Florida Building Code, Fifth Edition (2014) - Energy Conservation

EnergyGauge Summit® Fla/Com-2015, Effective Date: June 30, 2015 -- Form 506-2014

ASHRAE 90.1-2010 - Energy Cost Budget Option

	Check List
Appli includ	cations for compliance with the Florida Building Code, Energy Conservation shall de:
	This Checklist
	An Input report generated from the software just after completing compliance calculations without any further changes
	The full compliance report generated by the software that contains the project summary, complaince summary, certifications and detailed component compliance reports
	Boxes appropriately checked in the Miscellanous report generated by the software at the end of the compliance report

PROJECT SUMMARY

Short Desc: Building B1 CZ1 Ret **Description:** TAM Building B1

Owner: Enter Owner's name here

Permit No: 0

Address1:Enter Address hereCity:Enter city hereAddress2:Enter Address hereState:Enter state here

Zip: 0

Type: Retail Class: New Finished building

Jurisdiction: MIAMI, MIAMI-DADE COUNTY, FL (232400)

Conditioned Area: 40000 SF

No of Stories: 1

Conditioned & UnConditioned Area: 40000 SF

Area entered from Plans 0 SF

Max Tonnage 158.2

If different, write in:

Compliance	Compliance Summary								
Component	Design	Criteria	Result						
Gross Energy Cost (in \$)	82,250.0	62,704.0	FAILED						
LIGHTING CONTROLS			PASSES						
EXTERNAL LIGHTING			PASSES						
HVAC SYSTEM			FAILS						
PLANT			No Entry						
WATER HEATING SYSTEMS			PASSES						
PIPING SYSTEMS			No Entry						
Met all required compliance from Check List?			Yes/No/NA						

IMPORTANT MESSAGE

Info 5009 -- -- An input report of this design building must be submitted along with this

Compliance Report

CERTIFICATIONS

Prepared By:	Building Official:
Date:	Date:
certify that this building is in compliance with the FLor	da Energy Efficiency Code
Owner Agent:	Date:
Owner Agent.	<i>Dute.</i>
	ystem design is in compliance with the Florida Energy
Required by Florida law, I hereby certify (*) that the s	
Required by Florida law, I hereby certify (*) that the s	/stem design is in compliance with the Florida Energy
Required by Florida law, I hereby certify (*) that the s fficiency Code Architect:	ystem design is in compliance with the Florida Energy Reg No:
Required by Florida law, I hereby certify (*) that the s fficiency Code Architect: Electrical Designer:	rystem design is in compliance with the Florida Energy Reg No: Reg No:

Type: Retail

(WEA File: Miami.tmy)

Building	End	Uses
-----------------	-----	------

	\$21,514	\$15,822
MISC EQUIPMT	585.50 171550	585.50 171550
	\$8,989	\$8,972
PUMPS & MISC	0.00	0.00
FUMFS & MISC	6	1
	\$0	\$0
SPACE COOL	1,832.10	1,647.60
	536813	482737
	\$28,129	\$25,247
SPACE HEAT	8.80	0.40
SPACE REAT	2577	130
	\$135	\$7
VENT FANS	1,529.50	825.90
	448144	241990
	\$23,483	\$12,656

Credits Applied: None

Passing Criteria = 62704

Design (including any credits) = 82250

Passing requires Proposed Building cost to be at most 100% of

Baseline cost. This Proposed Building is at 131.2%

6/2/2015

FAILS

Type: Retail

(WEA File: Miami.tmy)

External	Lighting	Compliance

	Environ Englishing Compliant						
Description	Category	Tradable?	Allowance (W/Unit)	Area or Length or No. of Units (Sqft or ft)	ELPA (W)	CLP (W)	
Ext Light 1	Walk way less than 10 feet wide	e Yes	1.00	200.0	200		

Tradable Surfaces: 0 (W) Allowance for Tradable: 210 (W)

All External Lighting: 0 (W)

Complicance check includes a excess/Base allowance of 10.00(W)

Project: Building B1 CZ1 Ret Title: TAM Building B1

Type: Retail

(WEA File: Miami.tmy)

Lighting Controls Compliance

Acronym	Ashrae Description ID	Area (sq.ft)	Design CP	Min Compli- CP ance
Interior	25,001 Sales Area	28,900	3	3 PASSES
Pr0Zo2Sp1	25,001 Sales Area	2,775	2	2 PASSES
Pr0Zo3Sp1	25,001 Sales Area	2,775	2	2 PASSES
Pr0Zo4Sp1	25,001 Sales Area	2,775	2	2 PASSES
Pr0Zo5Sp1	25,001 Sales Area	2,775	2	2 PASSES

PASSES

PASSES

Type: Retail

(WEA File: Miami.tmy)

System Report Compliance

Pr0Sy1	System 1	Constant Volume Packaged	No. of Units
		System902	1

Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Comp- liance
Cooling System	Air Conditioners Air Cooled > 760000 Btu/h Cooling Capacity	1898474	12.80	9.50	9.80	9.80	PASSES
Heating System	Heat Pumps Air Cooled (Heating Mode) > 135000 Btu/h Cooling Capacity	3039570	3.50	3.20			PASSES
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	56288	0.80	0.82			PASSES

Pr0Sy2 System 2 Constant Volume Packaged No. of Units System--902 1

Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Comp- liance
Cooling System	Air Conditioners Air Cooled 135000 to 240000 Btu/h Clg	146348	12.80	10.60	10.70	10.70	PASSES
Heating System	Capacity Heat Pumps Air Cooled (Heating Mode) > 135000	215490	3.50	3.20			PASSES
Air Handling System -Supply	Btu/h Cooling Capacity Air Handler (Supply) - Constant Volume	3991	0.80	0.82			PASSES

Pr0Sy3 System 3 Constant Volume Packaged No. of Units System--902 1

Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Comp- liance
Cooling System	Air Conditioners Air Cooled 135000 to 240000 Btu/h Clg Capacity	233934	12.80	10.60	10.70	10.70	PASSES
Heating System	Heat Pumps Air Cooled (Heating Mode) > 135000 Btu/h Cooling Capacity	392580	3.50	3.20			PASSES
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	7270	0.80	0.82			PASSES

6/2/2015 Page 6 of 8

Pr0Sy4 Sy		Constant Volume Packaged System				No. of Units		
Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Comp- liance	
Cooling System	Air Conditioners Air Cooled 135000 to 240000 Btu/h Clg Capacity	212905	12.80	10.60	10.70	10.70	PASSES	
Heating System	Heat Pumps Air Cooled (Heating Mode) > 135000 Btu/h Cooling Capacity	354360	3.00	3.20			FAILS	
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	6562	0.80	0.82			PASSES	
	ystem 5		Syste	tant Volume m	1 ackageu	1	lo. of Units 1	
Component	C 4	a • · ·	ъ.	Ti ee	ъ.	IDIX/		
	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Comp- liance	
Cooling System	Air Conditioners Air Cooled 240000 to 760000 Btu/h	Capacity 689165	_				•	
Cooling System Heating System	Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity Heat Pumps Air Cooled (Heating Mode) > 135000		Eff	Criteria	IPLV	Criteria	liance	
	Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity Heat Pumps Air Cooled	689165	Eff 8.90	Criteria 9.50	IPLV	Criteria	liance FAILS	
Heating System Air Handling	Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity Heat Pumps Air Cooled (Heating Mode) > 135000 Btu/h Cooling Capacity Air Handler (Supply) -	689165 861616	8.90 3.50	9.50 3.20	IPLV	Criteria	FAILS PASSES	

Plant Compliance									
Description	Installed No	Size	Design Eff	Min Eff	Design IPLV	Min IPLV	Category		Comp liance
								None	

6/2/2015 Page 7 of 8

(WEA File: Miami.tn		Water Heater Com	oliance				
Description	Туре	Category	Design Eff	Min Eff	Design Loss	Max Loss	Comp liance
Water Heater 1	Electric water heater	<= 12 [kW]	0.86	0.86			PASSES
							PASSES
		Piping Syste	m Compli	iance			
Category		inches] Runout? Te	rating Ins C mp [Btu-i F] .SF.	in/hr 1	Ins [hick [in]	Req Thick	_
						None	
Project: Building B1 Title: TAM Building Type: Retail (WEA File: Miami.tn	B1						
		Other Required	Complia	nce			
Category	Section	Requirement (write N/A					Check

6/2/2015 Page 8 of 8

Florida Building Code, Fifth Edition (2014) - Energy Conservation

EnergyGauge Summit® Fla/Com-2015, Effective Date: June 30, 2015 -- Form 506-2014 IECC 2012 - Total Building Performance Compliance Option

	Check List
Appli includ	cations for compliance with the Florida Building Code, Energy Conservation shall de:
	This Checklist
	An Input report generated from the software just after completing compliance calculations without any further changes
	The full compliance report generated by the software that contains the project summary, complaince summary, certifications and detailed component compliance reports
	Boxes appropriately checked in the Miscellanous report generated by the software at the end of the compliance report

PROJECT SUMMARY

Short Desc: Building B1 CZ1 Ret **Description:** TAM Building B1

Owner: Enter Owner's name here

Address1:Enter Address hereCity:Enter city hereAddress2:Enter Address hereState:Enter state here

Zip: 0

Type: Retail Class: New Finished building

Jurisdiction: MIAMI, MIAMI-DADE COUNTY, FL (232400)

Conditioned Area: 40000 SF

No of Stories: 1

Permit No: 0

Conditioned & UnConditioned Area: 40000 SF

Area entered from Plans 0 SF

Max Tonnage 158.2

If different, write in:

Compliance Summary						
Component	Design	Criteria	Result			
Gross Energy Cost (in \$)	77,663.0	51,960.0	FAILED			
LIGHTING CONTROLS			DA CODO			
LIGHTING CONTROLS EXTERNAL LIGHTING			PASSES			
HVAC SYSTEM			PASSES FAILS			
PLANT			No Entry			
WATER HEATING SYSTEMS			PASSES			
PIPING SYSTEMS			No Entry			
Met all required compliance from Check List?			Yes/No/NA			

IMPORTANT MESSAGE

Info 5009 -- -- An input report of this design building must be submitted along with this

