

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Community Affairs Residential Whole Building Performance Method A

Project Name:	Morrison Residence	Builder:	<i>Morrison</i>
Address:		Permitting Office:	<i>Columbia</i>
City, State:	, FL	Permit Number:	<i>24778</i>
Owner:	Morrison	Jurisdiction Number:	<i>221000</i>
Climate Zone:	North		

1. New construction or existing	Addition	12. Cooling systems	
2. Single family or multi-family	Single family	a. N/A	
3. Number of units, if multi-family	1	b. N/A	
4. Number of Bedrooms	3	c. N/A	
5. Is this a worst case?	Yes	13. Heating systems	
6. Conditioned floor area (ft ²)	2644 ft ²	a. N/A	
7. Glass type ¹ and area: (Label reqd. by 13-104.4.5 if not default)		b. N/A	
a. U-factor:	Description Area	c. N/A	
(or Single or Double DEFAULT) 7a. (Dble Default)	161.0 ft ²	14. Hot water systems	
b. SHGC:		a. Electric Resistance	Cap: 40.0 gallons
(or Clear or Tint DEFAULT) 7b. (Clear)	161.0 ft ²	b. N/A	EF: 0.97
8. Floor types		c. N/A	
a. Slab-On-Grade Edge Insulation	R=19.0, 255.8(p) ft	15. HVAC credits	
b. N/A		(CF-Ceiling fan, CV-Cross ventilation,	
c. N/A		HF-Whole house fan,	
9. Wall types		PT-Programmable Thermostat,	
a. Frame, Wood, Exterior	R=19.0, 370.0 ft ²	MZ-C-Multizone cooling,	
b. Frame, Wood, Exterior	R=19.0, 320.8 ft ²	MZ-H-Multizone heating)	
c. Frame, Wood, Exterior	R=19.0, 296.0 ft ²		
d. Frame, Wood, Exterior	R=19.0, 176.8 ft ²		
e. 8 Others	867.3 ft ²		
10. Ceiling types			
a. Under Attic	R=30.0, 2644.0 ft ²		
b. N/A			
c. N/A			
11. Ducts			
a. Sup: Unc. Ret: Con. AH: Outdoors	Sup. R=6.0, 150.0 ft		
b. N/A			

Glass/Floor Area: 0.06

Total as-built points: 34706

Total base points: 35807

PASS

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

PREPARED BY: *6427 G114*

DATE: *7/7/06*

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: _____



¹ Predominant glass type. For actual glass type and areas, see Summer & Winter Glass output on pages 2&4.

SUMMER CALCULATIONS**Residential Whole Building Performance Method A - Details**

ADDRESS: , , FL,

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	2644.0	20.04	9537.4	Double, Clear	N	1.0 8.0	13.0	19.20	0.99	247.4
				Double, Clear	S	36.0 8.0	26.0	35.87	0.43	402.8
				Double, Clear	W	1.0 8.0	30.0	38.52	0.99	1146.3
				Double, Clear	N	1.0 8.0	30.0	19.20	0.99	570.9
				Double, Clear	E	1.0 8.0	10.0	42.06	0.99	416.9
				Double, Clear	E	1.0 8.0	52.0	42.06	0.99	2167.8
				As-Built Total:			161.0			4952.0
WALL TYPES										
Area X BSPM = Points				Type	R-Value		Area X	SPM	=	Points
Adjacent	0.0	0.00	0.0	Frame, Wood, Exterior	19.0		157.7	0.90		141.9
Exterior	2030.9	1.70	3452.5	Frame, Wood, Exterior	19.0		96.0	0.90		86.4
				Frame, Wood, Exterior	19.0		128.0	0.90		115.2
				Frame, Wood, Exterior	19.0		64.0	0.90		57.6
				Frame, Wood, Exterior	19.0		152.0	0.90		136.8
				Frame, Wood, Exterior	19.0		64.0	0.90		57.6
				Frame, Wood, Exterior	19.0		48.0	0.90		43.2
				Frame, Wood, Exterior	19.0		370.0	0.90		333.0
				Frame, Wood, Exterior	19.0		296.0	0.90		266.4
				Frame, Wood, Exterior	19.0		176.8	0.90		159.1
				Frame, Wood, Exterior	19.0		157.6	0.90		141.8
				Frame, Wood, Exterior	19.0		320.8	0.90		288.7
Base Total:				As-Built Total:			2030.9			1827.8
DOOR TYPES										
Area X BSPM = Points				Type			Area X	SPM	=	Points
Adjacent	0.0	0.00	0.0	Exterior Wood			80.0	6.10		488.2
Exterior	80.0	4.10	328.2							
Base Total:				As-Built Total:			80.0			488.2
CEILING TYPES										
Area X BSPM = Points				Type	R-Value		Area X	SPM X	SCM =	Points
Under Attic	2644.0	1.73	4574.1	Under Attic	30.0		2644.0	1.73 X 1.00		4574.1
Base Total:				As-Built Total:			2644.0			4574.1
FLOOR TYPES										
Area X BSPM = Points				Type	R-Value		Area X	SPM	=	Points
Slab	255.8(p)	-37.0	-9465.7	Slab-On-Grade Edge Insulation	19.0		255.8(p)	-35.70		-9133.1
Raised	0.0	0.00	0.0							
Base Total:				As-Built Total:			255.8			-9133.1

