## **ENERGY STAR v3.0 Home Report**

**Property** 

Sherjaique Diaz-Means 1904 Katherine Street Lake Charles, LA 70601

Weather:Lake Charles, LA LiveOak1904Katherine LiveOak1904Katherine.blg Organization

BHI-EnergyEfficiencySolutions 409-697-3360 James R. Barfield

Builder

Lemoine Disaster Recovery

HERS

Confirmed 2024-06-24 Rating

No:LiveOak1904Katherine

Rater ID:0917800

#### Normalized, Modified End-Use Loads (MMBtu/yr)

		ENERGY STAR	As Designed	
	Heating	13.0	6.8	
	Cooling	14.2	8.3	
	Water Heating	7.7	1.6	
	Lights and Appliances	22.9	20.9	
	Total	57.8	37.6	
ERI Index of Reference Design Home		72	46	ERI Index w/o PV
	ERI Index Target (SAF Adjusted)	72	46	ERI Index
	Size Adjustment Factor	1.00		

HERS Index w/o PV <= HERS Index of Reference Design Home AND HERS Index <= HERS Index Target to comply.

#### ENERGY STAR v3.0 (Rev 11) Mandatory Requirements

- X Duct leakage at post construction better than or equal to ENERGY STAR v3/3.1 requirements.
- X Envelope insulation levels meet or exceed ENERGY STAR v3/3.1 requirements.
- X Slab on Grade Insulation must be > R-5, and at IECC 2009 Depth for Climate Zones 4 and above.
- X Envelope insulation achieves RESNET Grade I installation, or Grade II with insulated sheathing.
- X Windows meet the 2009 IECC Requirements Table 402.1.1.
- X Duct insulation meets the EPA minimum requirements of R-6.
- X Mechanical ventilation system has been measured in the home.
  - ENERGY STAR Checklists fully verified and complete.



Χ

This home MEETS or EXCEEDS the energy efficiency requirements for designation as an EPA ENERGY STAR Version 3 Single-Family New Home (Rev 11).

Pollution Prevented		Energy Cost Savings	\$/yr
Type of Emissions	Reduction	Heating	59
Carbon Dioxide (CO2) - tons/yr	3.7	Cooling	202
Sulfur Dioxide (SO2) - lbs/yr	8.6	Water Heating	45
Nitrogen Oxides (NOx) - lbs/yr	7.3	Lights & Appliances	154
		Total	460

The energy savings and pollution prevented are calculated by comparing the Rated Home to the Reference Home as defined in the Mortgage Industry National Home Energy Rating Systems Standards as promulgated by the Residential Energy Services Network (RESNET). In accordance with these guidelines, building inputs affecting setpoints, infiltration rates, window shading and the existence of mechanical systems may have been changed prior to calculating loads.

## **ENERGY STAR v3.0 Home Verification** Summary

PropertyOrganizationHERSSherjaique Diaz-MeansBHI-EnergyEfficiencySolutionsConfirmed1904 Katherine Street409-697-33602024-06-24

Lake Charles, LA 70601 James R. Barfield Rating

No:LiveOak1904Katherine
Weather:Lake Charles, LA **Builder** Rater ID:0917800

Weather:Lake Charles, LA

Builder

LiveOak1904Katherine

Rater ID:C

LiveOak1904Katherine.blg

#### Building Information Rating

Conditioned Area (sq ft)	2102	ERI Index	46
Conditioned Volume (cubic ft)	18918	ERI Index w/o PV	46
Insulated Shell Area (sq ft)	5950	ERI Index Target (SAF Adjusted)	72
Number of Bedrooms	4	ERI Index of Reference Design Home	72
Housing Type	Single-family detached	Size Adjustment Factor	1.00

Foundation Type Open crawl space/raised floor

ERI Index w/o PV <= ERI Index of Reference Design Home AND ERI Index <= ERI Index Target to comply.



This home MEETS or EXCEEDS the energy efficiency requirements for designation as an EPA ENERGY STAR Version 3 Single-Family New Home (Rev 11).

