home Solutions! As a Pearl Certification partner, Main Street Home Solutions is proud to offer a third-party certification of this asset's energy efficiency, quality, and performance.

The enclosed Certification Report provides a detailed look at the high-performing attributes of your new asset(s). But there's much more to it than that.

Your Pearl Certification Report captures the resale value that these often "invisible" assets add to your home and translates that value into language that appraisers, buyers, and lenders can understand. This helps you build equity in your home and get a higher return on your investment when it's time to sell or refinance. To that end, enclosed in your Certification Report you'll find the following:

- An overview of the assets you had installed and your home's anticipated energy performance based on that installation
- Technical specifications for each asset
- Appraisal Institute Green and Energy Efficient Addendum
- Letter for lenders on the home's performance
- Marketing packet with home tour cards and other tools to show potential buyers the value you've added with your smart investments

We also recognize that achieving high home performance is a journey, not a destination. That's why we stay connected with you on our free, award-winning **Green Door** app to provide you with the tools, resources, and education you need to continue your home improvement journey.

Congratulations, and we look forward to seeing you in Green Door.



W. Casey Murphy
Senior VP of Quality and Standards
Pearl Certification

Pearl proudly works in partnership with





Pearl Home Certification Report



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Home Address

**101 W Main St,
Charlottesville, VA
22902**



Pearl Score

770

Your Home's Pearl Performance

This page shows how Pearl assesses your home's high-performing assets. Your Pearl score captures how well your home is doing in terms of energy efficiency, comfort, health, resilience, and home value. The higher the score, the higher your home's performance.



Building Shell

200/300 Points

Assets that provide air, moisture, and a thermal barrier for the home.



Home Management

175/300 Points

Smart devices and energy-use dashboards.



Heating & Cooling

262/360 Points

This equipment heats and cools air, water, or steam, then circulates it through the home.



Baseload

133/240 Points

Devices that run year-round, not just in the heating or cooling season.



Solar, EV & Energy Storage

Asset Present

Pre-wired or installed. Pearl Points are not yet awarded for these assets.



Badges

A badge affirms that a home excels in a particular area such as sourcing solar energy or operating solely on electricity.



Electrified Home



Certification Level

The certification tier reflects the home's performance level. The more categories in which a home excels, the higher the certification tier it earns.



Continue Your Journey

Find out how to increase your Pearl Score and Certification Tier — even earn badges using Pearl's Green Door app.

[Learn more](#)





Special Performance Features of Your Home



Attic Hatch: Very Well-insulated

This home's attic hatch has been insulated. Attic hatches are often the weakest link in a home's attic insulation, and can disproportionately impact a home's heat loss and heat gain. If an uninsulated attic hatch represents only 1% of an attic's surface area, it can decrease the attic's overall R-value by 27%.



Air Sealing: Top 1% of VA homes

This home's air tightness has been tested using special diagnostic equipment. The home's air tightness meets many modern energy codes and as a result will be more comfortable and less drafty. A well-sealed home will also help manage humidity, prevent dust, and limit entry points for insects.



Heat Pump: Top 3% of electric-heated homes

This home's heat pump is one of the most energy efficient sold. Its year round energy savings will be significant compared to most homes' heating and cooling equipment.



Central Air Conditioner: Top 2% of VA homes

This home's air conditioner is one of the most energy efficient available in the market. It saves the homeowner money every summer, while providing comfort.



Dishwasher: Very efficient

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.



LED Lighting: Very efficient lighting

More than half of this home's lights are LED bulbs, which not only use less energy, but also produce better light along the color spectrum, are dimmable, and last a very long time.



Special Performance Features of Your Home



Solar panels:

Top 1% of U.S. homes

Energy reliance, energy security, and sustainable living are three reasons why solar panels are gaining in popularity. They also keep energy costs down for the homeowner – particularly when utility bills keep rising.



Materials Warranty:

Top 12% of Warranties

The materials warranty, sometimes referred to as the product or equipment warranty, provides peace of mind that the manufacturer will replace your panels in the rare event that they stop functioning. The majority of solar materials warranties are for 10 years. This panel's warranty provides excellent coverage, exceeding 88% of available warranties.



Efficiency:

Top 1% of Efficiency

A solar panel's efficiency rating indicates the percentage of the sun's energy falling on the panels that is converted into usable electric energy. Your panels greatly exceed the industry average of 16.6% efficiency, placing them at the very top of available technology.



Installation Warranty:

Above Average Warranty

The quality of the installation of the solar panels on a home's roof is important: a poor quality job can cause serious long-term damage to the roof. The ten-year workmanship warranty offered on this home's PV system indicates that the installer has confidence in the quality of their work.



Inverter:

Above average warranty

The inverter converts the electricity generated by the panels from direct current (DC) to alternating current (AC), allowing it to be used in the home. The manufacturer supports this system's inverter(s) with a warranty, which far exceeds industry standards, and is a good indication of its quality.



Power Production Warranty:

Top 1% of Performance Warranties

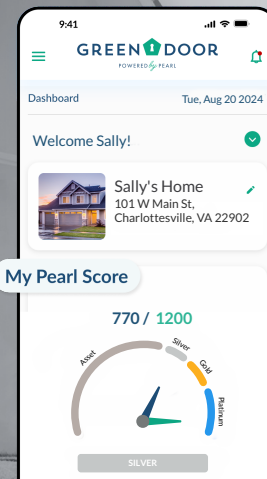
Your solar panels are designed to continue to deliver power over a long period of time. The manufacturer guarantees that after 25 years these panels will still be producing 87% of their nameplate power output rating. This is much higher than the industry average of 80.6%, and puts this installation among the top 1% of performance warranties.



101 W Main St,
Charlottesville, VA 22902

Certified on Aug. 20, 2024
Pearl Silver Certificate | Pearl Score: 770

Continue Your Home Performance Journey in Green Door



Stay Connected with
Your Contractor



Save on New
Upgrades



Level-up Your
Certification

Plan Your Next Home Investment

- Set some performance goals for your home, like comfort, health, cost, or added value.
- Understand what your existing home assets can do.
- Identify top priorities based on home performance impact.
- Find rebates, tax credits, and other discounts to help defray cost.

Take care of all this and more with a **Home Investment Plan** in Green Door.



Get Ready to Sell Your Home

- Add other high-performing home features to your home's profile and generate an updated Pearl Certification.
- Share with your real estate agent.
- Don't have an agent? Use the **Find Pros** tool in Green Door to connect with a Pearl Real Estate Network member who can market your high-performing home for maximum resale value.



Get the Mobile App



OR

Sign Up on the Web

Set up account



Home Technical Specifications

Note: remember to show the following pages to your home appraiser.

The following pages highlight:

- Special performance features of your home
- Details about your high-performing home assets
- Everything that you can certify with Pearl
- Science and industry standards behind Pearl's certification



What do I do with these tech specs?

Scan QR code with your phone camera to find out.



HOME ASSET DETAILS

Building Shell

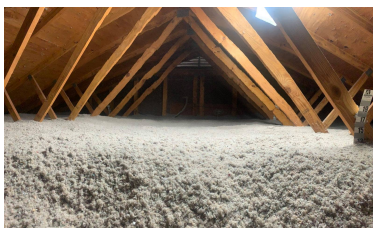
My Pearl Score:

770



Attic and Roof

✓ Last updated: Aug. 16, 2024



Attic Hatch

Greater than or equal to
surrounding insulation

Insulation Type (predominant)

Cellulose - Loose Fill

Insulation Manufacturer

Best Insulation Mfg

Add an image.

If you are the
homeowner, login
to [Green Door](#) and
submit a picture of
this asset.