SUMMER CALCULATIONS

Residential Whole Building Performance Method A - Details

ADDRESS: , , FL,	PERMIT #:
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BASE				AS-BUILT			
INFILTRATION Area X BSPM = Points				Area X SPM = Points			
2644.0 10.21 26995.2				2644.0 10.21 26995.2			
Summer Base Points: 35421.7				Summer As-Built Points: 29704.2			
Total Summer Points	X System Multiplier	= Cooling Points		Total Component (System - Points)	X Cap Ratio (DM x DSM x AHU)	X Duct Multiplier (DM x DSM x AHU)	X System Multiplier Credit Multiplier = Cooling Points
35421.7	0.4266	15110.9		29704.2	1.00	1.265	0.407 1.000 15306.7

WINTER CALCULATIONS

Residential Whole Building Performance Method A - Details

ADDRESS: , , FL,

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	2644.0	12.74	6063.2	Double, Clear	N	1.0	8.0	13.0	24.58	1.00	319.4
				Double, Clear	S	36.0	8.0	26.0	13.30	3.66	1265.4
				Double, Clear	W	1.0	8.0	30.0	20.73	1.00	623.4
				Double, Clear	N	1.0	8.0	30.0	24.58	1.00	737.2
				Double, Clear	E	1.0	8.0	10.0	18.79	1.01	189.5
				Double, Clear	E	1.0	8.0	52.0	18.79	1.01	985.4
				As-Built Total:				161.0	4120.3		
WALL TYPES Area X BWPM = Points				Type	R-Value		Area X WPM = Points				
Adjacent	0.0	0.00	0.0	Frame, Wood, Exterior	19.0		157.7	2.20	346.9		
Exterior	2030.9	3.70	7514.2	Frame, Wood, Exterior	19.0		96.0	2.20	211.2		
				Frame, Wood, Exterior	19.0		128.0	2.20	281.6		
				Frame, Wood, Exterior	19.0		64.0	2.20	140.8		
				Frame, Wood, Exterior	19.0		152.0	2.20	334.4		
				Frame, Wood, Exterior	19.0		64.0	2.20	140.8		
				Frame, Wood, Exterior	19.0		48.0	2.20	105.6		
				Frame, Wood, Exterior	19.0		370.0	2.20	814.0		
				Frame, Wood, Exterior	19.0		296.0	2.20	651.2		
				Frame, Wood, Exterior	19.0		176.8	2.20	389.0		
				Frame, Wood, Exterior	19.0		157.6	2.20	346.7		
				Frame, Wood, Exterior	19.0		320.8	2.20	705.8		
Base Total:				As-Built Total:		2030.9		4467.9			
DOOR TYPES Area X BWPM = Points				Type	R-Value		Area X WPM = Points				
Adjacent	0.0	0.00	0.0	Exterior Wood			80.0	12.30	984.5		
Exterior	80.0	8.40	672.3								
Base Total:				As-Built Total:		80.0		984.5			
CEILING TYPES Area X BWPM = Points				Type	R-Value		Area X WPM X WCM = Points				
Under Attic	2644.0	2.05	5420.2	Under Attic	30.0		2644.0	2.05 X 1.00	5420.2		
Base Total:				As-Built Total:		2644.0		5420.2			
FLOOR TYPES Area X BWPM = Points				Type	R-Value		Area X WPM = Points				
Slab	255.8(p)	8.9	2276.9	Slab-On-Grade Edge Insulation	19.0		255.8(p)	7.00	1790.8		
Raised	0.0	0.00	0.0								
Base Total:				As-Built Total:		255.8		1790.8			

