

# 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 Miscellaneous report generated by the software at the end of the compliance report

## PROJECT SUMMARY

**Short Desc:** Building C1 CZ1 Man

**Description:** TAM Building C1

**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:** Manufacturing Facility

**Class:** New Finished building

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

**Conditioned Area:** 160000 SF

**Conditioned & UnConditioned Area:** 160000 SF

**No of Stories:** 1

**Area entered from Plans** 160000 SF

**Permit No:** 0

**Max Tonnage** 587.8

**If different, write in:** \_\_\_\_\_

## Compliance Summary

Component	Design	Criteria	Result
Gross Energy Cost (in \$)	128,333.0	122,684.0	<b>FAILED</b>
LIGHTING CONTROLS			<b>FAILS</b>
EXTERNAL LIGHTING			<b>FAILS</b>
HVAC SYSTEM			<b>PASSES</b>
PLANT			<b>No Entry</b>
WATER HEATING SYSTEMS			<b>PASSES</b>
PIPING SYSTEMS			<b>No Entry</b>
Met all required compliance from Check List?			<b>Yes/No/NA</b>

### IMPORTANT MESSAGE

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

## CERTIFICATIONS

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

Prepared By: \_\_\_\_\_

Building Official: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

I certify that this building is in compliance with the FLorida Energy Efficiency Code

Owner Agent: \_\_\_\_\_

Date: \_\_\_\_\_

If Required by Florida law, I hereby certify (\*) that the system design is in compliance with the Florida Energy Efficiency Code

Architect: \_\_\_\_\_

Reg No: \_\_\_\_\_

Electrical Designer: \_\_\_\_\_

Reg No: \_\_\_\_\_

Lighting Designer: \_\_\_\_\_

Reg No: \_\_\_\_\_

Mechanical Designer: \_\_\_\_\_

Reg No: \_\_\_\_\_

Plumbing Designer: \_\_\_\_\_

Reg No: \_\_\_\_\_

(\*) Signature is required where Florida Law requires design to be performed by registered design professionals. Typed names and registration numbers may be used where all relevant information is contained on signed/sealed plans.

Project: Building C1 CZ1 Man  
 Title: TAM Building C1  
 Type: Manufacturing Facility  
 (WEA File: Miami.tmy)

### Building End Uses

	1) Proposed	2) Baseline
<b>Total</b>	8,242.20	7,897.10
	<i>\$128,333</i>	<i>\$122,684</i>
<b>ELECTRICITY(MBtu/kWh/\$)</b>	8,205.90	7,858.00
	2404346	2302419
	<i>\$128,152</i>	<i>\$122,489</i>
<b>AREA LIGHTS</b>	1,672.30	1,856.20
	489992	543877
	<i>\$26,117</i>	<i>\$28,934</i>
<b>MISC EQUIPMT</b>	1,600.10	1,600.10
	468840	468840
	<i>\$24,989</i>	<i>\$24,942</i>
<b>PUMPS &amp; MISC</b>	0.00	0.10
	9	23
	<i>\$0</i>	<i>\$1</i>
<b>SPACE COOL</b>	2,567.70	3,039.10
	752329	890452
	<i>\$40,099</i>	<i>\$47,372</i>
<b>SPACE HEAT</b>	0.00	0.20
	0	62
	<i>\$0</i>	<i>\$3</i>
<b>VENT FANS</b>	2,365.80	1,362.30
	693176	399165
	<i>\$36,946</i>	<i>\$21,236</i>
<b>NATURAL-GAS(MBtu/therm/\$)</b>	36.30	39.10
	363	391
	<i>\$182</i>	<i>\$196</i>
<b>SPACE HEAT</b>	36.30	39.10
	363	391
	<i>\$182</i>	<i>\$196</i>

Credits Applied: None

FAILS

Passing Criteria = 122684

Design (including any credits) = 128333

Passing requires Proposed Building cost to be at most 100% of Baseline cost. This Proposed Building is at 104.6%

Project: Building C1 CZ1 Man

Title: TAM Building C1

Type: Manufacturing Facility

(WEA File: Miami.tmy)

### 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 2	Walk way less than 10 feet wide	Yes	1.00	400.0	400	224
Ext Light 3	Main entries	Yes	30.00			600

Tradable Surfaces: 824 (W) Allowance for Tradable: 420 (W)

FAILS

All External Lighting: 824 (W)

Compliance check includes a excess/Base allowance of 20.00(W)

Project: Building C1 CZ1 Man

Title: TAM Building C1

Type: Manufacturing Facility

(WEA File: Miami.tmy)

### Lighting Controls Compliance

Acronym	Ashrae ID	Description	Area (sq.ft)	Design CP	Min CP	Compliance
Interior	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	37,000	4	4	PASSES
Pr0Zo2Sp1	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	5,775	3	3	PASSES
Pr0Zo3Sp1	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	5,775	1	3	FAILS
Pr0Zo4Sp1	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	5,775	1	3	FAILS
Pr0Zo5Sp1	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	5,775	1	3	FAILS
Interior	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	37,000	4	4	PASSES
Interior	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	37,000	4	4	PASSES
Interior	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	25,900	3	3	PASSES

FAILS

**Project: Building C1 CZ1 Man**  
**Title: TAM Building C1**  
**Type: Manufacturing Facility**  
**(WEA File: Miami.tmy)**

### System Report Compliance

<b>Pr0Sy1</b>	<b>System 1</b>	<b>Constant Volume Packaged System--902</b>		<b>No. of Units 1</b>
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Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Compliance
Cooling System	Air Conditioners Air Cooled > 760000 Btu/h Cooling Capacity	7053765	12.20	9.50	12.30	9.60	PASSES
Heating System	Warm Air Gas Furnace >= 225000 Btu/h	12100260	90.00	80.00			PASSES
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	224079	0.80	0.82			PASSES

<b>Pr0Sy2</b>	<b>System 2</b>	<b>Constant Volume Packaged System--902</b>		<b>No. of Units 1</b>
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Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Compliance
Cooling System	Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity	470394	12.20	9.80	12.30	9.90	PASSES
Heating System	Warm Air Gas Furnace >= 225000 Btu/h	848110	90.00	80.00			PASSES
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	15706	0.80	0.82			PASSES

<b>Pr0Sy3</b>	<b>System 3</b>	<b>Constant Volume Packaged System--902</b>		<b>No. of Units 1</b>
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Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Compliance
Cooling System	Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity	507008	12.20	9.80	12.30	9.90	PASSES
Heating System	Warm Air Gas Furnace >= 225000 Btu/h	924020	90.00	80.00			PASSES
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	17111	0.80	0.82			PASSES

<b>Pr0Sy4</b>		<b>System 4</b>		<b>Constant Volume Packaged System--902</b>			<b>No. of Units</b>	
							<b>1</b>	
<b>Component</b>	<b>Category</b>	<b>Capacity</b>	<b>Design Eff</b>	<b>Eff Criteria</b>	<b>Design IPLV</b>	<b>IPLV Criteria</b>	<b>Compliance</b>	
Cooling System	Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity	427951	12.20	9.80	12.30	9.90	<b>PASSES</b>	
Heating System	Warm Air Gas Furnace >= 225000 Btu/h	780700	90.00	80.00			<b>PASSES</b>	
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	14457	0.80	0.82			<b>PASSES</b>	
<b>Pr0Sy5</b>		<b>System 5</b>		<b>Constant Volume Packaged System--902</b>			<b>No. of Units</b>	
							<b>1</b>	
<b>Component</b>	<b>Category</b>	<b>Capacity</b>	<b>Design Eff</b>	<b>Eff Criteria</b>	<b>Design IPLV</b>	<b>IPLV Criteria</b>	<b>Compliance</b>	
Cooling System	Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity	491830	12.20	9.80	12.30	9.90	<b>PASSES</b>	
Heating System	Warm Air Gas Furnace >= 225000 Btu/h	923040	90.00	80.00			<b>PASSES</b>	
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	17093	0.80	0.82			<b>PASSES</b>	
<b>PASSES</b>								

<b>Plant Compliance</b>								
<b>Description</b>	<b>Installed No</b>	<b>Size</b>	<b>Design Eff</b>	<b>Min Eff</b>	<b>Design IPLV</b>	<b>Min IPLV</b>	<b>Category</b>	<b>Compliance</b>
<b>None</b>								

Project: Building C1 CZ1 Man  
 Title: TAM Building C1  
 Type: Manufacturing Facility  
 (WEA File: Miami.tmy)

### Water Heater Compliance

Description	Type	Category	Design Eff	Min Eff	Design Loss	Max Loss	Compliance
Water Heater 1	Gas Storage water heater	<= 75000 Btu/h; >= 20 Gal	0.58	0.52			PASSES
<b>PASSES</b>							

### 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]	Compliance
<b>None</b>							

Project: Building C1 CZ1 Man  
 Title: TAM Building C1  
 Type: Manufacturing Facility  
 (WEA File: Miami.tmy)

### Other Required Compliance

Category	Section	Requirement (write N/A in box if not applicable)	Check
			<input type="checkbox"/>

**Project: Building C1 CZ1 Man**



# 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

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 Miscellaneous report generated by the software at the end of the compliance report

## PROJECT SUMMARY

**Short Desc:** Building C1 CZ1 Man

**Description:** TAM Building C1

**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:** Manufacturing Facility

**Class:** New Finished building

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

**Conditioned Area:** 160000 SF

**Conditioned & UnConditioned Area:** 160000 SF

**No of Stories:** 1

**Area entered from Plans** 160000 SF

**Permit No:** 0

**Max Tonnage** 587.8

**If different, write in:** \_\_\_\_\_

## Compliance Summary

Component	Design	Criteria	Result
Gross Energy Cost (in \$)	126,942.0	106,010.0	<b>FAILED</b>
LIGHTING CONTROLS			<b>FAILS</b>
EXTERNAL LIGHTING			<b>FAILS</b>
HVAC SYSTEM			<b>PASSES</b>
PLANT			<b>No Entry</b>
WATER HEATING SYSTEMS			<b>PASSES</b>
PIPING SYSTEMS			<b>No Entry</b>
Met all required compliance from Check List?			<b>Yes/No/NA</b>

### IMPORTANT MESSAGE

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

## CERTIFICATIONS

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

Prepared By: \_\_\_\_\_

Building Official: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

I certify that this building is in compliance with the FLorida Energy Efficiency Code

Owner Agent: \_\_\_\_\_

Date: \_\_\_\_\_

If Required by Florida law, I hereby certify (\*) that the system design is in compliance with the Florida Energy Efficiency Code

Architect: \_\_\_\_\_

Reg No: \_\_\_\_\_

Electrical Designer: \_\_\_\_\_

Reg No: \_\_\_\_\_

Lighting Designer: \_\_\_\_\_

Reg No: \_\_\_\_\_

Mechanical Designer: \_\_\_\_\_

Reg No: \_\_\_\_\_

Plumbing Designer: \_\_\_\_\_

Reg No: \_\_\_\_\_

(\*) Signature is required where Florida Law requires design to be performed by registered design professionals. Typed names and registration numbers may be used where all relevant information is contained on signed/sealed plans.

Project: Building C1 CZ1 Man  
 Title: TAM Building C1  
 Type: Manufacturing Facility  
 (WEA File: Miami.tmy)

### Building End Uses

	1) Proposed	2) Baseline
<b>Total</b>	<b>8,168.70</b>	<b>8,035.10</b>
	<b>\$126,942</b>	<b>\$124,717</b>
<b>ELECTRICITY(MBtu/kWh/\$)</b>	<b>8,131.90</b>	<b>8,007.00</b>
	2382670	2346077
	<b>\$126,758</b>	<b>\$124,577</b>
<b>AREA LIGHTS</b>	<b>1,672.30</b>	<b>2,174.10</b>
	489992	637010
	<b>\$26,068</b>	<b>\$33,825</b>
<b>MISC EQUIPMT</b>	<b>1,600.10</b>	<b>1,600.10</b>
	468840	468840
	<b>\$24,942</b>	<b>\$24,895</b>
<b>PUMPS &amp; MISC</b>	<b>0.00</b>	<b>0.00</b>
	9	9
	<b>\$0</b>	<b>\$0</b>
<b>SPACE COOL</b>	<b>2,523.30</b>	<b>2,928.00</b>
	739326	857918
	<b>\$39,332</b>	<b>\$45,555</b>
<b>SPACE HEAT</b>	<b>0.00</b>	<b>0.00</b>
	0	1
	<b>\$0</b>	<b>\$0</b>
<b>VENT FANS</b>	<b>2,336.20</b>	<b>1,304.80</b>
	684503	382299
	<b>\$36,416</b>	<b>\$20,300</b>
<b>NATURAL-GAS(MBtu/therm/\$)</b>	<b>36.80</b>	<b>28.10</b>
	368	281
	<b>\$184</b>	<b>\$141</b>
<b>SPACE HEAT</b>	<b>36.80</b>	<b>28.10</b>
	368	281
	<b>\$184</b>	<b>\$141</b>

Credits Applied: None

**FAILS**

Passing Criteria = 106010

Design (including any credits) = 126942

Passing requires Proposed Building cost to be at most 85% of Baseline cost. This Proposed Building is at 101.8%