GREEN  DOOR



Air Sealing

✓ Last updated: Aug. 16, 2024

Tested and verified using blower door

Yes

Blower door result

1685 @CFM50

Professionally air sealed

Yes

Air leakiness: Air changes per hour

3.1 @ACH50



HOME ASSET DETAILS

Heating And Cooling

My Pearl Score:

770



Heat Pump

✓ Last updated: Aug. 16, 2024

Type

Mini-split Heat Pump

Outdoor Unit Model Number

25XHP18AOL

HSPF2

9.2

Indoor Unit Manufacturer

Great Heat Pump Mfg

SEER2

18

Indoor Unit Model Number

CCC25XHP18AAX

Outdoor Unit Manufacturer

Great Heat Pump Mfg

Compressor

Variable-speed



Cooling System

✓ Last updated: Aug. 16, 2024



Type

Central air conditioner

Indoor Unit Manufacturer

Great HVAC Mfg

Efficiency (SEER2)

18

Indoor Unit Model Number

GRCCAC18XC48CCE

Outdoor Unit Manufacturer

Great HVAC Mfg

Compressor

Variable-speed

Outdoor Unit Model Number

GRAC18XC48ABCDX

ENERGY STAR®

Yes



HOME ASSET DETAILS

Baseload

My Pearl Score:

770



Add an image.

If you are the homeowner, login to [Green Door](#) and submit a picture of this asset.

GREEN  DOOR



Dishwasher

✓ Last updated: Aug. 16, 2024

ENERGY STAR®

Yes

Model Number

DWESTR115

Manufacturer

DishWizard

Year Manufactured

2024

Add an image.

If you are the homeowner, login to [Green Door](#) and submit a picture of this asset.

GREEN  DOOR



Lighting

✓ Last updated: Aug. 16, 2024

Prevalence of LEDs

100%



HOME ASSET DETAILS

Home Management

My Pearl Score:

770



Add an image.

If you are the homeowner, login to [Green Door](#) and submit a picture of this asset.

GREEN  DOOR



Planning

✓ Last updated: Aug. 13, 2024

Green Door Account

Yes



HOME ASSET DETAILS

Photovoltaic System

My Pearl Score:

770



Add an image.

If you are the homeowner, login to [Green Door](#) and submit a picture of this asset.

GREEN  DOOR



Array #1 Panel Specifications

✓ Last updated: Aug. 16, 2024

System Size (kW)

6.8

Name of Utility Company

VA (Virginia State Average)

Panels Installation Date

08/2024

Charge /kWh from Utility

\$0.1465 kWh

Manufacturer

Great Solar Mfg

Warranty on Panels (years)

20

Model Number

LTY-306 BLK 23

Efficiency Rating

22.000 %

Add an image.

If you are the homeowner, login to [Green Door](#) and submit a picture of this asset.

GREEN  DOOR



Array #1 Inverter Specifications

✓ Last updated: Aug. 16, 2024

Number of Inverters Per Array

1

Inverter Model Number

GIM-7000

Inverter Installation Date

08/2024

Warranty Term (years)

12

Wattage

7000

Warranty Offered By

Great Inverter Mfg

Inverter Manufacturer

Great Inverter Mfg

Inverter Type

String Inverter



HOME ASSET DETAILS

Photovoltaic System

My Pearl Score:

770



Main Street



Home Solutions



Array #1 Installation Warranty

✓ Last updated: Aug. 16, 2024

Years in business

16

Workmanship Warranty (years)

18

Installer NABCEP Certified ?

Yes

Warranty Offered By

Main Street Home Solutions



Array #1 Power Production Warranty

✓ Last updated: Aug. 16, 2024

Warranty length (years)

25

Power at End of Warranty

88.70 %

Add an image.

If you are the
homeowner, login
to [Green Door](#) and
submit a picture of
this asset.

GREEN  DOOR



HOME ASSET DETAILS

Photovoltaic System

My Pearl Score:

770



Add an image.

If you are the homeowner, login to [Green Door](#) and submit a picture of this asset.

GREEN  DOOR



Array #1 Energy Storage/Batteries

✓ Last updated: Aug. 16, 2024

Battery Type

Lithium-ion Polymer

Manufacturer Warranty Term (years)

25

Battery Manufacturer

Best Battery Mfg

Battery Installation Date

08/2024

Model Number

SSB-12000

Add an image.

If you are the homeowner, login to [Green Door](#) and submit a picture of this asset.

GREEN  DOOR



Array #1 Electric Vehicle Readiness

✓ Last updated: Aug. 16, 2024

Electric Vehicle (EV) Ready

Yes

Charger Manufacturer

Great Charger Mfg

Electric Vehicle (EV) Charger Installed

Yes

Charger Installation Date

08/2024

ENERGY STAR

Yes

What Can I Certify with Pearl?

Pearl Certification can certify all the assets listed below; plus our certification system is always evolving and adding new certifiable categories.

Building Shell



Attic/Roof
Insulation



Wall Insulation



Rim Joist



Floors &
Foundation



Windows



Doors



Air Sealing

Baseload



Ventilation



Water Heating
System



Clothes Dryer



Clothes
Washer



Dishwasher



Refrigerator



Lighting



Pool
Equipment



Cooking
Appliances



Kitchen
Fixture



Indoor Air
Quality



Fireplace



Bathroom
Fixture

Heating & Cooling



Cooling



Heating



Heat Pump



Distribution
Systems

Home Management



Smart Home
Devices



Planning

Solar, Batteries, and Electric Vehicle Readiness

Pearl Points are not yet awarded for these assets.



Solar
Photovoltaic



Solar Inverter



EV Ready
Home



Home
Batteries



Solar
Installation



Power
Production
Warranty



Solar
Incentives



About Pearl Certification

Your home is your biggest investment. Pearl Certification helps you earn a higher return on that investment.

Pearl's mission is to give homeowners the tools to improve their homes' health, comfort, efficiency, resilience, and value. Pearl's nationally recognized certification captures the value that high-performing and energy-efficient assets like heat pumps, insulation, and ENERGY STAR® windows can add to your home's resale value. It then translates that value into language that homebuyers, lenders, and appraisers can understand. In doing so, we're building a market that rewards energy efficiency.

Sell Your Home for More

Not only do high-performing homes cost less to operate, but high-performing homes with [Pearl Certification can also earn a premium of up to 5% on average](#) when marketed properly.

Continue Your Home Performance Journey

Whether you're focused on comfort, health, savings, or home equity, Pearl's free, award-winning Green Door app has tools to help you get there. From customized home improvement plans to maintenance reminders to a rebates and tax credits search, [Green Door](#) can help you make smarter home investments for years to come.

Names You Recognize

Founded in building science, Pearl Certification is the only national sponsor of the U.S. Department of Energy's Home Performance with ENERGY STAR® program and partners with the National Association of REALTORS® Green Resource Council.

Pearl proudly works in partnership with





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."

