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					
Applications for compliance with the Florida Building Code, Energy Conservation shall include:						
	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, compliance 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: TAM A3 Description: TAM Building A3

Owner: Enter Owner's name here

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

Zip: 0

Type: Office Class: New Finished building

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

Conditioned Area: 67500 SF

No of Stories: 3

Conditioned & UnConditioned Area: 135000 SF

Area entered from Plans 67500 SF

Permit No: 0 Max Tonnage 92

If different, write in:

Compliance Summary								
Component	Design	Criteria	Result					
Gross Energy Cost (in \$)	83,096.0	92,220.0	PASSED					
LIGHTING CONTROLS			PASSES					
EXTERNAL LIGHTING			PASSES					
HVAC SYSTEM			FAILS					
PLANT			PASSES					
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

6/1/2015

CERTIFICATIONS

		ereby certify that the plans and specification orida Energy Code
Official:		Prepared By:
Date:		Date:
	the FLorida Energy Effic	certify that this building is in compliance with
Date:		Owner Agent:
		Required by Florida law, I hereby certify (*) t
	that the system design is	Required by Florida law, I hereby certify (*) t
with the Florida Energy	that the system design is	Required by Florida law, I hereby certify (*) t
with the Florida Energy Reg No:	that the system design is	Required by Florida law, I hereby certify (*) tfficiency Code Architect:
with the Florida Energy Reg No: Reg No:	that the system design is	Required by Florida law, I hereby certify (*) tifficiency Code Architect: Electrical Designer:

EnergyGauge Summit® Fla/Com-2014. Section 506.4 Compliant Software. Effective Date: June 30, 2015

Type: Office

(WEA File: FL_MIAMI_INTL_AP.tm3)

Building End Uses

	1) Proposed	2) Baseline
otal	5,410.80	5,949.80
	\$83,096	\$92,220
ELECTRICITY(MBtu/kWh/\$)	5,352.40	5,949.70
	1568261	1743272
	\$82,804	\$92,219
AREA LIGHTS	1,058.30	1,270.00
	310073	372096
	\$16,372	\$19,684
MISC EQUIPMT	2,025.20	2,025.20
	593376	593376
	\$31,330	\$31,390
PUMPS & MISC	0.30	0.00
	95	5
	\$5	\$0
SPACE COOL	1,524.80	2,002.60
	446769	586774
	\$23,589	\$31,040
SPACE HEAT	2.00	0.00
	589	2
	\$31	\$0
VENT FANS	741.80	651.90
	217359	191019
	\$11,477	\$10,105
NATURAL-GAS(MBtu/therm/\$)	58.40	0.10
	584	1
	\$292	\$1
SPACE HEAT	58.40	0.10
	584	1
	\$292	\$1

Credits Applied: None Passing Criteria = 92220

PASSES

Design (including any credits) = 83096

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

Baseline cost. This Proposed Building is at 90.1%

Project: TAM A3
Title: TAM Building A3

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	Yes	1.00	150.0	150		

Project: TAM A3
Title: TAM Building A3

Type: Office

(WEA File: FL_MIAMI_INTL_AP.tm3)

Lig	ghting	Control	ls C	ompl	liance

Acronym	Ashrae ID	Description	Area (sq.ft)	Design CP	Min CP	Compli- ance
Pr0Zo1Sp1	16	Office - Open Plan	14,400	2	2	PASSES
Pr0Zo2Sp1	16	Office - Open Plan	2,025	1	1	PASSES
Pr0Zo3Sp1	16	Office - Open Plan	2,025	1	1	PASSES
Pr0Zo3Sp1	16	Office - Open Plan	2,025	1	1	PASSES
Pr0Zo3Sp1	16	Office - Open Plan	2,025	1	1	PASSES
Pr0Zo6Sp1	16	Office - Open Plan	22,500	3	3	PASSES
Pr0Zo7Sp1	16	Office - Open Plan	14,400	2	2	PASSES
Pr0Zo2Sp1	16	Office - Open Plan	2,025	1	1	PASSES
Pr0Zo2Sp1	16	Office - Open Plan	2,025	1	1	PASSES
Pr0Zo2Sp1	16	Office - Open Plan	2,025	1	1	PASSES
Pr0Zo2Sp1	16	Office - Open Plan	2,025	1	1	PASSES
Pr0Zo6Sp1	16	Office - Open Plan	22,500	3	3	PASSES
Pr0Zo13Sp1	16	Office - Open Plan	14,400	2	2	PASSES
Pr0Zo2Sp1	16	Office - Open Plan	2,025	1	1	PASSES
Pr0Zo2Sp1	16	Office - Open Plan	2,025	1	1	PASSES
Pr0Zo2Sp1	16	Office - Open Plan	2,025	1	1	PASSES
Pr0Zo2Sp1	16	Office - Open Plan	2,025	1	1	PASSES
Pr0Zo6Sp1	16	Office - Open Plan	22,500	3	3	PASSES
				PASSES		