Compliance Report

CERTIFICATIONS

Prepared By:	Building Official:
Date:	Date:
certify that this building is in compliance with the FLor	da Energy Efficiency Code
Owner Agent:	Date:
Owner Agent.	<i>Dute.</i>
	ystem design is in compliance with the Florida Energy
Required by Florida law, I hereby certify (*) that the s	
Required by Florida law, I hereby certify (*) that the s	/stem design is in compliance with the Florida Energy
Required by Florida law, I hereby certify (*) that the s fficiency Code Architect:	ystem design is in compliance with the Florida Energy Reg No:
Required by Florida law, I hereby certify (*) that the s fficiency Code Architect: Electrical Designer:	rystem design is in compliance with the Florida Energy Reg No: Reg No:

Type: Retail

(WEA File: Miami.tmy)

Building	End	Uses
-----------------	-----	------

	1) Proposed	2) Baseline
	5,068.10	3,996.80
	\$77,663	\$61,129
ELECTRICITY(MBtu/kWh/\$)	5,068.10	3,996.80
	1484947	1171061
	\$77,663	\$61,129
AREA LIGHTS	1,401.30	1,032.50
	410567	302527
	\$21,473	\$15,792
MISC EQUIPMT	585.50	585.50
	171550	171550
	\$8,972	\$8,955
PUMPS & MISC	0.00	0.00
	8	0
	\$0	\$0
SPACE COOL	1,692.10	1,609.40
	495773	471549
	\$25,929	\$24,615
SPACE HEAT	10.10	0.00
	2970	0
	\$155	\$0
VENT FANS	1,379.10	769.40
	404079	225435
	<i>\$21,133</i>	\$11,768

Credits Applied: None Passing Criteria = 51960

FAILS

Design (including any credits) = 77663

Passing requires Proposed Building cost to be at most 85% of

Baseline cost. This Proposed Building is at 127%

Type: Retail

(WEA File: Miami.tmy)

External	Lighting	Compliance

	2.1741.141.2.	<u> </u>	ompilare			
Description	Category	Tradable?	Allowance (W/Unit)	Area or Length or No. of Units (Sqft or ft)	ELPA (W)	CLP (W)
Ext Light 1	Walk way less than 10 feet wide	e Yes	1.00	200.0	200	

Tradable Surfaces: 0 (W) Allowance for Tradable: 210 (W)

All External Lighting: 0 (W)

Complicance check includes a excess/Base allowance of 10.00(W)

Project: Building B1 CZ1 Ret Title: TAM Building B1

Type: Retail

(WEA File: Miami.tmy)

Lighting Controls Compliance

Acronym	Ashrae Description ID	Area (sq.ft)	Design CP	Min Compli- CP ance
Interior	25,001 Sales Area	28,900	3	3 PASSES
Pr0Zo2Sp1	25,001 Sales Area	2,775	2	2 PASSES
Pr0Zo3Sp1	25,001 Sales Area	2,775	2	2 PASSES
Pr0Zo4Sp1	25,001 Sales Area	2,775	2	2 PASSES
Pr0Zo5Sp1	25,001 Sales Area	2,775	2	2 PASSES

PASSES

PASSES

Type: Retail

(WEA File: Miami.tmy)

System Report Compliance

Pr0Sy1	System 1	Constant Volume Packaged	No. of Units
		System902	1

Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Comp- liance
Cooling System	Air Conditioners Air Cooled > 760000 Btu/h Cooling Capacity	1898474	12.80	9.50	9.80	9.80	PASSES
Heating System	Heat Pumps Air Cooled (Heating Mode) > 135000 Btu/h Cooling Capacity	3039570	3.50	3.20			PASSES
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	56288	0.80	0.82			PASSES

Pr0Sy2 System 2 Constant Volume Packaged No. of Units System--902 1

Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Comp- liance
Cooling System	Air Conditioners Air Cooled 135000 to 240000 Btu/h Clg	146348	12.80	10.60	10.70	10.70	PASSES
Heating System	Capacity Heat Pumps Air Cooled (Heating Mode) > 135000	215490	3.50	3.20			PASSES
Air Handling System -Supply	Btu/h Cooling Capacity Air Handler (Supply) - Constant Volume	3991	0.80	0.82			PASSES

Pr0Sy3 System 3 Constant Volume Packaged No. of Units System--902 1

Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Comp- liance
Cooling System	Air Conditioners Air Cooled 135000 to 240000 Btu/h Clg Capacity	233934	12.80	10.60	10.70	10.70	PASSES
Heating System	Heat Pumps Air Cooled (Heating Mode) > 135000 Btu/h Cooling Capacity	392580	3.50	3.20			PASSES
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	7270	0.80	0.82			PASSES

6/2/2015 Page 6 of 8

Pr0Sy4 Sy	vstem 4		Const System	tant Volume m	Packaged	N	lo. of Units 1
Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Comp- liance
Cooling System	Air Conditioners Air Cooled 135000 to 240000 Btu/h Clg Capacity	212905	12.80	10.60	10.70	10.70	PASSES
Heating System	Heat Pumps Air Cooled (Heating Mode) > 135000 Btu/h Cooling Capacity	354360	3.00	3.20			FAILS
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	6562	0.80	0.82			PASSES
	ystem 5		Syste	tant Volume m	1 ackageu	1	lo. of Units 1
Component	C 4	a • · ·	ъ.	Ti ee	ъ.	IDIX/	
	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Comp- liance
Cooling System	Air Conditioners Air Cooled 240000 to 760000 Btu/h	Capacity 689165	_				•
Cooling System Heating System	Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity Heat Pumps Air Cooled (Heating Mode) > 135000		Eff	Criteria	IPLV	Criteria	liance
	Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity Heat Pumps Air Cooled	689165	Eff 8.90	Criteria 9.50	IPLV	Criteria	liance FAILS
Heating System Air Handling	Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity Heat Pumps Air Cooled (Heating Mode) > 135000 Btu/h Cooling Capacity Air Handler (Supply) -	689165 861616	8.90 3.50	9.50 3.20	IPLV	Criteria	FAILS PASSES

			Plant	Comp	liance				
Description	Installed No	Size	Design Eff	Min Eff	Design IPLV	Min IPLV	Category		Comp liance
								None	

6/2/2015 Page 7 of 8

(WEA File: Miami.tn		Water Heater Com	oliance				
Description	Туре	Category	Design Eff	Min Eff	Design Loss	Max Loss	Comp liance
Water Heater 1	Electric water heater	<= 12 [kW]	0.86	0.86			PASSES
							PASSES
		Piping Syste	m Compli	iance			
Category		inches] Runout? Te	rating Ins C mp [Btu-i F] .SF.	in/hr 1	Ins [hick [in]	Req Thick	_
						None	
Project: Building B1 Title: TAM Building Type: Retail (WEA File: Miami.tn	B1						
		Other Required	Complia	nce			
Category	Section	Requirement (write N/A					Check

6/2/2015 Page 8 of 8

DOE Based Sizing

PROJECT SUMMARY

Short Desc: Building B1 Description: TAM Building B1

Owner: Enter Owner's name here

Address1:Enter Address hereCity:Enter city hereAddress2:Enter Address hereState:Enter state here

Zip: 0

Type: Retail Class: New Finished building

Weather File: FL_MIAMI.TMY

Conditioned Area: 64975 SF

No of Stories: 1

Conditioned & UnConditioned Area: 64975 SF

Area entered from Plans 0 SF

Permit No: 0 Max Tonnage 0

If different, write in:

CERTIFICATIONS

of jurisdiction		by
Prepared By:	Building Official:	
Date:	Date:	
this building is in compliance as required by the author	rity of jurisdiction	
Owner Agent:	Date:	
-		
y law, I hereby certify (*) that the system design is in o		
		of
y law, I hereby certify (*) that the system design is in o	compliance as required by the authority o	of
y law, I hereby certify (*) that the system design is in o	compliance as required by the authority of Reg No:	of
y law, I hereby certify (*) that the system design is in o	Reg No:	of

DOE 2.1 E Based Sized Parameters (Beta Feature)

<u>IdSystem</u>	System Name	System Type	
1	Pr0Sy1	System 1	
	<u>Component</u>	Sized Value	<u>Units</u>
	Cooling System	1898474	BTU/HR
	Heating System Air Handling System -Supply	3039570 56288	Btu/h CFM
	All Handling System -Supply	30200	CHW
2	Pr0Sy2	System 2	
	Component	Sized Value	<u>Units</u>
	Cooling System	146348	BTU/HR
	Heating System Air Handling System -Supply	215490 3991	Btu/h CFM
	All Handling System -Supply	3991	CI IVI
3	Pr0Sy3	System 3	
	<u>Component</u>	Sized Value	<u>Units</u>
	Cooling System	233934	BTU/HR
	Heating System Air Handling System -Supply	392580 7270	Btu/h CFM
	All Flanding Gystem -Supply	1210	OI W
4	Pr0Sy4	System 4	
	Component	Sized Value	<u>Units</u>
	Cooling System	212905	BTU/HR
	Heating System Air Handling System -Supply	354360 6562	Btu/h CFM
	All Flanding Gystem -Supply	0302	OI W
5	Pr0Sy5	System 5	
	<u>Component</u>	Sized Value	<u>Units</u>
	Cooling System	689165	BTU/HR
	Heating System Air Handling System -Supply	861616 13056	Btu/h CFM
	All Hariding System -Supply	15050	OI IVI

Florida Building Code, Fifth Edition (2014) - Energy Conservation

EnergyGauge Summit® Fla/Com-2015, Effective Date: June 30, 2015 -- Form 506-2014

ASHRAE 90.1-2010 - Energy Cost Budget Option

	Check List
Appli includ	cations for compliance with the Florida Building Code, Energy Conservation shall de:
	This Checklist
	An Input report generated from the software just after completing compliance calculations without any further changes
	The full compliance report generated by the software that contains the project summary, complaince summary, certifications and detailed component compliance reports
	Boxes appropriately checked in the Miscellanous report generated by the software at the end of the compliance report

PROJECT SUMMARY

Short Desc: Building B1 CZ1 Sup Description: TAM Building B1

Owner: Enter Owner's name here

Address1:Enter Address hereCity:Enter city hereAddress2:Enter Address hereState:Enter state here