WINTER CALCULATIONS

Residential Whole Building Performance Method A - Details

ADDRESS: , , FL,

PERMIT #:

BASE				AS-BUILT					
INFILTRATION Area X BWPM = Points				Area X WPM = Points					
2644.0 -0.59 -1560.0				2644.0 -0.59 -1560.0					
Winter Base Points: 20386.9				Winter As-Built Points: 15223.7					
Total Winter X System = Heating Points Multiplier Points				Total X Cap X Duct X System X Credit = Heating Component Ratio Multiplier Multiplier Multiplier Points (System - Points) (DM x DSM x AHU)					
20386.9 0.6274 12790.7				15223.7 1.00 1.326 0.590 1.000 11902.2					

WATER HEATING & CODE COMPLIANCE STATUS

Residential Whole Building Performance Method A - Details

ADDRESS: , , FL,

PERMIT #:

BASE				AS-BUILT					
WATER HEATING									
Number of Bedrooms	X	Multiplier	= Total	Tank Volume	EF	Number of Bedrooms	X	Tank X Ratio	Multiplier X Credit = Total Multiplier
3		2635.00	7905.0	40.0	0.97	3		1.00	2499.18
				As-Built Total:					7497.5

CODE COMPLIANCE STATUS

BASE					AS-BUILT				
Cooling Points	+	Heating Points	+	Hot Water Points = Total Points	Cooling Points	+	Heating Points	+	Hot Water Points = Total Points
15111		12791		7905	15307		11902		7498
				35807					34706

PASS

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Community Affairs
Residential Whole Building Performance Method A

Project Name:	Morrison Residence	Builder:	
Address:		Permitting Office:	
City, State:	, FL	Permit Number:	
Owner:	Morrison	Jurisdiction Number:	
Climate Zone:	North		

1. New construction or existing	Addition	12. Cooling systems	
2. Single family or multi-family	Single family	a. N/A	
3. Number of units, if multi-family	1	b. N/A	
4. Number of Bedrooms	3	c. N/A	
5. Is this a worst case?	Yes	13. Heating systems	
6. Conditioned floor area (ft ²)	2644 ft ²	a. N/A	
7. Glass type ¹ and area: (Label reqd. by 13-104.4.5 if not default)		b. N/A	
a. U-factor:	Description Area	c. N/A	
(or Single or Double DEFAULT) 7a. (Dble Default)	161.0 ft ²	14. Hot water systems	
b. SHGC:		a. Electric Resistance	Cap: 40.0 gallons
(or Clear or Tint DEFAULT) 7b. (Clear)	161.0 ft ²	b. N/A	EF: 0.97
8. Floor types		c. Conservation credits	
a. Slab-On-Grade Edge Insulation	R=19.0, 255.8(p) ft	(HR-Heat recovery, Solar	
b. N/A		DHP-Dedicated heat pump)	
c. N/A		15. HVAC credits	
9. Wall types		(CF-Ceiling fan, CV-Cross ventilation,	
a. Frame, Wood, Exterior	R=19.0, 370.0 ft ²	HF-Whole house fan,	
b. Frame, Wood, Exterior	R=19.0, 320.8 ft ²	PT-Programmable Thermostat,	
c. Frame, Wood, Exterior	R=19.0, 296.0 ft ²	MZ-C-Multizone cooling,	
d. Frame, Wood, Exterior	R=19.0, 176.8 ft ²	MZ-H-Multizone heating)	
e. 8 Others	867.3 ft ²		
10. Ceiling types			
a. Under Attic	R=30.0, 2644.0 ft ²		
b. N/A			
c. N/A			
11. Ducts			
a. Sup: Unc. Ret: Con. AH: Outdoors	Sup. R=6.0, 150.0 ft		
b. N/A			

Glass/Floor Area: 0.06

Total as-built points: 34706

Total base points: 35807

PASS

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

PREPARED BY: GARY GILK

DATE: 2/7/08

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: _____



¹ Predominant glass type. For actual glass type and areas, see Summer & Winter Glass output on pages 2&4.