Project: Building C1 CZ1 Man

Title: TAM Building C1

Type: Manufacturing Facility

(WEA File: Miami.tmy)

### 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 2	Walk way less than 10 feet wide	Yes	1.00	400.0	400	224
Ext Light 3	Main entries	Yes	30.00			600

Tradable Surfaces: 824 (W) Allowance for Tradable: 420 (W)

**FAILS**

All External Lighting: 824 (W)

Compliance check includes a excess/Base allowance of 20.00(W)

Project: Building C1 CZ1 Man

Title: TAM Building C1

Type: Manufacturing Facility

(WEA File: Miami.tmy)

### Lighting Controls Compliance

Acronym	Ashrae ID	Description	Area (sq.ft)	Design CP	Min CP	Compliance
Interior	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	37,000	4	4	PASSES
Pr0Zo2Sp1	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	5,775	3	3	PASSES
Pr0Zo3Sp1	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	5,775	1	3	FAILS
Pr0Zo4Sp1	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	5,775	1	3	FAILS
Pr0Zo5Sp1	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	5,775	1	3	FAILS
Interior	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	37,000	4	4	PASSES
Interior	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	37,000	4	4	PASSES
Interior	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	25,900	3	3	PASSES

**FAILS**

**Project: Building C1 CZ1 Man**  
**Title: TAM Building C1**  
**Type: Manufacturing Facility**  
**(WEA File: Miami.tmy)**

**System Report Compliance**

**Pr0Sy1      System 1      Constant Volume Packaged      No. of Units**  
**System--902      1**

<b>Component</b>	<b>Category</b>	<b>Capacity</b>	<b>Design Eff</b>	<b>Eff Criteria</b>	<b>Design IPLV</b>	<b>IPLV Criteria</b>	<b>Compliance</b>
Cooling System	Air Conditioners Air Cooled > 760000 Btu/h Cooling Capacity	7053765	12.20	9.70	12.30	9.80	<b>PASSES</b>
Heating System	Warm Air Gas Furnace >= 225000 Btu/h	12100260	90.00	80.00			<b>PASSES</b>
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	224079	0.80	0.82			<b>PASSES</b>

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

<b>Component</b>	<b>Category</b>	<b>Capacity</b>	<b>Design Eff</b>	<b>Eff Criteria</b>	<b>Design IPLV</b>	<b>IPLV Criteria</b>	<b>Compliance</b>
Cooling System	Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity	470394	12.20	10.00	12.30	10.10	<b>PASSES</b>
Heating System	Warm Air Gas Furnace >= 225000 Btu/h	848110	90.00	80.00			<b>PASSES</b>
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	15706	0.80	0.82			<b>PASSES</b>

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

<b>Component</b>	<b>Category</b>	<b>Capacity</b>	<b>Design Eff</b>	<b>Eff Criteria</b>	<b>Design IPLV</b>	<b>IPLV Criteria</b>	<b>Compliance</b>
Cooling System	Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity	507008	12.20	10.00	12.30	10.10	<b>PASSES</b>
Heating System	Warm Air Gas Furnace >= 225000 Btu/h	924020	90.00	80.00			<b>PASSES</b>
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	17111	0.80	0.82			<b>PASSES</b>

<b>Pr0Sy4</b>		<b>System 4</b>		<b>Constant Volume Packaged System--902</b>			<b>No. of Units</b>	
							<b>1</b>	
<b>Component</b>	<b>Category</b>	<b>Capacity</b>	<b>Design Eff</b>	<b>Eff Criteria</b>	<b>Design IPLV</b>	<b>IPLV Criteria</b>	<b>Compliance</b>	
Cooling System	Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity	427951	12.20	10.00	12.30	10.10	<b>PASSES</b>	
Heating System	Warm Air Gas Furnace >= 225000 Btu/h	780700	90.00	80.00			<b>PASSES</b>	
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	14457	0.80	0.82			<b>PASSES</b>	
<b>Pr0Sy5</b>		<b>System 5</b>		<b>Constant Volume Packaged System--902</b>			<b>No. of Units</b>	
							<b>1</b>	
<b>Component</b>	<b>Category</b>	<b>Capacity</b>	<b>Design Eff</b>	<b>Eff Criteria</b>	<b>Design IPLV</b>	<b>IPLV Criteria</b>	<b>Compliance</b>	
Cooling System	Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity	491830	12.20	10.00	12.30	10.10	<b>PASSES</b>	
Heating System	Warm Air Gas Furnace >= 225000 Btu/h	923040	90.00	80.00			<b>PASSES</b>	
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	17093	0.80	0.82			<b>PASSES</b>	
<b>PASSES</b>								

<b>Plant Compliance</b>								
<b>Description</b>	<b>Installed No</b>	<b>Size</b>	<b>Design Eff</b>	<b>Min Eff</b>	<b>Design IPLV</b>	<b>Min IPLV</b>	<b>Category</b>	<b>Compliance</b>
<b>None</b>								

Project: Building C1 CZ1 Man  
 Title: TAM Building C1  
 Type: Manufacturing Facility  
 (WEA File: Miami.tmy)

### Water Heater Compliance

Description	Type	Category	Design Eff	Min Eff	Design Loss	Max Loss	Compliance
Water Heater 1	Gas Storage water heater	<= 75000 Btu/h; >= 20 Gal	0.58	0.52			PASSES
<b>PASSES</b>							

### 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]	Compliance
<b>None</b>							

Project: Building C1 CZ1 Man  
 Title: TAM Building C1  
 Type: Manufacturing Facility  
 (WEA File: Miami.tmy)

### Other Required Compliance

Category	Section	Requirement (write N/A in box if not applicable)	Check
			<input type="checkbox"/>

**Project: Building C1 CZ1 Man**



# 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 - Prescriptive Compliance 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 Miscellaneous report generated by the software at the end of the compliance report

## PROJECT SUMMARY

**Short Desc:** Building C1 CZ1 Man

**Description:** TAM Building C1

**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:** Manufacturing Facility

**Class:** New Finished building

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

**Conditioned Area:** 160000 SF

**Conditioned & UnConditioned Area:** 160000 SF

**No of Stories:** 1

**Area entered from Plans** 160000 SF

**Permit No:** 0

**Max Tonnage** 587.8

**If different, write in:** \_\_\_\_\_

## Compliance Summary

Component	Design	Criteria	Result
ENVELOPE PRESCRIPTIVE			<b>FAILS</b>
LIGHTING POWER	160,001.0	177,600.0	<b>PASSES</b>
LIGHTING CONTROLS			<b>FAILS</b>
EXTERNAL LIGHTING			<b>FAILS</b>
HVAC SYSTEM			<b>PASSES</b>
PLANT			<b>No Entry</b>
WATER HEATING SYSTEMS			<b>PASSES</b>
PIPING SYSTEMS			<b>No Entry</b>
Met all required compliance from Check List?			<b>Yes/No/NA</b>

### IMPORTANT MESSAGE

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

## CERTIFICATIONS

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

Prepared By: \_\_\_\_\_

Building Official: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

I certify that this building is in compliance with the FLorida Energy Efficiency Code

Owner Agent: \_\_\_\_\_

Date: \_\_\_\_\_

If Required by Florida law, I hereby certify (\*) that the system design is in compliance with the Florida Energy Efficiency Code

Architect: \_\_\_\_\_

Reg No: \_\_\_\_\_

Electrical Designer: \_\_\_\_\_

Reg No: \_\_\_\_\_

Lighting Designer: \_\_\_\_\_

Reg No: \_\_\_\_\_

Mechanical Designer: \_\_\_\_\_

Reg No: \_\_\_\_\_

Plumbing Designer: \_\_\_\_\_

Reg No: \_\_\_\_\_

(\*) Signature is required where Florida Law requires design to be performed by registered design professionals. Typed names and registration numbers may be used where all relevant information is contained on signed/sealed plans.

Project: Building C1 CZ1 Man  
 Title: TAM Building C1  
 Type: Manufacturing Facility  
 (WEA File: Miami.tmy)

### Prescriptive Envelope Compliance

Item	Zone	Description	Design	Criteria	Meet Req.
Glass	Building C1 CZ1	East glass area must be less than or equal to South glass area	.000	1,280.000	Yes
Glass	Building C1 CZ1	West glass area must be less than or equal to South glass area	.000	1,280.000	Yes
Glass	IntA	Percent glass Max allowed (%)	.000	40.000	Yes
Skylights	IntA	Percent Skylight Max allowed (%)	8.649	5.000	No
Pr0Zo1Rf1	IntA	Exterior Roof UValue Max allowed	.040	0.063	Yes
Pr0Zo1Rf1Sk1	Pr0Zo1Rf1	Skylight: SHGC Max allowed	.250	0.190	No
Pr0Zo1Rf1Sk1	Pr0Zo1Rf1Sk1	Skylight: UValue Max allowed	1.000	1.360	Yes
Glass	PerA	Percent glass Max allowed (%)	13.333	40.000	Yes
Pr0Zo2Wa1	PerA	Exterior Wall: UValue Max allowed	.350	0.089	No
Pr0Zo2Wa1Wi1	Pr0Zo2Wa1	Exterior Window: SHGC Max allowed	.176	0.250	Yes
Pr0Zo2Wa1Wi1	Pr0Zo2Wa1	Exterior Window: UValue Max allowed	.600	1.200	Yes
Skylights	PerA	Percent Skylight Max allowed (%)	.000	5.000	Yes
Pr0Zo2Rf1	PerA	Exterior Roof UValue Max allowed	.040	0.063	Yes
Glass	PerB	Percent glass Max allowed (%)	.000	40.000	Yes
Pr0Zo3Wa1	PerB	Exterior Wall: UValue Max allowed	.350	0.089	No
Skylights	PerB	Percent Skylight Max allowed (%)	.000	5.000	Yes
Pr0Zo3Rf1	PerB	Exterior Roof UValue Max allowed	.040	0.063	Yes
Glass	PerC	Percent glass Max allowed (%)	.000	40.000	Yes
Pr0Zo4Wa1	PerC	Exterior Wall: UValue Max allowed	.350	0.089	No
Skylights	PerC	Percent Skylight Max allowed (%)	.000	5.000	Yes
Pr0Zo4Rf1	PerC	Exterior Roof UValue Max allowed	.040	0.063	Yes
Glass	PerD	Percent glass Max allowed (%)	.000	40.000	Yes
Pr0Zo5Wa1	PerD	Exterior Wall: UValue Max allowed	.350	0.089	No
Skylights	PerD	Percent Skylight Max allowed (%)	.000	5.000	Yes
Pr0Zo5Rf1	PerD	Exterior Roof UValue Max allowed	.040	0.063	Yes
Glass	IntB	Percent glass Max allowed (%)	.000	40.000	Yes
Skylights	IntB	Percent Skylight Max allowed (%)	.000	5.000	Yes
Pr0Zo1Rf1	IntB	Exterior Roof UValue Max allowed	.040	0.063	Yes
Glass	IntC	Percent glass Max allowed (%)	.000	40.000	Yes
Skylights	IntC	Percent Skylight Max allowed (%)	.000	5.000	Yes
Pr0Zo1Rf1	IntC	Exterior Roof UValue Max allowed	.040	0.063	Yes
Glass	IntD	Percent glass Max allowed (%)	.000	40.000	Yes
Skylights	IntD	Percent Skylight Max allowed (%)	.000	5.000	Yes
Pr0Zo1Rf1	IntD	Exterior Roof UValue Max allowed	.040	0.063	Yes

**DOES NOT meet Prescriptive Envelope Requirements -- FAILS**

**Project: Building C1 CZ1 Man**  
**Title: TAM Building C1**  
**Type: Manufacturing Facility**  
**(WEA File: Miami.tmy)**

**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 2	Walk way less than 10 feet wide	Yes	1.00	400.0	400	224
Ext Light 3	Main entries	Yes	30.00			600

**Tradable Surfaces: 824 (W) Allowance for Tradable: 420 (W)**

**All External Lighting: 824 (W)**

**Compliance check includes a excess/Base allowance of 20.00(W)**

<b>FAILS</b>
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**Project: Building C1 CZ1 Man**  
**Title: TAM Building C1**  
**Type: Manufacturing Facility**  
**(WEA File: Miami.tmy)**

### Lighting Power Compliance

Space	Ashrae ID	Description	Area (sq.ft)	Height (ft)	No. of Spaces	Design (W)	Effective (W)	Allowance (W)
Interior	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	37,000	24.0	1	37000	37000	41,070
Pr0Zo2Sp1	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	5,775	24.0	1	5775	5775	6,410
Pr0Zo3Sp1	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	5,775	24.0	1	5776	5776	6,410
Pr0Zo4Sp1	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	5,775	24.0	1	5775	5775	6,410
Pr0Zo5Sp1	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	5,775	24.0	1	5775	5775	6,410
Interior	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	37,000	24.0	1	37000	37000	41,070
Interior	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	37,000	24.0	1	37000	37000	41,070
Interior	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	25,900	24.0	1	25900	25900	28,749

**Design : 160001 (W)**

**Effective: 160001 (W)**

**Allowance: 177600 (W)**

**PASSES**

**Passing requires Design to be at most 100% of Criteria**

**Project: Building C1 CZ1 Man**  
**Title: TAM Building C1**  
**Type: Manufacturing Facility**  
**(WEA File: Miami.tmy)**