The Appraisal Institute makes no representations, warranties or guarantees as to, and assumes no responsibility for, the data, analysis or work product provided by the individual appraiser(s) or any other individual in the specific contents of the AI Reports®

Client:	Sally Sample	Client File #:	
Subject Property:	101 W Main St, Charlottesville, VA 22902-5031	Appraisal File #:	

EFFICIENCY FEATURES (Water, Energy, and Environmental. See types defined in glossary).							
The following items are considered within the appraisal analysis of the subject property:							
Insulation	<input type="checkbox"/> Fiberglass Blown-In <input type="checkbox"/> Foam Insulation <input checked="" type="checkbox"/> Cellulose <input type="checkbox"/> Fiberglass Batt Insulation <input type="checkbox"/> R-Value Wall Ceiling <input type="checkbox"/> Other						
Building Envelope	Envelope Tightness: 3.1 Unit: <input type="checkbox"/> CFM25 <input type="checkbox"/> CFM50 <input checked="" type="checkbox"/> ACH50 <input type="checkbox"/> ACH natural Instructions: Insert the rating as a number that could be 0.5 to 7ACH50 or higher. The lower the number, the more air tight the envelope. Building Codes for area show maximum Envelope Tightness allowed based on the climate zone. Not all areas have adopted a building code. http://bcap-energy.org/						
Windows	<input type="checkbox"/> ENERGY STAR®	<input type="checkbox"/> Low E	<input type="checkbox"/> High Impact	<input type="checkbox"/> Storm	<input type="checkbox"/> Double Pane <input type="checkbox"/> Triple Pane	<input type="checkbox"/> Tinted	<input type="checkbox"/> Solar Shades
Day Lighting	<input type="checkbox"/> # of Skylights:		<input type="checkbox"/> # of Solar Tubes:		<input type="checkbox"/> Other (Describe): % of lighting LEDs: 100		
ENERGY STAR® Appliances	ENERGY STAR®: <input checked="" type="checkbox"/> Dishwasher <input type="checkbox"/> Refrigerator <input type="checkbox"/> Washer/Dryer <input type="checkbox"/> Other Energy Source: <input type="checkbox"/> Propane <input type="checkbox"/> Electric <input type="checkbox"/> Natural Gas <input type="checkbox"/> Other (Describe): Note: ENERGY STAR® appliances do not result in an ENERGY STAR® Home.						
Water Heater	<input type="checkbox"/> ENERGY STAR®		Size: gallons <input type="checkbox"/> Tankless		<input type="checkbox"/> Solar (next page) <input type="checkbox"/> Heat Pump <input type="checkbox"/> Coil		
HVAC & Related Equipment Describe in comments area.	<input checked="" type="checkbox"/> High Efficiency HVAC SEER 18.0 Efficiency Rating % AFUE* % *Annual Fuel-Utilization Efficiency		<input checked="" type="checkbox"/> Heat Pump Efficiency Rating: COP: HSPF: 9.2 SEER: 18.0 EER:		Thermostat/Controllers? <input type="checkbox"/> Yes <input type="checkbox"/> No Programmable Thermostat? <input type="checkbox"/> Yes <input type="checkbox"/> No Auxiliary Heat Source? <input type="checkbox"/> Yes <input type="checkbox"/> No Radiant Floor Heat? <input type="checkbox"/> Yes <input type="checkbox"/> No Geothermal? <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Vehicle Ready? (car charger) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
Indoor Environmental Quality	<input type="checkbox"/> Energy (ERV) or Heat Recovery Ventilator (HRV) <input type="checkbox"/> Other Measured Whole-House Ventilation Device (See glossary) <input type="checkbox"/> Humidity Monitoring Device installed				<input type="checkbox"/> Non Toxic Pest Control <input type="checkbox"/> Radon System: <input type="checkbox"/> Active <input type="checkbox"/> Passive		
Water Efficiency	<input type="checkbox"/> Reclaimed Water System (Describe): <input type="checkbox"/> Greywater reuse system <input type="checkbox"/> Water Saving Fixtures				<input type="checkbox"/> Rain Barrels Used in Irrigation <input type="checkbox"/> Cistern size: gallons <input type="checkbox"/> Location of cistern:		
Utility Costs	Annual Utility Cost: \$ /year, based on: to (full year). Includes (check all that apply): <input type="checkbox"/> Electric <input type="checkbox"/> Heating <input type="checkbox"/> Water <input type="checkbox"/> Other:					# Of Occupants:	
Comments Include source for information provided in this section.	The following property has a number of high-performing features as detailed in the Pearl Certification report. With the cooperation and approval of the Appraisal Institute, Pearl Certification has an AI REPORTS® License Agreement. The Appraisal Institute makes no representations, warranties or guarantees as to, and assumes no responsibility for, the data, analysis or work product provided by the individual appraiser(s) or any other individual in the specific contents of the AI Reports®						

Completed by: W. Casey Murphy	Title: Vice-President of Quality Systems	Date: 08/20/2024
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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 appraisal 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. Complete the pages that apply to the property appraised and provide to appraiser prior to the completion of an appraisal. Provide the Addendum to the lender at the time of loan application to assist them in understanding the property type so an appraiser with sufficient knowledge of this property type will be engaged to provide an appraisal to meet secondary mortgage market guidelines.

*NOTICE: The Appraisal Institute publishes this form for use by appraisers where the appraiser deems use of the form appropriate. Depending on the assignment, the appraiser may need to provide additional data, analysis and work product not called for in this form. The Appraisal Institute makes no representations, warranties or guarantees as to, and assumes no responsibility for, the data, analysis or work product, or third party certifications, verifications, data specifications, scores, indexes, or valuation tools, used or provided by the individual appraiser(s) or others in the specific contents of the AI Reports®. AI Reports® AI-820.05 Residential Green and Energy Efficient Addendum. ©Appraisal Institute 2017, All Rights Reserved. (May 2017)

Client:	Sally Sample	Client File #:	
Subject Property:	101 W Main St, Charlottesville, VA 22902-5031	Appraisal File #:	

Solar Panels			
The following items are considered within the appraisal analysis of the subject property:			
Solar Photovoltaic (Electric) System			
Type of Ownership	Array #1	Array #2 (if applicable)	
	<input type="checkbox"/> Leased <input type="checkbox"/> Owned <input type="checkbox"/> *Solar Loan with UCC Filing <input type="checkbox"/> Purchase Power Agreement (PPA)	<input type="checkbox"/> Leased <input type="checkbox"/> Owned <input type="checkbox"/> *Solar Loan with UCC Filing <input type="checkbox"/> Purchase Power Agreement (PPA)	
Panel Specifications	System Size: 6.8000 kW (1kW = 1000 Watts) Age of Panels: 1 month Energy Production: kWh Source of Energy Production Estimate: Manufacturer: Great Solar Mfg Warranty on Panels: 20 years	System Size: kW (1kW = 1000 Watts) Age of Panels: Energy Production: kWh Source of Energy Production Estimate: Manufacturer: Warranty on Panels: years	
Array Placement <small>Affects energy production. *Orientation</small>	Location (roof, ground, etc.): roof <input checked="" type="checkbox"/> Fixed Mount <input type="checkbox"/> Tracking Mount Tilt / Slope: *Azimuth:	Location (roof, ground, etc.): <input type="checkbox"/> Fixed Mount <input type="checkbox"/> Tracking Mount Tilt / Slope: *Azimuth: *Orientation (direction panels face):	
Inverter Specifications	Number of Inverters per Array: 1 Age: 1 month Wattage: 7000 watts Manufacturer: Great Inverter Mfg Warranty Term: 12 years	Number of Inverters per Array: 22 Age: 1 month Wattage: 340 watts Manufacturer: Great Inverter Mfg Warranty Term: 25 years	
Energy Storing Batteries	Battery Type: <input type="checkbox"/> Lithium-ion <input checked="" type="checkbox"/> Lithium-ion Polymer <input type="checkbox"/> Lithium Iron Phosphate <input type="checkbox"/> Lead Acid <input type="checkbox"/> Lead Calcium <input type="checkbox"/> AGM <input type="checkbox"/> GEL Manufacturer: Best Battery Mfg Storage Capacity: kWh Warranty Term: 25 years Battery age: 1 month		
Name of Utility Company:	VA (Virginia State Average)	Charge / kWh from Utility	\$.1465/ kWh
Solar Thermal Water Heating System			
Type of System:	Active: <input type="checkbox"/> Direct <input type="checkbox"/> Indirect Passive: <input type="checkbox"/> Integral collector <input type="checkbox"/> Thermo-syphon	Storage Tank Size	Gallons:
Collector Type:	<input type="checkbox"/> Flat-Plat <input type="checkbox"/> Integral <input type="checkbox"/> Evacuated-Tube Solar	System Age	Years:
Back-Up System:	<input type="checkbox"/> Conventional Water Heater <input type="checkbox"/> Tankless On Demand <input type="checkbox"/> Tankless Heat Pump	Warranty Term	
Solar Uniform Energy Factor (SUEF):	*Rating ranges 1 to 11. Higher number is more efficient.	Manufacturer	
Comments	<div>Discuss incentives available for new panels, condition of current panels, and any maintenance issues. If leased, provide the lease terms.</div> <div>Note: Leased solar PV systems and Power Purchase Agreements should not be included in the value of the real property as these systems generally are considered personal property. If a system is a lease or a PPA the terms must be provided to the appraiser for analysis. Appraisers must analyze the effect any of the terms of the lease or PPA have on the price buyers are willing to pay for the property.</div> <div>Note: Solar loan with UCC filing If the solar installation is funded by a loan that is secured by UCC filing, the loan must be paid off, or the appraiser must indicate a value for the solar panels that is conditional upon the removal of the UCC.</div> <div>Please reference appendix C following the AI addendum for a detailed discussion on the valuation of this photovoltaic system. This includes the calculated value of the system based on the income based appraisal method.</div>		