SUMMER CALCULATIONS

Residential Whole Building Performance Method A - Details

ADDRESS: , , FL,

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	2644.0	20.04	9537.4	Double, Clear	N	1.0	8.0	13.0	19.20	0.99	247.4
				Double, Clear	S	36.0	8.0	26.0	35.87	0.43	402.8
				Double, Clear	W	1.0	8.0	30.0	38.52	0.99	1146.3
				Double, Clear	N	1.0	8.0	30.0	19.20	0.99	570.9
				Double, Clear	E	1.0	8.0	10.0	42.06	0.99	416.9
				Double, Clear	E	1.0	8.0	52.0	42.06	0.99	2167.8
				As-Built Total: 161.0 4952.0							
WALL TYPES Area X BSPM = Points				Type	R-Value		Area X SPM = Points				
Adjacent	0.0	0.00	0.0	Frame, Wood, Exterior	19.0		157.7	0.90		141.9	
Exterior	2030.9	1.70	3452.5	Frame, Wood, Exterior	19.0		96.0	0.90		86.4	
				Frame, Wood, Exterior	19.0		128.0	0.90		115.2	
				Frame, Wood, Exterior	19.0		64.0	0.90		57.6	
				Frame, Wood, Exterior	19.0		152.0	0.90		136.8	
				Frame, Wood, Exterior	19.0		64.0	0.90		57.6	
				Frame, Wood, Exterior	19.0		48.0	0.90		43.2	
				Frame, Wood, Exterior	19.0		370.0	0.90		333.0	
				Frame, Wood, Exterior	19.0		296.0	0.90		266.4	
				Frame, Wood, Exterior	19.0		176.8	0.90		159.1	
				Frame, Wood, Exterior	19.0		157.6	0.90		141.8	
				Frame, Wood, Exterior	19.0		320.8	0.90		288.7	
Base Total: 2030.9 3452.5				As-Built Total: 2030.9 1827.8							
DOOR TYPES Area X BSPM = Points				Type			Area X SPM = Points				
Adjacent	0.0	0.00	0.0	Exterior Wood			80.0	6.10		488.2	
Exterior	80.0	4.10	328.2								
Base Total: 80.0 328.2				As-Built Total: 80.0 488.2							
CEILING TYPES Area X BSPM = Points				Type	R-Value		Area X SPM X SCM = Points				
Under Attic	2644.0	1.73	4574.1	Under Attic	30.0		2644.0	1.73 X 1.00		4574.1	
Base Total: 2644.0 4574.1				As-Built Total: 2644.0 4574.1							
FLOOR TYPES Area X BSPM = Points				Type	R-Value		Area X SPM = Points				
Slab	255.8(p)	-37.0	-9465.7	Slab-On-Grade Edge Insulation	19.0		255.8(p)	-35.70		-9133.1	
Raised	0.0	0.00	0.0								
Base Total: -9465.7				As-Built Total: 255.8 -9133.1							

SUMMER CALCULATIONS

Residential Whole Building Performance Method A - Details

ADDRESS: , , FL,

PERMIT #:

BASE				AS-BUILT			
INFILTRATION Area X BSPM = Points				Area X SPM = Points			
2644.0 10.21 26995.2				2644.0 10.21 26995.2			
Summer Base Points: 35421.7				Summer As-Built Points: 29704.2			
Total Summer X System = Cooling Points Multiplier Points				Total X Cap X Duct X System X Credit = Cooling Component Ratio Multiplier Multiplier Multiplier Points (System - Points) (DM x DSM x AHU)			
35421.7 0.4266 15110.9				29704.2 1.00 1.265 0.407 1.000 15306.7			