### Lighting Controls Compliance

Acronym	Ashrae ID	Description	Area (sq.ft)	Design CP	Min CP	Compliance
Interior	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	37,000	4	4	PASSES
Pr0Zo2Sp1	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	5,775	3	3	PASSES
Pr0Zo3Sp1	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	5,775	1	3	FAILS
Pr0Zo4Sp1	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	5,775	1	3	FAILS
Pr0Zo5Sp1	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	5,775	1	3	FAILS
Interior	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	37,000	4	4	PASSES
Interior	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	37,000	4	4	PASSES
Interior	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	25,900	3	3	PASSES

**FAILS**

**Project: Building C1 CZ1 Man**  
**Title: TAM Building C1**  
**Type: Manufacturing Facility**  
**(WEA File: Miami.tmy)**

### System Report Compliance

<b>Pr0Sy1</b>	<b>System 1</b>	<b>Constant Volume Packaged System--902</b>		<b>No. of Units</b> 1
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Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Compliance
Cooling System	Air Conditioners Air Cooled > 760000 Btu/h Cooling Capacity	7053765	12.20	9.50	12.30	9.60	<b>PASSES</b>
Heating System	Warm Air Gas Furnace >= 225000 Btu/h	12100260	90.00	80.00			<b>PASSES</b>
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	224079	0.80	0.82			<b>PASSES</b>

<b>Pr0Sy2</b>	<b>System 2</b>	<b>Constant Volume Packaged System--902</b>		<b>No. of Units</b> 1
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Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Compliance
Cooling System	Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity	470394	12.20	9.80	12.30	9.90	<b>PASSES</b>
Heating System	Warm Air Gas Furnace >= 225000 Btu/h	848110	90.00	80.00			<b>PASSES</b>
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	15706	0.80	0.82			<b>PASSES</b>

<b>Pr0Sy3</b>	<b>System 3</b>	<b>Constant Volume Packaged System--902</b>		<b>No. of Units</b> 1
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Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Compliance
Cooling System	Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity	507008	12.20	9.80	12.30	9.90	<b>PASSES</b>
Heating System	Warm Air Gas Furnace >= 225000 Btu/h	924020	90.00	80.00			<b>PASSES</b>
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	17111	0.80	0.82			<b>PASSES</b>



Pr0Sy4		System 4		Constant Volume Packaged System--902			No. of Units 1	
Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Compliance	
Cooling System	Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity	427951	12.20	9.80	12.30	9.90	PASSES	
Heating System	Warm Air Gas Furnace >= 225000 Btu/h	780700	90.00	80.00			PASSES	
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	14457	0.80	0.82			PASSES	
Pr0Sy5		System 5		Constant Volume Packaged System--902			No. of Units 1	
Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Compliance	
Cooling System	Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity	491830	12.20	9.80	12.30	9.90	PASSES	
Heating System	Warm Air Gas Furnace >= 225000 Btu/h	923040	90.00	80.00			PASSES	
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	17093	0.80	0.82			PASSES	
<b>PASSES</b>								

Plant Compliance								
Description	Installed No	Size	Design Eff	Min Eff	Design IPLV	Min IPLV	Category	Compliance
<b>None</b>								

Project: Building C1 CZ1 Man  
 Title: TAM Building C1  
 Type: Manufacturing Facility  
 (WEA File: Miami.tmy)

### Water Heater Compliance

Description	Type	Category	Design Eff	Min Eff	Design Loss	Max Loss	Compliance
Water Heater 1	Gas Storage water heater	<= 75000 Btu/h; >= 20 Gal	0.58	0.52			PASSES
<b>PASSES</b>							

### 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]	Compliance
<b>None</b>							

Project: Building C1 CZ1 Man  
 Title: TAM Building C1  
 Type: Manufacturing Facility  
 (WEA File: Miami.tmy)

### Other Required Compliance

Category	Section	Requirement (write N/A in box if not applicable)	Check
			<input type="checkbox"/>

**Project: Building C1 CZ1 Man**

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

EnergyGauge Summit® Fla/Com-2015, Effective Date: June 30, 2015 -- Form 506-2014  
IECC 2012 - Prescriptive Compliance 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 Miscellaneous report generated by the software at the end of the compliance report

## PROJECT SUMMARY

**Short Desc:** Building C1 CZ1 Man

**Description:** TAM Building C1

**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:** Manufacturing Facility

**Class:** New Finished building

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

**Conditioned Area:** 160000 SF

**Conditioned & UnConditioned Area:** 160000 SF

**No of Stories:** 1

**Area entered from Plans** 160000 SF

**Permit No:** 0

**Max Tonnage** 587.8

**If different, write in:** \_\_\_\_\_

## Compliance Summary

Component	Design	Criteria	Result
ENVELOPE PRESCRIPTIVE			<b>FAILS</b>
Additional Efficiency Prescriptive Option			<b>Failed</b>
LIGHTING POWER	160,001.0	208,000.0	<b>PASSES</b>
LIGHTING CONTROLS			<b>FAILS</b>
EXTERNAL LIGHTING			<b>FAILS</b>
HVAC SYSTEM			<b>PASSES</b>
PLANT			<b>No Entry</b>
WATER HEATING SYSTEMS			<b>PASSES</b>
PIPING SYSTEMS			<b>No Entry</b>
Met all required compliance from Check List?			<b>Yes/No/NA</b>
<b>IMPORTANT MESSAGE</b>			
Info 5009 -- -- -- An input report of this design building must be submitted along with this Compliance Report			

## CERTIFICATIONS

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

Prepared By: \_\_\_\_\_

Building Official: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

I certify that this building is in compliance with the FLorida Energy Efficiency Code

Owner Agent: \_\_\_\_\_

Date: \_\_\_\_\_

If Required by Florida law, I hereby certify (\*) that the system design is in compliance with the Florida Energy Efficiency Code

Architect: \_\_\_\_\_

Reg No: \_\_\_\_\_

Electrical Designer: \_\_\_\_\_

Reg No: \_\_\_\_\_

Lighting Designer: \_\_\_\_\_

Reg No: \_\_\_\_\_

Mechanical Designer: \_\_\_\_\_

Reg No: \_\_\_\_\_

Plumbing Designer: \_\_\_\_\_

Reg No: \_\_\_\_\_

(\*) Signature is required where Florida Law requires design to be performed by registered design professionals. Typed names and registration numbers may be used where all relevant information is contained on signed/sealed plans.

**Project: Building C1 CZ1 Man**  
**Title: TAM Building C1**  
**Type: Manufacturing Facility**  
**(WEA File: Miami.tmy)**

### Prescriptive Envelope Compliance

Item	Zone	Description	Design	Criteria	Meet Req.
Glass	IntA	Percent glass Max allowed (%)	.000	30.000	Yes
Skylights	IntA	Percent Skylight Max allowed (%)	8.649	3.000	No
Pr0Zo1Rf1	IntA	Exterior Roof UValue Max allowed	.040	0.048	Yes
Pr0Zo1Rf1	IntA	Exterior Roof Absorptance (3-year aged) Max allowed	.400	0.450	Yes
Pr0Zo1Rf1	IntA	Exterior Roof Emissivity (3-year aged) Min Required	.900	0.750	Yes
Pr0Zo1Rf1Sk1	Pr0Zo1Rf1	Skylight: SHGC Max allowed	.250	0.350	Yes
Pr0Zo1Rf1Sk1	Pr0Zo1Rf1Sk1	Skylight: UValue Max allowed	1.000	0.750	No
Glass	PerA	Percent glass Max allowed (%)	13.333	30.000	Yes
Pr0Zo2Wa1	PerA	Exterior Wall: UValue Max allowed	.350	0.064	No
Pr0Zo2Wa1Wi1	Pr0Zo2Wa1	Exterior Window: SHGC Max allowed	.400	0.400	Yes
Pr0Zo2Wa1Wi1	Pr0Zo2Wa1	Exterior Window: UValue Max allowed	.600	0.500	No
Skylights	PerA	Percent Skylight Max allowed (%)	.000	3.000	Yes
Pr0Zo2Rf1	PerA	Exterior Roof UValue Max allowed	.040	0.048	Yes
Pr0Zo2Rf1	PerA	Exterior Roof Absorptance (3-year aged) Max allowed	.400	0.450	Yes
Pr0Zo2Rf1	PerA	Exterior Roof Emissivity (3-year aged) Min Required	.900	0.750	Yes
Glass	PerB	Percent glass Max allowed (%)	.000	30.000	Yes
Pr0Zo3Wa1	PerB	Exterior Wall: UValue Max allowed	.350	0.064	No
Skylights	PerB	Percent Skylight Max allowed (%)	.000	3.000	Yes
Pr0Zo3Rf1	PerB	Exterior Roof UValue Max allowed	.040	0.048	Yes
Pr0Zo3Rf1	PerB	Exterior Roof Absorptance (3-year aged) Max allowed	.400	0.450	Yes
Pr0Zo3Rf1	PerB	Exterior Roof Emissivity (3-year aged) Min Required	.900	0.750	Yes
Glass	PerC	Percent glass Max allowed (%)	.000	30.000	Yes
Pr0Zo4Wa1	PerC	Exterior Wall: UValue Max allowed	.350	0.064	No
Skylights	PerC	Percent Skylight Max allowed (%)	.000	3.000	Yes
Pr0Zo4Rf1	PerC	Exterior Roof UValue Max allowed	.040	0.048	Yes
Pr0Zo4Rf1	PerC	Exterior Roof Absorptance (3-year aged) Max allowed	.400	0.450	Yes
Pr0Zo4Rf1	PerC	Exterior Roof Emissivity (3-year aged) Min Required	.900	0.750	Yes
Glass	PerD	Percent glass Max allowed (%)	.000	30.000	Yes
Pr0Zo5Wa1	PerD	Exterior Wall: UValue Max allowed	.350	0.064	No
Skylights	PerD	Percent Skylight Max allowed (%)	.000	3.000	Yes
Pr0Zo5Rf1	PerD	Exterior Roof UValue Max allowed	.040	0.048	Yes
Pr0Zo5Rf1	PerD	Exterior Roof Absorptance (3-year aged) Max allowed	.400	0.450	Yes
Pr0Zo5Rf1	PerD	Exterior Roof Emissivity (3-year aged) Min Required	.900	0.750	Yes
Glass	IntB	Percent glass Max allowed (%)	.000	30.000	Yes
Skylights	IntB	Percent Skylight Max allowed (%)	.000	3.000	Yes
Pr0Zo1Rf1	IntB	Exterior Roof UValue Max allowed	.040	0.048	Yes

Pr0Zo1Rf1	IntB	Exterior Roof Absorptance (3-year aged) Max allowed	.400	0.450	Yes
Pr0Zo1Rf1	IntB	Exterior Roof Emissivity (3-year aged) Min Required	.900	0.750	Yes
Glass	IntC	Percent glass Max allowed (%)	.000	30.000	Yes
Skylights	IntC	Percent Skylight Max allowed (%)	.000	3.000	Yes
Pr0Zo1Rf1	IntC	Exterior Roof UValue Max allowed	.040	0.048	Yes
Pr0Zo1Rf1	IntC	Exterior Roof Absorptance (3-year aged) Max allowed	.400	0.450	Yes
Pr0Zo1Rf1	IntC	Exterior Roof Emissivity (3-year aged) Min Required	.900	0.750	Yes
Glass	IntD	Percent glass Max allowed (%)	.000	30.000	Yes
Skylights	IntD	Percent Skylight Max allowed (%)	.000	3.000	Yes
Pr0Zo1Rf1	IntD	Exterior Roof UValue Max allowed	.040	0.048	Yes
Pr0Zo1Rf1	IntD	Exterior Roof Absorptance (3-year aged) Max allowed	.400	0.450	Yes
Pr0Zo1Rf1	IntD	Exterior Roof Emissivity (3-year aged) Min Required	.900	0.750	Yes

**DOES NOT meet Prescriptive Envelope Requirements -- FAILS**

**Project: Building C1 CZ1 Man**  
**Title: TAM Building C1**  
**Type: Manufacturing Facility**  
**(WEA File: Miami.tmy)**

**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 2	Walk way less than 10 feet wide	Yes	1.00	400.0	400	224
Ext Light 3	Main entries	Yes	30.00			600

**Tradable Surfaces: 824 (W) Allowance for Tradable: 420 (W)**

**FAILS**

**All External Lighting: 824 (W)**

**Complicance check includes a excess/Base allowance of 20.00(W)**

**Project: Building C1 CZ1 Man**  
**Title: TAM Building C1**  
**Type: Manufacturing Facility**  
**(WEA File: Miami.tmy)**

**Lighting Power Compliance**

Space	Ashrae ID	Description	Area (sq.ft)	Height (ft)	No. of Spaces	Design (W)	Effective (W)	Allowance (W)
Interior	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	37,000	24.0	1	37000	37000	48,100
Pr0Zo2Sp1	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	5,775	24.0	1	5775	5775	7,508
Pr0Zo3Sp1	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	5,775	24.0	1	5776	5776	7,508
Pr0Zo4Sp1	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	5,775	24.0	1	5775	5775	7,508
Pr0Zo5Sp1	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	5,775	24.0	1	5775	5775	7,508
Interior	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	37,000	24.0	1	37000	37000	48,100
Interior	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	37,000	24.0	1	37000	37000	48,100
Interior	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	25,900	24.0	1	25900	25900	33,670