#### **Building Shell**

Ceiling w/Attic	R-38 Blown, Attic* U=0.027 w/RB I	Window Type	Dbl/LoE/Arg - Vinyl0
Sealed Attic	None	Window	U-Value: 0.330, SHGC: 0.210
Vaulted Ceiling	None	Window/Wall Ratio	0.07
Above Grade Walls	R-13 R-2 U=0.071	Infiltration Type	Blower door
Found. Walls(Cond)	None	Infiltration	4.20 ACH50
Found. Walls(Uncond)	None	Duct Leakage to Outside	1.70 CFM @ 25 Pascals
Floors	R-30* U=0.032	Total Duct Leakage	1.70 CFM @ 25 Pascals
Slab Floors	None		

#### Mechanical Systems

Heating Fuel-fired air distribution, 32.0 kBtuh, 80.0 AFUE.

Cooling Air conditioner, 36.0 kBtuh, 16.0 SEER.

Water Heating Conventional, Gas, 0.93 EF.

Programmable Thermostat Heat=Yes; Cool=Yes

Ventilation System Exhaust Only: 76 cfm, 26.6 watts.

#### **Lights and Appliances**

Refrigerator (kWh/yr) 691.00 Clothes Dryer Fuel Electric Interior LED Lighting (%) 100.00 Dishwasher Energy Factor 0.46 Clothes Dryer CEF 3.73 Ceiling Fan (cfm/Watt) 120.00

Range/Oven Fuel Natural gas Clothes Washer LER 400.00

Clothes Washer Capacity 3.00

Note: Where feature level varies in home, the dominant value is shown.



# ENERGY STAR® CERTIFIED NEW CONSTRUCTION

Builder/Developer: Lemoine Disaster Recovery

Permit Date/Number:

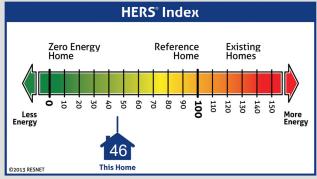
Home/Unit Address: 1904 Katherine Street

Lake Charles, LA 70601

Rating Company: BHI-EnergyEfficiencySolutions

Rater ID Number: 0917800
Rating Date: 2024-06-24
Oversight By: RESNET

Program/Version Number: v3.0 (Rev 11)



This value is not intended to be used for code compliance.

### **Standard Features of ENERGY STAR Certified New Homes and Apartments**

Your ENERGY STAR certified new home or apartment has been designed, constructed, and independently verified to meet rigorous requirements for energy efficiency set by the U.S. Environmental Protection Agency (EPA), including:

#### **Thermal Enclosure System**

A complete thermal enclosure system that includes comprehensive air sealing, quality-installed insulation, and high-performing windows to deliver improved comfort and lower utility bills.

Air Infiltration Test: 4.20 ACH50

**Primary Insulation Levels:** 

Ceiling: R-38.0 Floor: R-30.0 Wall: R-T5:0 Slab:

**Primary Window Efficiency:** 

U-Value: 0.330 SHGC: 0.210

#### Water Management System

A comprehensive water management system to protect roofs, walls, and foundations.

Flashing, a drainage plane, and site grading to move water from the roof to the ground and then away from the home or building

Water-resistant materials on below-grade walls and underneath slabs to reduce the potential for water entering the home or building.

Management of moisture levels in building materials during construction.



A high-efficiency heating, cooling, and ventilation system that is designed and installed for optimal performance.

Total Duct Leakage: Duct Leakage to Outdoors:

1.70 CFM25 1.70 CFM25

Primary Heating (System Type • Fuel Type • Efficiency): Fuel-fired air distribution, Natural gas, 80.0 AFUE.

Primary Cooling (System Type • Fuel Type • Efficiency):

Air conditioner, Electric, 16.0 SEER.

Whole-House Ventilation Type (System Type):

**Exhaust-only** 

## Energy Efficient Lighting and Appliances Energy efficient products to help reduce utility bills, while

Energy efficient products to help reduce utility bills, while providing high-quality performance.