Completed by: W. Casey Murphy	Title: Vice-President of Quality Systems	Date: 08/20/2024
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Client:	Sally Sample	Client File #:	
Subject Property:	101 W Main St, Charlottesville, VA 22902-5031	Appraisal File #:	

Location - Site			
The following items are considered within the appraisal analysis of the subject property:			
Walk Score	Score	Source: <input type="checkbox"/> http://www.walkscore.com <input type="checkbox"/> Other:	
Public Transportation	<input type="checkbox"/> Bus Distance: Blocks	<input type="checkbox"/> Train Distance: Blocks	<input type="checkbox"/> Subway Distance: Blocks
Site	Orientation (front faces): <input type="checkbox"/> East/West <input type="checkbox"/> North/South	Landscaping: <input type="checkbox"/> Water Efficient <input type="checkbox"/> Natural <input type="checkbox"/> Pond/Lake on site <input type="checkbox"/> Rain Garden	
Comments			

Incentives – Amount of Incentive and Terms	
The following items are considered within the appraised value of the subject property and based on effective date of value.	
Federal	
State	
Local	
Comments	Incentives offset cost and should be reported and described in the cost approach section of the report. Clearly identify the incentives that offset the gross cost of construction to meet appraisal standards. Incentives are typically not a sales concession in sales comparison approach since they do not transfer with the property and are not paid by the seller. Incentives are typically for a specified period and only those available as of the date of value should be addressed in the appraisal process. Incentives may be available to offset repairs or deferred maintenance items as well. Incentives, rebates, and tax credits for most U.S. properties can be found at www.dsireusa.org

Completed by: W. Casey Murphy	Title: Vice-President of Quality Systems	Date: 08/20/2024
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- Builders, contractors, homeowners, and third party verifiers are encouraged to complete this Addendum and present to appraisers, agents, lenders, and homeowners. Appraisers typically do not have sufficient information to complete this addendum without builder, contractor, or third party verifier documentation.
- Attach this completed document to the MLS listing to provide sufficient detail on sales and listings to assist buyers, appraisers, and real estate agents in understanding the high performance features of the property.
- Complete the pages that apply to the property appraised and provide to appraiser prior to the completion of an appraisal.
- Provide the Addendum to the lender at the time of loan application to assist them in understanding the property type so an appraiser with sufficient knowledge of this property type will be engaged to provide an appraisal to meet secondary mortgage market guidelines.

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Client:	Sally Sample	Client File #:	
Subject Property:	101 W Main St, Charlottesville, VA 22902-5031	Appraisal File #:	

Residential Green and Energy Efficient Addendum

Additional Resources

Appraised Value and Energy Efficiency: Getting it Right. This document provides links to resources in understanding the secondary mortgage market guidelines on appraisals of energy efficient and green features. It addresses the following:

- What can builders do?
- For Buyers: Assuring a competent appraiser for your home
- For Lenders: A sample letter that should be completed and provided to the lender at the time of mortgage application alerts the lender to the special features that requires an appraiser with knowledge of the property type. https://www.appraisalinstitute.org/assets/1/29/AI-BCAP_Flyer.pdf

PV Value®. PV Value® is a discounted cash flow (Income Capitalization Approach) to valuing energy produced. The solar PV system inputs on this form are necessary to use this program. www.pvvalue.com

Residential Green Valuation Tools. A textbook resource for completing the AI Residential Green and Energy Efficient Addendum is available. It can be purchased at the following website: <http://www.appraisalinstitute.org/residential-green-valuation-tools/>

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Glossary

ASHRAE 700 / ICC National Green Building Standard (NGBS): An ANSI-approved residential green building standard developed by the National Association of Home Builders (NAHB) and the International Code Council (ICC). It is applicable to single and multifamily projects, renovations and additions and residential land development. To comply, all buildings must incorporate sustainable lot development techniques and address energy, water & material resource efficiency and indoor environmental quality. Also, all owners must be educated about building operation and maintenance. <https://www.nahb.org/en/research/nahb-priorities/green-building-remodeling-and-development/icc-700-national-green-building-standard.aspx>

Building Envelope: The building envelope is everything that separates the building's interior from the exterior. This includes the foundation, exterior walls, roof, doors and windows. The envelope rating should be compared to the local building code requirements for this rating to identify a structure that exceeds the building code.

Energy Recovery Ventilation System (ERV) or Heat Recovery Ventilators (HRV): These systems provide fresh air without wasting all the energy already used to heat the indoor air. By recovering sensible (heat) or latent (moisture) energy from the stale indoor air, they offer fresh air ventilation with reduced energy loss.

ENERGY STAR Certified New Homes: EPA's ENERGY STAR certified homes are independently verified to be at least 15 percent more efficient than code-built homes, and include additional energy efficiency measures that can deliver savings of up to 30 percent compared to standard new homes. More than just a collection of ENERGY STAR products, an ENERGY STAR certified home includes a comprehensive package of energy efficiency systems and features that work together to deliver better performance, including a High-Efficiency Heating & Cooling System, a Complete Thermal Enclosure System; a Water Protection System; and Efficient Lighting & Appliances. www.energystar.gov/newhomes

ENERGY STAR Products: Behind each blue label is a product, building, or home that is independently certified to use less energy and cause fewer of the emissions that contribute to climate change. Today, ENERGY STAR is the most widely recognized symbol for energy efficiency in the world. In order to earn the label, ENERGY STAR products must be third-party certified based on testing in EPA-recognized laboratories. In addition to up-front testing, a percentage of all ENERGY STAR products are subject to "off-the-shelf" verification testing each year. The goal of this testing is to ensure that changes or variations in the manufacturing process do not undermine a product's qualification with ENERGY STAR requirements. [https://www.energystar.gov/about/origins_mission](http://www.energystar.gov/about/origins_mission)

Geothermal: A geothermal heat pump uses the constant below ground temperature of soil or water to heat and cool your home. <http://energy.gov/energysaver/articles/geothermal-heat-pumps>

HERS Index: The Home Energy Rating System (HERS) Index is an industry standard by which a home's energy efficiency is measured. It's also the nationally recognized system for inspecting and calculating a home's energy performance. A qualified third party certifier assesses the house based on its physical characteristics. The energy estimates from this assessment may vary depending on the lifestyle of the occupants, increasing utility expenses, and changes in the maintenance or characteristics of the energy features. There are three rating types: sampling rating, projected rating, and confirmed rating. A Sampling Rating is an application of the Home Energy Rating process whereby fewer than 100% of a builder's new homes are randomly inspected and tested to evaluate compliance with a set of threshold specifications. A Projected Rating: A Rating Type that encompasses one individual dwelling or dwelling unit and is conducted in accordance with Section 5.1.4.3.1 through 5.1.4.3.5 of the ANSI/RESNET/ICC Standard 301. A Confirmed Rating is a rating type that encompasses one individual dwelling or dwelling unit and is conducted in accordance with Sections 5.1.4.1.1 through 5.1.4.1.3. More information: <http://www.resnet.us/hers-index>. The ANSI standard utilized in the HERS Index is posted at <https://codes.iccsafe.org/public/chapter/content/7324/>.