**Design : 160001 (W)**

**Effective: 160001 (W)**

**Allowance: 208000 (W)**

**PASSES**

**Passing requires Design to be at most 100% of Criteria**



**Project: Building C1 CZ1 Man**  
**Title: TAM Building C1**  
**Type: Manufacturing Facility**  
**(WEA File: Miami.tmy)**

### Lighting Controls Compliance

Acronym	Ashrae ID	Description	Area (sq.ft)	Design CP	Min CP	Compliance
Interior	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	37,000	4	4	PASSES
Pr0Zo2Sp1	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	5,775	3	3	PASSES
Pr0Zo3Sp1	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	5,775	1	3	FAILS
Pr0Zo4Sp1	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	5,775	1	3	FAILS
Pr0Zo5Sp1	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	5,775	1	3	FAILS
Interior	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	37,000	4	4	PASSES
Interior	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	37,000	4	4	PASSES
Interior	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	25,900	3	3	PASSES

**FAILS**

**Project: Building C1 CZ1 Man**  
**Title: TAM Building C1**  
**Type: Manufacturing Facility**  
**(WEA File: Miami.tmy)**

### System Report Compliance

<b>Pr0Sy1</b>	<b>System 1</b>	<b>Constant Volume Packaged System--902</b>	<b>No. of Units 1</b>
---------------	-----------------	-------------------------------------------------	---------------------------

Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Compliance
Cooling System	Air Conditioners Air Cooled > 760000 Btu/h Cooling Capacity	7053765	12.20	9.70	12.30	9.80	<b>PASSES</b>
Heating System	Warm Air Gas Furnace >= 225000 Btu/h	12100260	90.00	80.00			<b>PASSES</b>
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	224079	0.80	0.82			<b>PASSES</b>

<b>Pr0Sy2</b>	<b>System 2</b>	<b>Constant Volume Packaged System--902</b>	<b>No. of Units 1</b>
---------------	-----------------	-------------------------------------------------	---------------------------

Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Compliance
Cooling System	Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity	470394	12.20	10.00	12.30	10.10	<b>PASSES</b>
Heating System	Warm Air Gas Furnace >= 225000 Btu/h	848110	90.00	80.00			<b>PASSES</b>
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	15706	0.80	0.82			<b>PASSES</b>

<b>Pr0Sy3</b>	<b>System 3</b>	<b>Constant Volume Packaged System--902</b>	<b>No. of Units 1</b>
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Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Compliance
Cooling System	Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity	507008	12.20	10.00	12.30	10.10	<b>PASSES</b>
Heating System	Warm Air Gas Furnace >= 225000 Btu/h	924020	90.00	80.00			<b>PASSES</b>
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	17111	0.80	0.82			<b>PASSES</b>

Pr0Sy4		System 4		Constant Volume Packaged System--902			No. of Units 1	
Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Compliance	
Cooling System	Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity	427951	12.20	10.00	12.30	10.10	PASSES	
Heating System	Warm Air Gas Furnace >= 225000 Btu/h	780700	90.00	80.00			PASSES	
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	14457	0.80	0.82			PASSES	
Pr0Sy5		System 5		Constant Volume Packaged System--902			No. of Units 1	
Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Compliance	
Cooling System	Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity	491830	12.20	10.00	12.30	10.10	PASSES	
Heating System	Warm Air Gas Furnace >= 225000 Btu/h	923040	90.00	80.00			PASSES	
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	17093	0.80	0.82			PASSES	
<b>PASSES</b>								

Plant Compliance								
Description	Installed No	Size	Design Eff	Min Eff	Design IPLV	Min IPLV	Category	Compliance
<b>None</b>								

Project: Building C1 CZ1 Man  
 Title: TAM Building C1  
 Type: Manufacturing Facility  
 (WEA File: Miami.tmy)

### Water Heater Compliance

Description	Type	Category	Design Eff	Min Eff	Design Loss	Max Loss	Compliance
Water Heater 1	Gas Storage water heater	<= 75000 Btu/h; >= 20 Gal	0.58	0.52			PASSES
<b>PASSES</b>							

### 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]	Compliance
<b>None</b>							

Project: Building C1 CZ1 Man  
 Title: TAM Building C1  
 Type: Manufacturing Facility  
 (WEA File: Miami.tmy)

### Other Required Compliance

Category	Section	Requirement (write N/A in box if not applicable)	Check
			<input type="checkbox"/>

**Project: Building C1 CZ1 Man**

# DOE Based Sizing

## PROJECT SUMMARY

**Short Desc:** Building C1

**Owner:** Enter Owner's name here

**Address1:** Enter Address here

**Address2:** Enter Address here

**Type:** Manufacturing Facility

**Weather File:** FL\_MIAMI\_INTL\_AP.tm3

**Conditioned Area:** 160000 SF

**No of Stories:** 1

**Permit No:** 0

**Description:** TAM Building C1

**City:** Enter city here

**State:** Enter state here

**Zip:** 0

**Class:** New Finished building

**Conditioned & UnConditioned Area:** 160000 SF

**Area entered from Plans** 160000 SF

**Max Tonnage** 0

**If different, write in:** \_\_\_\_\_

## CERTIFICATIONS

I hereby certify that the plans and specifications covered by this calculation are in compliance as required by the authority of jurisdiction

Prepared By: \_\_\_\_\_

Building Official: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

I certify that this building is in compliance as required by the authority of jurisdiction

Owner Agent: \_\_\_\_\_

Date: \_\_\_\_\_

If required by law, I hereby certify (\*) that the system design is in compliance as required by the authority of jurisdiction

Architect: \_\_\_\_\_

Reg No: \_\_\_\_\_

Electrical Designer: \_\_\_\_\_

Reg No: \_\_\_\_\_

Lighting Designer: \_\_\_\_\_

Reg No: \_\_\_\_\_

Mechanical Designer: \_\_\_\_\_

Reg No: \_\_\_\_\_

Plumbing Designer: \_\_\_\_\_

Reg No: \_\_\_\_\_

(\*) Signature may be required when law requires design to be performed by registered design professionals. Typed names and registration numbers may be used where all relevant information is contained on signed/sealed plans.

**DOE 2.1 E Based Sized Parameters (Beta Feature)**

<u>IdSystem</u>	<u>System Name</u>	<u>System Type</u>		
1	<b>Pr0Sy1</b>	System 1		
	<u>Component</u>	<u>Sized Value</u>	<u>Units</u>	
	Cooling System	7053765	BTU/HR	
	Heating System	1.210026E+07	Btu/h	
	Air Handling System -Supply	224079	CFM	
2	<b>Pr0Sy2</b>	System 2		
	<u>Component</u>	<u>Sized Value</u>	<u>Units</u>	
	Cooling System	470394	BTU/HR	
	Heating System	848110	Btu/h	
	Air Handling System -Supply	15706	CFM	
3	<b>Pr0Sy3</b>	System 3		
	<u>Component</u>	<u>Sized Value</u>	<u>Units</u>	
	Cooling System	507008	BTU/HR	
	Heating System	924020	Btu/h	
	Air Handling System -Supply	17111	CFM	
4	<b>Pr0Sy4</b>	System 4		
	<u>Component</u>	<u>Sized Value</u>	<u>Units</u>	
	Cooling System	427951	BTU/HR	
	Heating System	780700	Btu/h	
	Air Handling System -Supply	14457	CFM	
5	<b>Pr0Sy5</b>	System 5		
	<u>Component</u>	<u>Sized Value</u>	<u>Units</u>	
	Cooling System	491830	BTU/HR	
	Heating System	923040	Btu/h	
	Air Handling System -Supply	17093	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

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 Miscellaneous report generated by the software at the end of the compliance report



## PROJECT SUMMARY

**Short Desc:** Building C1 CZ1 Ware

**Description:** TAM Building C1

**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:** Warehouse

**Class:** New Finished building

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

**Conditioned Area:** 160000 SF

**Conditioned & UnConditioned Area:** 160000 SF

**No of Stories:** 1

**Area entered from Plans** 160000 SF

**Permit No:** 0

**Max Tonnage** 41

**If different, write in:** \_\_\_\_\_

## Compliance Summary

Component	Design	Criteria	Result
Gross Energy Cost (in \$)	103,055.0	81,753.0	<b>FAILED</b>
LIGHTING CONTROLS			<b>FAILS</b>
EXTERNAL LIGHTING			<b>FAILS</b>
HVAC SYSTEM			<b>FAILS</b>
PLANT			<b>No Entry</b>
WATER HEATING SYSTEMS			<b>PASSES</b>
PIPING SYSTEMS			<b>No Entry</b>
Met all required compliance from Check List?			<b>Yes/No/NA</b>

### IMPORTANT MESSAGE

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

## CERTIFICATIONS

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

Prepared By: \_\_\_\_\_

Building Official: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

I certify that this building is in compliance with the FLorida Energy Efficiency Code

Owner Agent: \_\_\_\_\_

Date: \_\_\_\_\_

If Required by Florida law, I hereby certify (\*) that the system design is in compliance with the Florida Energy Efficiency Code

Architect: \_\_\_\_\_

Reg No: \_\_\_\_\_

Electrical Designer: \_\_\_\_\_

Reg No: \_\_\_\_\_

Lighting Designer: \_\_\_\_\_

Reg No: \_\_\_\_\_

Mechanical Designer: \_\_\_\_\_

Reg No: \_\_\_\_\_

Plumbing Designer: \_\_\_\_\_

Reg No: \_\_\_\_\_

(\*) Signature is required where Florida Law requires design to be performed by registered design professionals. Typed names and registration numbers may be used where all relevant information is contained on signed/sealed plans.

Project: Building C1 CZ1 Ware  
 Title: TAM Building C1  
 Type: Warehouse  
 (WEA File: FL\_MIAMI\_INTL\_AP.tm3)

**Building End Uses**

	1) Proposed	2) Baseline
<b>Total</b>	<b>6,562.00</b>	<b>5,205.60</b>
	<b>\$103,055</b>	<b>\$81,753</b>
ELECTRICITY(MBtu/kWh/\$)	6,562.00	5,205.60
	1922662	1525235
	<b>\$103,055</b>	<b>\$81,753</b>
AREA LIGHTS	1,672.30	1,103.80
	489992	323404
	<b>\$26,264</b>	<b>\$17,334</b>
MISC EQUIPMT	320.00	320.00
	93763	93763
	<b>\$5,026</b>	<b>\$5,026</b>
PUMPS & MISC	0.00	0.00
	8	10
	<b>\$0</b>	<b>\$1</b>
SPACE COOL	2,467.60	2,689.50
	722996	788019
	<b>\$38,753</b>	<b>\$42,238</b>
SPACE HEAT	6.20	47.10
	1807	13794
	<b>\$97</b>	<b>\$739</b>
VENT FANS	2,095.90	1,045.20
	614096	306245
	<b>\$32,916</b>	<b>\$16,415</b>

Credits Applied: None  
 Passing Criteria = 81753  
 Design (including any credits) = 103055  
 Passing requires Proposed Building cost to be at most 100% of  
 Baseline cost. This Proposed Building is at 126.1%

**FAILS**

Project: Building C1 CZ1 Ware  
 Title: TAM Building C1  
 Type: Warehouse  
 (WEA File: FL\_MIAMI\_INTL\_AP.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 2	Walk way less than 10 feet wide	Yes	1.00	400.0	400	224
Ext Light 3	Main entries	Yes	30.00			600

Tradable Surfaces: 824 (W) Allowance for Tradable: 420 (W)

**FAILS**

All External Lighting: 824 (W)

Compliance check includes a excess/Base allowance of 20.00(W)

Project: Building C1 CZ1 Ware  
 Title: TAM Building C1  
 Type: Warehouse  
 (WEA File: FL\_MIAMI\_INTL\_AP.tm3)

### Lighting Controls Compliance

Acronym	Ashrae ID	Description	Area (sq.ft)	Design CP	Min CP	Compliance
Interior	3	Storage & Warehouse - Bulky Active Storage	37,000	4	4	PASSES
Pr0Zo2Sp1	3	Storage & Warehouse - Bulky Active Storage	5,775	3	3	PASSES
Pr0Zo3Sp1	3	Storage & Warehouse - Bulky Active Storage	5,775	1	3	FAILS
Pr0Zo4Sp1	3	Storage & Warehouse - Bulky Active Storage	5,775	1	3	FAILS
Pr0Zo5Sp1	3	Storage & Warehouse - Bulky Active Storage	5,775	1	3	FAILS
Interior	3	Storage & Warehouse - Bulky Active Storage	37,000	4	4	PASSES
Interior	3	Storage & Warehouse - Bulky Active Storage	37,000	4	4	PASSES
Interior	3	Storage & Warehouse - Bulky Active Storage	25,900	3	3	PASSES