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Type: Office

(WEA File: FL_MIAMI_INTL_AP.tm3)

System Re	eport Compliance	
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Pr0Sy1	System 1	Variable Air Volume	No. of Units	
		Packaged System903	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	1104049	12.80	9.50	12.90	9.60	PASSES
Heating System	Warm Air Gas Furnace >= 225000 Btu/h	499500	80.00	80.00			PASSES
Air Handling System -Supply	Air Handler (Supply) - Variable Volume	30834	1.25	1.12			FAILS

Pr0Sy2 System 2 Variable Air Volume No. of Units Packaged System--903 1

Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Comp- liance
Cooling System	Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity	457541	12.80	9.80	12.90	9.90	PASSES
Heating System	Warm Air Gas Furnace < 225000 Btu/h	137430	80.00	80.00			PASSES
Air Handling System -Supply	Air Handler (Supply) - Variable Volume	8484	1.25	1.12			FAILS

Pr0Sy3 System 3 Variable Air Volume No. of Units Packaged System--903 1

Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Comp- liance
Cooling System	Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity	470133	12.80	9.80	8.00	9.90	FAILS
Heating System	Warm Air Gas Furnace < 225000 Btu/h	137430	80.00	80.00			PASSES
Air Handling System -Supply	Air Handler (Supply) - Variable Volume	8484	1.25	1.12			FAILS

FAILS

6/1/2015 Page 6 of 8

Plant Compliance									
Description	Installed No	Size	Design Eff	Min Eff	Design IPLV	Min IPLV	Category	Comp liance	
Hot Water Boiler (Fuel)	1	1	80.000	80.000			Gas Fired >=300,000 and < 2,500,000 Btu/h	PASSES	
							PASSES		

Type: Office

	W	Vater Heater Comp	pliance				
Description	Туре	Category	Design Eff	Min Eff	Design Loss	Max Loss	Comp liance
Water Heater 1	Gas Storage water heater	<= 75000 Btu/h; >= 20 Gal	0.58	0.52			PASSES
							PASSES

Piping System Compliance							
Category	Pipe Dia [inches]	Is Runout?	Operating Temp [F]	Ins Cond [Btu-in/hr .SF.F]	Ins Thick [in]	Req Ins Thick [in]	Complian

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Project: TAM A3 Title: TAM Buildir Type: Office			
(WEA File: FL_MI	IAMI_INTL_AP.tm3)		
		Other Required Compliance	
Category	Section	Requirement (write N/A in box if not applicable)	Check
Project: TAM A	.3		

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:
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	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: TAM A3 Description: TAM Building A3

Owner: Enter Owner's name here

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

Zip: 0

Type: Office Class: New Finished building

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

Conditioned Area: 67500 SF

No of Stories: 3

Conditioned & UnConditioned Area: 135000 SF

Area entered from Plans 67500 SF

Permit No: 0 Max Tonnage 92

If different, write in:

Compliance Summary									
Component	Design	Criteria	Result						
Gross Energy Cost (in \$)	82,902.0	79,058.0	FAILED						
LICHTING CONTROLS			DACCEC						
LIGHTING CONTROLS EXTERNAL LIGHTING			PASSES PASSES						
HVAC SYSTEM			FAILS						
PLANT			PASSES						
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