Home Energy Score (HES): The Home Energy Score, developed and managed by the U.S. Department of Energy (DOE), is a national system that allows homes to receive an energy rating, like the MPG rating available for cars. The Home Energy Score uses a 10-point scale to reflect how much energy a home is expected to use under standard operating conditions. The Home Energy Score uses a standard calculation method and considers the home's structure and envelope (walls, windows, foundation) and its heating, cooling, and hot water systems. Only Assessors who pass DOE's Simulation Training can provide the Home Energy Score. www.HomeEnergyScore.gov

Indoor airPLUS: EPA's Indoor airPLUS is a voluntary EPA label for new homes that integrate a set of construction practices and technologies to reduce indoor air pollutants and improve the indoor air quality in a new home beyond minimum code requirements. It is only available to homes that first meet ENERGY STAR® Certified Home requirements. <http://www.epa.gov/indoorairplus>

LEED: Leadership in Energy and Environmental Design is a green certification program created by the U.S. Green Building Council (USGBC). As an internationally recognized mark of excellence, LEED provides building owners and operators with a framework for identifying and implementing practical and measurable green building design, construction, operations and maintenance solutions. <http://www.usgbc.org/DisplayPage.aspx?CMSPageID=1988>

Living Building Challenge: Created by the Living Future Institute, the Living Building Challenge is the world's most rigorous proven performance standard for buildings. People can use the regenerative design framework to create spaces that, like a flower, give more than they take. Living Building Challenge certification requires actual rather than modeled performance. Therefore, projects must be operational for at least twelve consecutive months prior to evaluation. <https://living-future.org/lbc/basics/>

Low E: "Low emissivity" indicates a coating is added to the glass surface. The coating allows visible light to pass through the glass while stopping radiant heat energy from entering the building by passing through the glass. Approximately 40% of the sun's harmful ultra violet rays are blocked and insulation enhanced. <https://energy.gov/energysaver/energy-efficient-windows>

NGBS Small Project Remodel: Run by the Home Innovation Research Labs, this program certifies whole house and small project remodels as energy efficient. Unlike the Whole-House Remodel, the Small Project certification is prescriptive. Chapter 12 of the National Green Building Standard includes a list of mandatory practices, related to materials use, sustainable products, energy efficiency, and indoor environmental quality. A Home Innovation Accredited NGBS Green Verifier gives a final inspection to verify Small Project certification. During inspection, the Verifier will ensure the applicable practices have been met. http://www.homeinnovation.com/services/certification/green_homes/remodeling_certification/remodel_home_certification_process

NGBS Whole Home Remodel: Run by the Home Innovation Research Labs, this program certifies whole house and small project remodels as energy efficient. Certification of a whole-building remodel requires demonstrating that there has been a minimum of a 15% reduction in energy consumption and at least a 20% reduction in water consumption over the pre-remodel condition. There are some mandatory practices that must be met. A minimum number of points must be obtained from practices related to Lot Design, Resource Efficiency, Indoor Environmental Quality, and Homeowner Education. http://www.homeinnovation.com/services/certification/green_homes/remodeling_certification/remodel_home_certification_process

Passivhaus Standard: German standard for low energy homes that began in the 1980s. Passivhaus is a rigorous, voluntary standard for energy efficiency in a building, reducing its ecological footprint. It results in ultra-low energy buildings that require little energy for space heating or cooling. The Passive House Institute (PHI) is an independent research institute that has played an especially crucial role in the development of the Passive House concept - the only internationally recognized, performance-based energy standard in construction. <http://passiv.de/en/>

Passive House Institute US (PHIUS): Buildings designed and built to the PHIUS+ 2015 Passive Building Standard consume 86% less energy for heating and 46% less energy for cooling (depending on climate zone and building type) when compared to a code-compliant building. PHIUS+ 2015 is the first and only passive building standard based upon climate-specific comfort and performance criteria aimed at presenting a cost-optimized solution to achieving the most durable, resilient, and energy-efficient building possible for a specific location. <http://www.phius.org/home-page>

Passive Solar: Passive solar is technology for using sunlight to light and heat buildings with no circulating fluid or energy conversion system. <http://rredc.nrel.gov/solar/glossary>. A complete passive solar building design has the following five elements: (1) aperture (collector) (2) absorber (3) thermal mass (4) distribution (5) control. <http://www.nrel.gov/docs/fy01osti/27954.pdf>

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Rain Garden: A rain garden is a depressed area in the landscape that collects rain water from a roof, driveway or street and allows it to soak into the ground. Planted with grasses and flowering perennials, rain gardens can be a cost effective and beautiful way to reduce runoff from your property. Rain gardens can also help filter out pollutants in runoff and provide food and shelter for butterflies, songbirds and other wildlife. More complex rain gardens with drainage systems and amended soils are referred to as bio-retention. <https://www.epa.gov/soakuptherain/rain-gardens>

SEER: Seasonal energy efficiency ratio - The higher the SEER rating, the more energy efficient the equipment is. A higher SEER can result in lower energy costs. <https://energystar.zendesk.com/hc/en-us/articles/212111387-What-is-SEER-EER-HSPF->

Smart House: A smart house is a home that has highly advanced, automated systems to control and monitor any function of a house – lighting, temperature control, multi-media, security, window and door operations, air quality, or any other task of necessity or comfort performed by a home's resident. <http://architecture.about.com/od/buildyourhous1/g/smarthouse.htm>

Water Heaters: Types are described here: <http://energy.gov/energysaver/articles/solar-water-heaters>.

WaterSense: EPA released its Final Version 1.1 WaterSense New Home Specification. This specification will be effective January 1, 2013 and establishes the criteria for new homes labeled under the WaterSense program and is applicable to newly constructed single-family and multi-family homes. http://www.epa.gov/watersense/new_homes/homes_final.html

Whole Building Ventilation System: A whole building ventilation system assists in a controlled movement of air in tight envelope construction. Whole building ventilation equipment is often a part of the forced air heating or cooling systems. There are various methods of providing whole home ventilation including a heat recovery ventilator (HRV) or an energy recovery ventilator (ERV). Four primary types of systems here: <https://energy.gov/energysaver/whole-house-ventilation>

Zero Energy Ready Home (ZERH): To qualify as a DOE Zero Energy Ready Home, a home shall meet certain minimum requirements, be verified and field-tested in accordance with HERS Standards by an approved verifier, and meet all applicable codes. Builders may meet the requirements of either the Performance Path or the Prescriptive path to qualify a home. <http://energy.gov/eere/buildings/zero-energy-ready-home>

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Appendix C: Photovoltaic (PV) Addendum

Your Photovoltaic (PV) System Can Add Value to Your Home

Photovoltaic systems (or solar systems) save you money on electricity costs and they can also increase the value of your home. Studies have consistently found that homes with PV systems can sell for more than comparable homes without them. A large national study conducted by the [Lawrence Berkeley National Laboratory](#) in 2015, for example, found that PV panels added an average of \$4 per watt to a home's sales price. In other words, a typically-sized 5 kW (5,000 W) PV system can add \$20,000 to a home's value.