Zip: 0

Type: Retail Class: New Finished building

Jurisdiction: MIAMI, MIAMI-DADE COUNTY, FL (232400)

Conditioned Area:40000 SFConditioned & UnConditioned Area:40000 SFNo of Stories:1Area entered from Plans0 SF

Permit No: 0 Max Tonnage 141.8

If different, write in:

Compliance	Summary		
Component	Design	Criteria	Result
Gross Energy Cost (in \$)	82,250.0	62,704.0	FAILED
LIGHTING CONTROLS			PASSES
EXTERNAL LIGHTING			PASSES
HVAC SYSTEM			FAILS
PLANT			No Entry
WATER HEATING SYSTEMS			PASSES
PIPING SYSTEMS			No Entry
Met all required compliance from Check List?			Yes/No/NA

IMPORTANT MESSAGE

Info 5009 -- -- An input report of this design building must be submitted along with this

Compliance Report

CERTIFICATIONS

Prepared By:	Building Official:
Date:	Date:
certify that this building is in compliance with the FLor	da Energy Efficiency Code
Owner Agent:	Date:
Owner Agent.	<i>Dute.</i>
	ystem design is in compliance with the Florida Energy
Required by Florida law, I hereby certify (*) that the s	
Required by Florida law, I hereby certify (*) that the s	/stem design is in compliance with the Florida Energy
Required by Florida law, I hereby certify (*) that the s fficiency Code Architect:	ystem design is in compliance with the Florida Energy Reg No:
Required by Florida law, I hereby certify (*) that the s fficiency Code Architect: Electrical Designer:	rystem design is in compliance with the Florida Energy Reg No: Reg No:

Type: Retail

(WEA File: Miami.tmy)

Building End Uses

	\$21,514	\$15,822
MISC EQUIPMT	585.50 171550	585.50 171550
	\$8,989	\$8,972
PUMPS & MISC	0.00	0.00
FUMFS & MISC	6	1
	\$0	\$0
SPACE COOL	1,832.10	1,647.60
	536813	482737
	\$28,129	\$25,247
SPACE HEAT	8.80	0.40
SPACE REAT	2577	130
	\$135	\$7
VENT FANS	1,529.50	825.90
	448144	241990
	\$23,483	\$12,656

Credits Applied: None Passing Criteria = 62704

Design (including any credits) = 82250

Passing requires Proposed Building cost to be at most 100% of

Baseline cost. This Proposed Building is at 131.2%

FAILS

Type: Retail

Description

(WEA File: Miami.tmy)

External Lighting C	omplianc	e		
Tradable?	Allowance (W/Unit)	Area or Length or No. of Units (Sqft or ft)	CLP (W)	

Ext Light 1 Walk way less than 10 feet wide Yes 1.00 200.0 200

Tradable Surfaces: 0 (W) Allowance for Tradable: 210 (W)

Category

--- Anowance for fraudoic. 210 (w)

PASSES

All External Lighting: 0 (W)

Complicance check includes a excess/Base allowance of 10.00(W)

Project: Building B1 CZ1 Sup Title: TAM Building B1

Type: Retail

(WEA File: Miami.tmy)

Lighting Controls Compliance

Acronym	Ashrae Description ID	Area (sq.ft)	Design CP	Min Compli- CP ance
Interior	25,001 Sales Area	28,900	3	3 PASSES
Pr0Zo2Sp1	25,001 Sales Area	2,775	2	2 PASSES
Pr0Zo3Sp1	25,001 Sales Area	2,775	2	2 PASSES
Pr0Zo4Sp1	25,001 Sales Area	2,775	2	2 PASSES
Pr0Zo5Sp1	25,001 Sales Area	2,775	2	2 PASSES

PASSES

Type: Retail

(WEA File: Miami.tmy)

System Report Compliance

Pr0Sy1	System 1	Constant Volume Packaged No. of U	Jnits
		System902	1

Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Comp- liance
Cooling System	Air Conditioners Air Cooled > 760000 Btu/h Cooling Capacity	1701926	12.80	9.50	9.80	9.80	PASSES
Heating System	Heat Pumps Air Cooled (Heating Mode) > 135000 Btu/h Cooling Capacity	3036520	3.50	3.20			PASSES
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	56232	0.80	0.82			PASSES

Pr0Sy2 System 2 Constant Volume Packaged No. of Units System--902 1

Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Comp- liance
Cooling System	Air Conditioners Air Cooled 65000 to 135000 Btu/h Cooling Capacity	129178	12.80	11.00	10.70	11.20	FAILS
Heating System	Heat Pumps Air Cooled (Heating Mode) 65000 to 135000 Btu/h Clg Cap	215200	3.50	3.30			PASSES
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	3985	0.80	0.82			PASSES

Pr0Sy3 System 3 Constant Volume Packaged No. of Units System--902 1

Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Comp- liance
Cooling System	Air Conditioners Air Cooled 135000 to 240000 Btu/h Clg Capacity	213813	12.80	10.60	10.70	10.70	PASSES
Heating System	Heat Pumps Air Cooled (Heating Mode) > 135000 Btu/h Cooling Capacity	392280	3.50	3.20			PASSES
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	7264	0.80	0.82			PASSES

6/2/2015 Page 6 of 8

	vstem 4		Const System	tant Volume m	Packaged	N	lo. of Units 1
Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Comp- liance
Cooling System	Air Conditioners Air Cooled 135000 to 240000 Btu/h Clg Capacity	192822	12.80	10.60	10.70	10.70	PASSES
Heating System	Heat Pumps Air Cooled (Heating Mode) > 135000 Btu/h Cooling Capacity	354030	3.00	3.20			FAILS
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	6556	0.80	0.82			PASSES
Pr0Sy5 Sy	ystem 5		Syste	tant Volume m	1 ackageu	1	lo. of Units
	C .	G 1:	ъ.,	T. 00	ъ.	IDI I	
Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Comp- liance
Cooling System	Air Conditioners Air Cooled 240000 to 760000 Btu/h	Capacity 551074	_				Comp-
	Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity Heat Pumps Air Cooled (Heating Mode) > 135000		Eff	Criteria	IPLV	Criteria	Comp- liance
Cooling System	Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity Heat Pumps Air Cooled	551074	Eff 8.90	Criteria 9.50	IPLV	Criteria	Compliance FAILS
Cooling System Heating System Air Handling	Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity Heat Pumps Air Cooled (Heating Mode) > 135000 Btu/h Cooling Capacity Air Handler (Supply) -	551074 803799	8.90 3.50	9.50 3.20	IPLV	Criteria	Compliance FAILS PASSES

			Plant	Comp	liance				
Description	Installed No	Size	Design Eff	Min Eff	Design IPLV	Min IPLV	Category		Comp liance
								None	

6/2/2015 Page 7 of 8

Project: Building B1 CZ Title: TAM Building B1 Type: Retail (WEA File: Miami.tmy)	1 Sup						
X Z	7	Water Heater (Compliance				
Description	Туре	Category	Desig Eff		Design Loss		Comp liance
Water Heater 1	Electric water heater	<= 12 [kW]	0.86	0.86		P	PASSES
						PA	ASSES
		Piping S	System Com	pliance			
Category		ipe Dia Is inches] Runout?	Temp [B	s Cond tu-in/hr SF.F]	Ins Thick [in]	Req In Thick [i	
						None	
Project: Building B1 CZ Title: TAM Building B1 Type: Retail (WEA File: Miami.tmy)							
		Other Requ	iired Compl	liance			
Category	Section	Requirement (writ	e N/A in box if n	ot applicab	ole)		Check
Project: Building B	1.671.5	_					

6/2/2015 Page 8 of 8

Florida Building Code, Fifth Edition (2014) - Energy Conservation

EnergyGauge Summit® Fla/Com-2015, Effective Date: June 30, 2015 -- Form 506-2014 IECC 2012 - Total Building Performance Compliance Option

	Check List
Appli includ	cations for compliance with the Florida Building Code, Energy Conservation shall de:
	This Checklist
	An Input report generated from the software just after completing compliance calculations without any further changes
	The full compliance report generated by the software that contains the project summary, complaince summary, certifications and detailed component compliance reports
	Boxes appropriately checked in the Miscellanous report generated by the software at the end of the compliance report

PROJECT SUMMARY

Short Desc: Building B1 CZ1 Sup **Description:** TAM Building B1

Owner: Enter Owner's name here

Address1: Enter Address here City: Enter city here Address2: Enter Address here State: Enter state here

Zip: 0

Type: Retail Class: New Finished building

Jurisdiction: MIAMI, MIAMI-DADE COUNTY, FL (232400)

Conditioned Area: 40000 SF Conditioned & UnConditioned Area: 40000 SF No of Stories: 1 Area entered from Plans 0 SF Permit No: 0

Max Tonnage 141.8

If different, write in:

Complianc	e Summary		
Component	Design	Criteria	Result
Gross Energy Cost (in \$)	77,663.0	51,960.0	FAILED
LIGHTING CONTROLS			PASSES
EXTERNAL LIGHTING			PASSES
HVAC SYSTEM			FAILS
PLANT			No Entry
WATER HEATING SYSTEMS			PASSES
PIPING SYSTEMS			No Entry
Met all required compliance from Check List?			Yes/No/NA

IMPORTANT MESSAGE

Info 5009 -- -- An input report of this design building must be submitted along with this

Compliance Report

CERTIFICATIONS

Prepared By:	Building Official:
Date:	Date:
certify that this building is in compliance with the FLor	da Energy Efficiency Code
Owner Agent:	Date:
Owner Agent.	<i>Dute.</i>
	ystem design is in compliance with the Florida Energy
Required by Florida law, I hereby certify (*) that the s	
Required by Florida law, I hereby certify (*) that the s	/stem design is in compliance with the Florida Energy
Required by Florida law, I hereby certify (*) that the s fficiency Code Architect:	ystem design is in compliance with the Florida Energy Reg No:
Required by Florida law, I hereby certify (*) that the s fficiency Code Architect: Electrical Designer:	rystem design is in compliance with the Florida Energy Reg No: Reg No:

Type: Retail

(WEA File: Miami.tmy)