6/1/2015

CERTIFICATIONS

		ereby certify that the plans and specification orida Energy Code
Official:		Prepared By:
Date:		Date:
	the FLorida Energy Effic	certify that this building is in compliance with
Date:		Owner Agent:
		Required by Florida law, I hereby certify (*) t
	that the system design is	Required by Florida law, I hereby certify (*) t
with the Florida Energy	that the system design is	Required by Florida law, I hereby certify (*) t
with the Florida Energy Reg No:	that the system design is	Required by Florida law, I hereby certify (*) tfficiency Code Architect:
with the Florida Energy Reg No: Reg No:	that the system design is	Required by Florida law, I hereby certify (*) tifficiency Code Architect: Electrical Designer:

EnergyGauge Summit® Fla/Com-2014. Section 506.4 Compliant Software. Effective Date: June 30, 2015

Type: Office

(WEA File: FL_MIAMI_INTL_AP.tm3)

Building End Uses

	1) Proposed	2) Baseline
	i) i ioposeu	Z) Daseinie
otal	5,398.20	6,000.80
	\$82,902	\$93,009
ELECTRICITY(MBtu/kWh/\$)	5,339.80	6,000.80
	1564576	1758204
	\$82,610	\$93,009
AREA LIGHTS	1,058.30	1,270.00
	310073	372096
	\$16,372	\$19,684
MISC EQUIPMT	2,025.20	2,025.20
	593376	593376
	\$31,330	\$31,390
PUMPS & MISC	0.30	0.00
	95	4
	\$5	\$0
SPACE COOL	1,512.90	2,064.20
	443286	604799
	\$23,406	\$31,994
SPACE HEAT	2.00	0.00
	590	0
	\$31	\$0
VENT FANS	741.10	641.40
	217156	187929
	\$11,466	\$9,941
NATURAL-GAS(MBtu/therm/\$)	58.40	
	584	0
	\$292	\$0
SPACE HEAT	58.40	0.00
	584	0
	\$292	\$0

Credits Applied: None Passing Criteria = 79058

FAILS

Design (including any credits) = 82902

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

Baseline cost. This Proposed Building is at 89.1%

Project: TAM A3
Title: TAM Building A3

Type: Office (WEA File: FL_MIAMI_INTL_AP.tm3) **External Lighting Compliance** Description Category Tradable? Allowance Area or Length ELPA CLP (W/Unit) or No. of Units **(W) (W)** (Sqft or ft) Ext Light 1 Walk way less than 10 feet wide Yes 1.00 150.0 150 96 Tradable Surfaces: 96 (W) Allowance for Tradable: 157.5 (W) **PASSES** All External Lighting: 96 (W) Complicance check includes a excess/Base allowance of 7.50(W)

Project: TAM A3
Title: TAM Building A3

Type: Office

(WEA File: FL_MIAMI_INTL_AP.tm3)

Acronym	Ashrae ID	Description	Area (sq.ft)	Design CP	Min CP	Compli- ance
Pr0Zo1Sp1	16	Office - Open Plan	14,400	2	2	PASSES
Pr0Zo2Sp1	16	Office - Open Plan	2,025	1	1	PASSES
Pr0Zo3Sp1	16	Office - Open Plan	2,025	1	1	PASSES
Pr0Zo3Sp1	16	Office - Open Plan	2,025	1	1	PASSES
Pr0Zo3Sp1	16	Office - Open Plan	2,025	1	1	PASSES
Pr0Zo6Sp1	16	Office - Open Plan	22,500	3	3	PASSES
Pr0Zo7Sp1	16	Office - Open Plan	14,400	2	2	PASSES
Pr0Zo2Sp1	16	Office - Open Plan	2,025	1	1	PASSES
Pr0Zo2Sp1		Office - Open Plan	2,025	1	1	PASSES
Pr0Zo2Sp1	16	Office - Open Plan	2,025	1	1	PASSES
Pr0Zo2Sp1	16	Office - Open Plan	2,025	1	1	PASSES
Pr0Zo6Sp1	16	Office - Open Plan	22,500	3	3	PASSES
Pr0Zo13Sp1	16	Office - Open Plan	14,400	2	2	PASSES
Pr0Zo2Sp1	16	Office - Open Plan	2,025	1	1	PASSES
Pr0Zo2Sp1	16	Office - Open Plan	2,025	1	1	PASSES
Pr0Zo2Sp1	16	Office - Open Plan	2,025	1	1	PASSES
Pr0Zo2Sp1	16	Office - Open Plan	2,025	1	1	PASSES
Pr0Zo6Sp1		Office - Open Plan	22,500	3	3	PASSES

