

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Community Affairs
Residential Whole Building Performance Method A

Project Name:	DAVIS RESIDENCE <i>120 Holly Berry Ln.</i>	Builder:	
Address:	Lot: 22, Sub: PORT ST JOHNS, Plat:	Permitting Office:	ST JOHNS COUNTY
City, State:	ST. JOHNS, FL 32259	Permit Number:	
Owner:	GREG DAVIS	Jurisdiction Number:	651000
Climate Zone:	North		

1. New construction or existing 2. Single family or multi-family 3. Number of units, if multi-family 4. Number of Bedrooms 5. Is this a worst case? 6. Conditioned floor area (ft²) 7. Glass type ¹ and area: (Label reqd. by 13-104.4.5 if not default)	New Single family 1 4 Yes 4208 ft²	12. Cooling systems a. Central Unit b. Central Unit c. N/A	Cap: 42.0 kBtu/hr SEER: 13.00 Cap: 60.0 kBtu/hr SEER: 13.00
7a. U-factor: (or Single or Double DEFAULT) 7a. (Dble, U=0.6) b. SHGC: (or Clear or Tint DEFAULT) 7b. (SHGC=0.42)	Description Area 905.0 ft² 905.0 ft²	13. Heating systems a. Electric Heat Pump b. Electric Heat Pump c. N/A	Cap: 42.0 kBtu/hr HSPF: 7.70 Cap: 60.0 kBtu/hr HSPF: 7.70
8. Floor types a. Slab-On-Grade Edge Insulation b. N/A c. N/A	R=0.0, 380.0(p) ft	14. Hot water systems a. Electric Resistance b. N/A c. Conservation credits (HR-Heat recovery, Solar DHP-Dedicated heat pump)	Cap: 80.0 gallons EF: 0.92
9. Wall types a. Frame, Wood, Exterior b. Frame, Wood, Adjacent c. N/A d. N/A e. N/A	R=11.0, 3700.0 ft² R=11.0, 708.0 ft²	15. HVAC credits (CF-Ceiling fan, CV-Cross ventilation, HF-Whole house fan, PT-Programmable Thermostat, MZ-C-Multizone cooling, MZ-H-Multizone heating)	PT, —
10. Ceiling types a. Under Attic b. Under Attic c. N/A	R=30.0, 4419.0 ft² R=19.0, 282.0 ft²		
11. Ducts a. Sup: Unc. Ret: Unc. AH(Sealed):Interior b. Sup: Unc. Ret: Unc. AH(Sealed):Interior	Sup. R=6.0, 50.0 ft Sup. R=6.0, 50.0 ft		

10800749

OFFICE CO.

Glass/Floor Area: 0.22	Total as-built points: 51152	PASS
	Total base points: 52584	

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

PREPARED BY: *Rauna Cocha*
AIR TO ME, INC

DATE: *January 8, 2008*

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

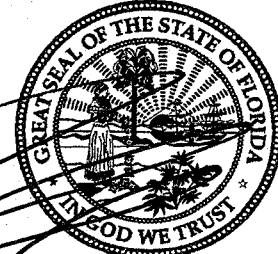
OWNER/AGENT: *[Signature]*

DATE: *1/9/08*

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 553.906 Florida Statutes.

BUILDING OFFICIAL: _____

DATE: _____



SUMMER CALCULATIONS

Residential Whole Building Performance Method A - Details

ADDRESS: Lot: 22, Sub: PORT ST JOHNS, Plat: , , , PERMIT #:

BASE				AS-BUILT						
GLASS TYPES .18 X Conditioned X BSPM = Points Floor Area				Type/SC	Overhang Ornt Len Hgt	Area	X SPM	X SOF	= Points	
.18	4208.0	18.59	14081.0	1.Double,U=0.56,SHGC=0.42	S 1.0 1.0	18.0	21.90	0.52	205.0	
				2.Double,U=0.56,SHGC=0.42	S 1.0 1.0	15.0	21.90	0.52	171.0	
				3.Double,U=0.56,SHGC=0.42	S 1.0 1.0	18.0	21.90	0.52	205.0	
				4.Double,U=0.56,SHGC=0.42	S 10.0 1.0	24.0	21.90	0.43	227.0	
				5.Double,U=0.56,SHGC=0.42	S 10.0 1.0	24.0	21.90	0.43	227.0	
				6.Double,U=0.56,SHGC=0.42	S 10.0 1.0	108.0	21.90	0.43	1021.0	
				7.Double,U=0.56,SHGC=0.42	SE 5.0 1.0	21.0	26.28	0.38	209.0	
				8.Double,U=0.56,SHGC=0.42	SE 5.0 1.0	24.0	26.28	0.38	239.0	
				9.Double,U=0.56,SHGC=0.42	S 5.0 1.0	21.0	21.90	0.43	198.0	
				10.Double,U=0.56,SHGC=0.42	S 5.0 1.0	24.0	21.90	0.43	227.0	
				11.Double,U=0.56,SHGC=0.42	SE 10.0 1.0	120.0	26.28	0.38	1196.0	
				12.Double,U=0.56,SHGC=0.42	S 10.0 1.0	120.0	21.90	0.43	1135.0	
				13.Double,U=0.56,SHGC=0.42	SE 24.0 1.0	21.0	26.28	0.38	209.0	
				14.Double,U=0.56,SHGC=0.42	S 1.0 1.0	4.0	21.90	0.52	45.0	
				15.Double,U=0.56,SHGC=0.42	S 1.0 1.0	36.0	21.90	0.52	410.0	
				16.Double,U=0.56,SHGC=0.42	S 1.0 1.0	4.0	21.90	0.52	45.0	
				17.Double,U=0.56,SHGC=0.42	S 1.0 1.0	36.0	21.90	0.52	410.0	
				18.Double,U=0.56,SHGC=0.42	W 1.0 1.0	24.0	23.58	0.53	300.0	
				19.Double,U=0.56,SHGC=0.42	W 1.0 1.0	3.0	23.58	0.53	37.0	
				20.Double,U=0.56,SHGC=0.42	W 1.0 1.0	3.0	23.58	0.53	37.0	
				21.Double,U=0.56,SHGC=0.42	W 1.0 1.0	3.0	23.58	0.53	37.0	
				22.Double,U=0.56,SHGC=0.42	W 1.0 1.0	8.0	23.58	0.53	100.0	
				23.Double,U=0.56,SHGC=0.42	W 1.0 1.0	24.0	23.58	0.53	300.0	
				24.Double,U=0.56,SHGC=0.42	N 1.0 1.0	18.0	11.36	0.71	145.0	
				25.Double,U=0.56,SHGC=0.42	N 1.0 1.0	18.0	11.36	0.71	145.0	
				26.Double,U=0.56,SHGC=0.42	N 1.0 1.0	36.0	11.36	0.71	290.0	
				27.Double,U=0.56,SHGC=0.42	N 10.0 1.0	18.0	11.36	0.59	121.0	
				28.Double,U=0.56,SHGC=0.42	N 1.0 1.0	36.0	11.36	0.71	290.0	
				29.Double,U=0.56,SHGC=0.42	N 1.0 1.0	18.0	11.36	0.71	145.0	
				30.Double,U=0.56,SHGC=0.42	N 1.0 1.0	18.0	11.36	0.71	145.0	
				31.Double,U=0.56,SHGC=0.42	E 1.0 1.0	6.0	25.82	0.52	80.0	
				32.Double,U=0.56,SHGC=0.42	E 1.0 1.0	4.0	25.82	0.52	53.0	
				33.Double,U=0.56,SHGC=0.42	E 1.0 1.0	15.0	25.82	0.52	200.0	
				34.Double,U=0.56,SHGC=0.42	E 1.0 1.0	15.0	25.82	0.52	200.0	
				As-Built Total:					905.0	9004.0
WALL TYPES Area X BSPM = Points				Type	R-Value	Area	X SPM	= Points		
Adjacent	708.0	0.70	495.6	1. Frame, Wood, Exterior	11.0	3700.0	1.70	6290.0		
Exterior	3700.0	1.70	6290.0	2. Frame, Wood, Adjacent	11.0	708.0	0.70	495.6		
Base Total:	4408.0		6785.6	As-Built Total:	4408.0			6785.6		

SUMMER CALCULATIONS

Residential Whole Building Performance Method A - Details

ADDRESS: Lot: 22, Sub: PORT ST JOHNS, Plat: , , , PERMIT #:

BASE				AS-BUILT					
DOOR TYPES	Area X BSPM = Points			Type	Area X SPM = Points				
Adjacent	48.0	2.40	115.2	1.Exterior Insulated	48.0	4.10	196.8		
Exterior	48.0	6.10	292.8	2.Adjacent Wood	48.0	2.40	115.2		
Base Total:	96.0		408.0	As-Built Total:	96.0		312.0		
CEILING TYPES	Area X BSPM = Points			Type	R-Value	Area X SPM X SCM = Points			
Under Attic	4208.0	1.73	7279.8	1. Under Attic	30.0	4419.0 1.73 X 1.00	7644.9		
				2. Under Attic	19.0	282.0 2.34 X 1.00	659.9		
Base Total:	4208.0		7279.8	As-Built Total:		4701.0	8304.8		
FLOOR TYPES	Area X BSPM = Points			Type	R-Value	Area X SPM = Points			
Slab	380.0(p)	-37.0	-14060.0	1. Slab-On-Grade Edge Insulation	0.0	380.0(p) -41.20	-15656.0		
Raised	0.0	0.00	0.0						
Base Total:			-14060.0	As-Built Total:		380.0	-15656.0		
INFILTRATION	Area X BSPM = Points					Area X SPM = Points			
	4208.0	10.21	42963.7			4208.0 10.21	42963.7		
Summer Base Points: 57458.1				Summer As-Built Points: 51714.0					
Total Summer Points	X System Multiplier	= Cooling Points		Total Component (System - Points)	X Cap Ratio (DM x DSM x AHU)	X Duct Multiplier	X System Multiplier	X Credit Multiplier	= Cooling Points
57458.1	0.3250	18673.9		51714	0.41 (1.09 x 1.147 x 0.86)	0.260	0.950	5684.7	
				51714	0.59 (1.09 x 1.147 x 0.86)	0.260	0.950	8121.0	
				51714.0	1.00	1.081	0.260	0.950	13805.8

WINTER CALCULATIONS

Residential Whole Building Performance Method A - Details

ADDRESS: Lot: 22, Sub: PORT ST JOHNS, Plat: , , , PERMIT #:

BASE				AS-BUILT							
GLASS TYPES											
.18 X Conditioned X BWPM = Points Floor Area				Type/SC	Overhang Ornt	Len	Hgt	Area X WPM	X WOF = Points		
.18	4208.0	20.17	15278.0	1.Double,U=0.56,SHGC=0.42	S	1.0	1.0	18.0	10.29	2.73	506.0
				2.Double,U=0.56,SHGC=0.42	S	1.0	1.0	15.0	10.29	2.73	421.0
				3.Double,U=0.56,SHGC=0.42	S	1.0	1.0	18.0	10.29	2.73	506.0
				4.Double,U=0.56,SHGC=0.42	S	10.0	1.0	24.0	10.29	3.66	904.0
				5.Double,U=0.56,SHGC=0.42	S	10.0	1.0	24.0	10.29	3.66	904.0
				6.Double,U=0.56,SHGC=0.42	S	10.0	1.0	108.0	10.29	3.66	4069.0
				7.Double,U=0.56,SHGC=0.42	SE	5.0	1.0	21.0	11.22	2.65	624.0
				8.Double,U=0.56,SHGC=0.42	SE	5.0	1.0	24.0	11.22	2.65	713.0
				9.Double,U=0.56,SHGC=0.42	S	5.0	1.0	21.0	10.29	3.66	791.0
				10.Double,U=0.56,SHGC=0.42	S	5.0	1.0	24.0	10.29	3.66	904.0
				11.Double,U=0.56,SHGC=0.42	SE	10.0	1.0	120.0	11.22	2.65	3566.0
				12.Double,U=0.56,SHGC=0.42	S	10.0	1.0	120.0	10.29	3.66	4521.0
				13.Double,U=0.56,SHGC=0.42	SE	24.0	1.0	21.0	11.22	2.65	624.0
				14.Double,U=0.56,SHGC=0.42	S	1.0	1.0	4.0	10.29	2.73	112.0
				15.Double,U=0.56,SHGC=0.42	S	1.0	1.0	36.0	10.29	2.73	1012.0
				16.Double,U=0.56,SHGC=0.42	S	1.0	1.0	4.0	10.29	2.73	112.0
				17.Double,U=0.56,SHGC=0.42	S	1.0	1.0	36.0	10.29	2.73	1012.0
				18.Double,U=0.56,SHGC=0.42	W	1.0	1.0	24.0	15.06	1.17	421.0
				19.Double,U=0.56,SHGC=0.42	W	1.0	1.0	3.0	15.06	1.17	52.0
				20.Double,U=0.56,SHGC=0.42	W	1.0	1.0	3.0	15.06	1.17	52.0
				21.Double,U=0.56,SHGC=0.42	W	1.0	1.0	3.0	15.06	1.17	52.0
				22.Double,U=0.56,SHGC=0.42	W	1.0	1.0	8.0	15.06	1.17	140.0
				23.Double,U=0.56,SHGC=0.42	W	1.0	1.0	24.0	15.06	1.17	421.0
				24.Double,U=0.56,SHGC=0.42	N	1.0	1.0	18.0	17.51	1.02	320.0
				25.Double,U=0.56,SHGC=0.42	N	1.0	1.0	18.0	17.51	1.02	320.0
				26.Double,U=0.56,SHGC=0.42	N	1.0	1.0	36.0	17.51	1.02	641.0
				27.Double,U=0.56,SHGC=0.42	N	10.0	1.0	18.0	17.51	1.03	323.0
				28.Double,U=0.56,SHGC=0.42	N	1.0	1.0	36.0	17.51	1.02	641.0
				29.Double,U=0.56,SHGC=0.42	N	1.0	1.0	18.0	17.51	1.02	320.0
				30.Double,U=0.56,SHGC=0.42	N	1.0	1.0	18.0	17.51	1.02	320.0
				31.Double,U=0.56,SHGC=0.42	E	1.0	1.0	6.0	13.87	1.29	106.0
				32.Double,U=0.56,SHGC=0.42	E	1.0	1.0	4.0	13.87	1.29	71.0
				33.Double,U=0.56,SHGC=0.42	E	1.0	1.0	15.0	13.87	1.29	267.0
				34.Double,U=0.56,SHGC=0.42	E	1.0	1.0	15.0	13.87	1.29	267.0
				As-Built Total:				905.0			26035.0
WALL TYPES											
Area X BWPM = Points				Type	R-Value	Area X WPM		= Points			
Adjacent	708.0	3.60	2548.8	1. Frame, Wood, Exterior	11.0	3700.0	3.70	13690.0			
Exterior	3700.0	3.70	13690.0	2. Frame, Wood, Adjacent	11.0	708.0	3.60	2548.8			
Base Total:	4408.0		16238.8	As-Built Total:		4408.0		16238.8			

