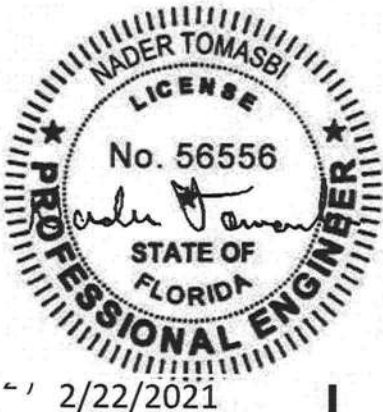


FORM R405-2020

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Business and Professional Regulation - Residential Performance



Project Name: SVM-9407-FL

Street: 1154 NW Noegel Road

City, State, Zip: Lake City , FL , 32055

Owner: Energy Gauge

Design Location: FL, Jacksonville

These prints comply with the Florida Manufactured Building Act and adopted Codes and adhere to the following criteria:

APPROVED BY

NIA INC.

Const. Type: VB-unprots Single Family Dwelling

Occupancy: Single Family Dwelling

Allowable No. of Floors: 1

Wind Velocity: 160 MPH V-Min 130 MPH

Fire Rating of Ext. Walls: 0 Hr

Plan No.: MET10186-01A-030

Allow. Floor Load: 40 PSF

Approval Date: 2/23/2021

Manufacturer: Deer Valley Homes

Builder Name: Deer Valley Homebuilders

Permit Office: Permit No. 16010186-01A-030

Jurisdiction: Columbia (Florida Climate Zone 4)

County: 2/22/2021

1. New construction or existing	New (From Plans)
2. Single family or multiple family	Detached
3. Number of units, if multiple family	1
4. Number of Bedrooms	4
5. Is this a worst case?	Yes
6. Conditioned floor area above grade (ft²)	2126
Conditioned floor area below grade (ft²)	0
7. Windows(256.7 sqft.)	DescriptionArea
a. U-Factor:	Dbl, U=0.37256.67 ft²
SHGC:	SHGC=0.21
b. U-Factor:	N/Aft²
SHGC:	
c. U-Factor:	N/Aft²
SHGC:	
Area Weighted Average Overhang Depth:	1.000 ft.
Area Weighted Average SHGC:	0.210
8. Skylights	Area
c. U-Factor:(AVG)	N/Aft²
SHGC(AVG):	N/A
9. Floor Types (2126.0 sqft.)	InsulationArea
a. Crawlspace	R=22.02126.00 ft²
b. N/A	R=ft²
c. N/A	R=ft²
10. Wall Type(2088.0 sqft.)	InsulationArea
a. Frame - Wood, Exterior	R=19.02088.00 ft²
b. N/A	R=ft²
c. N/A	R=ft²
d. N/A	R=ft²
11. Ceiling Types (2126.0 sqft.)	InsulationArea
a. Under Attic (Vented)	R=40.02126.00 ft²
b. N/A	R=ft²
c. N/A	R=ft²
12. Ducts	Rft²
a. Sup: Attic, Ret: Attic, AH: Main	6400
13. Cooling systems	kBtu/hrEfficiency
a. Central Unit	19.5SEER:14.00
14. Heating systems	kBtu/hrEfficiency
a. Natural Gas Furnace	33.0AFUE:0.80
15. Hot water systems	
a. Natural Gas	Cap: 50 gallons
b. Conservation features	EF: 0.640
None	
16. Credits	CF

Glass/Floor Area: 0.121

Total Proposed Modified Loads: 55.87

Total Baseline Loads: 64.31

PASS

I hereby certify that the plans and specifications covered by this calculation are in compliance with the Florida Energy Code.

PREPARED BY: Jerome Triplett

DATE: 02/22/21

I hereby certify that this building, as designed, is in compliance with the Florida Energy Code.

OWNER/AGENT:

DATE:

Review of the plans and specifications covered by this calculation indicates compliance with the Florida Energy Code. Before construction is completed this building will be inspected for compliance with Section 553.908 Florida Statutes.

BUILDING OFFICIAL:

DATE:

- Compliance requires certification by the air handler unit manufacturer that the air handler enclosure qualifies as certified factory-sealed in accordance with R403.3.2.1.
- Compliance requires an Air Barrier and Insulation Inspection Checklist in accordance with R402.4.1.1 and this project requires an envelope leakage test report with envelope leakage no greater than 7.00 ACH50 (R402.4.1.2).
- Compliance requires a roof absorptance test and a roof emittance test in accordance with R405.7.2
- Compliance with a proposed duct leakage Qn requires a Duct Leakage Test Report confirming duct leakage to outdoors, tested in accordance with ANSI/RESNET/ICC 380, is not greater than 0.040 Qn for whole house.