**FAILS**

Project: Building C1 CZ1 Ware  
 Title: TAM Building C1  
 Type: Warehouse  
 (WEA File: FL\_MIAMI\_INTL\_AP.tm3)

### System Report Compliance

**Pr0Sy1      System 1      Constant Volume Packaged System--902      No. of Units 1**

Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Compliance
Cooling System	Air Conditioners Air Cooled 0 to 65000 Btu/h Cooling Capacity	6760	12.20	13.00	12.30		<b>FAILS</b>
Heating System	Heat Pumps Air Cooled (Heating Mode) < 65000 Btu/h Cooling Capacity	11515080	3.40	2.25			<b>PASSES</b>
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	213242	0.80	0.82			<b>PASSES</b>

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

Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Compliance
Cooling System	Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity	455562	12.20	9.50	12.30	9.60	<b>PASSES</b>
Heating System	Heat Pumps Air Cooled (Heating Mode) > 135000 Btu/h Cooling Capacity	824180	3.40	3.20			<b>PASSES</b>
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	15263	0.80	0.82			<b>PASSES</b>

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

Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Compliance
Cooling System	Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity	492161	12.20	9.50	12.30	9.60	<b>PASSES</b>
Heating System	Heat Pumps Air Cooled (Heating Mode) > 135000 Btu/h Cooling Capacity	900090	3.40	3.20			<b>PASSES</b>
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	16668	0.80	0.82			<b>PASSES</b>

Pr0Sy4		System 4		Constant Volume Packaged System--902			No. of Units 1	
Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Compliance	
Cooling System	Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity	415573	12.20	9.50	12.30	9.60	PASSES	
Heating System	Heat Pumps Air Cooled (Heating Mode) > 135000 Btu/h Cooling Capacity	762050	3.40	3.20			PASSES	
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	14112	0.80	0.82			PASSES	
Pr0Sy5		System 5		Constant Volume Packaged System--902			No. of Units 1	
Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Compliance	
Cooling System	Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity	487196	12.20	9.50	12.30	9.60	PASSES	
Heating System	Heat Pumps Air Cooled (Heating Mode) > 135000 Btu/h Cooling Capacity	914370	3.40	3.20			PASSES	
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	16933	0.80	0.82			PASSES	
<b>FAILS</b>								

Plant Compliance								
Description	Installed No	Size	Design Eff	Min Eff	Design IPLV	Min IPLV	Category	Compliance
<b>None</b>								

Project: Building C1 CZ1 Ware  
 Title: TAM Building C1  
 Type: Warehouse  
 (WEA File: FL\_MIAMI\_INTL\_AP.tm3)

### Water Heater Compliance

Description	Type	Category	Design Eff	Min Eff	Design Loss	Max Loss	Compliance
Water Heater 1	Gas Storage water heater	<= 75000 Btu/h; >= 20 Gal	0.58	0.52			PASSES
<b>PASSES</b>							

### 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]	Compliance
<b>None</b>							

Project: Building C1 CZ1 Ware  
 Title: TAM Building C1  
 Type: Warehouse  
 (WEA File: FL\_MIAMI\_INTL\_AP.tm3)

### Other Required Compliance

Category	Section	Requirement (write N/A in box if not applicable)	Check
			<input type="checkbox"/>

**Project: Building C1 CZ1 Ware**

# 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

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 Miscellaneous report generated by the software at the end of the compliance report



## PROJECT SUMMARY

**Short Desc:** Building C1 CZ1 Ware

**Description:** TAM Building C1

**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:** Warehouse

**Class:** New Finished building

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

**Conditioned Area:** 160000 SF

**Conditioned & UnConditioned Area:** 160000 SF

**No of Stories:** 1

**Area entered from Plans** 160000 SF

**Permit No:** 0

**Max Tonnage** 41

**If different, write in:** \_\_\_\_\_

## Compliance Summary

Component	Design	Criteria	Result
Gross Energy Cost (in \$)	101,879.0	63,147.0	<b>FAILED</b>
LIGHTING CONTROLS			<b>FAILS</b>
EXTERNAL LIGHTING			<b>FAILS</b>
HVAC SYSTEM			<b>FAILS</b>
PLANT			<b>No Entry</b>
WATER HEATING SYSTEMS			<b>PASSES</b>
PIPING SYSTEMS			<b>No Entry</b>
Met all required compliance from Check List?			<b>Yes/No/NA</b>

### IMPORTANT MESSAGE

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

## CERTIFICATIONS

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

Prepared By: \_\_\_\_\_

Building Official: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

I certify that this building is in compliance with the FLorida Energy Efficiency Code

Owner Agent: \_\_\_\_\_

Date: \_\_\_\_\_

If Required by Florida law, I hereby certify (\*) that the system design is in compliance with the Florida Energy Efficiency Code

Architect: \_\_\_\_\_

Reg No: \_\_\_\_\_

Electrical Designer: \_\_\_\_\_

Reg No: \_\_\_\_\_

Lighting Designer: \_\_\_\_\_

Reg No: \_\_\_\_\_

Mechanical Designer: \_\_\_\_\_

Reg No: \_\_\_\_\_

Plumbing Designer: \_\_\_\_\_

Reg No: \_\_\_\_\_

(\*) Signature is required where Florida Law requires design to be performed by registered design professionals. Typed names and registration numbers may be used where all relevant information is contained on signed/sealed plans.

Project: Building C1 CZ1 Ware  
 Title: TAM Building C1  
 Type: Warehouse  
 (WEA File: FL\_MIAMI\_INTL\_AP.tm3)

**Building End Uses**

	1) Proposed	2) Baseline
<b>Total</b>	<b>6,487.10</b>	<b>4,730.40</b>
	<b>\$101,879</b>	<b>\$74,291</b>
ELECTRICITY(MBtu/kWh/\$)	6,487.10	4,730.40
	1900735	1386019
	<b>\$101,879</b>	<b>\$74,291</b>
AREA LIGHTS	1,672.30	1,003.40
	489992	293984
	<b>\$26,264</b>	<b>\$15,758</b>
MISC EQUIPMT	320.00	320.00
	93763	93763
	<b>\$5,026</b>	<b>\$5,026</b>
PUMPS & MISC	0.00	0.00
	8	9
	<b>\$0</b>	<b>\$0</b>
SPACE COOL	2,421.60	2,482.70
	709532	727436
	<b>\$38,031</b>	<b>\$38,991</b>
SPACE HEAT	7.40	22.50
	2155	6596
	<b>\$116</b>	<b>\$354</b>
VENT FANS	2,065.80	901.80
	605285	264231
	<b>\$32,443</b>	<b>\$14,163</b>

Credits Applied: None  
 Passing Criteria = 63147  
 Design (including any credits) = 101879  
 Passing requires Proposed Building cost to be at most 85% of  
 Baseline cost. This Proposed Building is at 137.1%

**FAILS**

Project: Building C1 CZ1 Ware  
 Title: TAM Building C1  
 Type: Warehouse  
 (WEA File: FL\_MIAMI\_INTL\_AP.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 2	Walk way less than 10 feet wide	Yes	1.00	400.0	400	224
Ext Light 3	Main entries	Yes	30.00			600

Tradable Surfaces: 824 (W) Allowance for Tradable: 420 (W)

**FAILS**

All External Lighting: 824 (W)

Compliance check includes a excess/Base allowance of 20.00(W)

Project: Building C1 CZ1 Ware  
 Title: TAM Building C1  
 Type: Warehouse  
 (WEA File: FL\_MIAMI\_INTL\_AP.tm3)

### Lighting Controls Compliance

Acronym	Ashrae ID	Description	Area (sq.ft)	Design CP	Min CP	Compli- ance
Interior	3	Storage & Warehouse - Bulky Active Storage	37,000	4	4	PASSES
Pr0Zo2Sp1	3	Storage & Warehouse - Bulky Active Storage	5,775	3	3	PASSES
Pr0Zo3Sp1	3	Storage & Warehouse - Bulky Active Storage	5,775	1	3	FAILS
Pr0Zo4Sp1	3	Storage & Warehouse - Bulky Active Storage	5,775	1	3	FAILS
Pr0Zo5Sp1	3	Storage & Warehouse - Bulky Active Storage	5,775	1	3	FAILS
Interior	3	Storage & Warehouse - Bulky Active Storage	37,000	4	4	PASSES
Interior	3	Storage & Warehouse - Bulky Active Storage	37,000	4	4	PASSES
Interior	3	Storage & Warehouse - Bulky Active Storage	25,900	3	3	PASSES

**FAILS**

Project: Building C1 CZ1 Ware  
 Title: TAM Building C1  
 Type: Warehouse  
 (WEA File: FL\_MIAMI\_INTL\_AP.tm3)

### System Report Compliance

**Pr0Sy1      System 1      Constant Volume Packaged System--902      No. of Units 1**

Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Compliance
Cooling System	Air Conditioners Air Cooled < 65000 Btu/h Cooling Capacity	6760	12.20	12.23	12.30		<b>FAILS</b>
Heating System	Heat Pumps Air Cooled (Heating Mode) < 65000 Btu/h Cooling Capacity	11515080	3.40	2.25			<b>PASSES</b>
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	213242	0.80	0.82			<b>PASSES</b>

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

Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Compliance
Cooling System	Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity	455562	12.20	9.50	12.30	9.60	<b>PASSES</b>
Heating System	Heat Pumps Air Cooled (Heating Mode) > 135000 Btu/h Cooling Capacity	824180	3.40	3.20			<b>PASSES</b>
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	15263	0.80	0.82			<b>PASSES</b>

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

Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Compliance
Cooling System	Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity	492161	12.20	9.50	12.30	9.60	<b>PASSES</b>
Heating System	Heat Pumps Air Cooled (Heating Mode) > 135000 Btu/h Cooling Capacity	900090	3.40	3.20			<b>PASSES</b>
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	16668	0.80	0.82			<b>PASSES</b>

<b>Pr0Sy4</b>		<b>System 4</b>		<b>Constant Volume Packaged System--902</b>			<b>No. of Units</b>	
							<b>1</b>	
<b>Component</b>	<b>Category</b>	<b>Capacity</b>	<b>Design Eff</b>	<b>Eff Criteria</b>	<b>Design IPLV</b>	<b>IPLV Criteria</b>	<b>Compliance</b>	
Cooling System	Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity	415573	12.20	9.50	12.30	9.60	<b>PASSES</b>	
Heating System	Heat Pumps Air Cooled (Heating Mode) > 135000 Btu/h Cooling Capacity	762050	3.40	3.20			<b>PASSES</b>	
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	14112	0.80	0.82			<b>PASSES</b>	
<b>Pr0Sy5</b>		<b>System 5</b>		<b>Constant Volume Packaged System--902</b>			<b>No. of Units</b>	
							<b>1</b>	
<b>Component</b>	<b>Category</b>	<b>Capacity</b>	<b>Design Eff</b>	<b>Eff Criteria</b>	<b>Design IPLV</b>	<b>IPLV Criteria</b>	<b>Compliance</b>	
Cooling System	Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity	487196	12.20	9.50	12.30	9.60	<b>PASSES</b>	
Heating System	Heat Pumps Air Cooled (Heating Mode) > 135000 Btu/h Cooling Capacity	914370	3.40	3.20			<b>PASSES</b>	
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	16933	0.80	0.82			<b>PASSES</b>	
							<b>FAILS</b>	

<b>Plant Compliance</b>								
<b>Description</b>	<b>Installed No</b>	<b>Size</b>	<b>Design Eff</b>	<b>Min Eff</b>	<b>Design IPLV</b>	<b>Min IPLV</b>	<b>Category</b>	<b>Compliance</b>
								<b>None</b>

Project: Building C1 CZ1 Ware  
 Title: TAM Building C1  
 Type: Warehouse  
 (WEA File: FL\_MIAMI\_INTL\_AP.tm3)

### Water Heater Compliance

Description	Type	Category	Design Eff	Min Eff	Design Loss	Max Loss	Compliance
Water Heater 1	Gas Storage water heater	<= 75000 Btu/h; >= 20 Gal	0.58	0.52			PASSES
<b>PASSES</b>							

### 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]	Compliance
<b>None</b>							

Project: Building C1 CZ1 Ware  
 Title: TAM Building C1  
 Type: Warehouse  
 (WEA File: FL\_MIAMI\_INTL\_AP.tm3)

### Other Required Compliance

Category	Section	Requirement (write N/A in box if not applicable)	Check
			<input type="checkbox"/>

**Project: Building C1 CZ1 Ware**

# 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 - Prescriptive Compliance 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 Miscellaneous report generated by the software at the end of the compliance report



## PROJECT SUMMARY

**Short Desc:** Building C1 CZ1 Ware

**Description:** TAM Building C1

**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:** Warehouse

**Class:** New Finished building

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

**Conditioned Area:** 160000 SF

**Conditioned & UnConditioned Area:** 160000 SF

**No of Stories:** 1

**Area entered from Plans** 160000 SF

**Permit No:** 0

**Max Tonnage** 41

**If different, write in:** \_\_\_\_\_

### Compliance Summary

Component	Design	Criteria	Result
ENVELOPE PRESCRIPTIVE			<b>FAILS</b>
LIGHTING POWER	160,001.0	105,600.0	<b>FAILS</b>
LIGHTING CONTROLS			<b>FAILS</b>
EXTERNAL LIGHTING			<b>FAILS</b>
HVAC SYSTEM			<b>FAILS</b>
PLANT			<b>No Entry</b>
WATER HEATING SYSTEMS			<b>PASSES</b>
PIPING SYSTEMS			<b>No Entry</b>
Met all required compliance from Check List?			<b>Yes/No/NA</b>

#### IMPORTANT MESSAGE

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

## CERTIFICATIONS

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

Prepared By: \_\_\_\_\_

Building Official: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

I certify that this building is in compliance with the FLorida Energy Efficiency Code

Owner Agent: \_\_\_\_\_

Date: \_\_\_\_\_

If Required by Florida law, I hereby certify (\*) that the system design is in compliance with the Florida Energy Efficiency Code

Architect: \_\_\_\_\_

Reg No: \_\_\_\_\_

Electrical Designer: \_\_\_\_\_

Reg No: \_\_\_\_\_

Lighting Designer: \_\_\_\_\_

Reg No: \_\_\_\_\_

Mechanical Designer: \_\_\_\_\_

Reg No: \_\_\_\_\_

Plumbing Designer: \_\_\_\_\_

Reg No: \_\_\_\_\_

(\*) Signature is required where Florida Law requires design to be performed by registered design professionals. Typed names and registration numbers may be used where all relevant information is contained on signed/sealed plans.