PASSES

6/1/2015 Page 5 of 8

Type: Office

(WEA File: FL_MIAMI_INTL_AP.tm3)

Pr0Sy1	System 1	Variable Air Volume	No. of Units
		Packaged System903	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	1104049	12.80	9.70	12.90	9.80	PASSES
Heating System	Warm Air Gas Furnace >= 225000 Btu/h	499500	80.00	80.00			PASSES
Air Handling System -Supply	Air Handler (Supply) - Variable Volume	30834	1.25	1.12			FAILS

Pr0Sy2 System 2 Variable Air Volume No. of Units Packaged System--903 1

Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Comp- liance
Cooling System	Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity	457541	12.80	10.00	12.90	10.10	PASSES
Heating System	Warm Air Gas Furnace < 225000 Btu/h	137430	80.00	80.00			PASSES
Air Handling System -Supply	Air Handler (Supply) - Variable Volume	8484	1.25	1.12			FAILS

Pr0Sy3 System 3 Variable Air Volume No. of Units Packaged System--903 1

Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Comp- liance
Cooling System	Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity	470133	12.80	10.00	8.00	10.10	FAILS
Heating System	Warm Air Gas Furnace < 225000 Btu/h	137430	80.00	80.00			PASSES
Air Handling System -Supply	Air Handler (Supply) - Variable Volume	8484	1.25	1.12			FAILS

FAILS

6/1/2015 Page 6 of 8

			Plan	t Comp	liance			
Description	Installed No	Size	Design Eff	Min Eff	Design IPLV	Min IPLV	Category	Comp liance
Hot Water Boiler (Fuel)	1	1	80.000	80.000			Gas Fired >=300,000 and < 2,500,000 Btu/h	PASSES
							PASSES	

Type: Office

	W	Vater Heater Comp	pliance				
Description	Туре	Category	Design Eff	Min Eff	Design Loss	Max Loss	Comp liance
Water Heater 1	Gas Storage water heater	<= 75000 Btu/h; >= 20 Gal	0.58	0.52			PASSES
							PASSES

		Piping S	System Co	ompliance	e		
Category	Pipe Dia [inches]	Is Runout?	Operating Temp [F]	Ins Cond [Btu-in/hr .SF.F]	Ins Thick [in]	Req Ins Thick [in]	Complian

6/1/2015 Page 7 of 8

Project: TAM A3 Title: TAM Buildir Type: Office			
(WEA File: FL_MI	IAMI_INTL_AP.tm3)		
		Other Required Compliance	
Category	Section	Requirement (write N/A in box if not applicable)	Check
Project: TAM A	.3		

DOE Based Sizing

PROJECT SUMMARY

Short Desc: TAM A3 Description: TAM Building A3

Owner: Enter Owner's name here

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

Zip: 0

Type: Office Class: New Finished building

Weather File: FL_MIAMI_INTL_AP.tm3

Conditioned Area:67500 SFConditioned & UnConditioned Area:135000 SFNo of Stories:3Area entered from Plans67500 SF

Permit No: 0 Max Tonnage 92

If different, write in:

CERTIFICATIONS

		authority of jurisdiction
	Building Official:	Prepared By:
	Date:	Date:
	quired by the authority of jurisdiction	rtify that this building is in compliance as required by the a
	Date:	Owner Agent:
	stem design is in compliance as required by the au	equired by law, I hereby certify (*) that the system design is ediction
ne authority of	Reg No:	sdiction
ne authority of	Reg No: Reg No:	Architect:
ne authority of	Reg No: Reg No: Reg No: Reg No:	Architect: Electrical Designer:

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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 Heating System	1104049 499500	BTU/HR Btu/h
	Air Handling System -Supply	30834	CFM
2	Pr0Sy2	System 2	
	Component	Sized Value	<u>Units</u>
	Cooling System Heating System	457541 137430	BTU/HR Btu/h
	Air Handling System -Supply	8484	CFM
3	Pr0Sy3	System 3	
	Component	Sized Value	<u>Units</u>
	Cooling System Heating System	470133 137430	BTU/HR Btu/h
	Air Handling System -Supply	8484	CFM
10	Hot Water Boiler (Fuel)	Hot Water Boile	er (Fuel)
	Component	Sized Value	<u>Units</u>
	Hot Water Boiler (Fuel)	0.553	[Million Btu/l