Building End Uses

	1) Proposed	2) Baseline
al	5,068.10	3,996.80
	\$77,663	\$61,129
ELECTRICITY(MBtu/kWh/\$)	5,068.10	3,996.80
	1484947	1171061
	\$77,663	\$61,129
AREA LIGHTS	1,401.30	1,032.50
	410567	302527
	\$21,473	\$15,792
MISC EQUIPMT	585.50	585.50
	171550	171550
	\$8,972	\$8,955
PUMPS & MISC	0.00	0.00
	8	0
	\$0	\$0
SPACE COOL	1,692.10	1,609.40
	495773	471549
	\$25,929	\$24,615
SPACE HEAT	10.10	0.00
	2970	0
	\$155	\$0
VENT FANS	1,379.10	769.40
	404079	225435
	<i>\$21,133</i>	\$11,768

Credits Applied: None
Passing Criteria = 51960

Design (including any credits) = 77663

Passing requires Proposed Building cost to be at most 85% of

Baseline cost. This Proposed Building is at 127%

6/2/2015

FAILS

Type: Retail

Description

(WEA File: Miami.tmy)

External Lighting C	omplianc	e		
Tradable?	Allowance (W/Unit)	Area or Length or No. of Units (Sqft or ft)	CLP (W)	

Ext Light 1 Walk way less than 10 feet wide Yes 1.00 200.0 200

Tradable Surfaces: 0 (W) Allowance for Tradable: 210 (W)

Category

--- Anowance for fraudoic. 210 (w)

PASSES

All External Lighting: 0 (W)

Complicance check includes a excess/Base allowance of 10.00(W)

Project: Building B1 CZ1 Sup Title: TAM Building B1

Type: Retail

(WEA File: Miami.tmy)

Lighting Controls Compliance

Acronym	Ashrae Description ID	Area (sq.ft)	Design CP	Min Compli- CP ance
Interior	25,001 Sales Area	28,900	3	3 PASSES
Pr0Zo2Sp1	25,001 Sales Area	2,775	2	2 PASSES
Pr0Zo3Sp1	25,001 Sales Area	2,775	2	2 PASSES
Pr0Zo4Sp1	25,001 Sales Area	2,775	2	2 PASSES
Pr0Zo5Sp1	25,001 Sales Area	2,775	2	2 PASSES

PASSES

Type: Retail

(WEA File: Miami.tmy)

System Report Compliance

Pr0Sy1	System 1	Constant Volume Packaged No. of U	Jnits
		System902	1

Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Comp- liance
Cooling System	Air Conditioners Air Cooled > 760000 Btu/h Cooling Capacity	1701926	12.80	9.50	9.80	9.80	PASSES
Heating System	Heat Pumps Air Cooled (Heating Mode) > 135000 Btu/h Cooling Capacity	3036520	3.50	3.20			PASSES
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	56232	0.80	0.82			PASSES

Pr0Sy2 System 2 Constant Volume Packaged No. of Units System--902 1

Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Comp- liance
Cooling System	Air Conditioners Air Cooled 65000 to 135000 Btu/h Cooling Capacity	129178	12.80	11.00	10.70	11.20	FAILS
Heating System	Heat Pumps Air Cooled (Heating Mode) 65000 to 135000 Btu/h Clg Cap	215200	3.50	3.30			PASSES
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	3985	0.80	0.82			PASSES

Pr0Sy3 System 3 Constant Volume Packaged No. of Units System--902 1

Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Comp- liance
Cooling System	Air Conditioners Air Cooled 135000 to 240000 Btu/h Clg Capacity	213813	12.80	10.60	10.70	10.70	PASSES
Heating System	Heat Pumps Air Cooled (Heating Mode) > 135000 Btu/h Cooling Capacity	392280	3.50	3.20			PASSES
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	7264	0.80	0.82			PASSES

6/2/2015 Page 6 of 8

Component Category Capacity Eff Design Eff Eff Design IPLV Criteria Component IPLV Criteria Component III Criteria Component III Criteria Component III Criteria Air Conditioners Air Cooled 192822 12.80 10.60 10.70 10.70 PASSES Heating System Heat Pumps Air Cooled (Heating Mode) > 135000 Btu/h Cooling Capacity 354030 3.00 3.20 ■ FAILS Air Handling Air Handler (Supply) - System -Supply Air Handler (Supply) - Constant Volume 6556 0.80 0.82 ■ No. of Units System ProSy5 System 5 Capacity Eff Criteria Packaged System No. of Units System Component Category Capacity Eff Pesign Eff Design Pluy Pub. Criteria Passes Cooling System Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity 8.90 9.50 8.00 9.60 FAILS PASSES Heating System Heat Pumps Air Cooled (Heating Mode) > 1350000 Btu/h Cooling Capacity 8.90 3.50 3.20 PASSES Air Handling Air Handler (Supply) - Constant Volume 12995 0.80		rstem 4			Constant Volume Packaged System			No. of Units		
135000 to 240000 Btu/h Clg	Component	Category	Capacity			_		•		
Heating System Heat Pumps Air Cooled (Heating Mode) > 135000 Btu/h Cooling Capacity Air Handling Air Handler (Supply) - 6556 0.80 0.82 Prosystem -Supply Constant Volume Component Category Capacity Besign Eff Criteria IPLV Criteria liance Cooling System Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity Heating System Heat Pumps Air Cooled 803799 3.50 3.20 Air Handling Air Handler (Supply) - 12995 0.80 0.82 PASSES	Cooling System	135000 to 240000 Btu/h Clg	192822	12.80	10.60	10.70	10.70	PASSES		
Air Handling System -Supply Constant Volume Component Category Capacity Design Eff Criteria IPLV Criteria liance Cooling System Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity Heating System Heat Pumps Air Cooled (Heating Mode) > 135000 Btu/h Cooling Capacity Air Handling Air Handler (Supply) - 12995 0.80 0.82 PASSES	Heating System	Heat Pumps Air Cooled (Heating Mode) > 135000	354030	3.00	3.20			FAILS		
Component Category Capacity Design Eff Criteria IPLV Compliance Cooling System Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity Heating System Heat Pumps Air Cooled (Heating Mode) > 135000 Btu/h Cooling Capacity Air Handling Air Handler (Supply) - 12995 0.80 0.82 PASSES	_	Air Handler (Supply) -	6556	0.80	0.82			PASSES		
Cooling System Air Conditioners Air Cooled 2551074 8.90 9.50 8.00 9.60 FAILS 240000 to 760000 Btu/h Cooling Capacity Heating System Heat Pumps Air Cooled (Heating Mode) > 135000 Btu/h Cooling Capacity Air Handling Air Handler (Supply) - 12995 0.80 0.82 PASSES	Pr0Sy5 Sy	stem 5		Const	ant Volume	Packaged	N	o. of Units		
$ \begin{array}{c} 240000 \text{ to } 760000 \text{ Btu/h} \\ \text{Cooling Capacity} \\ \text{Heating System} & \text{Heat Pumps Air Cooled} \\ \text{Heat Pumps Air Cooled} \\ \text{(Heating Mode)} > 135000 \\ \text{Btu/h Cooling Capacity} \\ \text{Air Handling} & \text{Air Handler (Supply)} - \\ 12995 & 0.80 & 0.82 & \textbf{PASSES} \end{array} $			Canacity	System	m			1		
Heating System Heat Pumps Air Cooled 803799 3.50 3.20 PASSES (Heating Mode) > 135000 Btu/h Cooling Capacity Air Handling Air Handler (Supply) - 12995 0.80 0.82 PASSES			Capacity	System	Eff	Design	IPLV	Comp-		
Air Handling Air Handler (Supply) - 12995 0.80 0.82 PASSES	Component	Category Air Conditioners Air Cooled 240000 to 760000 Btu/h		Syster Design Eff	m Eff Criteria	Design IPLV	IPLV Criteria	Comp- liance		
	Component Cooling System	Category Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity Heat Pumps Air Cooled (Heating Mode) > 135000	551074	Design Eff 8.90	Eff Criteria 9.50	Design IPLV	IPLV Criteria	Compliance FAILS		
	Component Cooling System Heating System Air Handling	Category Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity Heat Pumps Air Cooled (Heating Mode) > 135000 Btu/h Cooling Capacity Air Handler (Supply) -	551074 803799	Design Eff 8.90	Eff Criteria 9.50 3.20	Design IPLV	IPLV Criteria	Compliance FAILS PASSES		

Plant Compliance									
Description	Installed No	Size	Design Eff	Min Eff	Design IPLV	Min IPLV	Category		Comp liance
								None	

6/2/2015 Page 7 of 8

Project: Building B1 CZ Title: TAM Building B1 Type: Retail (WEA File: Miami.tmy)	A Sup						
X Z	1	Water Heater (Compliance				
Description	Туре	Category	Desigi Eff	n Min Eff	Design Loss		omp ance
Water Heater 1	Electric water heater	<= 12 [kW]	0.86	0.86		PA	ASSES
						PA	SSES
		Piping S	System Comp	oliance			
Category		ipe Dia Is inches] Runout?	Temp [Bt	Cond u-in/hr SF.F]	Ins Thick [in]	Req Ins Thick [in	
						None	
Project: Building B1 CZ Title: TAM Building B1 Type: Retail (WEA File: Miami.tmy)							
		Other Requ	iired Compli	ance			
Category	Section	Requirement (writ	e N/A in box if no	t applicab	le)		Check
Project: Building B	1 C71 Sus						

6/2/2015 Page 8 of 8

DOE Based Sizing

PROJECT SUMMARY

Short Desc: Building B1 CZ1 Sup Description: TAM Building B1

Owner: Enter Owner's name here

Address1:Enter Address hereCity:Enter city hereAddress2:Enter Address hereState:Enter state here

Zip: 0

Type: Retail Class: New Finished building

Weather File: FL_MIAMI.TMY

Conditioned Area: 64975 SF Conditioned & UnConditioned Area: 64975 SF

No of Stories:1Area entered from Plans0 SFPermit No:0Max Tonnage158.2

If different, write in:

CERTIFICATIONS

of jurisdiction		by
Prepared By:	Building Official:	
Date:	Date:	
this building is in compliance as required by the author	rity of jurisdiction	
Owner Agent:	Date:	
-		
y law, I hereby certify (*) that the system design is in o		
		of
y law, I hereby certify (*) that the system design is in o	compliance as required by the authority o	of
y law, I hereby certify (*) that the system design is in o	compliance as required by the authority of Reg No:	of
y law, I hereby certify (*) that the system design is in o	Reg No:	of

DOE 2.1 E Based Sized Parameters (Beta Feature)

<u>IdSystem</u>	System Name	System Type	
1	Pr0Sy1	System 1	
	<u>Component</u>	Sized Value	<u>Units</u>
	Cooling System	1701926	BTU/HR
	Heating System Air Handling System -Supply	3036520 56232	Btu/h CFM
	All Handling System -Supply	30232	CI IVI
2	Pr0Sy2	System 2	
	<u>Component</u>	Sized Value	<u>Units</u>
	Cooling System	129178	BTU/HR
	Heating System Air Handling System -Supply	215200 3985	Btu/h CFM
	All Handling System -Supply	3903	CI IVI
3	Pr0Sy3	System 3	
	<u>Component</u>	Sized Value	<u>Units</u>
	Cooling System	213813	BTU/HR
	Heating System Air Handling System -Supply	392280 7264	Btu/h CFM
	All Harlaining Gystem -Supply	7204	OI W
4	Pr0Sy4	System 4	
	<u>Component</u>	Sized Value	<u>Units</u>
	Cooling System	192822	BTU/HR
	Heating System Air Handling System -Supply	354030 6556	Btu/h CFM
	All Harlaining Gystem -Supply	0000	OI W
5	Pr0Sy5	System 5	
	<u>Component</u>	Sized Value	<u>Units</u>
	Cooling System	551074	BTU/HR
	Heating System Air Handling System -Supply	803799 12995	Btu/h CFM
	All Hariding System -Supply	12330	OI IVI

Florida Building Code, Fifth Edition (2014) - Energy Conservation

EnergyGauge Summit® Fla/Com-2015, Effective Date: June 30, 2015 -- Form 506-2014

ASHRAE 90.1-2010 - Energy Cost Budget Option

	Check List
Appli includ	cations for compliance with the Florida Building Code, Energy Conservation shall de:
	This Checklist
	An Input report generated from the software just after completing compliance calculations without any further changes
	The full compliance report generated by the software that contains the project summary, complaince summary, certifications and detailed component compliance reports
	Boxes appropriately checked in the Miscellanous report generated by the software at the end of the compliance report

PROJECT SUMMARY

Short Desc: Building B1 CZ2 Ret **Description:** TAM Building B1

Owner: Enter Owner's name here

Address1:Enter Address hereCity:Enter city hereAddress2:Enter Address hereState:Enter state here

Zip: 0

Type: Retail Class: New Finished building

Jurisdiction: ORLANDO, ORANGE COUNTY, FL (582100)

Conditioned Area: 40000 SF

No of Stories: 1

Permit No: 0

Conditioned & UnConditioned Area: 40000 SF

Area entered from Plans 0 SF

Max Tonnage 163.7

If different, write in:

Compliance Summary							
Component	Design	Criteria	Result				
Gross Energy Cost (in \$)	78,570.0	56,555.0	FAILED				
LIGHTING CONTROLS			PASSES				
EXTERNAL LIGHTING			PASSES				
HVAC SYSTEM			PASSES				
PLANT			No Entry				
WATER HEATING SYSTEMS			PASSES				
PIPING SYSTEMS			No Entry				
Met all required compliance from Check List?			Yes/No/NA				

IMPORTANT MESSAGE

Info 5009 -- -- An input report of this design building must be submitted along with this Compliance Report

CERTIFICATIONS

Prepared By:	Building Official:
Date:	Date:
certify that this building is in compliance with the FLor	da Energy Efficiency Code
Owner Agent:	Date:
Owner Agent.	<i>Dute.</i>
	ystem design is in compliance with the Florida Energy
Required by Florida law, I hereby certify (*) that the s	
Required by Florida law, I hereby certify (*) that the s	/stem design is in compliance with the Florida Energy
Required by Florida law, I hereby certify (*) that the s fficiency Code Architect:	ystem design is in compliance with the Florida Energy Reg No:
Required by Florida law, I hereby certify (*) that the s fficiency Code Architect: Electrical Designer:	rystem design is in compliance with the Florida Energy Reg No: Reg No:

Type: Retail

(WEA File: FL_ORLANDO_INTL_ARPT.tm3)

Building End Uses

	1) Proposed	2) Baseline
	5,107.80	3,690.60
	\$78,570	\$56,555
ELECTRICITY(MBtu/kWh/\$)	5,107.80	3,690.60
	1496576	1081351
	\$78,570	\$56,555
AREA LIGHTS	1,401.30	1,032.50
	410567	302527
	\$21,555	\$15,822
MISC EQUIPMT	585.50	585.50
	171550	171550
	\$9,006	\$8,972
PUMPS & MISC	0.20	0.00
	57	13
	\$3	\$1
SPACE COOL	1,412.40	1,273.40
	413824	373110
	\$21,726	\$19,514
SPACE HEAT	85.80	5.30
	25144	1548
	\$1,320	\$81
VENT FANS	1,622.60	793.90
	475434	232603
	\$24,960	\$12,165

Credits Applied: None

Passing Criteria = 56555

Design (including any credits) = 78570

Passing requires Proposed Building cost to be at most 100% of

Baseline cost. This Proposed Building is at 138.9%

6/2/2015

FAILS

Type: Retail

(WEA File: FL_ORLANDO_INTL_ARPT.tm3)

External Lighting	Compliance
--------------------------	------------

Description	Category	Tradable?	Allowance (W/Unit)	Area or Length or No. of Units (Sqft or ft)	ELPA (W)	CLP (W)	
Ext Light 1	Walk way less than 10 feet wide	e Yes	1.00	200.0	200		

Tradable Surfaces: 0 (W) Allowance for Tradable: 210 (W)

races. U (W) Allowance for Tradable. 210 (W)

All External Lighting: 0 (W)

Complicance check includes a excess/Base allowance of 10.00(W)

Project: Building B1 CZ2 Ret Title: TAM Building B1

Type: Retail

(WEA File: FL_ORLANDO_INTL_ARPT.tm3)

Lighting Controls Compliance

Acronym	Ashrae Description ID	Area (sq.ft)	Design CP	Min Compli- CP ance
Interior	25,001 Sales Area	28,900	3	3 PASSES
Pr0Zo2Sp1	25,001 Sales Area	2,775	2	2 PASSES
Pr0Zo3Sp1	25,001 Sales Area	2,775	2	2 PASSES
Pr0Zo4Sp1	25,001 Sales Area	2,775	2	2 PASSES
Pr0Zo5Sp1	25,001 Sales Area	2,775	2	2 PASSES

PASSES

PASSES

Type: Retail

(WEA File: FL_ORLANDO_INTL_ARPT.tm3)

Pr0Sy1	System 1	Constant Volume Packaged No	o. of Units
		System902	1

Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Comp- liance
Cooling System	Air Conditioners Air Cooled > 760000 Btu/h Cooling Capacity	1963849	12.60	9.50	9.80	9.80	PASSES
Heating System	Heat Pumps Air Cooled (Heating Mode) > 135000 Btu/h Cooling Capacity	3240050	3.50	3.20			PASSES
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	60001	0.80	0.82			PASSES

Pr0Sy2 System 2 Constant Volume Packaged No. of Units System--902 1

Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Comp- liance
Cooling System	Air Conditioners Air Cooled 135000 to 240000 Btu/h Clg Capacity	143053	12.60	10.60	10.70	10.70	PASSES
Heating System	Heat Pumps Air Cooled (Heating Mode) > 135000 Btu/h Cooling Capacity	218700	3.50	3.20			PASSES
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	4050	0.80	0.82			PASSES

Pr0Sy3 System 3 Constant Volume Packaged No. of Units System--902 1

Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Comp- liance
Cooling System	Air Conditioners Air Cooled 135000 to 240000 Btu/h Clg Capacity	238026	12.60	10.60	10.70	10.70	PASSES
Heating System	Heat Pumps Air Cooled (Heating Mode) > 135000 Btu/h Cooling Capacity	413160	3.50	3.20			PASSES
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	7651	0.80	0.82			PASSES

6/2/2015 Page 6 of 8

Pr0Sy4 System 4			Const Syster	tant Volume m	Packaged	N	o. of Units 1
Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Comp- liance
Cooling System	Air Conditioners Air Cooled 135000 to 240000 Btu/h Clg Capacity	218241	12.60	10.60	10.70	10.70	PASSES
Heating System	Heat Pumps Air Cooled (Heating Mode) > 135000 Btu/h Cooling Capacity	371760	3.50	3.20			PASSES
	Air Handler (Supply) -	6884	0.80	0.82			PASSES
Air Handling System -Supply Pr0Sy5 Sys	Constant Volume			ant Volume	Packaged	N	o. of Units
System -Supply	Constant Volume	Capacity	System Design	m Eff	Packaged Design	N IPLV	o. of Units 1 Comp-
System -Supply Pr0Sy5 Sys	Constant Volume	Capacity	Syster	m			1
System -Supply Pr0Sy5 Sys	Constant Volume Stem 5 Category Air Conditioners Air Cooled 240000 to 760000 Btu/h	Capacity 681756	System Design	m Eff	Design	IPLV	Comp-
Pr0Sy5 Sys Component	Constant Volume stem 5 Category Air Conditioners Air Cooled		Syster Design Eff	m Eff Criteria	Design IPLV	IPLV Criteria	Compliance

			Plant	Comp	liance				
Description	Installed No	Size	Design Eff	Min Eff	Design IPLV	Min IPLV	Category		Comp liance
								None	

6/2/2015 Page 7 of 8

Project: Building B1 CZ2 Ret Title: TAM Building B1 Type: Retail (WEA File: FL_ORLANDO_INTL_ARPT.tm3) Water Heater Compliance Design Design Max Min Comp Description Type Category Eff Eff Loss Loss liance Water Heater 1 0.86 250.00 293.40 PASSES Electric water heater > 12 [kW]**PASSES Piping System Compliance** Pipe Dia Operating Compliance Category Is **Ins Cond** Ins Req Ins Thick [in] [inches] Runout? Temp [Btu-in/hr Thick [in] .SF.F] [F] None Project: Building B1 CZ2 Ret Title: TAM Building B1 Type: Retail (WEA File: FL ORLANDO INTL ARPT.tm3) **Other Required Compliance** Category Section Requirement (write N/A in box if not applicable) Check **Project: Building B1 CZ2 Ret**