Project: Building C1 CZ1 Ware  
 Title: TAM Building C1  
 Type: Warehouse  
 (WEA File: FL\_MIAMI\_INTL\_AP.tm3)

### Prescriptive Envelope Compliance

Item	Zone	Description	Design	Criteria	Meet Req.
Glass	Building C1 CZ1	East glass area must be less than or equal to South glass area	.000	1,280.000	Yes
Glass	Building C1 CZ1	West glass area must be less than or equal to South glass area	.000	1,280.000	Yes
Glass	IntA	Percent glass Max allowed (%)	.000	40.000	Yes
Skylights	IntA	Percent Skylight Max allowed (%)	8.649	5.000	No
Pr0Zo1Rf1	IntA	Exterior Roof UValue Max allowed	.040	0.063	Yes
Pr0Zo1Rf1Sk1	Pr0Zo1Rf1	Skylight: SHGC Max allowed	.250	0.190	No
Pr0Zo1Rf1Sk1	Pr0Zo1Rf1Sk1	Skylight: UValue Max allowed	1.000	1.360	Yes
Glass	PerA	Percent glass Max allowed (%)	13.333	40.000	Yes
Pr0Zo2Wa1	PerA	Exterior Wall: UValue Max allowed	.350	0.089	No
Pr0Zo2Wa1Wi1	Pr0Zo2Wa1	Exterior Window: SHGC Max allowed	.220	0.250	Yes
Pr0Zo2Wa1Wi1	Pr0Zo2Wa1	Exterior Window: UValue Max allowed	.900	1.200	Yes
Skylights	PerA	Percent Skylight Max allowed (%)	.000	5.000	Yes
Pr0Zo2Rf1	PerA	Exterior Roof UValue Max allowed	.040	0.063	Yes
Glass	PerB	Percent glass Max allowed (%)	.000	40.000	Yes
Pr0Zo3Wa1	PerB	Exterior Wall: UValue Max allowed	.350	0.089	No
Skylights	PerB	Percent Skylight Max allowed (%)	.000	5.000	Yes
Pr0Zo3Rf1	PerB	Exterior Roof UValue Max allowed	.040	0.063	Yes
Glass	PerC	Percent glass Max allowed (%)	.000	40.000	Yes
Pr0Zo4Wa1	PerC	Exterior Wall: UValue Max allowed	.350	0.089	No
Skylights	PerC	Percent Skylight Max allowed (%)	.000	5.000	Yes
Pr0Zo4Rf1	PerC	Exterior Roof UValue Max allowed	.040	0.063	Yes
Glass	PerD	Percent glass Max allowed (%)	.000	40.000	Yes
Pr0Zo5Wa1	PerD	Exterior Wall: UValue Max allowed	.350	0.089	No
Skylights	PerD	Percent Skylight Max allowed (%)	.000	5.000	Yes
Pr0Zo5Rf1	PerD	Exterior Roof UValue Max allowed	.040	0.063	Yes
Glass	IntB	Percent glass Max allowed (%)	.000	40.000	Yes
Skylights	IntB	Percent Skylight Max allowed (%)	.000	5.000	Yes
Pr0Zo1Rf1	IntB	Exterior Roof UValue Max allowed	.040	0.063	Yes
Glass	IntC	Percent glass Max allowed (%)	.000	40.000	Yes
Skylights	IntC	Percent Skylight Max allowed (%)	.000	5.000	Yes
Pr0Zo1Rf1	IntC	Exterior Roof UValue Max allowed	.040	0.063	Yes
Glass	IntD	Percent glass Max allowed (%)	.000	40.000	Yes
Skylights	IntD	Percent Skylight Max allowed (%)	.000	5.000	Yes
Pr0Zo1Rf1	IntD	Exterior Roof UValue Max allowed	.040	0.063	Yes

**DOES NOT meet Prescriptive Envelope Requirements -- FAILS**

Project: Building C1 CZ1 Ware  
 Title: TAM Building C1  
 Type: Warehouse  
 (WEA File: FL\_MIAMI\_INTL\_AP.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 2	Walk way less than 10 feet wide	Yes	1.00	400.0	400	224
Ext Light 3	Main entries	Yes	30.00			600

Tradable Surfaces: 824 (W) Allowance for Tradable: 420 (W)

**FAILS**

All External Lighting: 824 (W)

Compliance check includes a excess/Base allowance of 20.00(W)

Project: Building C1 CZ1 Ware  
 Title: TAM Building C1  
 Type: Warehouse  
 (WEA File: FL\_MIAMI\_INTL\_AP.tm3)

**Lighting Power Compliance**

Space	Ashrae ID	Description	Area (sq.ft)	Height (ft)	No. of Spaces	Design (W)	Effective (W)	Allowance (W)
Interior	3	Storage & Warehouse - Bulky Active Storage	37,000	24.0	1	37000	37000	24,420
Pr0Zo2Sp1	3	Storage & Warehouse - Bulky Active Storage	5,775	24.0	1	5775	5775	3,812
Pr0Zo3Sp1	3	Storage & Warehouse - Bulky Active Storage	5,775	24.0	1	5776	5776	3,812
Pr0Zo4Sp1	3	Storage & Warehouse - Bulky Active Storage	5,775	24.0	1	5775	5775	3,812
Pr0Zo5Sp1	3	Storage & Warehouse - Bulky Active Storage	5,775	24.0	1	5775	5775	3,812
Interior	3	Storage & Warehouse - Bulky Active Storage	37,000	24.0	1	37000	37000	24,420
Interior	3	Storage & Warehouse - Bulky Active Storage	37,000	24.0	1	37000	37000	24,420
Interior	3	Storage & Warehouse - Bulky Active Storage	25,900	24.0	1	25900	25900	17,094

Design : 160001 (W)

Effective: 160001 (W)

Allowance: 105600 (W)

Passing requires Design to be at most 100% of Criteria

**FAILS**

**Project: Building C1 CZ1 Ware**  
**Title: TAM Building C1**  
**Type: Warehouse**  
**(WEA File: FL\_MIAMI\_INTL\_AP.tm3)**

**Lighting Controls Compliance**

Acronym	Ashrae ID	Description	Area (sq.ft)	Design CP	Min CP	Compliance
Interior	3	Storage & Warehouse - Bulky Active Storage	37,000	4	4	PASSES
Pr0Zo2Sp1	3	Storage & Warehouse - Bulky Active Storage	5,775	3	3	PASSES
Pr0Zo3Sp1	3	Storage & Warehouse - Bulky Active Storage	5,775	1	3	FAILS
Pr0Zo4Sp1	3	Storage & Warehouse - Bulky Active Storage	5,775	1	3	FAILS
Pr0Zo5Sp1	3	Storage & Warehouse - Bulky Active Storage	5,775	1	3	FAILS
Interior	3	Storage & Warehouse - Bulky Active Storage	37,000	4	4	PASSES
Interior	3	Storage & Warehouse - Bulky Active Storage	37,000	4	4	PASSES
Interior	3	Storage & Warehouse - Bulky Active Storage	25,900	3	3	PASSES

**FAILS**

Project: Building C1 CZ1 Ware  
 Title: TAM Building C1  
 Type: Warehouse  
 (WEA File: FL\_MIAMI\_INTL\_AP.tm3)

### System Report Compliance

**Pr0Sy1      System 1      Constant Volume Packaged System--902      No. of Units 1**

Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Compliance
Cooling System	Air Conditioners Air Cooled 0 to 65000 Btu/h Cooling Capacity	6760	12.20	13.00	12.30		<b>FAILS</b>
Heating System	Heat Pumps Air Cooled (Heating Mode) < 65000 Btu/h Cooling Capacity	11515080	3.40	2.25			<b>PASSES</b>
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	213242	0.80	0.82			<b>PASSES</b>

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

Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Compliance
Cooling System	Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity	455562	12.20	9.50	12.30	9.60	<b>PASSES</b>
Heating System	Heat Pumps Air Cooled (Heating Mode) > 135000 Btu/h Cooling Capacity	824180	3.40	3.20			<b>PASSES</b>
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	15263	0.80	0.82			<b>PASSES</b>

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

Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Compliance
Cooling System	Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity	492161	12.20	9.50	12.30	9.60	<b>PASSES</b>
Heating System	Heat Pumps Air Cooled (Heating Mode) > 135000 Btu/h Cooling Capacity	900090	3.40	3.20			<b>PASSES</b>
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	16668	0.80	0.82			<b>PASSES</b>

Pr0Sy4		System 4		Constant Volume Packaged System--902			No. of Units 1	
Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Compliance	
Cooling System	Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity	415573	12.20	9.50	12.30	9.60	PASSES	
Heating System	Heat Pumps Air Cooled (Heating Mode) > 135000 Btu/h Cooling Capacity	762050	3.40	3.20			PASSES	
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	14112	0.80	0.82			PASSES	
Pr0Sy5		System 5		Constant Volume Packaged System--902			No. of Units 1	
Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Compliance	
Cooling System	Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity	487196	12.20	9.50	12.30	9.60	PASSES	
Heating System	Heat Pumps Air Cooled (Heating Mode) > 135000 Btu/h Cooling Capacity	914370	3.40	3.20			PASSES	
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	16933	0.80	0.82			PASSES	
<b>FAILS</b>								

Plant Compliance								
Description	Installed No	Size	Design Eff	Min Eff	Design IPLV	Min IPLV	Category	Compliance
<b>None</b>								

Project: Building C1 CZ1 Ware  
 Title: TAM Building C1  
 Type: Warehouse  
 (WEA File: FL\_MIAMI\_INTL\_AP.tm3)

### Water Heater Compliance

Description	Type	Category	Design Eff	Min Eff	Design Loss	Max Loss	Compliance
Water Heater 1	Gas Storage water heater	<= 75000 Btu/h; >= 20 Gal	0.58	0.52			PASSES
<b>PASSES</b>							

### 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]	Compliance
<b>None</b>							

Project: Building C1 CZ1 Ware  
 Title: TAM Building C1  
 Type: Warehouse  
 (WEA File: FL\_MIAMI\_INTL\_AP.tm3)

### Other Required Compliance

Category	Section	Requirement (write N/A in box if not applicable)	Check
			<input type="checkbox"/>

**Project: Building C1 CZ1 Ware**



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

EnergyGauge Summit® Fla/Com-2015, Effective Date: June 30, 2015 -- Form 506-2014  
IECC 2012 - Prescriptive Compliance 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 Miscellaneous report generated by the software at the end of the compliance report

## PROJECT SUMMARY

**Short Desc:** Building C1 CZ1 Ware

**Description:** TAM Building C1

**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:** Warehouse

**Class:** New Finished building

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

**Conditioned Area:** 160000 SF

**Conditioned & UnConditioned Area:** 160000 SF

**No of Stories:** 1

**Area entered from Plans** 160000 SF

**Permit No:** 0

**Max Tonnage** 41

**If different, write in:** \_\_\_\_\_

## Compliance Summary

Component	Design	Criteria	Result
ENVELOPE PRESCRIPTIVE			<b>FAILS</b>
Additional Efficiency Prescriptive Option			<b>Failed</b>
LIGHTING POWER	160,001.0	96,000.0	<b>FAILS</b>
LIGHTING CONTROLS			<b>FAILS</b>
EXTERNAL LIGHTING			<b>FAILS</b>
HVAC SYSTEM			<b>FAILS</b>
PLANT			<b>No Entry</b>
WATER HEATING SYSTEMS			<b>PASSES</b>
PIPING SYSTEMS			<b>No Entry</b>
Met all required compliance from Check List?			<b>Yes/No/NA</b>
<b>IMPORTANT MESSAGE</b>			
Info 5009 -- -- -- An input report of this design building must be submitted along with this Compliance Report			

## CERTIFICATIONS

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

Prepared By: \_\_\_\_\_

Building Official: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

I certify that this building is in compliance with the FLorida Energy Efficiency Code

Owner Agent: \_\_\_\_\_

Date: \_\_\_\_\_

If Required by Florida law, I hereby certify (\*) that the system design is in compliance with the Florida Energy Efficiency Code

Architect: \_\_\_\_\_

Reg No: \_\_\_\_\_

Electrical Designer: \_\_\_\_\_

Reg No: \_\_\_\_\_

Lighting Designer: \_\_\_\_\_

Reg No: \_\_\_\_\_

Mechanical Designer: \_\_\_\_\_

Reg No: \_\_\_\_\_

Plumbing Designer: \_\_\_\_\_

Reg No: \_\_\_\_\_

(\*) Signature is required where Florida Law requires design to be performed by registered design professionals. Typed names and registration numbers may be used where all relevant information is contained on signed/sealed plans.