2/9/2021 10:57 AM

7.0.00 - FlaRes2020 FBC 7th Edition (2020) Compliant Software

Page 1 of 4

PROJECT													
Title:	SVM-9407-FL	Bedrooms:	4	Address Type:	Street Address								
Building Type:	User	Conditioned Area:	2126	Lot #									
Owner Name:	Energy Gauge	Total Stories:	1	Block/Subdivision:									
# of Units:	1	Worst Case:	Yes	PlatBook:									
Builder Name:	Deer Valley Homebuilders	Rotate Angle:	0	Street:	1154 NW Noegel Road								
Permit Office:		Cross Ventilation:	No	County:	Columbia								
Jurisdiction:		Whole House Fan:	No	City, State, Zip:	Lake City , FL , 32055								
Family Type:	Detached												
New/Existing:	New (From Plans)												
Comment:													
CLIMATE													
✓	Design Location	TMY Site	Design Temp 97.5 %	2.5 %	Int Design Temp Winter	Summer	Heating Degree Days	Design Moisture	Daily Temp Range				
_____	FL, Jacksonville	FL_JACKSONVILLE_INT	32	93	70	75	1281	49	Medium				
BLOCKS													
Number	Name	Area	Volume										
1	Block1	2126	19134										
SPACES													
Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Infil ID	Finished	Cooled	Heated			
1	Main	2126	19134	Yes	3	4	1	Yes	Yes	Yes			
FLOORS													
✓	#	Floor Type	Space	Exposed PerWall	Ins. R-Value	Area	Floor Joist R-Value	Tile	Wood	Carpet			
_____	1	Crawlspace	Main	232 ft	19	2126 ft²	22	0.6	0	0.4			
ROOF													
✓	#	Type	Materials	Roof Area	Gable Area	Roof Color	Rad Barr	Solar Absor.	SA Tested	Emitt	Emitt Tested	Deck Insul.	Pitch (deg)
_____	1	Gable or shed	Composition shingles	2191 ft²	266 ft²	Medium	N	0.75	Yes	0.9	Yes	0	14.04
ATTIC													
✓	#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC						
_____	1	No attic	Vented	300	2126 ft²	N	N						
CEILING													
✓	#	Ceiling Type	Space	R-Value	Ins Type	Area	Framing Frac	Truss Type					
_____	1	Under Attic (Vented)	Main	40	Blown	2126 ft²	0.11	Wood					

These prints comply with the Florida Manufactured Building Act and adopted Codes and adhere to the following criteria:



Const. Type: VB-unprotected
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 160 MPH Valt. 124 MPH Valt.
Fire Rating of Ext. Walls: 0 Hr.
Plan No.: MET10186-SVM-9407
Allow. Floor Load: 40 PSE
Approval Date: 2/23/2021
Manufacturer: Deer Valley Homes

WALLS															
✓	#	Ornt	Adjacent To	Wall Type	Space	Cavity R-Value	Width Ft	In	Height Ft	In	Area	Sheathing R-Value	Framing Fraction	Solar Absor.	Below Grade%
	1	W	Exterior	Frame - Wood	Main	19	76	0	9	0	684.0 ft²	0	0.23	0.01	0
	2	S	Exterior	Frame - Wood	Main	19	10		9		90.0 ft²		0.23	0.75	0
	3	N	Exterior	Frame - Wood	Main	19	10		9		90.0 ft²		0.23	0.75	0
	4	S	Exterior	Frame - Wood	Main	19	30		9		270.0 ft²		0.23	0.75	0
	5	N	Exterior	Frame - Wood	Main	19	30		9		270.0 ft²		0.23	0.75	0
	6	E	Exterior	Frame - Wood	Main	19	76		9		684.0 ft²		0.23	0.75	0

DOORS											
✓	#	Ornt	Door Type	Space	Storms	U-Value	Width Ft	In	Height Ft	In	Area
	1	S	Insulated	Main	None	.35	3		8		24 ft²
	2	N	Insulated	Main	None	.16	3		8		24 ft²
	3	S	Insulated	Main	None	.16	3		8		24 ft²
	4	E	Insulated	Main	None	.16	3		8		24 ft²

WINDOWS														
Orientation shown is the entered orientation (=>) changed to Worst Case.														
✓	#	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Imp	Area	Overhang Depth	Separation	Int Shade	Screening
	1	W	1	Vinyl	Low-E Double	Yes	0.37	0.21	N	126.0 ft²	1 ft 0 in	1 ft 0 in	IECC 2012	None
	2	W	1	Vinyl	Low-E Double	Yes	0.37	0.21	N	8.3 ft²	1 ft 0 in	1 ft 0 in	IECC 2012	None
	3	W	1	Vinyl	Low-E Double	Yes	0.37	0.21	N	3.0 ft²	1 ft 0 in	1 ft 0 in	IECC 2012	None
	4	S	2	Vinyl	Low-E Double	Yes	0.37	0.21	N	18.0 ft²	1 ft 0 in	1 ft 0 in	IECC 2012	None
	5	E	6	Vinyl	Low-E Double	Yes	0.37	0.21	N	90.0 ft²	1 ft 0 in	1 ft 0 in	IECC 2012	None
	6	E	6	Vinyl	Low-E Double	Yes	0.37	0.21	N	8.3 ft²	1 ft 0 in	1 ft 0 in	IECC 2012	None
	7	E	6	Vinyl	Low-E Double	Yes	0.37	0.21	N	3.0 ft²	1 ft 0 in	1 ft 0 in	IECC 2012	None