These numbers are averages, however. When the appraiser looks at a home, he or she isn't thinking about national averages, but about how that *home's specific PV system* will be valued by the *local market*.

Your Pearl Certification report will enable buyers, agents, and appraisers to access critical information and increase the likelihood that your home will be properly valued.

Your Pearl Certification report also includes the results of our equity calculator. The calculator generates a discounted cash flow analysis that provides data for appraisers to use when determining how much value to assign to your PV system.

How to Capture Your Panel's Value When You Sell or Refinance Your Home

When you decide to sell or refinance your home, follow these steps to position yourself to recapture the value of your PV system. Start early, so that all parties in the transaction have access to your Pearl Certification Report when they need it:

1. If you are refinancing, give your Pearl Certification Report to your loan officer.
2. If you are selling, print out your full Pearl Certification Report and give it to your real estate agent. If you haven't selected an agent, consider working with a Pearl Partner agent who will be more knowledgeable in marketing Pearl-certified homes.
3. Make sure your agent includes a copy of your Pearl Certification Report and information about the PV system in your MLS listing.
4. Make sure your agent makes a copy of your Pearl Certification Report available at the home showing so that buyers understand the value of your PV system.



5. During refinance or at time of sale, if your solar system is secured by a UCC-1 filing, the appraiser and lender may consider your PV system "personal property", rather than a feature of your home, and assign no value to it in the appraisal as a result. To ensure that your PV system is properly valued, tell the buyer's lender (or the lender of your refinance) to instruct the appraiser to perform a "subject to" or "hypothetical" appraisal for the home that assumes the UCC-1 will be removed at closing because the solar loan will be paid off as part of the transaction. (For other approaches and more information about this subject, visit <https://pearlcertification.com/>)

a. Alternatively, you can pay off the solar loan and remove the UCC-1 filing before the home is appraised.

6. Make sure that the appraiser has a copy of your Pearl Certification Report *before* they conduct the appraisal. Providing them with documentation showing how much you paid for the system will also help them. *You do have the right to provide information to your appraiser!*

How the Appraiser Will Use This Report

Your Pearl Certification report shows the discounted cash flow -- the dollar value of the energy your PV is projected to generate -- from today through the end of the power production warranty period. This value is an important data point for the appraiser.

However, you should keep in mind that the appraiser is unlikely to simply add this value to the appraisal. The appraiser is required to take into account "market reaction" to PV in your neighborhood. He or she usually does this by looking at the sales prices of comparable homes in the same market that have sold recently. If the appraiser sees that homes with PV are selling for more than similar homes without PV, they can use your Pearl Certification report as an additional tool to help determine how much value your PV system adds to your home. If PV is relatively new in your market and the appraiser cannot find comparable homes with PV that have sold recently, they can consider the discounted cash flow amount shown in your Pearl Certification report as an alternative basis for assigning value to your PV system.

Owned and Leased Systems

Fannie Mae and the Federal Housing Administration (the FHA) recognize that PV systems can add value to a home. However, there's an important qualification: both recognize the value of a PV system only if it is owned by the homeowner. If the system is leased from a third party, these institutions do not recognize that it will add value. This does NOT mean that a leased system is not a benefit to a buyer: the home's electricity costs will be lower as a result of the PV system than they would otherwise be. However, the PV system will not be assigned a value in the appraisal.



More Information

The data presented in this report are accurate as of 08/20/2024, when you plan to refinance or sell, reach out to Pearl for an updated Certification Report including the value of your PV system. Additional information and resources on appraising solar panels can be found on Pearl's Appraiser page <https://pearlcertification.com/appraiser-advantage/> and at the Appraisal Institute's website <https://www.appraisalinstitute.org/>

Pearl is also here to help. If you are planning to sell or refinance, log in to your [Green Door](#) account, call us at 1-844-307-3275, or email us at help@pearlcertification.com to get support from the Pearl team. Please note that Pearl does not perform real estate or valuation services. Licensed agents and appraisers are the experts in their respective industries and geographical areas. Pearl can share best practices and assist these professionals as they perform their services, which may include responding to requests from agents or appraisers for information when the agent or appraiser initiates communication with Pearl. Pearl does not intervene in disputes and does not initiate communication with agents, appraisers, or lenders during real estate transactions.



Pearl Certification Discounted Cash Flow Details

Overview

The values presented here are calculated using the Income-Based Approach where our algorithm looks at the total future benefits that the homeowner will receive from the photovoltaic system over its useful life, and calculates what the value of those future benefits is right now.

The useful life of the photovoltaic system is determined by the length of the power production warranty. A system will likely continue to operate after the warranty has expired and in that sense the value presented here is a conservative estimate of the potential value of the system.

System Information

Ownership Type	Financed
Total System Size (kW)	6.8
Discounted Cash Flow Range	\$13,586 - \$16,997
Discounted Cash Flow	\$15,291

Rates and Costs

Utility Provider	VA (Virginia State Average)
Electricity Rate	0.1465 \$/kWh
Discount Rate	6.89%
Electricity Escalation Rate	1.76%
Operations & Maintenance Costs	\$11.50 per kW per year

Solar Panel Array

Installed Date	Aug. 1, 2024
Manufacturer	Great Solar Mfg
Model Number	LTY-306 BLK 23
Array Size (kW)	6.80
Tilt	20
Azimuth	180
Panel efficiency rating	22.00%
Array Type	Roof Mounted - Fixed
Reported Installation Cost	None
Panel warranty (years)	20

Inverter

Inverter Type	String Inverter
Age Of Inverter	0 years
Warranty (years)	12
Manufacturer	Great Inverter Mfg
Model Number	GIM-7000

Power Production Warranty

Warranty (years)	25
Power at the end of the warranty	88.70



Total Discounted Cash Flow

Year	Low	Expected	High
2024	\$13,586.01	\$15,291.28	\$16,996.56
2025	\$12,547.63	\$14,129.40	\$15,711.18
2026	\$11,565.30	\$13,030.31	\$14,495.33
2027	\$10,635.98	\$11,990.62	\$13,345.27
2028	\$9,756.83	\$11,007.13	\$12,257.44
2029	\$8,925.14	\$10,076.81	\$11,228.48
2030	\$8,138.37	\$9,196.78	\$10,255.21
2031	\$7,394.08	\$8,364.35	\$9,334.63
2032	\$6,689.99	\$7,576.93	\$8,463.88
2033	\$6,023.94	\$6,832.10	\$7,640.27
2034	\$5,393.86	\$6,127.56	\$6,861.26
2035	\$4,797.84	\$5,461.13	\$6,124.43
2036	\$4,234.02	\$4,830.76	\$5,427.51
2037	\$4,541.78	\$5,075.60	\$5,609.44
2038	\$4,037.26	\$4,511.61	\$4,985.97
2039	\$3,560.02	\$3,978.14	\$4,396.28
2040	\$3,108.58	\$3,473.55	\$3,838.54
2041	\$2,681.55	\$2,996.28	\$3,311.01
2042	\$2,277.61	\$2,544.84	\$2,812.08
2043	\$1,895.53	\$2,117.85	\$2,340.18
2044	\$1,534.11	\$1,713.98	\$1,893.86
2045	\$1,192.24	\$1,331.98	\$1,471.73
2046	\$868.86	\$970.67	\$1,072.49
2047	\$562.99	\$628.93	\$694.88
2048	\$273.67	\$305.71	\$337.76

Source Details:

1) Electricity Rate: This calculation applies an average dollar per kWh rate for electricity. The average \$/kWh rate is sourced on a per utility basis from the Energy Information Administration's (EIA) forms EIA-861- schedules 4A & 4D and EIA-861S.