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: TAM A3 Description: TAM Building A3

Owner: Enter Owner's name here

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

Zip: 0

Type: Office Class: New Finished building

Jurisdiction: ORLANDO, ORANGE COUNTY, FL (582100)

Conditioned Area: 67500 SF

No of Stories: 3

Permit No: 0

Conditioned & UnConditioned Area: 135000 SF

Area entered from Plans 67500 SF

Max Tonnage 97.6

If different, write in:

Compliance S	ummary		
Component	Design	Criteria	Result
Gross Energy Cost (in \$)	79,928.0	88,564.0	PASSED
LIGHTING CONTROLS			PASSES
EXTERNAL LIGHTING			PASSES
HVAC SYSTEM			FAILS
PLANT			FAILS
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

	ed by this calculation are in compliance	nereby certify that the plans and specifications cover lorida Energy Code
:	Building Official:	Prepared By:
::	Date:	Date:
	rida Energy Efficiency Code	certify that this building is in compliance with the FLo
::	Date:	Owner Agent:
he Florida Energy	system design is in compliance with the	
he Florida Energy o:		
	Reg No:	efficiency Code
:	Reg No:	Efficiency Code Architect:
x:	Reg No: Reg No: Reg No:	Electrical Designer:

6/1/2015

Type: Office

(WEA File: FL_ORLANDO_INTL_ARPT.tm3)

Building End Uses

	1) Proposed	2) Baseline
al	5,314.50	5,719.50
	\$79,928	\$88,564
ELECTRICITY(MBtu/kWh/\$)	5,095.90	5,711.40
	1493095	1673414
	\$78,835	\$88,524
AREA LIGHTS	1,058.30	1,270.00
	310073	372096
	\$16,372	\$19,684
MISC EQUIPMT	2,025.20	2,025.20
	593376	593376
	\$31,330	\$31,390
PUMPS & MISC	2.00	0.30
	595	76
	\$31	\$4
SPACE COOL	1,315.10	1,792.70
	385323	525268
	\$20,345	\$27,787
SPACE HEAT	10.60	0.40
	3116	132
	\$165	\$7
VENT FANS	684.70	622.80
	200612	182466
	\$10,592	\$9,652
NATURAL-GAS(MBtu/therm/\$)	218.60	8.10
	2186	81
	\$1,093	\$41
SPACE HEAT	218.60	8.10
	2186	81
	\$1,093	\$41

Credits Applied: None Passing Criteria = 88564

PASSES

Design (including any credits) = 79928

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

Baseline cost. This Proposed Building is at 90.2%

Project: TAM A3
Title: TAM Building A3

Type: Office

	External Li	ghting C	omplianc	e			
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	Yes	1.00	150.0	150		96

All External Lighting: 96 (W)

Complicance check includes a excess/Base allowance of 7.50(W)

Project: TAM A3
Title: TAM Building A3

Type: Office

(WEA File: FL_ORLANDO_INTL_ARPT.tm3)

T . I		~ 1·
Lighting	('antrale	Compliance
Lighting	Commons	Comphance

Acronym	Ashrae Description ID	Area (sq.ft)	Design CP	Min Compli- CP ance
Pr0Zo1Sp1	16 Office - Open Plan	14,400	2	2 PASSES
Pr0Zo2Sp1	16 Office - Open Plan	2,025	1	1 PASSES
Pr0Zo3Sp1	16 Office - Open Plan	2,025	1	1 PASSES
Pr0Zo3Sp1	16 Office - Open Plan	2,025	1	1 PASSES
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Pr0Zo2Sp1	16 Office - Open Plan	2,025	1	1 PASSES
Pr0Zo2Sp1	16 Office - Open Plan	2,025	1	1 PASSES
Pr0Zo6Sp1	16 Office - Open Plan	22,500	3	3 PASSES
Pr0Zo13Sp1	16 Office - Open Plan	14,400	2	2 PASSES
Pr0Zo2Sp1	16 Office - Open Plan	2,025	1	1 PASSES
Pr0Zo2Sp1	16 Office - Open Plan	2,025	1	1 PASSES
Pr0Zo2Sp1	16 Office - Open Plan	2,025	1	1 PASSES
Pr0Zo2Sp1	16 Office - Open Plan	2,025	1	1 PASSES
Pr0Zo6Sp1	16 Office - Open Plan	22,500	3	3 PASSES