Energy Efficient Lighting: 100%

ENERGY STAR Certified Appliances and Fans: Refrigerators: 1 Dishwashers: 1 Ceiling Fans: 4 Exhaust Fans: 4

Primary Water Heater (System Type • Fuel Type • Efficiency): Conventional, Natural gas, 0.93 EF, 40.0 Gal.



#### About this certificate

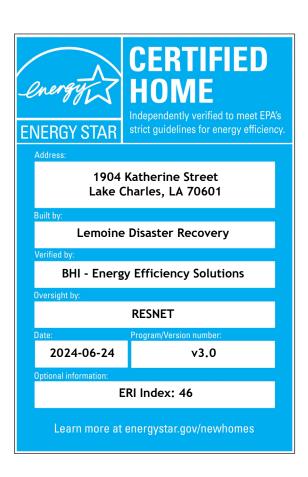
The certificate provides a summary of the major energy efficiency and other construction features that contribute to this home or apartment earning the ENERGY STAR, as determined through independent inspection and verification performed by a trained professional. The Energy Rating Index or HERS index for this home, if reported, is calculated in accordance with ANSI/RESNET/ICC Standard 301, with any exceptions

approved by EPA. Because the version of Standard 301 used to calculate this index may not align with the version referenced by code, this value is not intended to be used to demonstrate compliance with code. Note that when a home or apartment contains multiple performance levels for a particular feature (e.g., window efficiency or insulation levels), the predominant value is shown. Also, homes and apartments may be certified

to earn the ENERGY STAR using a sampling protocol, whereby one home or apartment is randomly selected from a set for representative inspections and testing. In such cases, the features found in each home or apartment within the set are intended to meet or exceed the values presented on this certificate. The actual values for your home or apartment may differ, but offer equivalent or better performance.

This certificate was printed using REM/Rate - v16.3.4.1019. © 1985-2022 NORESCO, Boulder, Colorado.





## HOME CERTIFIED TO MEET THE PROVISIONS OF THE 2021 INTERNATIONAL ENERGY CONSERVATION CODE

## This home built at 1904 Katherine Street, Lake Charles, LA by Lemoine Disaster Recovery exceeds the minimum requirements

#### **Building Features**

Ceiling Flat	R-38.0 w/RB I	Duct	NA
Sealed Attic:	NA	Duct Leakage to Outside:	1.70 CFM @ 25 Pascals
Vaulted Ceiling	NA	Total Duct Leakage:	1.70 CFM @ 25 Pascals
Above Grade Walls	R-15.0	Infiltration:	4.20 ACH50
Foundation Walls	NA	Window	U-Value: 0.330, SHGC: 0.210
Exposed Floor	R-30.0	Heating	Fuel-fired air distribution, Natural gas, 80.0 AFUE.
Slab	None	Cooling	Air conditioner, Electric, 16.0 SEER.
ERI:	PV: 48/48	Water Heating	Conventional, Natural gas, 0.93 EF, 40.0 Gal.

The organization below certifies that the proposed building design described herein is consistent with the building plans, specifications, and other calculations submitted with the permit application. The proposed building has been designed to meet the 2021 IECC requirements in compliance with Chapter 4 based on Climate Zone 2A and with all mandatory requirements.

Name James R. Barfield Organization BHI-EnergyEfficiencySolutions

#### 2021 IECC Certificate

1904 Katherine Street, Lake Charles, LA 70601

D:ld:na	Enval			:
Building	cnve	lobe	msu	lation

R-38.0 w/RB I Ceiling Above Grade Walls R-15.0 Foundation Walls NA **Exposed Floor** R-30.0 Slab None Infiltration 4.20 ACH50 Duct NA

1.70 CFM @ 25 Pascals Total Duct Leakage

Window Data	U-Factor	SHGC
Window	0.330	0.210

#### Mechanical Equipment

HEAT: Fuel-fired air distribution, Natural gas, 80.0 AFUE.

COOL: Air conditioner, Electric, 16.0 SEER.

DHW: Conventional, Natural gas, 0.93 EF, 40.0 Gal.

ERI:PV: 48/48

Builder or Design Professional

Signature

REM/Rate - Residential Energy Analysis and Rating Software v16.3.4.1019