GARAGE						
✓	#	Floor Area	Ceiling Area	Exposed Wall Perimeter	Avg. Wall Height	Exposed Wall Insulation
	1	382.8 ft²	382.8 ft²	64 ft	9 ft	11

INFILTRATION								
#	Scope	Method	SLA	CFM 50	ELA	EqLA	ACH	ACH 50
1	Wholehouse	Proposed ACH(50)	.0004	2232.3	122.47	229.92	.1438	7

HEATING SYSTEM								
✓	#	System Type	Subtype	Speed	Efficiency	Capacity	Block	Ducts
	1	Natural Gas Furnace/	None		AFUE:0.8	33 kBtu/hr	1	sys#1

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Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 160 MPH Vdir, 124 MPH Vavg
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MET10186-SYM-9407
Allow. Floor Load: 40 PSF
Approval Date: 2/23/2021
Manufacturer: Deer Valley Homes

COOLING SYSTEM														
<input checked="" type="checkbox"/>	#	System Type	Subtype	Subtype	Efficiency	Capacity	Air Flow	SHR	Block	Ducts				
	1	Central Unit/	None	Singl	SEER: 14	19.5 kBtu/hr	585 cfm	0.75	1	sys#1				
HOT WATER SYSTEM														
<input checked="" type="checkbox"/>	#	System Type	SubType	Location	EF	Cap	Use	SetPnt	Conservation					
	1	Natural Gas	None	Garage	0.639538	50 gal	60 gal	120 deg	None					
SOLAR HOT WATER SYSTEM														
<input checked="" type="checkbox"/>	FSEC Cert #	Company Name	System Model #			Collector Model #		Collector Area	Storage Volume	FEF				
	None	None						ft²						
DUCTS														
<input checked="" type="checkbox"/>	#	---- Supply ----		---- Return ----				Air	CFM 25	CFM25	HVAC #			
	1	Attic	6	400 ft²	Attic	100 ft²	Proposed Qn	Main	--- cfm	85.0 cfm	0.04	0.50	1	1
TEMPERATURES														
Programable Thermostat: N						Ceiling Fans:								
Cooling	<input checked="" type="checkbox"/> Jan	<input checked="" type="checkbox"/> Feb	<input checked="" type="checkbox"/> Mar	<input checked="" type="checkbox"/> Apr	<input checked="" type="checkbox"/> May	<input checked="" type="checkbox"/> Jun	<input checked="" type="checkbox"/> Jul	<input checked="" type="checkbox"/> Aug	<input checked="" type="checkbox"/> Sep	<input checked="" type="checkbox"/> Oct	<input checked="" type="checkbox"/> Nov	<input checked="" type="checkbox"/> Dec		
Heating	<input checked="" type="checkbox"/> Jan	<input checked="" type="checkbox"/> Feb	<input checked="" type="checkbox"/> Mar	<input checked="" type="checkbox"/> Apr	<input checked="" type="checkbox"/> May	<input checked="" type="checkbox"/> Jun	<input checked="" type="checkbox"/> Jul	<input checked="" type="checkbox"/> Aug	<input checked="" type="checkbox"/> Sep	<input checked="" type="checkbox"/> Oct	<input checked="" type="checkbox"/> Nov	<input checked="" type="checkbox"/> Dec		
Venting	<input checked="" type="checkbox"/> Jan	<input checked="" type="checkbox"/> Feb	<input checked="" type="checkbox"/> Mar	<input checked="" type="checkbox"/> Apr	<input checked="" type="checkbox"/> May	<input checked="" type="checkbox"/> Jun	<input checked="" type="checkbox"/> Jul	<input checked="" type="checkbox"/> Aug	<input checked="" type="checkbox"/> Sep	<input checked="" type="checkbox"/> Oct	<input checked="" type="checkbox"/> Nov	<input checked="" type="checkbox"/> Dec		
Thermostat Schedule: FloridaCode 2014														
Schedule Type		Hours												
		1	2	3	4	5	6	7	8	9	10	11	12	
Cooling (WD)	AM	75	75	75	75	75	75	75	75	75	75	75	75	
	PM	75	75	75	75	75	75	75	75	75	75	75	75	
Cooling (WEH)	AM	75	75	75	75	75	75	75	75	75	75	75	75	
	PM	75	75	75	75	75	75	75	75	75	75	75	75	
Heating (WD)	AM	72	72	72	72	72	72	72	72	72	72	72	72	
	PM	72	72	72	72	72	72	72	72	72	72	72	72	
Heating (WEH)	AM	72	72	72	72	72	72	72	72	72	72	72	72	
	PM	72	72	72	72	72	72	72	72	72	72	72	72	
MASS														
Mass Type		Area		Thickness		Furniture Fraction		Space						
Default(8 lbs/sq.ft.		0 ft²		0 ft		0.3		Main						

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