



Bedford Co. Dept. of Building Inspections

New Residential Energy Certificate (2021 VRC)

This certificate "shall be completed...and posted on a wall in the space where the furnace is located, a utility room on an approved location inside the building" per the 2021 Virginia Residential Code (VRC), §N1101.14 (R401.3).

Address: _____ City: _____ State: ____ Zip: _____

Permit #: _____ Code Edition: VRC 2021

Energy Compliance Path: Prescriptive* Total Building Performance Energy Rating Index

*If Prescriptive check the Additional Efficiency package Options selected: Enhanced Envelope Performance

More Efficient HVAC Equipment Performance Reduced Energy Use in Service Water-Heating

More Efficient Duct Thermal Distribution System.

Thermal Envelope:

Enter All Applicable Insulation U-Factor & R-Values (*Indicates required values)			
*Fenestration U-Factor		Mass Wall	
Skylight		Floor	
*Glazed Fenestration SHGC		Basement Wall	
*Ceiling		Slab R-Value & Depth	, ft
*Frame Wall		Crawl Space Wall	

Duct Leakage Results: _____ Check if additional systems (see attached documents)

HVAC System 1 - Date Tested: _____		HVAC System 2 - Date Tested: _____	
Conditioned Floor Area:	ft ²	Conditioned Floor Area:	ft ²
Total Leakage per 100 square ft:	CFM	Total Leakage per 100 square ft:	CFM

Blower Door Test Results: _____ ACH Date Tested: _____

Equipment Efficiencies:

System Type & RATING	HVAC System 1 Ratings	HVAC System 2 Ratings
Heating (HSPF ___/AFUE ___)	_____ or N/A - *Ex #: _____	_____ or N/A - *Ex #: _____
Cooling (SEER)		
Water Heater (UEF)		

*Exemptions: #1) gas-fired unvented room heater, #2) electric furnace, #3) baseboard electric heater

Photovoltaic (Solar) Panel Systems (if applicable):

Array Capacity	Inverter Efficiency	Panel Tilt	Orientation
kW	%	°(degrees)	

Energy Rating Index (ERI) Score (if applicable):

Score with on-site generation _____	Score without on-site generation _____
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By signing below you confirm that you are the builder or approved party and have verified the above information as true and accurate. You understand that any false statements are in violations of the 2021 VRC, N1101.14 and may result in denial of permanent Certificate of Occupancy, fines or other penalties deemed appropriate by the Building Official.

Printed Name of Builder or Approved Party

Date

Signature of Builder or Approved Party

Phone

Email

Residential Energy Compliance Verification (2021 VRC)

Location Verified

Address: _____

City: _____ State: _____ Zip: _____

Name and Information of person (or builder) verifying Energy Compliance

Name: _____

Address: _____

City: _____ State: _____ Zip: _____

Phone: _____ Email: _____

Select **ONE** Energy Compliance Method used to meet the requirements of the 2021 VRC, Section N1101.12 (R401.2).

___ **1) *Prescriptive Compliance - Sections N1101.14 through N1104**

___ **2) Total Building Performance - Section N1105** *(software generated)*

*#1. ___ Additional Efficiency Package Option #2. ___ Energy Savings ≤ 95% Annual Energy Cost

*If "**Prescriptive Compliance**" or "**#1**" selected under *Total Building Performance*, please **Select one** required Efficiency Package option from Section N1108 (R408):

- ___ Enhanced envelope
- ___ More efficient HVAC equipment
- ___ Reduced energy use in service water-heating
- ___ More efficient duct thermal distribution
- ___ Improved air sealing and efficient ventilation

___ **3) Energy Rating Index (ERI) Option - Section N1106** *(software generated)*

Enter the required insulation U-Factor & R-Values, to verify compliance with the 2021 Virginia Residential Code (VRC), Tables N1102.1.2 (R402.1.2) & N1102.1.3 (R402.1.3)		U-Factor	R-Value
*FENESTRATION		0.20 - 1.20	
SKYLIGHT		0.20 - 1.20	
*GLAZED FENESTRATION SHGC		0.00 - 1	
*CEILING		0.20 - 1.20	0 - 100
*FRAME WALL		0.20 - 1.20	0 - 100
MASS WALL		0.20 - 1.20	0 - 100
FLOOR		0.20 - 1.20	0 - 100
BASEMENT WALL		0.20 - 1.20	0 - 100
SLAB INSULATION, & DEPTH (ft)	, ft		0 - 100 & depth
CRAWL SPACE WALL R-VALUE		0.20 - 1.20	0 - 100

*(*Indicates required values)*

Please submit supporting documentation (generated software reports, pictures, or similar)