WINTER CALCULATIONS

Residential Whole Building Performance Method A - Details

ADDRESS: Lot: 22, Sub: PORT ST JOHNS, Plat: , , , PERMIT #:

BASE				AS-BUILT					
DOOR TYPES Area X BWPM = Points				Type	Area X WPM = Points				
Adjacent Exterior	48.0	11.50	552.0	1. Exterior Insulated	48.0	8.40	403.2		
	48.0	12.30	590.4	2. Adjacent Wood	48.0	11.50	552.0		
Base Total:	96.0		1142.4	As-Built Total:	96.0		955.2		
CEILING TYPES Area X BWPM = Points				Type	R-Value	Area X WPM X WCM = Points			
Under Attic	4208.0	2.05	8626.4	1. Under Attic	30.0	4419.0	2.05 X 1.00 = 9059.0		
				2. Under Attic	19.0	282.0	2.70 X 1.00 = 761.4		
Base Total:	4208.0		8626.4	As-Built Total:	4701.0		9820.4		
FLOOR TYPES Area X BWPM = Points				Type	R-Value	Area X WPM = Points			
Slab	380.0(p)	8.9	3382.0	1. Slab-On-Grade Edge Insulation	0.0	380.0(p)	18.80 = 7144.0		
Raised	0.0	0.00	0.0						
Base Total:			3382.0	As-Built Total:		380.0	7144.0		
INFILTRATION Area X BWPM = Points				Area X WPM = Points					
	4208.0	-0.59	-2482.7		4208.0	-0.59	-2482.7		
Winter Base Points:			42184.9	Winter As-Built Points:			57710.6		
Total Winter X Points	System Multiplier	= Heating Points		Total Component (System - Points)	X Cap Ratio (DM x DSM x AHU)	X Duct Multiplier	X System Multiplier	X Credit Multiplier	= Heating Points
				(sys 1: Electric Heat Pump 42000 btuh ,EFF(7.7) Ducts:Unc(S),Unc(R),Int(AH),R6.0					
				57710.6	0.412	(1.069 x 1.169 x 0.88)	0.443	0.950	11038.0
				(sys 2: Electric Heat Pump 60000 btuh ,EFF(7.7) Ducts:Unc(S),Unc(R),Int(AH),R6.0					
				57710.6	0.588	(1.069 x 1.169 x 0.88)	0.443	0.950	15768.6
42184.9	0.5540		23370.4	57710.6	1.00	1.104	0.443	0.950	26806.6

WATER HEATING & CODE COMPLIANCE STATUS

Residential Whole Building Performance Method A - Details

ADDRESS: Lot: 22, Sub: PORT ST JOHNS, Plat: , , , PERMIT #:

BASE				AS-BUILT						
WATER HEATING				Tank	EF	Number of	X	Tank X	Multiplier X	Credit = Total
Number of	X	Multiplier	= Total	Volume		Bedrooms		Ratio	Multiplier	Multiplier
Bedrooms										
4		2635.00	10540.0	80.0	0.92	4		1.00	2635.00	1.00 10540.0
As-Built Total:										10540.0