2) Discount Rate: As a default, this calculation uses the weekly published 30 year mortgage rate from Freddie Mac

3) Electricity Escalation Rate: This calculation pulls in the specific state's average percentage electricity rate increase over the past 30 years, and applies this rate as a constant year-over-year increase to the electricity rate

4) Operation and Maintenance Costs: This calculation assumes an O&M cost of \$11.50 per kW per year. The \$11.50 rate is sourced from the two system benchmark studies from NREL, one from 2018 and the other from 2020.

For further details on the methodology used in these calculations please visit:

<https://resources.pearlcertification.com/solar-equity-calculator/methodology-for-calculator>



we make *home* value visible™

Dear Loan Officer,

This home located at **101 W Main St, Charlottesville, VA 22902-5031** is a special property type. It has energy efficient, high- performing home features that are third-party certified by Pearl Certification and the home meets includes a Pearl **Silver** Certification Report. Pearl Certification is an ENERGY STAR Partner, and works in collaboration with the U.S. Department of Energy, the Appraisal Institute, and the National Association of Realtors.

A copy of the Appraisal Institute's Green and Energy Efficient Appraisal Addendum and the Pearl Certification Report should be accompanied with this letter. If it isn't, please work with your client or your client's agent to obtain a copy. The Pearl Home Certification report can be verified at Pearl's registry: www.pearlcertification.com/registry.

Please ensure that the loan package that you send to your Appraisal / Valuation / Collateral Department includes:

- The Pearl Certification Report;
- The Appraisal Institute's Green and Energy Efficiency Addendum;
- A "Letter to the Lender's Appraisal / Valuation / Collateral Department" that helps them (or your company's Appraisal Management Company) find a competent appraiser for this assignment;
- A "Letter to the Appraiser" that provides an overview of the Pearl Certification Report, as well as resources developed by the appraisal industry to help them form their opinion of value.

Special note: *If your client's home has solar that is not fully owned and paid off, it is critical that you and your client include information about the loan type (if the system is owned), the lease, or the Power Purchase Agreement (PPA).*

This is particularly important if the system's loan, lease, or PPA will be fully paid off as part of the mortgage loan process. Your Appraisal / Valuation / Collateral Department must include that information to the appraiser and request a "subject to" appraisal that instructs the appraiser to consider the solar system as real property, "subject to" the loan, lease, or PPA being fully paid off.

If you have specific questions about the Pearl Certification Report or the contents of this letter, please contact realestate@pearlcertification.com.





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Dear Buyer and/or Buyer's Agent,

Congratulations on choosing to purchase a Pearl Certified home!

This home includes special performance features that may result in a higher appraised value. A higher appraised value can:

- Increase the likelihood that your loan will be approved;
- Decrease the likelihood that you will have to put down more money;
- Decrease the likelihood that you might need to purchase Private Mortgage Insurance (PMI);
- Decrease the possibility of your intended close date being extended due to an inaccurate appraised value.

What You Need To Know Regarding the Appraisal Process

As part of the typical loan process, a lender - or a lender's Appraisal Management Company (AMC) - has a pool of appraisers that bid on the assignment.

- Per the appraisal industry's own standards, called the Uniform Standards of Professional Appraisal Practice (USPAP), appraisers must be competent to work on an assignment.
- Per Fannie Mae, Freddie Mac and FHA guidelines, lenders are required to hire competent appraisers in the property type they are appraising.

The home you are purchasing is not a typical home - it is a high-performing building with unique features. If you do not clearly identify the property as a special property type requiring a competent appraiser trained in energy efficient, high-performance homes, a typical appraiser will be assigned, and these features may not be taken into account. This will put your appraisal at risk of not being competently appraised.





we make *home* value visible TM

What You Need to Do

Submit the following Pearl-provided documents to your lender:

- The Pearl Certification Report that includes the details of the home's high-performing features. The Pearl Certification Report also includes:
 - The Appraisal Institute's Green and Energy Efficiency Addendum;
- A "Letter to the Loan Officer" that informs him/her to include important information in the loan application;
- A "Letter to the Lender's Appraisal / Valuation / Collateral Department" that notifies the lender that this home is a special property type and explains the need for a trained, competent appraiser for this energy-efficiency, high-performing home;

If you have specific questions about the Pearl Certification Report or the contents of this letter, please contact realestate@pearlcertification.com.





we make *home* value visible™

Dear Appraiser,

This home located at **101 W Main St, Charlottesville, VA 22902-5031** is a special property type. It is an energy efficient, high-performing home that has met Pearl Certification's standards for a **Silver** Certified Home. Pearl's Certification standards are based on International Energy Conservation Code and ENERGY STAR® standards. Pearl Certification is an ENERGY STAR partner, and works in partnership with the U.S. Dept. of Energy and the leading real estate, appraisal, contracting, and building science organizations.

A copy of the Appraisal Institute's Green and Energy Efficient Appraisal Addendum and the Pearl Certification Report are included with this letter. These documents provide certified, third-party information about the home's energy efficient features that can be used to form your opinion of value as well as help with compliance with USPAP, Fannie Mae, Freddie Mac, and other GSE requirements, such as:

- **Compliance with 2024 Uniform Standards of Professional Appraisal Practice (2024 USPAP) Standard Rule 1-2**, (e) requires appraisers to "identify, from sources the appraiser reasonably believes to be reliable, the characteristics of the property....including... its location and physical, legal, and economic characteristics."²
- The Pearl Certification Report includes information about the physical, economic, and/or legal characteristics of the subject property;
- **Compliance with USPAP Standard Rule 1-4**, which requires appraisers to collect, verify, and analyze all information for credible assignment results and includes the use of the cost and income based approaches to value.
- The Pearl Certification Report may include information about the cost of certain special features of the subject property and/or a discounted cash flow analysis of the subject property's special features;
- **Compliance with USPAP Standard Rule 2-2** that states that the Appraisal Report must include, at a minimum:
 - The reasons for excluding the sales comparison, cost, or income approach(es) if any have not been developed per SR 2-2 section (x)(2);
 - The information analyzed and the reasoning that supports the analyses, opinions, and conclusions, including reconciliation of the data and approaches per SR 2-2 section (x)(5)

²[2024 Uniform Standards of Professional Appraisal Practice](#) (2024 USPAP), page 19 USPAP 2024 Edition.

³The Appraisal Foundation. Standard Rule 1-4. Page 20. Line 579-580.



- **Note:** *an opinion of \$0 must be properly supported as much as a negative or positive contributory value.*
- **Compliance with requirements set forth by Government-Sponsored Entities (GSEs).**
 - FHA requires that “The appraiser must consider all appropriate approaches to value and all information relevant to the subject property and the market conditions in the opinion of Market Value.”
 - Fannie and Freddie require that the Comparable Sales Approach be used as the primary method. But the Comparable Sales Approach is not synonymous with paired sales analysis. Appraisers can - and should - use quantitative techniques and qualitative analysis to form their opinion of value, particularly when there is a lack of paired sales. For example, Freddie Mac’s Seller/Service Guide Section 5601.4 provides the following guidance:
 - “Energy-efficient features (e.g., photovoltaic systems, water efficient improvements, energy-efficient windows) or high-performing energy-efficient homes must be identified and any impact to market value must be recognized in the appraisal report. The contributory value of energy improvements and any premium paid for a high-performing energy-efficient home must be measured based on the market reaction, similar to any other property feature. Appraisers must be familiar with energy reports.”
 - “If the high-performing energy-efficient home or energy improvements are new to the market, there may be a lack of sales with similar features or a lack of data available from traditional data sources. As a result, additional due diligence on behalf of the appraiser may be necessary. The Appraisal Institute’s Form 820.05, Residential Green and Energy Efficient Addendum, may be used to collect and report energy efficiency data associated with a property. When performing the analysis to determine the contributory value of the energy efficient improvements, the appraiser should consider whether methods such as the income approach, cost analysis, discounted cash flows, market surveys or any other applicable methods are appropriate. If the appraiser’s analysis concludes an adjustment is necessary, the appraiser must justify and support the analysis and conclusions.
 - *As noted above, an opinion of \$0 must be properly supported as much as a negative or positive contributory value.*

If you have questions, please contact a Pearl representative at: help@pearlcertification.com. You may also find [additional resources](#) by the **Appraisal Institute**⁶ on their website.