WINTER CALCULATIONS

Residential Whole Building Performance Method A - Details

ADDRESS: , , FL,

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	2644.0	12.74	6063.2	Double, Clear	N	1.0	8.0	13.0	24.58	1.00	319.4
				Double, Clear	S	36.0	8.0	26.0	13.30	3.66	1265.4
				Double, Clear	W	1.0	8.0	30.0	20.73	1.00	623.4
				Double, Clear	N	1.0	8.0	30.0	24.58	1.00	737.2
				Double, Clear	E	1.0	8.0	10.0	18.79	1.01	189.5
				Double, Clear	E	1.0	8.0	52.0	18.79	1.01	985.4
				As-Built Total:				161.0	4120.3		
WALL TYPES				Area X BWPM = Points							
				Type	R-Value		Area X WPM = Points				
Adjacent	0.0	0.00	0.0	Frame, Wood, Exterior	19.0		157.7	2.20		346.9	
Exterior	2030.9	3.70	7514.2	Frame, Wood, Exterior	19.0		96.0	2.20		211.2	
				Frame, Wood, Exterior	19.0		128.0	2.20		281.6	
				Frame, Wood, Exterior	19.0		64.0	2.20		140.8	
				Frame, Wood, Exterior	19.0		152.0	2.20		334.4	
				Frame, Wood, Exterior	19.0		64.0	2.20		140.8	
				Frame, Wood, Exterior	19.0		48.0	2.20		105.6	
				Frame, Wood, Exterior	19.0		370.0	2.20		814.0	
				Frame, Wood, Exterior	19.0		296.0	2.20		651.2	
				Frame, Wood, Exterior	19.0		176.8	2.20		389.0	
				Frame, Wood, Exterior	19.0		157.6	2.20		346.7	
				Frame, Wood, Exterior	19.0		320.8	2.20		705.8	
Base Total:				2030.9		7514.2		As-Built Total:			
								2030.9		4467.9	
DOOR TYPES				Area X BWPM = Points							
				Type	R-Value		Area X WPM = Points				
Adjacent	0.0	0.00	0.0	Exterior Wood			80.0	12.30		984.5	
Exterior	80.0	8.40	672.3								
Base Total:				80.0		672.3		As-Built Total:			
								80.0		984.5	
CEILING TYPES				Area X BWPM = Points							
				Type	R-Value		Area X WPM X WCM = Points				
Under Attic	2644.0	2.05	5420.2	Under Attic	30.0		2644.0	2.05 X 1.00		5420.2	
Base Total:				2644.0		5420.2		As-Built Total:			
								2644.0		5420.2	
FLOOR TYPES				Area X BWPM = Points							
				Type	R-Value		Area X WPM = Points				
Slab	255.8(p)	8.9	2276.9	Slab-On-Grade Edge Insulation	19.0		255.8(p)	7.00		1790.8	
Raised	0.0	0.00	0.0								
Base Total:				2276.9		1790.8		As-Built Total:			
								255.8		1790.8	

WINTER CALCULATIONS

Residential Whole Building Performance Method A - Details

ADDRESS: , , FL,

PERMIT #:

BASE				AS-BUILT					
INFILTRATION Area X BWPM = Points				Area X WPM = Points					
2644.0 -0.59 -1560.0				2644.0 -0.59 -1560.0					
Winter Base Points: 20386.9				Winter As-Built Points: 15223.7					
Total Winter X Points	System = Multiplier	Heating Points		Total X Cap X Duct X System X Credit = Heating Component Ratio Multiplier Multiplier Multiplier Points (System - Points) (DM x DSM x AHU)					
20386.9	0.6274	12790.7		15223.7	1.00	1.326	0.590	1.000	11902.2

WATER HEATING & CODE COMPLIANCE STATUS

Residential Whole Building Performance Method A - Details

ADDRESS: , , FL,

PERMIT #:

BASE				AS-BUILT					
WATER HEATING									
Number of Bedrooms	X	Multiplier	= Total	Tank Volume	EF	Number of Bedrooms	X	Tank X Ratio	Multiplier X Credit = Total Multiplier
3		2635.00	7905.0	40.0	0.97	3		1.00	2499.18
				As-Built Total:					7497.5

CODE COMPLIANCE STATUS

BASE					AS-BUILT				
Cooling Points	+	Heating Points	+	Hot Water Points = Total Points	Cooling Points	+	Heating Points	+	Hot Water Points = Total Points
15111		12791		7905	15307		11902		7498
				35807					34706

PASS