CODE COMPLIANCE STATUS							
BASE				AS-BUILT			
Cooling	+	Heating	+	Hot Water	=	Total	
Points		Points		Points		Points	
18674		23370		10540		52584	
13806		26807		10540		51152	

PASS



Code Compliance Checklist

Residential Whole Building Performance Method A - Details

ADDRESS: Lot: 22, Sub: PORT ST JOHNS, Plat: , , , PERMIT #:

6A-21 INFILTRATION REDUCTION COMPLIANCE CHECKLIST

COMPONENTS	SECTION	REQUIREMENTS FOR EACH PRACTICE	CHECK
Exterior Windows & Doors	606.1.ABC.1.1	Maximum: .3 cfm/sq.ft. window area; .5 cfm/sq.ft. door area.	
Exterior & Adjacent Walls	606.1.ABC.1.2.1	Caulk, gasket, weatherstrip or seal between: windows/doors & frames, surrounding wall; foundation & wall sole or sill plate; joints between exterior wall panels at corners; utility penetrations; between wall panels & top/bottom plates; between walls and floor. EXCEPTION: Frame walls where a continuous infiltration barrier is installed that extends from, and is sealed to, the foundation to the top plate.	✓
Floors	606.1.ABC.1.2.2	Penetrations/openings >1/8" sealed unless backed by truss or joint members. EXCEPTION: Frame floors where a continuous infiltration barrier is installed that is sealed to the perimeter, penetrations and seams.	✓
Ceilings	606.1.ABC.1.2.3	Between walls & ceilings; penetrations of ceiling plane of top floor; around shafts, chases, soffits, chimneys, cabinets sealed to continuous air barrier; gaps in gyp board & top plate; attic access. EXCEPTION: Frame ceilings where a continuous infiltration barrier is installed that is sealed at the perimeter, at penetrations and seams.	✓
Recessed Lighting Fixtures	606.1.ABC.1.2.4	Type IC rated with no penetrations, sealed; or Type IC or non-IC rated, installed inside a sealed box with 1/2" clearance & 3" from insulation; or Type IC rated with < 2.0 cfm from conditioned space, tested.	✓
Multi-story Houses	606.1.ABC.1.2.5	Air barrier on perimeter of floor cavity between floors.	✓
Additional Infiltration reqts	606.1.ABC.1.3	Exhaust fans vented to outdoors, dampers; combustion space heaters comply with NFPA, have combustion air.	✓

6A-22 OTHER PRESCRIPTIVE MEASURES (must be met or exceeded by all residences.)

COMPONENTS	SECTION	REQUIREMENTS	CHECK
Water Heaters	612.1	Comply with efficiency requirements in Table 612.1.ABC.3.2. Switch or clearly marked circuit breaker (electric) or cutoff (gas) must be provided. External or built-in heat trap required.	✓
Swimming Pools & Spas	612.1	Spas & heated pools must have covers (except solar heated). Non-commercial pools must have a pump timer. Gas spa & pool heaters must have a minimum thermal efficiency of 78%.	N/A
Shower heads	612.1	Water flow must be restricted to no more than 2.5 gallons per minute at 80 PSIG.	✓
Air Distribution Systems	610.1	All ducts, fittings, mechanical equipment and plenum chambers shall be mechanically attached, sealed, insulated, and installed in accordance with the criteria of Section 610. Ducts in unconditioned attics: R-6 min. insulation.	✓
HVAC Controls	607.1	Separate readily accessible manual or automatic thermostat for each system.	✓
Insulation	604.1, 602.1	Ceilings-Min. R-19. Common walls-Frame R-11 or CBS R-3 both sides. Common ceiling & floors R-11.	✓

ENERGY PERFORMANCE LEVEL (EPL) DISPLAY CARD

ESTIMATED ENERGY PERFORMANCE SCORE* = 85.7

The higher the score, the more efficient the home.