⁴https://www.hud.gov/sites/documents/SFH_POLI_APPR_RPT_FIN.PDF

⁵<https://guide.freddiemac.com/app/guide/section/5601.4>

⁶<https://www.appraisalinstitute.org/education/education-resources/green-resources/find-a-green-appraiser>



101 W Main St, Charlottesville, VA 22902-5031
Verified MLS Green Fields Listing Sheet (RESO Green Fields Report)

This property's home performance features map to the MLS fields below. Please see accompanying Pearl Home Certification Report for documentation of the features' technical specifications.

Green Marketing Group

Attic/Crawl Hatchway(s) Insulated

Insulation

ENERGY STAR Qualified Dishwasher

Appliances

Lighting

Ductless

Natural Gas

Central

ENERGY STAR Qualified Equipment (Heating)

Central Air

HVAC

Solar

PropertyPowerProduction Collection

PowerProductionSize: 6.8

PowerProductionYearInstall: 2024

This MLS Listing Report was created based on home feature data provided and/or verified by third party sources. More information on the certified high-performing features of the home can be found in Pearl's Certification Report and the accompanying Appraisal Green and Energy Efficient Addendum.
Best efforts have been made to match the verified data to the applicable MLS data fields, but Pearl does not represent that all applicable fields have been captured in this report. The listing agent bears legal responsibility for appropriately representing the home in the MLS and during the sale.



Social Media Templates

How to access and customize your files in Canva.

Access Your Files

Click the links below to access your social media templates. After selecting a link, you will see a preview of the template. Select the purple “Edit Template” button below the preview.

Canva will prompt you to sign in to your account and then will open the file.

Be sure to select the link below that corresponds to the home’s Pearl Certification tier level.

Square Templates

Facebook and Instagram posts | 1080x1080px

[Asset Tier | Square Template](#)

[Silver Tier | Square Template](#)

[Gold Tier | Square Template](#)

[Platinum Tier | Square Template](#)

Vertical Templates

Stories and Reels | 1080x1920px


[Asset Tier | Vertical Template](#)

[Silver Tier | Vertical Template](#)

[Gold Tier | Vertical Template](#)

[Platinum Tier | Vertical Template](#)

Customize Your Template

- Once in a Canva template, double-click inside any text field to customize your text (includes your main headline, address line, and basic home details such as price and size).
- Use the  Upload menu on the left navigation bar to upload your own photo of the home. Delete the placeholder home photo and then select your own uploaded photo to add it to the template. Simply use the sizing and move controls to position your photo. If your photo is not layered correctly, right-click your photo and select **Layer > Send to Back**.
- All your changes save to Canva automatically.

Having Trouble?

Email us at help@pearlcertification.com and we’ll get back to you as soon as possible.

Pearl Score
770

Home Highlights

101 W Main St, Charlottesville, VA 22902-5031

Certified Aug. 20, 2024

Certification Level

The certification tier authenticates the home's performance level. The more categories in which a home excels, the higher the certification tier it earns.

 Silver
700+ pt

 Gold
825+ pt

 Platinum
975+ pt



Badges

Pearl's **Solar Badge** shows buyers, lenders, and appraisers that your home is high performing and energy independent.



High-Performing Features



Heat Pump

Top 3% of electric-heated homes



Air Sealing

Top 1% of VA homes



Central Air Conditioner

Top 2% of VA homes



Attic Hatch

Very Well-insulated



LED Lighting

Very efficient lighting



Dishwasher

Very efficient



About Pearl Certification

Pearl's nationally recognized certification captures the value that high-performing and energy-efficient assets like heat pumps, insulation, and ENERGY STAR® windows can add to your home's value. Learn more about Pearl at www.pearlcertification.com



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Pearl Silver Certificate | Pearl Score: 770



Heat Pump

Top 3% of electric-heated homes

This home's heating and cooling equipment is very efficient and exceeds ENERGY STAR standards.

As summarized by the US Dept. of Energy, heat pumps use electricity to move heat from a cool place to a warm place - making the cool space cooler and the warm space warmer. This is how they manage work well in both summer and winter months.

Because they move heat rather than generate it, they can provide the same benefits as regular heating and cooling equipment at a fraction of the cost.



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Air Sealing

Top 1% of VA homes

So many benefits with a well-sealed home: from a comfort perspective it's less drafty and has greater humidity control. Bonus: less dust and insects!

All homes should be air sealed to increase comfort, minimize air leakage and enhance the effectiveness of the insulation. This home's performance for air sealing is exceptionally high.

Air sealing typically includes using spray foam on the rim joists, areas where plumbing and electrical penetrations come through walls, around windows/doors, and other areas of the home.



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Central Air Conditioner

Top 2% of VA homes

This home's cooling equipment is extremely efficient and exceeds ENERGY STAR standards.

Today's air conditioners use 30% - 50% less energy than those installed ten years ago. A higher efficiency unit can save the owner money on monthly energy bills.

Over the lifetime of the unit, these savings can really add up! Newer, more efficient units last for 15 - 20 years with proper maintenance. That can be thousands of dollars worth of energy savings you get to keep.



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Attic Hatch

Very Well-insulated

It's difficult to overstate the importance of addressing the attic hatch when insulating and air sealing a home. The details count!

This home's attic hatch has been insulated. Attic hatches are often the weakest link in a home's attic insulation, and can disproportionately impact a home's heat loss and heat gain.

Even though an uninsulated attic hatch often represents only 1% of an attic's surface area, it can decrease the attic's overall R-value by 27%.



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LED Lighting

Very efficient lighting

This home's LED lighting not only use less energy, but the bulbs also last a very long time.

A home's lighting is considered part of its "base load" energy use. Because lights are on year round and frequently used throughout the day, it's important that they be energy efficient.

Utility companies frequently target home lighting for rebates as it's an inexpensive way to make a big impact on the electric grid - one bulb at a time.



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Dishwasher

Very efficient

Every appliance has two price tags: the one you pay to the store and the one you pay to the utility company. Pay less every month with ENERGY STAR.

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.



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Solar panels

Top 1% of U.S. homes

Powered by the sun, but connected to the power grid for peace of mind on cloudy, winter days. Congratulations, this home has the best of both worlds!

Energy self-reliance, energy security, and sustainable living are three reasons why solar panels are gaining in popularity. They also keep energy costs down for the homeowner - particularly when utility bills keep rising.



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Electric Vehicle Charger

Top 1% of U.S. homes

This home has an ENERGY STAR certified electric vehicle charger. The charger not only provides a convenient way to charge certain models of electric and plug-in hybrid vehicles, but ENERGY STAR certified chargers use 40% less energy than a standard EV charger in standby modes.



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Energy Storage

Top 1% of U.S. homes

Batteries enhance this home's resiliency by providing clean, quiet backup power. Batteries can also significantly reduce energy costs, especially when paired with a solar system or when the local utility has a variable rate structure. Batteries can also help to maintain power quality, protecting electronic devices within the home.