Florida Building Code, Fifth Edition (2014) - Energy Conservation

EnergyGauge Summit® Fla/Com-2015, Effective Date: June 30, 2015 -- Form 506-2014 IECC 2012 - Total Building Performance Compliance Option

	Check List
Appli includ	cations for compliance with the Florida Building Code, Energy Conservation shall de:
	This Checklist
	An Input report generated from the software just after completing compliance calculations without any further changes
	The full compliance report generated by the software that contains the project summary, complaince summary, certifications and detailed component compliance reports
	Boxes appropriately checked in the Miscellanous report generated by the software at the end of the compliance report

PROJECT SUMMARY

Short Desc: Building B1 CZ2 Ret **Description:** TAM Building B1

Owner: Enter Owner's name here

Address1:Enter Address hereCity:Enter city hereAddress2:Enter Address hereState:Enter state here

Zip: 0

Type: Retail Class: New Finished building

Jurisdiction: ORLANDO, ORANGE COUNTY, FL (582100)

Conditioned Area: 40000 SF

No of Stories: 1

Permit No: 0

Conditioned & UnConditioned Area: 40000 SF

Area entered from Plans 0 SF

Max Tonnage 163.7

If different, write in:

Compliance Summary						
Component	Design	Criteria	Result			
Gross Energy Cost (in \$)	74,121.0	48,761.0	FAILED			
LIGHTING CONTROLS			PASSES			
EXTERNAL LIGHTING			PASSES			
HVAC SYSTEM			PASSES			
PLANT			No Entry			
WATER HEATING SYSTEMS			PASSES			
PIPING SYSTEMS			No Entry			
Met all required compliance from Check List?			Yes/No/NA			

IMPORTANT MESSAGE

Info 5009 -- -- An input report of this design building must be submitted along with this

Compliance Report

CERTIFICATIONS

Prepared By:	Building Official:
Date:	Date:
certify that this building is in compliance with the FLor	da Energy Efficiency Code
Owner Agent:	Date:
Owner Agent.	<i>Dute.</i>
	ystem design is in compliance with the Florida Energy
Required by Florida law, I hereby certify (*) that the s	
Required by Florida law, I hereby certify (*) that the s	/stem design is in compliance with the Florida Energy
Required by Florida law, I hereby certify (*) that the s fficiency Code Architect:	ystem design is in compliance with the Florida Energy Reg No:
Required by Florida law, I hereby certify (*) that the s fficiency Code Architect: Electrical Designer:	rystem design is in compliance with the Florida Energy Reg No: Reg No:

Type: Retail

(WEA File: FL_ORLANDO_INTL_ARPT.tm3)

Building End Uses

Credits Applied: None Passing Criteria = 48761

Design (including any credits) = 74121

Passing requires Proposed Building cost to be at most 85% of

Baseline cost. This Proposed Building is at 129.2%

Type: Retail

(WEA File: FL_ORLANDO_INTL_ARPT.tm3)

External Lighting C	Compliance
----------------------------	------------

Date har Lighting Compliance						
Description	Category	Tradable?	Allowance (W/Unit)	Area or Length or No. of Units (Sqft or ft)	ELPA (W)	CLP (W)
Ext Light 1	Walk way less than 10 feet wide	e Yes	1.00	200.0	200	

Tradable Surfaces: 0 (W) Allowance for Tradable: 210 (W)

PASSES

All External Lighting: 0 (W)

Complicance check includes a excess/Base allowance of 10.00(W)

Project: Building B1 CZ2 Ret Title: TAM Building B1

Type: Retail

(WEA File: FL_ORLANDO_INTL_ARPT.tm3)

Lighting Controls Compliance

Acronym	Ashrae Description ID	Area (sq.ft)	Design CP	Min Compli- CP ance
Interior	25,001 Sales Area	28,900	3	3 PASSES
Pr0Zo2Sp1	25,001 Sales Area	2,775	2	2 PASSES
Pr0Zo3Sp1	25,001 Sales Area	2,775	2	2 PASSES
Pr0Zo4Sp1	25,001 Sales Area	2,775	2	2 PASSES
Pr0Zo5Sp1	25,001 Sales Area	2,775	2	2 PASSES

PASSES

Type: Retail

(WEA File: FL_ORLANDO_INTL_ARPT.tm3)

Pr0Sy1	System 1	Constant Volume Packaged No	o. of Units
		System902	1

Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Comp- liance
Cooling System	Air Conditioners Air Cooled > 760000 Btu/h Cooling Capacity	1963849	12.60	9.50	9.80	9.80	PASSES
Heating System	Heat Pumps Air Cooled (Heating Mode) > 135000 Btu/h Cooling Capacity	3240050	3.50	3.20			PASSES
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	60001	0.80	0.82			PASSES

Pr0Sy2 System 2 Constant Volume Packaged No. of Units System--902 1

Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Comp- liance
Cooling System	Air Conditioners Air Cooled 135000 to 240000 Btu/h Clg Capacity	143053	12.60	10.60	10.70	10.70	PASSES
Heating System	Heat Pumps Air Cooled (Heating Mode) > 135000 Btu/h Cooling Capacity	218700	3.50	3.20			PASSES
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	4050	0.80	0.82			PASSES

Pr0Sy3 System 3 Constant Volume Packaged No. of Units System--902 1

Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Comp- liance
Cooling System	Air Conditioners Air Cooled 135000 to 240000 Btu/h Clg Capacity	238026	12.60	10.60	10.70	10.70	PASSES
Heating System	Heat Pumps Air Cooled (Heating Mode) > 135000 Btu/h Cooling Capacity	413160	3.50	3.20			PASSES
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	7651	0.80	0.82			PASSES

6/2/2015 Page 6 of 8

Pr0Sy4 Sys	stem 4		Const Syster	tant Volume m	Packaged	N	o. of Units 1
Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Comp- liance
Cooling System	Air Conditioners Air Cooled 135000 to 240000 Btu/h Clg Capacity	218241	12.60	10.60	10.70	10.70	PASSES
Heating System	Heat Pumps Air Cooled (Heating Mode) > 135000 Btu/h Cooling Capacity	371760	3.50	3.20			PASSES
	Air Handler (Supply) -	6884	0.80	0.82			PASSES
Air Handling System -Supply Pr0Sy5 Sys	Constant Volume			ant Volume	Packaged	N	o. of Units
System -Supply	Constant Volume	Capacity	System Design	m Eff	Packaged Design	N IPLV	o. of Units 1 Comp-
System -Supply Pr0Sy5 Sys	Constant Volume	Capacity	Syster	m			1
System -Supply Pr0Sy5 Sys	Constant Volume Stem 5 Category Air Conditioners Air Cooled 240000 to 760000 Btu/h	Capacity 681756	System Design	m Eff	Design	IPLV	Comp-
Pr0Sy5 Sys Component	Constant Volume stem 5 Category Air Conditioners Air Cooled		Syster Design Eff	m Eff Criteria	Design IPLV	IPLV Criteria	Compliance

			Plant	Comp	liance				
Description	Installed No	Size	Design Eff	Min Eff	Design IPLV	Min IPLV	Category		Comp liance
								None	

6/2/2015 Page 7 of 8

Project: Building B1 CZ2 Ret Title: TAM Building B1 Type: Retail (WEA File: FL_ORLANDO_INTL_ARPT.tm3) Water Heater Compliance Design Design Max Min Comp Description Type Category Eff Eff Loss Loss liance Water Heater 1 0.86 250.00 293.40 PASSES Electric water heater > 12 [kW]**PASSES Piping System Compliance** Pipe Dia Operating Compliance Category Is **Ins Cond** Ins Req Ins Thick [in] [inches] Runout? Temp [Btu-in/hr Thick [in] .SF.F] [F] None Project: Building B1 CZ2 Ret Title: TAM Building B1 Type: Retail (WEA File: FL ORLANDO INTL ARPT.tm3) **Other Required Compliance** Category Section Requirement (write N/A in box if not applicable) Check **Project: Building B1 CZ2 Ret**

DOE Based Sizing

PROJECT SUMMARY

Short Desc: Building B1 CZ2 Ret **Description:** TAM Building B1

Owner: Enter Owner's name here

Address1:Enter Address hereCity:Enter city hereAddress2:Enter Address hereState:Enter state here

Zip: 0

Type: Retail Class: New Finished building

Weather File: FL_ORLANDO_INTL_ARPT.tm3

Conditioned Area:64975 SFConditioned & UnConditioned Area:64975 SFNo of Stories:1Area entered from Plans0 SFPermit No:0Max Tonnage158.2

If different, write in:

CERTIFICATIONS

of jurisdiction		by
Prepared By:	Building Official:	
Date:	Date:	
this building is in compliance as required by the author	rity of jurisdiction	
Owner Agent:	Date:	
-		
y law, I hereby certify (*) that the system design is in o		
		of
y law, I hereby certify (*) that the system design is in o	compliance as required by the authority o	of
y law, I hereby certify (*) that the system design is in o	compliance as required by the authority of Reg No:	of
y law, I hereby certify (*) that the system design is in o	Reg No:	of

DOE 2.1 E Based Sized Parameters (Beta Feature)

<u>IdSystem</u>	System Name	System Type	
1	Pr0Sy1	System 1	
	<u>Component</u>	Sized Value	<u>Units</u>
	Cooling System	1963849	BTU/HR
	Heating System	3240050	Btu/h
	Air Handling System -Supply	60001	CFM
2	Pr0Sy2	System 2	
	Component	Sized Value	<u>Units</u>
	Cooling System	143053	BTU/HR
	Heating System	218700	Btu/h CFM
	Air Handling System -Supply	4050	CFIVI
3	Pr0Sy3	System 3	
	Component	Sized Value	<u>Units</u>
	Cooling System	238026	BTU/HR
	Heating System	413160	Btu/h
	Air Handling System -Supply	7651	CFM
4	Pr0Sy4	System 4	
	Component	Sized Value	<u>Units</u>
	Cooling System	218241	BTU/HR
	Heating System	371760	Btu/h
	Air Handling System -Supply	6884	CFM
5	Pr0Sy5	System 5	
	Component	Sized Value	<u>Units</u>
	Cooling System	681756	BTU/HR
	Heating System	852354	Btu/h
	Air Handling System -Supply	13556	CFM