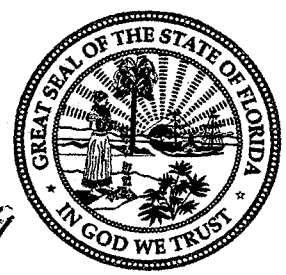
, Lot: 22, Sub: PORT ST JOHNS, Plat: , , ,

1. New construction or existing	New	___	12. Cooling systems	___
2. Single family or multi-family	Single family	___	a. Central Unit	Cap: 42.0 kBtu/hr
3. Number of units, if multi-family	1	___	b. Central Unit	SEER: 13.00
4. Number of Bedrooms	4	___	c. N/A	Cap: 60.0 kBtu/hr
5. Is this a worst case?	Yes	___		SEER: 13.00
6. Conditioned floor area (ft ²)	4208 ft ²	___	13. Heating systems	___
7. Glass type ¹ and area: (Label reqd. by 13-104.4.5 if not default)		___	a. Electric Heat Pump	Cap: 42.0 kBtu/hr
a. U-factor:	Description Area	___	b. Electric Heat Pump	HSPF: 7.70
(or Single or Double DEFAULT)	7a. (Dble, U=0.6) 905.0 ft ²	___	c. N/A	Cap: 60.0 kBtu/hr
b. SHGC:	7b. (SHGC=0.42) 905.0 ft ²	___		HSPF: 7.70
(or Clear or Tint DEFAULT)		___	14. Hot water systems	___
8. Floor types		___	a. Electric Resistance	Cap: 80.0 gallons
a. Slab-On-Grade Edge Insulation	R=0.0, 380.0(p) ft	___	b. N/A	EF: 0.92
b. N/A		___	c. Conservation credits	___
c. N/A		___	(HR-Heat recovery, Solar	___
9. Wall types		___	DHP-Dedicated heat pump)	___
a. Frame, Wood, Exterior	R=11.0, 3700.0 ft ²	___	15. HVAC credits	___
b. Frame, Wood, Adjacent	R=11.0, 708.0 ft ²	___	(CF-Ceiling fan, CV-Cross ventilation,	PT, ___
c. N/A		___	HF-Whole house fan,	___
d. N/A		___	PT-Programmable Thermostat,	___
e. N/A		___	MZ-C-Multizone cooling,	___
10. Ceiling types		___	MZ-H-Multizone heating)	___
a. Under Attic	R=30.0, 4419.0 ft ²	___		___
b. Under Attic	R=19.0, 282.0 ft ²	___		___
c. N/A		___		___
11. Ducts		___		___
a. Sup: Unc. Ret: Unc. AH(Sealed):Interior	Sup. R=6.0, 50.0 ft	___		___
b. Sup: Unc. Ret: Unc. AH(Sealed):Interior	Sup. R=6.0, 50.0 ft	___		___

I certify that this home has complied with the Florida Energy Efficiency Code For Building Construction through the above energy saving features which will be installed (or exceeded) in this home before final inspection. Otherwise, a new EPL Display Card will be completed based on installed Code compliant features.

Builder Signature: [Signature] Date: 1/9/03

Address of New Home: 120 Holly Berry LN City/FL Zip: St. Johns FL 32259



*NOTE: The home's estimated energy performance score is only available through the FLA/RES computer program. This is not a Building Energy Rating. If your score is 80 or greater (or 86 for a US EPA/DOE EnergyStarTM designation), your home may qualify for energy efficiency mortgage (EEM) incentives if you obtain a Florida Energy Gauge Rating. Contact the Energy Gauge Hotline at 321/638-1492 or see the Energy Gauge web site at www.fsec.ucf.edu for information and a list of certified Raters. For information about Florida's Energy Efficiency Code For Building Construction, contact the Department of Community Affairs at 850/487-1824.

¹ Predominant glass type. For actual glass type and areas, see Summer & Winter Glass output on pages 2&4.
EnergyGauge® (Version: FLRCSB v4.5.2)



Project Summary
Entire House
Air to Air Inc.

Job:
 Date: JANUARY 8, 2008
 By: LC

11578 Davis Creek Ct, Jacksonville, FL 32256 Phone: 904-262-4279 Fax: 904-262-0772

Project Information

For: HERITAGE
 Notes: DAVIS RESIDENCE
 22 PORT ST JOHNS

Design Information

Weather: Jacksonville, Cecil Field NAS, FL, US

Winter Design Conditions

Outside db 34 °F
 Inside db 70 °F
 Design TD 36 °F

Summer Design Conditions

Outside db 95 °F
 Inside db 75 °F
 Design TD 20 °F
 Daily range M
 Relative humidity 50 %
 Moisture difference 40 gr/lb

Heating Summary

Structure 76187 Btuh
 Ducts 7619 cfm
 Central vent (0 cfm) 0 Btuh
 Humidification 0 Btuh
 Piping 0 Btuh
 Equipment load 83806 Btuh

Sensible Cooling Equipment Load Sizing

Structure 63936 Btuh
 Ducts 6394 Btuh
 Central vent (0 cfm) 0 Btuh
 Blower 0 Btuh
 Use manufacturer's data n
 Rate/swing multiplier 1.00
 Equipment sensible load 70330 Btuh