Project: Building C1 CZ1 Ware  
 Title: TAM Building C1  
 Type: Warehouse  
 (WEA File: FL\_MIAMI\_INTL\_AP.tm3)

### Prescriptive Envelope Compliance

Item	Zone	Description	Design	Criteria	Meet Req.
Glass	IntA	Percent glass Max allowed (%)	.000	30.000	Yes
Skylights	IntA	Percent Skylight Max allowed (%)	8.649	3.000	No
Pr0Zo1Rf1	IntA	Exterior Roof UValue Max allowed	.040	0.048	Yes
Pr0Zo1Rf1	IntA	Exterior Roof Absorptance (3-year aged) Max allowed	.400	0.450	Yes
Pr0Zo1Rf1	IntA	Exterior Roof Emissivity (3-year aged) Min Required	.900	0.750	Yes
Pr0Zo1Rf1Sk1	Pr0Zo1Rf1	Skylight: SHGC Max allowed	.250	0.350	Yes
Pr0Zo1Rf1Sk1	Pr0Zo1Rf1Sk1	Skylight: UValue Max allowed	1.000	0.750	No
Glass	PerA	Percent glass Max allowed (%)	13.333	30.000	Yes
Pr0Zo2Wa1	PerA	Exterior Wall: UValue Max allowed	.350	0.064	No
Pr0Zo2Wa1Wi1	Pr0Zo2Wa1	Exterior Window: SHGC Max allowed	.500	0.400	No
Pr0Zo2Wa1Wi1	Pr0Zo2Wa1	Exterior Window: UValue Max allowed	.900	0.500	No
Skylights	PerA	Percent Skylight Max allowed (%)	.000	3.000	Yes
Pr0Zo2Rf1	PerA	Exterior Roof UValue Max allowed	.040	0.048	Yes
Pr0Zo2Rf1	PerA	Exterior Roof Absorptance (3-year aged) Max allowed	.400	0.450	Yes
Pr0Zo2Rf1	PerA	Exterior Roof Emissivity (3-year aged) Min Required	.900	0.750	Yes
Glass	PerB	Percent glass Max allowed (%)	.000	30.000	Yes
Pr0Zo3Wa1	PerB	Exterior Wall: UValue Max allowed	.350	0.064	No
Skylights	PerB	Percent Skylight Max allowed (%)	.000	3.000	Yes
Pr0Zo3Rf1	PerB	Exterior Roof UValue Max allowed	.040	0.048	Yes
Pr0Zo3Rf1	PerB	Exterior Roof Absorptance (3-year aged) Max allowed	.400	0.450	Yes
Pr0Zo3Rf1	PerB	Exterior Roof Emissivity (3-year aged) Min Required	.900	0.750	Yes
Glass	PerC	Percent glass Max allowed (%)	.000	30.000	Yes
Pr0Zo4Wa1	PerC	Exterior Wall: UValue Max allowed	.350	0.064	No
Skylights	PerC	Percent Skylight Max allowed (%)	.000	3.000	Yes
Pr0Zo4Rf1	PerC	Exterior Roof UValue Max allowed	.040	0.048	Yes
Pr0Zo4Rf1	PerC	Exterior Roof Absorptance (3-year aged) Max allowed	.400	0.450	Yes
Pr0Zo4Rf1	PerC	Exterior Roof Emissivity (3-year aged) Min Required	.900	0.750	Yes
Glass	PerD	Percent glass Max allowed (%)	.000	30.000	Yes
Pr0Zo5Wa1	PerD	Exterior Wall: UValue Max allowed	.350	0.064	No
Skylights	PerD	Percent Skylight Max allowed (%)	.000	3.000	Yes
Pr0Zo5Rf1	PerD	Exterior Roof UValue Max allowed	.040	0.048	Yes
Pr0Zo5Rf1	PerD	Exterior Roof Absorptance (3-year aged) Max allowed	.400	0.450	Yes
Pr0Zo5Rf1	PerD	Exterior Roof Emissivity (3-year aged) Min Required	.900	0.750	Yes
Glass	IntB	Percent glass Max allowed (%)	.000	30.000	Yes
Skylights	IntB	Percent Skylight Max allowed (%)	.000	3.000	Yes
Pr0Zo1Rf1	IntB	Exterior Roof UValue Max allowed	.040	0.048	Yes

Pr0Zo1Rf1	IntB	Exterior Roof Absorptance (3-year aged) Max allowed	.400	0.450	Yes
Pr0Zo1Rf1	IntB	Exterior Roof Emissivity (3-year aged) Min Required	.900	0.750	Yes
Glass	IntC	Percent glass Max allowed (%)	.000	30.000	Yes
Skylights	IntC	Percent Skylight Max allowed (%)	.000	3.000	Yes
Pr0Zo1Rf1	IntC	Exterior Roof UValue Max allowed	.040	0.048	Yes
Pr0Zo1Rf1	IntC	Exterior Roof Absorptance (3-year aged) Max allowed	.400	0.450	Yes
Pr0Zo1Rf1	IntC	Exterior Roof Emissivity (3-year aged) Min Required	.900	0.750	Yes
Glass	IntD	Percent glass Max allowed (%)	.000	30.000	Yes
Skylights	IntD	Percent Skylight Max allowed (%)	.000	3.000	Yes
Pr0Zo1Rf1	IntD	Exterior Roof UValue Max allowed	.040	0.048	Yes
Pr0Zo1Rf1	IntD	Exterior Roof Absorptance (3-year aged) Max allowed	.400	0.450	Yes
Pr0Zo1Rf1	IntD	Exterior Roof Emissivity (3-year aged) Min Required	.900	0.750	Yes

**DOES NOT meet Prescriptive Envelope Requirements -- FAILS**

**Project: Building C1 CZ1 Ware**

**Title: TAM Building C1**

**Type: Warehouse**

**(WEA File: FL\_MIAMI\_INTL\_AP.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 2	Walk way less than 10 feet wide	Yes	1.00	400.0	400	224
Ext Light 3	Main entries	Yes	30.00			600

**Tradable Surfaces: 824 (W) Allowance for Tradable: 420 (W)**

**FAILS**

**All External Lighting: 824 (W)**

**Compliance check includes a excess/Base allowance of 20.00(W)**

Project: Building C1 CZ1 Ware  
 Title: TAM Building C1  
 Type: Warehouse  
 (WEA File: FL\_MIAMI\_INTL\_AP.tm3)

**Lighting Power Compliance**

Space	Ashrae ID	Description	Area (sq.ft)	Height (ft)	No. of Spaces	Design (W)	Effective (W)	Allowance (W)
Interior	3	Storage & Warehouse - Bulky Active Storage	37,000	24.0	1	37000	37000	22,200
Pr0Zo2Sp1	3	Storage & Warehouse - Bulky Active Storage	5,775	24.0	1	5775	5775	3,465
Pr0Zo3Sp1	3	Storage & Warehouse - Bulky Active Storage	5,775	24.0	1	5776	5776	3,465
Pr0Zo4Sp1	3	Storage & Warehouse - Bulky Active Storage	5,775	24.0	1	5775	5775	3,465
Pr0Zo5Sp1	3	Storage & Warehouse - Bulky Active Storage	5,775	24.0	1	5775	5775	3,465
Interior	3	Storage & Warehouse - Bulky Active Storage	37,000	24.0	1	37000	37000	22,200
Interior	3	Storage & Warehouse - Bulky Active Storage	37,000	24.0	1	37000	37000	22,200
Interior	3	Storage & Warehouse - Bulky Active Storage	25,900	24.0	1	25900	25900	15,540

**Design : 160001 (W)**  
**Effective: 160001 (W)**  
**Allowance: 96000 (W)**

**FAILS**

**Passing requires Design to be at most 100% of Criteria**

**Project: Building C1 CZ1 Ware**  
**Title: TAM Building C1**  
**Type: Warehouse**  
**(WEA File: FL\_MIAMI\_INTL\_AP.tm3)**

**Lighting Controls Compliance**

<b>Acronym</b>	<b>Ashrae ID</b>	<b>Description</b>	<b>Area (sq.ft)</b>	<b>Design CP</b>	<b>Min CP</b>	<b>Compliance</b>
Interior	3	Storage & Warehouse - Bulky Active Storage	37,000	4	4	<b>PASSES</b>
Pr0Zo2Sp1	3	Storage & Warehouse - Bulky Active Storage	5,775	3	3	<b>PASSES</b>
Pr0Zo3Sp1	3	Storage & Warehouse - Bulky Active Storage	5,775	1	3	<b>FAILS</b>
Pr0Zo4Sp1	3	Storage & Warehouse - Bulky Active Storage	5,775	1	3	<b>FAILS</b>
Pr0Zo5Sp1	3	Storage & Warehouse - Bulky Active Storage	5,775	1	3	<b>FAILS</b>
Interior	3	Storage & Warehouse - Bulky Active Storage	37,000	4	4	<b>PASSES</b>
Interior	3	Storage & Warehouse - Bulky Active Storage	37,000	4	4	<b>PASSES</b>
Interior	3	Storage & Warehouse - Bulky Active Storage	25,900	3	3	<b>PASSES</b>

**FAILS**

Project: Building C1 CZ1 Ware  
 Title: TAM Building C1  
 Type: Warehouse  
 (WEA File: FL\_MIAMI\_INTL\_AP.tm3)

### System Report Compliance

**Pr0Sy1      System 1      Constant Volume Packaged System--902      No. of Units 1**

Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Compliance
Cooling System	Air Conditioners Air Cooled < 65000 Btu/h Cooling Capacity	6760	12.20	12.23	12.30		<b>FAILS</b>
Heating System	Heat Pumps Air Cooled (Heating Mode) < 65000 Btu/h Cooling Capacity	11515080	3.40	2.25			<b>PASSES</b>
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	213242	0.80	0.82			<b>PASSES</b>

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

Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Compliance
Cooling System	Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity	455562	12.20	9.50	12.30	9.60	<b>PASSES</b>
Heating System	Heat Pumps Air Cooled (Heating Mode) > 135000 Btu/h Cooling Capacity	824180	3.40	3.20			<b>PASSES</b>
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	15263	0.80	0.82			<b>PASSES</b>

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

Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Compliance
Cooling System	Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity	492161	12.20	9.50	12.30	9.60	<b>PASSES</b>
Heating System	Heat Pumps Air Cooled (Heating Mode) > 135000 Btu/h Cooling Capacity	900090	3.40	3.20			<b>PASSES</b>
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	16668	0.80	0.82			<b>PASSES</b>



Pr0Sy4		System 4		Constant Volume Packaged System--902			No. of Units 1	
Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Compliance	
Cooling System	Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity	415573	12.20	9.50	12.30	9.60	PASSES	
Heating System	Heat Pumps Air Cooled (Heating Mode) > 135000 Btu/h Cooling Capacity	762050	3.40	3.20			PASSES	
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	14112	0.80	0.82			PASSES	
Pr0Sy5		System 5		Constant Volume Packaged System--902			No. of Units 1	
Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Compliance	
Cooling System	Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity	487196	12.20	9.50	12.30	9.60	PASSES	
Heating System	Heat Pumps Air Cooled (Heating Mode) > 135000 Btu/h Cooling Capacity	914370	3.40	3.20			PASSES	
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	16933	0.80	0.82			PASSES	
<b>FAILS</b>								

Plant Compliance								
Description	Installed No	Size	Design Eff	Min Eff	Design IPLV	Min IPLV	Category	Compliance
<b>None</b>								

Project: Building C1 CZ1 Ware  
 Title: TAM Building C1  
 Type: Warehouse  
 (WEA File: FL\_MIAMI\_INTL\_AP.tm3)

### Water Heater Compliance

Description	Type	Category	Design Eff	Min Eff	Design Loss	Max Loss	Compliance
Water Heater 1	Gas Storage water heater	<= 75000 Btu/h; >= 20 Gal	0.58	0.52			PASSES
<b>PASSES</b>							

### 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]	Compliance
<b>None</b>							

Project: Building C1 CZ1 Ware  
 Title: TAM Building C1  
 Type: Warehouse  
 (WEA File: FL\_MIAMI\_INTL\_AP.tm3)

### Other Required Compliance

Category	Section	Requirement (write N/A in box if not applicable)	Check
			<input type="checkbox"/>

**Project: Building C1 CZ1 Ware**

# DOE Based Sizing

## PROJECT SUMMARY

**Short Desc:** Building C1

**Owner:** Enter Owner's name here

**Address1:** Enter Address here

**Address2:** Enter Address here

**Type:** Warehouse

**Weather File:** FL\_MIAMI\_INTL\_AP.tm3

**Conditioned Area:** 160000 SF

**No of Stories:** 1

**Permit No:** 0

**Description:** TAM Building C1

**City:** Enter city here

**State:** Enter state here

**Zip:** 0

**Class:** New Finished building

**Conditioned & UnConditioned Area:** 160000 SF

**Area entered from Plans** 160000 SF

**Max Tonnage** 0

**If different, write in:** \_\_\_\_\_

## CERTIFICATIONS

I hereby certify that the plans and specifications covered by this calculation are in compliance as required by the authority of jurisdiction

Prepared By: \_\_\_\_\_

Building Official: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

I certify that this building is in compliance as required by the authority of jurisdiction

Owner Agent: \_\_\_\_\_

Date: \_\_\_\_\_

If required by law, I hereby certify (\*) that the system design is in compliance as required by the authority of jurisdiction

Architect: \_\_\_\_\_

Reg No: \_\_\_\_\_

Electrical Designer: \_\_\_\_\_

Reg No: \_\_\_\_\_

Lighting Designer: \_\_\_\_\_

Reg No: \_\_\_\_\_

Mechanical Designer: \_\_\_\_\_

Reg No: \_\_\_\_\_

Plumbing Designer: \_\_\_\_\_

Reg No: \_\_\_\_\_

(\*) Signature may be required when law requires design to be performed by registered design professionals. Typed names and registration numbers may be used where all relevant information is contained on signed/sealed plans.