6/1/2015 Page 5 of 8

Type: Office

(WEA File: FL_ORLANDO_INTL_ARPT.tm3)

System	Report	Compliance
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Pr0Sy1	System 1	Variable Air Volume	No. of Units
		Packaged System903	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	1171205	12.80	9.50	12.90	9.60	PASSES
Heating System	Warm Air Gas Furnace >= 225000 Btu/h	541200	80.00	80.00			PASSES
Air Handling System -Supply	Air Handler (Supply) - Variable Volume	33408	1.25	1.12			FAILS

Pr0Sy2 System 2 Variable Air Volume No. of Units Packaged System--903 1

Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Comp- liance
Cooling System	Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity	451805	12.80	9.80	12.90	9.90	PASSES
Heating System	Warm Air Gas Furnace < 225000 Btu/h	136880	80.00	80.00			PASSES
Air Handling System -Supply	Air Handler (Supply) - Variable Volume	8449	1.25	1.12			FAILS

Pr0Sy3 System 3 Variable Air Volume No. of Units Packaged System--903 1

Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Comp- liance
Cooling System	Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity	463985	12.80	9.80	12.90	9.90	PASSES
Heating System	Warm Air Gas Furnace < 225000 Btu/h	136880	80.00	80.00			PASSES
Air Handling System -Supply	Air Handler (Supply) - Variable Volume	8449	1.25	1.12			FAILS

FAILS

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			Plan	t Comp	liance			
Description	Installed No	Size	Design Eff	Min Eff	Design IPLV	Min IPLV	Category	Comp liance
Hot Water Boiler (Fuel)	1	1	80.000	82.000			Oil Fired >=300,000 and < 2,500,000 Btu/h	FAILS
Hot water Boiler (Fuel)	I	1	80.000	82.000			•	FA

Type: Office

(WEA File: FL_ORLANDO_INTL_ARPT.tm3)

Water Heater Compliance							
Description	Туре	Category	Design Eff	Min Eff	Design Loss	Max Loss	Comp liance
Water Heater 1	Gas Storage water heater	>75000 & <=155000 Btu/h; < 4000 (Btu/h)/gal	80.00	0.80		1,080.1	PASSES

PASSES

		Piping S	System Co	ompliance	e		
Category	Pipe Dia [inches]	Is Runout?	Operating Temp [F]	Ins Cond [Btu-in/hr .SF.F]	Ins Thick [in]	Req Ins Thick [in]	Complianc

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Project: TAM A3 Title: TAM Buildin Type: Office (WEA File: FL OF	ng A3 RLANDO INTL ARP	T.tm3)	
		Other Required Compliance	
Category	Section	Requirement (write N/A in box if not applicable)	Check
Project: TAM A	.3		

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: TAM A3 Description: TAM Building A3

Owner: Enter Owner's name here

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

Zip: 0

Type: Office Class: New Finished building

Jurisdiction: ORLANDO, ORANGE COUNTY, FL (582100)

Conditioned Area: 67500 SF

No of Stories: 3

Permit No: 0

Conditioned & UnConditioned Area: 135000 SF

Area entered from Plans 67500 SF

Max Tonnage 97.6

If different, write in:

Compliance Summary							
Component	Design	Criteria	Result				
Gross Energy Cost (in \$)	79,675.0	75,719.0	FAILED				
LIGHTING CONTROLS			PASSES				
EXTERNAL LIGHTING			PASSES				
HVAC SYSTEM			FAILS				
PLANT			FAILS				
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

6/1/2015

CERTIFICATIONS

	ed by this calculation are in compliance	nereby certify that the plans and specifications cover lorida Energy Code
:	Building Official:	Prepared By:
::	Date:	Date:
	rida Energy Efficiency Code	certify that this building is in compliance with the FLo
::	Date:	Owner Agent:
he Florida Energy	system design is in compliance with the	
he Florida Energy o:		
	Reg No:	efficiency Code
:	Reg No:	Efficiency Code Architect:
x:	Reg No: Reg No: Reg No:	Electrical Designer:

6/1/2015

Type: Office

(WEA File: FL_ORLANDO_INTL_ARPT.tm3)

Building End Uses

	1) Proposed	2) Baseline
al	5,300.10	5,751.20
	\$79,675	\$89,082
ELECTRICITY(MBtu/kWh/\$)	5,078.70	5,745.70
	1488026	1683444
	\$78,568	\$89,054
AREA LIGHTS	1,058.30	1,270.00
	310073	372096
	\$16,372	\$19,684
MISC EQUIPMT	2,025.20	2,025.20
	593376	593376
	\$31,330	\$31,390
PUMPS & MISC	2.10	0.20
	601	50
	\$32	\$3
SPACE COOL	1,301.20	1,821.50
	381244	533685
	\$20,130	\$28,232
SPACE HEAT	10.80	0.30
	3160	89
	\$167	\$5
VENT FANS	681.10	628.50
	199572	184148
	\$10,537	\$9,741
NATURAL-GAS(MBtu/therm/\$)	221.40	5.50
	2214	55
	\$1,107	\$28
SPACE HEAT	221.40	5.50
	2214	55
	<i>\$1,107</i>	\$28

Credits Applied: None Passing Criteria = 75719

FAILS

Design (including any credits) = 79675

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

Baseline cost. This Proposed Building is at 89.4%

Project: TAM A3 Title: TAM Building A3

Type: Office

	External Li	ghting C	omplianc	e		
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	Yes	1.00	150.0	150	!

Tradable Surfaces: 96 (W) Allowance for Tradable: 157.5 (W)

All External Lighting: 96 (W)

Complicance check includes a excess/Base allowance of 7.50(W)

Project: TAM A3 **Title: TAM Building A3**

Type: Office

(WEA File: FL_ORLANDO_INTL_ARPT.tm3)

	4 1 - 7	7 !•
Lighting C	ontrois (Lombilance

Acronym	Ashrae Description ID	Area (sq.ft)	Design CP	Min Compli- CP ance
Pr0Zo1Sp1	16 Office - Open Plan	14,400	2	2 PASSES
Pr0Zo2Sp1	16 Office - Open Plan	2,025	1	1 PASSES
Pr0Zo3Sp1	16 Office - Open Plan	2,025	1	1 PASSES
Pr0Zo3Sp1	16 Office - Open Plan	2,025	1	1 PASSES
Pr0Zo3Sp1	16 Office - Open Plan	2,025	1	1 PASSES
Pr0Zo6Sp1	16 Office - Open Plan	22,500	3	3 PASSES
Pr0Zo7Sp1	16 Office - Open Plan	14,400	2	2 PASSES
Pr0Zo2Sp1	16 Office - Open Plan	2,025	1	1 PASSES
Pr0Zo2Sp1	16 Office - Open Plan	2,025	1	1 PASSES
Pr0Zo2Sp1	16 Office - Open Plan	2,025	1	1 PASSES
Pr0Zo2Sp1	16 Office - Open Plan	2,025	1	1 PASSES
Pr0Zo6Sp1	16 Office - Open Plan	22,500	3	3 PASSES
Pr0Zo13Sp1	16 Office - Open Plan	14,400	2	2 PASSES
Pr0Zo2Sp1	16 Office - Open Plan	2,025	1	1 PASSES
Pr0Zo2Sp1	16 Office - Open Plan	2,025	1	1 PASSES
Pr0Zo2Sp1	16 Office - Open Plan	2,025	1	1 PASSES
Pr0Zo2Sp1	16 Office - Open Plan	2,025	1	1 PASSES
Pr0Zo6Sp1	16 Office - Open Plan	22,500	3	3 PASSES

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Type: Office

(WEA File: FL_ORLANDO_INTL_ARPT.tm3)

Pr0Sy1	System 1	Variable Air Volume	No. of Units
		Packaged System903	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	1171205	12.80	9.70	12.90	9.80	PASSES
Heating System	Warm Air Gas Furnace >= 225000 Btu/h	541200	80.00	80.00			PASSES
Air Handling System -Supply	Air Handler (Supply) - Variable Volume	33408	1.25	1.12			FAILS