Infiltration

Method Simplified
 Construction quality Average
 Fireplaces 0

	Heating	Cooling
Area (ft ²)	4208	4208
Volume (ft ³)	48813	48813
Air changes/hour	0.70	0.40
Equiv. AVF (cfm)	569	325

Latent Cooling Equipment Load Sizing

Structure 10024 Btuh
 Ducts 0 Btuh
 Central vent (0 cfm) 0 Btuh
 Equipment latent load 10024 Btuh
 Equipment total load 80354 Btuh
 Req. total capacity at 0.70 SHR 8.4 ton

Heating Equipment Summary

Make
 Trade
 Model
 Efficiency 80 AFUE
 Heating input 0 Btuh
 Heating output 0 Btuh
 Temperature rise 0 °F
 Actual air flow 3761 cfm
 Air flow factor 0.045 cfm/Btuh
 Static pressure 0.00 in H2O
 Space thermostat

Cooling Equipment Summary

Make
 Trade
 Cond
 Coil
 Efficiency 0 EER
 Sensible cooling 0 Btuh
 Latent cooling 0 Btuh
 Total cooling 0 Btuh
 Actual air flow 3761 cfm
 Air flow factor 0.053 cfm/Btuh
 Static pressure 0.00 in H2O
 Load sensible heat ratio 0.88

Bold/italic values have been manually overridden

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Calculation Procedures A, B, C, D

Entire House

Air to Air Inc.

Job:
Date: JANUARY 8, 2008
By: LC

11578 Davis Creek Ct, Jacksonville, FL 32256 Phone: 904-262-4279 Fax: 904-262-0772

Procedure A - Winter Infiltration HTM Calculation*

1. Winter infiltration AVF	0.70 ach	x	48813 ft ³	x	0.0167	=	569 cfm
2. Winter infiltration load	1.1	x	569 cfm	x	36 °F	Winter TD =	22552 Btuh
3. Winter infiltration HTM	22552 Btuh	/	1004 ft ²	Total window =			22.5 Btuh/ft ²

Procedure B - Summer Infiltration HTM Calculation

1. Summer infiltration AVF	0.40 ach	x	48813 ft ³	x	0.0167	=	325 cfm
2. Summer infiltration load	1.1	x	325 cfm	x	20 °F	Summer TD =	7159 Btuh
3. Summer infiltration HTM	7159 Btuh	/	1004 ft ²	Total window =			7.1 Btuh/ft ²

Procedure C - Latent Infiltration Gain

0.68	x	40 gr/lb	moist.diff.	x	325 cfm	=	8874 Btuh
------	---	----------	-------------	---	---------	---	-----------

Procedure D - Equipment Sizing Loads

1. Sensible sizing load								
Sensible ventilation load	1.1	x	0 cfm vent.	x	20 °F	Summer TD	=	0 Btuh
Sensible load for structure (Line 19)							+	70330 Btuh
Vent + structure + other equip loads							=	70330 Btuh
Rating and temperature swing multiplier							x	1.00
Equipment sizing load - sensible							=	70330 Btuh
2. Latent sizing load								
Latent ventilation load	0.68	x	0 cfm vent.	x	40 gr/lb	moist.diff.	=	0 Btuh
Internal loads =	230			x	5	people	=	1150 Btuh
Infiltration load from Procedure C							+	8874 Btuh
Equipment sizing load - latent							=	10024 Btuh

*Construction Quality is: a

No. of Fireplaces is: 0

Bold/italic values have been manually overridden

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Window Data

Air to Air Inc.

Job:
Date: JANUARY 8, 2008
By: LC

11578 Davis Creek Ct, Jacksonville, FL 32256 Phone: 904-262-4279 Fax: 904-262-0772

W N D W	S K Y	O R I	G L A Z	L O W E	S T R M	S H A D	N G L Z	I N C L	S H C O	O V R X	O V R Y	W H G T	C H T M	W N A R	S H A R
whole house															
3C0	n	w	c	n	n	b	2	90.0	1.0	0.0	0.0	4.0	46.0	40.0	0.0
3C0	n	s	c	n	n	b	2	90.0	1.0	0.0	0.0	4.0	25.0	162.0	0.0
3C0	n	e	c	n	n	b	2	90.0	1.0	0.0	0.0	4.0	46.0	65.0	0.0
3C0	n	n	c	n	n	b	2	90.0	1.0	0.0	0.0	4.0	16.0	641.0	0.0



Right-J Worksheet Entire House Air to Air Inc.