Florida Building Code, Fifth Edition (2014) - Energy Conservation

EnergyGauge Summit® Fla/Com-2015, Effective Date: June 30, 2015 -- Form 506-2014

ASHRAE 90.1-2010 - Energy Cost Budget Option

	Check List
Appli includ	cations for compliance with the Florida Building Code, Energy Conservation shall de:
	This Checklist
	An Input report generated from the software just after completing compliance calculations without any further changes
	The full compliance report generated by the software that contains the project summary, complaince summary, certifications and detailed component compliance reports
	Boxes appropriately checked in the Miscellanous report generated by the software at the end of the compliance report

PROJECT SUMMARY

Short Desc: Building B1 CZ1 Sup Description: TAM Building B1

Owner: Enter Owner's name here

Address1:Enter Address hereCity:Enter city hereAddress2:Enter Address hereState:Enter state here

Zip: 0

Type: Retail Class: New Finished building

Jurisdiction: ORLANDO, ORANGE COUNTY, FL (582100)

Conditioned Area: 40000 SF

No of Stories: 1

Conditioned & UnConditioned Area: 40000 SF

Area entered from Plans 0 SF

Permit No: 0 Max Tonnage 149.2

If different, write in:

Compliance S	Summary		
Component	Design	Criteria	Result
Gross Energy Cost (in \$)	79,165.0	56,555.0	FAILED
LIGHTING CONTROLS			PASSES
EXTERNAL LIGHTING			PASSES
HVAC SYSTEM			FAILS
PLANT			No Entry
WATER HEATING SYSTEMS			PASSES
PIPING SYSTEMS			No Entry
Met all required compliance from Check List?			Yes/No/NA

IMPORTANT MESSAGE

Info 5009 -- -- An input report of this design building must be submitted along with this Compliance Report

CERTIFICATIONS

Prepared By:	Building Official:
Date:	Date:
certify that this building is in compliance with the FLor	da Energy Efficiency Code
Owner Agent:	Date:
Owner Agent.	<i>Dute.</i>
	ystem design is in compliance with the Florida Energy
Required by Florida law, I hereby certify (*) that the s	
Required by Florida law, I hereby certify (*) that the s	/stem design is in compliance with the Florida Energy
Required by Florida law, I hereby certify (*) that the s fficiency Code Architect:	ystem design is in compliance with the Florida Energy Reg No:
Required by Florida law, I hereby certify (*) that the s fficiency Code Architect: Electrical Designer:	rystem design is in compliance with the Florida Energy Reg No: Reg No:

Type: Retail

(WEA File: FL_ORLANDO_INTL_ARPT.tm3)

Building End Uses

	1) Proposed	2) Baseline
	5,136.70	3,690.60
	\$79,165	\$56,555
ECTRICITY(MBtu/kWh/\$)	5,136.70	3,690.60
	1505038	1081351
	\$79,165	\$56,555
AREA LIGHTS	1,401.30	1,032.50
	410567	302527
	\$21,596	\$15,822
MISC EQUIPMT	585.50	585.50
	171550	171550
	\$9,024	\$8,972
PUMPS & MISC	0.20	0.00
	57	13
	\$3	\$1
SPACE COOL	1,438.50	1,273.40
	421480	373110
	\$22,170	\$19,514
SPACE HEAT	88.60	5.30
	25950	1548
	\$1,365	\$81
VENT FANS	1,622.60	793.90
	475434	232603
	\$25,008	\$12,165

Credits Applied: None Passing Criteria = 56555

Design (including any credits) = 79165

Passing requires Proposed Building cost to be at most 100% of

Baseline cost. This Proposed Building is at 140%

Type: Retail

(WEA File: FL_ORLANDO_INTL_ARPT.tm3)

External Lighting	Compliance
--------------------------	------------

	External Eighting Compliance								
Description	Category	Tradable?	Allowance (W/Unit)	Area or Length or No. of Units (Sqft or ft)	ELPA (W)	CLP (W)			
Ext Light 1	Walk way less than 10 feet wide	e Yes	1.00	200.0	200				

Tradable Surfaces: 0 (W) Allowance for Tradable: 210 (W)

PASSES

All External Lighting: 0 (W)

Complicance check includes a excess/Base allowance of 10.00(W)

Project: Building B1 CZ1 Sup Title: TAM Building B1

Type: Retail

(WEA File: FL_ORLANDO_INTL_ARPT.tm3)

Lighting Controls Compliance

Acronym	Ashrae Description ID	Area (sq.ft)	Design CP	Min Compli- CP ance
Interior	25,001 Sales Area	28,900	3	3 PASSES
Pr0Zo2Sp1	25,001 Sales Area	2,775	2	2 PASSES
Pr0Zo3Sp1	25,001 Sales Area	2,775	2	2 PASSES
Pr0Zo4Sp1	25,001 Sales Area	2,775	2	2 PASSES
Pr0Zo5Sp1	25,001 Sales Area	2,775	2	2 PASSES

PASSES

Type: Retail

(WEA File: FL_ORLANDO_INTL_ARPT.tm3)

Pr0Sy1	System 1	Constant Volume Packaged No. of U	Jnits
		System902	1

Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Comp- liance
Cooling System	Air Conditioners Air Cooled > 760000 Btu/h Cooling Capacity	1790840	12.80	9.50	9.80	9.80	PASSES
Heating System	Heat Pumps Air Cooled (Heating Mode) > 135000 Btu/h Cooling Capacity	3236990	3.50	3.20			PASSES
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	59944	0.80	0.82			PASSES

Pr0Sy2 System 2 Constant Volume Packaged No. of Units System--902 1

Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Comp- liance
Cooling System	Air Conditioners Air Cooled 65000 to 135000 Btu/h Cooling Capacity	128107	12.80	11.00	10.70	11.20	FAILS
Heating System	Heat Pumps Air Cooled (Heating Mode) 65000 to 135000 Btu/h Clg Cap	218410	3.50	3.30			PASSES
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	4045	0.80	0.82			PASSES

Pr0Sy3 System 3 Constant Volume Packaged No. of Units System--902 1

Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Comp- liance
Cooling System	Air Conditioners Air Cooled 135000 to 240000 Btu/h Clg Capacity	220324	12.80	10.60	10.70	10.70	PASSES
Heating System	Heat Pumps Air Cooled (Heating Mode) > 135000 Btu/h Cooling Capacity	412870	3.50	3.20			PASSES
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	7646	0.80	0.82			PASSES

6/2/2015 Page 6 of 8

Pr0Sy4 Sy		Const System	tant Volume m	Packaged	ckaged No. of Unit		
Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Comp- liance
Cooling System	Air Conditioners Air Cooled 135000 to 240000 Btu/h Clg Capacity	200688	12.80	10.60	10.70	10.70	PASSES
Heating System	Heat Pumps Air Cooled (Heating Mode) > 135000 Btu/h Cooling Capacity	371430	3.00	3.20			FAILS
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	6878	0.80	0.82			PASSES
	stem 5		Const	tant Volume	Packaged	N	lo. of Units
		Capacity	System	m Eff	Design	IPLV	To. of Units 1 Comp-
Pr0Sy5 Sy	stem 5	Capacity	System	m			1
Pr0Sy5 Sy	Category Air Conditioners Air Cooled 240000 to 760000 Btu/h	Capacity 558483	System	m Eff	Design	IPLV	Comp-
Pr0Sy5 Sy Component	Category Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity Heat Pumps Air Cooled (Heating Mode) > 135000		System Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Comp- liance
Pr0Sy5 Sy Component Cooling System	Category Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity Heat Pumps Air Cooled	558483	Design Eff 8.90	Eff Criteria 9.50	Design IPLV	IPLV Criteria	Compliance FAILS

Plant Compliance									
Description	Installed No	Size	Design Eff	Min Eff	Design IPLV	Min IPLV	Category		Comp liance
								None	

6/2/2015 Page 7 of 8

Project: Building B1 CZ1 Sup Title: TAM Building B1 Type: Retail (WEA File: FL_ORLANDO_INTL_ARPT.tm3) Water Heater Compliance Design Design Max Min Comp Description Type Category Eff Eff Loss Loss liance Water Heater 1 0.86 250.00 293.40 PASSES Electric water heater > 12 [kW]**PASSES Piping System Compliance** Pipe Dia Operating Category Is **Ins Cond** Ins Req Ins Compliance Thick [in] [inches] Runout? Temp [Btu-in/hr Thick [in] .SF.F] [F] None Project: Building B1 CZ1 Sup Title: TAM Building B1 Type: Retail (WEA File: FL ORLANDO INTL ARPT.tm3) **Other Required Compliance** Category Section Requirement (write N/A in box if not applicable) Check Project: Building B1 CZ1 Sup

6/2/2015 Page 8 of 8

Florida Building Code, Fifth Edition (2014) - Energy Conservation

EnergyGauge Summit® Fla/Com-2015, Effective Date: June 30, 2015 -- Form 506-2014 IECC 2012 - Total Building Performance Compliance Option

	Check List
Appli includ	cations for compliance with the Florida Building Code, Energy Conservation shall de:
	This Checklist
	An Input report generated from the software just after completing compliance calculations without any further changes
	The full compliance report generated by the software that contains the project summary, complaince summary, certifications and detailed component compliance reports
	Boxes appropriately checked in the Miscellanous report generated by the software at the end of the compliance report

PROJECT SUMMARY

Short Desc: Building B1 CZ1 Sup Description: TAM Building B1

Owner: Enter Owner's name here

Address1:Enter Address hereCity:Enter city hereAddress2:Enter Address hereState:Enter state here

Zip: 0

Type: Retail Class: New Finished building

Jurisdiction: ORLANDO, ORANGE COUNTY, FL (582100)