Pr0Sy2 System 2 Variable Air Volume No. of Units Packaged System--903 1

Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Comp- liance
Cooling System	Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity	451805	12.80	10.00	12.90	10.10	PASSES
Heating System	Warm Air Gas Furnace < 225000 Btu/h	136880	80.00	80.00			PASSES
Air Handling System -Supply	Air Handler (Supply) - Variable Volume	8449	1.25	1.12			FAILS

Pr0Sy3 System 3 Variable Air Volume No. of Units Packaged System--903 1

Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Comp- liance
Cooling System	Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity	463985	12.80	10.00	12.90	10.10	PASSES
Heating System	Warm Air Gas Furnace < 225000 Btu/h	136880	80.00	80.00			PASSES
Air Handling System -Supply	Air Handler (Supply) - Variable Volume	8449	1.25	1.12			FAILS

FAILS

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			Plan	t Compl	liance			
Description	Installed No	Size	Design Eff	Min Eff	Design IPLV	Min IPLV	Category	Comp liance
Hot Water Boiler (Fuel)	1	1	80.000	82.000			Oil Fired >=300,000 and < 2,500,000 Btu/h	FAILS
Hot water Boller (Fuel)	I	1	80.000	82.000			•	FA

Type: Office

(WEA File: FL_ORLANDO_INTL_ARPT.tm3)

	Wat	ter Heater Compli	iance				
Description	Туре	Category	Design Eff	Min Eff	Design Loss	Max Loss	Comp liance
Water Heater 1	Gas Storage water heater	>75000 & <=155000 Btu/h; < 4000 (Btu/h)/gal	80.00	0.80		1,080.1	PASSES

PASSES

		Piping S	System Co	ompliance	e		
Category	Pipe Dia [inches]	Is Runout?	Operating Temp [F]	Ins Cond [Btu-in/hr .SF.F]	Ins Thick [in]	Req Ins Thick [in]	Complianc

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Project: TAM A3 Title: TAM Buildin Type: Office (WEA File: FL OF	ng A3 RLANDO INTL ARP	T.tm3)	
		Other Required Compliance	
Category	Section	Requirement (write N/A in box if not applicable)	Check
Project: TAM A	.3		

DOE Based Sizing

PROJECT SUMMARY

Short Desc: TAM A3 Description: TAM Building A3

Owner: Enter Owner's name here

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

Zip: 0

Type: Office Class: New Finished building

Weather File: FL_ORLANDO_INTL_ARPT.tm3

Conditioned Area:67500 SFConditioned & UnConditioned Area:135000 SFNo of Stories:3Area entered from Plans67500 SFPermit No:0Max Tonnage97.6

If different, write in:

CERTIFICATIONS

		ereby certify that the plans and specifications covered authority of jurisdiction
	Building Official:	Prepared By:
	Date:	Date:
	d by the authority of jurisdiction	ertify that this building is in compliance as required by t
	Date:	Owner Agent:
	n design is in compliance as required by the aut	required by law, I hereby certify (*) that the system desi
e authority of	Reg No:	isdiction
e authority of	Reg No: Reg No:	Architect:
e authority of	Reg No: Reg No: Reg No:	Architect: Electrical Designer:

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DOE 2.1 E Based Sized Parameters (Beta Feature)

dSystem	<u>System Name</u>	System Typ	<u>e</u>	
1	Pr0Sy1	System 1		
	<u>Component</u>	Sized Value	<u>Units</u>	
	Cooling System	1171205	BTU/HR	
	Heating System	541200	Btu/h	
	Air Handling System -Supply	33408	CFM	
2	Pr0Sy2	System 2		
	Component	Sized Value	<u>Units</u>	
	Cooling System	451805	BTU/HR	
	Heating System	136880	Btu/h	
	Air Handling System -Supply	8449	CFM	
3	Pr0Sy3	System 3		
	<u>Component</u>	Sized Value	<u>Units</u>	
	Cooling System	463985	BTU/HR	
	Heating System	136880	Btu/h	
	Air Handling System -Supply	8449	CFM	
10	Hot Water Boiler (Fuel)	Hot Water Bo	oiler (Fuel)	
	<u>Component</u>	Sized Value	<u>Units</u>	
	Hot Water Boiler (Fuel)	0.689	[Million Btu/l	

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