Job:
Date: **JANUARY 8, 2008**
By: **LC**

11578 Davis Creek Ct, Jacksonville, FL 32256 Phone: 904-262-4279 Fax: 904-262-0772

MANUAL J: 7th Ed.																
1	Name of room				Entire House 380.0 ft				whole house 380.0 ft							
	2 Length of exposed wall 3 Room dimensions				11.6 ft				4208 x 1.0 ft 11.6 ft heat/cool							
4	Ceilings			Condit. Option		Area (ft²)		Load (Btuh) Htg Clg		Area (ft²)		Load (Btuh) Htg Clg		Area Htg Clg		
5	TYPE OF EXPOSURE	CST NO.	HTM Htg	HTM Clg	Area (ft²)	Load (Btuh) Htg	Load (Btuh) Clg	Area (ft²)	Load (Btuh) Htg	Load (Btuh) Clg	Area	Htg	Clg	Area	Htg	Clg
5	Gross Exposed walls and partitions	a 12C0	3.2	2.1	4408	****	****	4408	****	****						
		b	0.0	0.0	0	****	****	0	****	****						
		c	0.0	0.0	0	****	****	0	****	****						
		d	0.0	0.0	0	****	****	0	****	****						
		e	0.0	0.0	0	****	****	0	****	****						
		f	0.0	0.0	0	****	****	0	****	****						
6	Windows and glass doors Heating	a 3C0	26.1	**	908	23699	****	908	23699	****						
		b	0.0	**	0	0	****	0	0	****						
		c	0.0	**	0	0	****	0	0	****						
		d	0.0	**	0	0	****	0	0	****						
		e	0.0	**	0	0	****	0	0	****						
		f	0.0	**	0	0	****	0	0	****						
7	Windows and glass doors Cooling	North		16.0	641	****	10256	641	****	10256						
		NE/NW		0.0	0	****	0	0	****	0						
		E/W		46.0	105	****	4830	105	****	4830						
		SE/SW		0.0	0	****	0	0	****	0						
		South		25.0	162	****	4050	162	****	4050						
		Horz		0.0	0	****	0	0	****	0						
8	Other doors	a 11A0	21.2	13.9	96	2039	1337	96	2039	1337						
		b	0.0	0.0	0	0	0	0	0	0						
		c	0.0	0.0	0	0	0	0	0	0						
9	Net exposed walls and partitions	a 12C0	3.2	2.1	3404	11029	7230	3404	11029	7230						
		b	0.0	0.0	0	0	0	0	0	0						
		c	0.0	0.0	0	0	0	0	0	0						
		d	0.0	0.0	0	0	0	0	0	0						
		e	0.0	0.0	0	0	0	0	0	0						
		f	0.0	0.0	0	0	0	0	0	0						
10	Ceilings	a 16G0	1.2	1.5	4419	5250	6416	4419	5250	6416						
		b 16D0	1.8	2.3	282	538	658	282	538	658						
		c	0.0	0.0	0	0	0	0	0	0						
		d	0.0	0.0	0	0	0	0	0	0						
		e	0.0	0.0	0	0	0	0	0	0						
		f	0.0	0.0	0	0	0	0	0	0						
11	Floors (Note: room perimeter is displ. for slab floors)	a 22A0	29.2	0.0	380	11081	0	380	11081	0						
		b 20D0	1.9	0.8	0	0	0	0	0	0						
		c	0.0	0.0	0	0	0	0	0	0						
		d	0.0	0.0	0	0	0	0	0	0						
		e	0.0	0.0	0	0	0	0	0	0						
		f	0.0	0.0	0	0	0	0	0	0						
12	Infiltration Ventilation	a	22.5	7.1	1004	22552	7159	1004	22552	7159						
					0	0	0	0	0	0						
13	Subtotal loss=6+8..+11+12				****	76187	****	****	76187	****						
	Less external heating				****	0	****	****	0	****						
	Less transfer				****	0	****	****	0	****						
	Heating redistribution				****	0	****	****	0	****						
14	Duct loss				10%	7619	****	10%	7619	****						
15	Total loss = 13+14				****	83806	****	****	83806	****						
16	Int. gains: People @		600	5	****	3000	****	5	****	3000						
	Appl. @		1000	19	****	19000	****	19	****	19000						
17	Subtot RSH gain=7+8..+12+16				****	63936	****	****	63936	****						
	Less external cooling				****	0	****	****	0	****						
	Less transfer				****	0	****	****	0	****						
	Cooling redistribution				****	0	****	****	0	****						
18	Duct gain				10%	6394	****	10%	6394	****						
19	Total RSH gain=(17+18)*PLF				1.00	70330	****	1.00	70330	****						
20	Air required (cfm)					3761	****		3761	****						

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