Conditioned Area: 40000 SF

No of Stories: 1

Area entered from Plans 0 SF

Permit No: 0

Max Tonnage 149.2

If different, write in:

Compliance Summary							
Component	Design	Criteria	Result				
Gross Energy Cost (in \$)	74,541.0	48,761.0	FAILED				
LIGHTING CONTROLS			PASSES				
EXTERNAL LIGHTING			PASSES				
HVAC SYSTEM			FAILS				
PLANT			No Entry				
WATER HEATING SYSTEMS			PASSES				
PIPING SYSTEMS			No Entry				
Met all required compliance from Check List?			Yes/No/NA				

IMPORTANT MESSAGE

Info 5009 -- -- An input report of this design building must be submitted along with this Compliance Report

CERTIFICATIONS

Prepared By:	Building Official:
Date:	Date:
certify that this building is in compliance with the FLor	da Energy Efficiency Code
Owner Agent:	Date:
Owner Agent.	<i>Dute.</i>
	ystem design is in compliance with the Florida Energy
Required by Florida law, I hereby certify (*) that the s	
Required by Florida law, I hereby certify (*) that the s	/stem design is in compliance with the Florida Energy
Required by Florida law, I hereby certify (*) that the s fficiency Code Architect:	ystem design is in compliance with the Florida Energy Reg No:
Required by Florida law, I hereby certify (*) that the s fficiency Code Architect: Electrical Designer:	rystem design is in compliance with the Florida Energy Reg No: Reg No:

Type: Retail

(WEA File: FL_ORLANDO_INTL_ARPT.tm3)

Building End Uses

	1) Proposed	2) Baseline
	4,845.90	3,743.50
	\$74,541	\$57,366
LECTRICITY(MBtu/kWh/\$)	4,845.90	3,743.50
	1419835	1096859
	\$74,541	\$57,366
AREA LIGHTS	1,401.30	1,032.50
	410567	302527
	\$21,555	\$15,822
MISC EQUIPMT	585.50	585.50
	171550	171550
	\$9,006	\$8,972
PUMPS & MISC	0.20	0.00
	61	7
	\$3	\$0
SPACE COOL	1,300.30	1,317.80
	380985	386114
	\$20,002	\$20,194
SPACE HEAT	97.00	2.50
	28425	728
	\$1,492	\$38
VENT FANS	1,461.60	805.20
	428247	235933
	<i>\$22,483</i>	\$12,339

Credits Applied: None Passing Criteria = 48761

FAILS

Design (including any credits) = 74541

Passing requires Proposed Building cost to be at most 85% of

Baseline cost. This Proposed Building is at 129.9%

Type: Retail

(WEA File: FL_ORLANDO_INTL_ARPT.tm3)

External Lighting	Compliance
--------------------------	------------

External Eighting Compliance							
Description	Category	Tradable?	Allowance (W/Unit)	Area or Length or No. of Units (Sqft or ft)	ELPA (W)	CLP (W)	
Ext Light 1	Walk way less than 10 feet wide	e Yes	1.00	200.0	200		

Tradable Surfaces: 0 (W) Allowance for Tradable: 210 (W)

PASSES

All External Lighting: 0 (W)

Complicance check includes a excess/Base allowance of 10.00(W)

Project: Building B1 CZ1 Sup Title: TAM Building B1

Type: Retail

(WEA File: FL_ORLANDO_INTL_ARPT.tm3)

Lighting Controls Compliance

Acronym	Ashrae Description ID	Area (sq.ft)	Design CP	Min Compli- CP ance
Interior	25,001 Sales Area	28,900	3	3 PASSES
Pr0Zo2Sp1	25,001 Sales Area	2,775	2	2 PASSES
Pr0Zo3Sp1	25,001 Sales Area	2,775	2	2 PASSES
Pr0Zo4Sp1	25,001 Sales Area	2,775	2	2 PASSES
Pr0Zo5Sp1	25,001 Sales Area	2,775	2	2 PASSES

PASSES

Type: Retail

(WEA File: FL_ORLANDO_INTL_ARPT.tm3)

Pr0Sy1	System 1	Constant Volume Packaged No. of U	Jnits
		System902	1

Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Comp- liance
Cooling System	Air Conditioners Air Cooled > 760000 Btu/h Cooling Capacity	1790840	12.80	9.50	9.80	9.80	PASSES
Heating System	Heat Pumps Air Cooled (Heating Mode) > 135000 Btu/h Cooling Capacity	3236990	3.50	3.20			PASSES
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	59944	0.80	0.82			PASSES

Pr0Sy2 System 2 Constant Volume Packaged No. of Units System--902 1

Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Comp- liance
Cooling System	Air Conditioners Air Cooled 65000 to 135000 Btu/h Cooling Capacity	128107	12.80	11.00	10.70	11.20	FAILS
Heating System	Heat Pumps Air Cooled (Heating Mode) 65000 to 135000 Btu/h Clg Cap	218410	3.50	3.30			PASSES
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	4045	0.80	0.82			PASSES

Pr0Sy3 System 3 Constant Volume Packaged No. of Units System--902 1

Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Comp- liance
Cooling System	Air Conditioners Air Cooled 135000 to 240000 Btu/h Clg Capacity	220324	12.80	10.60	10.70	10.70	PASSES
Heating System	Heat Pumps Air Cooled (Heating Mode) > 135000 Btu/h Cooling Capacity	412870	3.50	3.20			PASSES
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	7646	0.80	0.82			PASSES

6/2/2015 Page 6 of 8

Pr0Sy4 System 4			Const System	tant Volume m	No. of Uni		
Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Comp- liance
Cooling System	Air Conditioners Air Cooled 135000 to 240000 Btu/h Clg Capacity	200688	12.80	10.60	10.70	10.70	PASSES
Heating System	Heat Pumps Air Cooled (Heating Mode) > 135000 Btu/h Cooling Capacity	371430	3.00	3.20			FAILS
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	6878	0.80	0.82			PASSES
	stem 5		Const	tant Volume	Packaged	N	lo. of Units
		Capacity	System	m Eff	Design	IPLV	To. of Units 1 Comp-
Pr0Sy5 Sy	stem 5	Capacity	System	m			1
Pr0Sy5 Sy	Category Air Conditioners Air Cooled 240000 to 760000 Btu/h	Capacity 558483	System	m Eff	Design	IPLV	Comp-
Pr0Sy5 Sy Component	Category Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity Heat Pumps Air Cooled (Heating Mode) > 135000		System Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Comp- liance
Pr0Sy5 Sy Component Cooling System	Category Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity Heat Pumps Air Cooled	558483	Design Eff 8.90	Eff Criteria 9.50	Design IPLV	IPLV Criteria	Compliance FAILS

Plant Compliance									
Description	Installed No	Size	Design Eff	Min Eff	Design IPLV	Min IPLV	Category		Comp liance
								None	

6/2/2015 Page 7 of 8

Project: Building B1 CZ1 Sup Title: TAM Building B1 Type: Retail (WEA File: FL_ORLANDO_INTL_ARPT.tm3) Water Heater Compliance Design Design Max Min Comp Description Type Category Eff Eff Loss Loss liance Water Heater 1 0.86 250.00 293.40 PASSES Electric water heater > 12 [kW]**PASSES Piping System Compliance** Pipe Dia Operating Category Is **Ins Cond** Ins Req Ins Compliance Thick [in] [inches] Runout? Temp [Btu-in/hr Thick [in] .SF.F] [F] None Project: Building B1 CZ1 Sup Title: TAM Building B1 Type: Retail (WEA File: FL ORLANDO INTL ARPT.tm3) **Other Required Compliance** Category Section Requirement (write N/A in box if not applicable) Check Project: Building B1 CZ1 Sup

6/2/2015 Page 8 of 8

DOE Based Sizing

PROJECT SUMMARY

Short Desc: Building B1 CZ1 Sup Description: TAM Building B1

Owner: Enter Owner's name here

Address1:Enter Address hereCity:Enter city hereAddress2:Enter Address hereState:Enter state here

Zip: 0

Type: Retail Class: New Finished building

Weather File: FL_ORLANDO_INTL_ARPT.tm3

Conditioned Area:64975 SFConditioned & UnConditioned Area:64975 SFNo of Stories:1Area entered from Plans0 SFPermit No:0Max Tonnage141.8

If different, write in: _

CERTIFICATIONS

of jurisdiction		by
Prepared By:	Building Official:	
Date:	Date:	
this building is in compliance as required by the author	rity of jurisdiction	
Owner Agent:	Date:	
y law, I hereby certify (*) that the system design is in (of
y law, I hereby certify (*) that the system design is in o	ompliance as required by the authority o	
y law, I hereby certify (*) that the system design is in o	ompliance as required by the authority of Reg No:	
y law, I hereby certify (*) that the system design is in o	ompliance as required by the authority of Reg No: Reg No: Reg No:	

DOE 2.1 E Based Sized Parameters (Beta Feature)

<u>IdSystem</u>	System Name	System Type	
1	Pr0Sy1	System 1	
	<u>Component</u>	Sized Value	<u>Units</u>
	Cooling System	1790840	BTU/HR
	Heating System Air Handling System -Supply	3236990 59944	Btu/h CFM
	, in Handling System Supply	00011	O
2	Pr0Sy2	System 2	
	Component	Sized Value	<u>Units</u>
	Cooling System	128107	BTU/HR
	Heating System Air Handling System -Supply	218410 4045	Btu/h CFM
	The content of the co		
3	Pr0Sy3	System 3	
	<u>Component</u>	Sized Value	<u>Units</u>
	Cooling System	220324	BTU/HR
	Heating System Air Handling System -Supply	412870 7646	Btu/h CFM
	, in Handling System Supply	70.10	O
4	Pr0Sy4	System 4	
	Component	Sized Value	<u>Units</u>
	Cooling System	200688	BTU/HR
	Heating System Air Handling System -Supply	371430 6878	Btu/h CFM
	, iii iiaiiaiiiig eyeteiii eappi,	33.3	C
5	Pr0Sy5	System 5	
	<u>Component</u>	Sized Value	<u>Units</u>
	Cooling System	558483	BTU/HR
	Heating System Air Handling System -Supply	814605 13496	Btu/h CFM
	All Handling System -Supply	10430	OI IVI