**DOE 2.1 E Based Sized Parameters (Beta Feature)**

<u>IdSystem</u>	<u>System Name</u>	<u>System Type</u>		
1	<b>Pr0Sy1</b>	System 1		
	<u>Component</u>	<u>Sized Value</u>	<u>Units</u>	
	Cooling System	6760303	BTU/HR	
	Heating System	1.151508E+07	Btu/h	
	Air Handling System -Supply	213242	CFM	
2	<b>Pr0Sy2</b>	System 2		
	<u>Component</u>	<u>Sized Value</u>	<u>Units</u>	
	Cooling System	455562	BTU/HR	
	Heating System	824180	Btu/h	
	Air Handling System -Supply	15263	CFM	
3	<b>Pr0Sy3</b>	System 3		
	<u>Component</u>	<u>Sized Value</u>	<u>Units</u>	
	Cooling System	492161	BTU/HR	
	Heating System	900090	Btu/h	
	Air Handling System -Supply	16668	CFM	
4	<b>Pr0Sy4</b>	System 4		
	<u>Component</u>	<u>Sized Value</u>	<u>Units</u>	
	Cooling System	415573	BTU/HR	
	Heating System	762050	Btu/h	
	Air Handling System -Supply	14112	CFM	
5	<b>Pr0Sy5</b>	System 5		
	<u>Component</u>	<u>Sized Value</u>	<u>Units</u>	
	Cooling System	487196	BTU/HR	
	Heating System	914370	Btu/h	
	Air Handling System -Supply	16933	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

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 Miscellaneous report generated by the software at the end of the compliance report

## PROJECT SUMMARY

**Short Desc:** Building C1 CZ2 Man

**Description:** TAM Building C1

**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:** Manufacturing Facility

**Class:** New Finished building

**Jurisdiction:** ORLANDO, ORANGE COUNTY, FL (582100)

**Conditioned Area:** 160000 SF

**Conditioned & UnConditioned Area:** 160000 SF

**No of Stories:** 1

**Area entered from Plans** 160000 SF

**Permit No:** 0

**Max Tonnage** 624

**If different, write in:** \_\_\_\_\_

## Compliance Summary

Component	Design	Criteria	Result
Gross Energy Cost (in \$)	118,809.0	110,224.0	<b>FAILED</b>
LIGHTING CONTROLS			<b>FAILS</b>
EXTERNAL LIGHTING			<b>FAILS</b>
HVAC SYSTEM			<b>PASSES</b>
PLANT			<b>No Entry</b>
WATER HEATING SYSTEMS			<b>PASSES</b>
PIPING SYSTEMS			<b>No Entry</b>
Met all required compliance from Check List?			<b>Yes/No/NA</b>

### IMPORTANT MESSAGE

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

## CERTIFICATIONS

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

Prepared By: \_\_\_\_\_

Building Official: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

I certify that this building is in compliance with the FLorida Energy Efficiency Code

Owner Agent: \_\_\_\_\_

Date: \_\_\_\_\_

If Required by Florida law, I hereby certify (\*) that the system design is in compliance with the Florida Energy Efficiency Code

Architect: \_\_\_\_\_

Reg No: \_\_\_\_\_

Electrical Designer: \_\_\_\_\_

Reg No: \_\_\_\_\_

Lighting Designer: \_\_\_\_\_

Reg No: \_\_\_\_\_

Mechanical Designer: \_\_\_\_\_

Reg No: \_\_\_\_\_

Plumbing Designer: \_\_\_\_\_

Reg No: \_\_\_\_\_

(\*) Signature is required where Florida Law requires design to be performed by registered design professionals. Typed names and registration numbers may be used where all relevant information is contained on signed/sealed plans.



Project: Building C1 CZ2 Man  
 Title: TAM Building C1  
 Type: Manufacturing Facility  
 (WEA File: Orlando.TMY)

### Building End Uses

	1) Proposed	2) Baseline
<b>Total</b>	<b>8,031.10</b>	<b>7,714.90</b>
	<b>\$118,809</b>	<b>\$110,224</b>
ELECTRICITY(MBtu/kWh/\$)	7,387.70	6,767.10
	2164647	1982796
	<b>\$115,592</b>	<b>\$105,485</b>
AREA LIGHTS	1,672.30	1,856.20
	489992	543877
	<b>\$26,166</b>	<b>\$28,934</b>
MISC EQUIPMT	1,600.10	1,600.10
	468840	468840
	<b>\$25,036</b>	<b>\$24,942</b>
PUMPS & MISC	0.50	7.60
	149	2226
	<b>\$8</b>	<b>\$118</b>
SPACE COOL	1,428.00	2,207.30
	418417	646747
	<b>\$22,343</b>	<b>\$34,407</b>
SPACE HEAT	124.70	40.70
	36548	11934
	<b>\$1,952</b>	<b>\$635</b>
VENT FANS	2,562.10	1,055.20
	750701	309172
	<b>\$40,087</b>	<b>\$16,448</b>
NATURAL-GAS(MBtu/therm/\$)	643.40	947.80
	6434	9478
	<b>\$3,217</b>	<b>\$4,739</b>
SPACE HEAT	643.40	947.80
	6434	9478
	<b>\$3,217</b>	<b>\$4,739</b>

Credits Applied: None

**FAILS**

Passing Criteria = 110224

Design (including any credits) = 118809

Passing requires Proposed Building cost to be at most 100% of Baseline cost. This Proposed Building is at 107.8%

Project: Building C1 CZ2 Man

Title: TAM Building C1

Type: Manufacturing Facility

(WEA File: Orlando.TMY)

### 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 2	Walk way less than 10 feet wide	Yes	1.00	400.0	400	224
Ext Light 3	Main entries	Yes	30.00			600

Tradable Surfaces: 824 (W) Allowance for Tradable: 420 (W)

**FAILS**

All External Lighting: 824 (W)

Compliance check includes a excess/Base allowance of 20.00(W)

Project: Building C1 CZ2 Man

Title: TAM Building C1

Type: Manufacturing Facility

(WEA File: Orlando.TMY)

### Lighting Controls Compliance

Acronym	Ashrae ID	Description	Area (sq.ft)	Design CP	Min CP	Compliance
Interior	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	37,000	4	4	PASSES
Pr0Zo2Sp1	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	5,775	3	3	PASSES
Pr0Zo3Sp1	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	5,775	1	3	FAILS
Pr0Zo4Sp1	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	5,775	1	3	FAILS
Pr0Zo5Sp1	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	5,775	1	3	FAILS
Interior	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	37,000	4	4	PASSES
Interior	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	37,000	4	4	PASSES
Interior	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	25,900	3	3	PASSES

**FAILS**

**Project: Building C1 CZ2 Man**  
**Title: TAM Building C1**  
**Type: Manufacturing Facility**  
**(WEA File: Orlando.TMY)**

**System Report Compliance**

**Pr0Sy1      System 1      Constant Volume Packaged      No. of Units**  
**System--902      1**

<b>Component</b>	<b>Category</b>	<b>Capacity</b>	<b>Design Eff</b>	<b>Eff Criteria</b>	<b>Design IPLV</b>	<b>IPLV Criteria</b>	<b>Compliance</b>
Cooling System	Air Conditioners Air Cooled > 760000 Btu/h Cooling Capacity	7487544	12.20	9.50	12.30	9.60	<b>PASSES</b>
Heating System	Warm Air Gas Furnace >= 225000 Btu/h	13107540	90.00	80.00			<b>PASSES</b>
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	242732	0.80	0.82			<b>PASSES</b>

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

<b>Component</b>	<b>Category</b>	<b>Capacity</b>	<b>Design Eff</b>	<b>Eff Criteria</b>	<b>Design IPLV</b>	<b>IPLV Criteria</b>	<b>Compliance</b>
Cooling System	Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity	499642	12.20	9.80	12.30	9.90	<b>PASSES</b>
Heating System	Warm Air Gas Furnace >= 225000 Btu/h	934050	90.00	80.00			<b>PASSES</b>
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	17297	0.80	0.82			<b>PASSES</b>

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

<b>Component</b>	<b>Category</b>	<b>Capacity</b>	<b>Design Eff</b>	<b>Eff Criteria</b>	<b>Design IPLV</b>	<b>IPLV Criteria</b>	<b>Compliance</b>
Cooling System	Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity	515018	12.20	9.80	12.30	9.90	<b>PASSES</b>
Heating System	Warm Air Gas Furnace >= 225000 Btu/h	966500	90.00	80.00			<b>PASSES</b>
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	17898	0.80	0.82			<b>PASSES</b>

<b>Pr0Sy4</b>		<b>System 4</b>		<b>Constant Volume Packaged System--902</b>			<b>No. of Units</b>	
							<b>1</b>	
<b>Component</b>	<b>Category</b>	<b>Capacity</b>	<b>Design Eff</b>	<b>Eff Criteria</b>	<b>Design IPLV</b>	<b>IPLV Criteria</b>	<b>Compliance</b>	
Cooling System	Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity	460540	12.20	9.80	12.30	9.90	<b>PASSES</b>	
Heating System	Warm Air Gas Furnace >= 225000 Btu/h	854520	90.00	80.00			<b>PASSES</b>	
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	15824	0.80	0.82			<b>PASSES</b>	
<b>Pr0Sy5</b>		<b>System 5</b>		<b>Constant Volume Packaged System--902</b>			<b>No. of Units</b>	
							<b>1</b>	
<b>Component</b>	<b>Category</b>	<b>Capacity</b>	<b>Design Eff</b>	<b>Eff Criteria</b>	<b>Design IPLV</b>	<b>IPLV Criteria</b>	<b>Compliance</b>	
Cooling System	Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity	530705	12.20	9.80	12.30	9.90	<b>PASSES</b>	
Heating System	Warm Air Gas Furnace >= 225000 Btu/h	987430	90.00	80.00			<b>PASSES</b>	
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	18286	0.80	0.82			<b>PASSES</b>	
<b>PASSES</b>								

<b>Plant Compliance</b>								
<b>Description</b>	<b>Installed No</b>	<b>Size</b>	<b>Design Eff</b>	<b>Min Eff</b>	<b>Design IPLV</b>	<b>Min IPLV</b>	<b>Category</b>	<b>Compliance</b>
								<b>None</b>

Project: Building C1 CZ2 Man  
 Title: TAM Building C1  
 Type: Manufacturing Facility  
 (WEA File: Orlando.TMY)

### Water Heater Compliance

Description	Type	Category	Design Eff	Min Eff	Design Loss	Max Loss	Compliance
Water Heater 1	Gas Storage water heater	>75000 & <=155000 Btu/h; < 4000 (Btu/h)/gal	84.00	0.80		1,080.1	PASSES
<b>PASSES</b>							

### 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]	Compliance
<b>None</b>							

Project: Building C1 CZ2 Man  
 Title: TAM Building C1  
 Type: Manufacturing Facility  
 (WEA File: Orlando.TMY)

### Other Required Compliance

Category	Section	Requirement (write N/A in box if not applicable)	Check
			<input type="checkbox"/>

**Project: Building C1 CZ2 Man**

# 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

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 Miscellaneous report generated by the software at the end of the compliance report

## PROJECT SUMMARY

**Short Desc:** Building C1 CZ2 Man

**Description:** TAM Building C1

**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:** Manufacturing Facility

**Class:** New Finished building

**Jurisdiction:** ORLANDO, ORANGE COUNTY, FL (582100)

**Conditioned Area:** 160000 SF

**Conditioned & UnConditioned Area:** 160000 SF

**No of Stories:** 1

**Area entered from Plans** 160000 SF

**Permit No:** 0

**Max Tonnage** 624

**If different, write in:** \_\_\_\_\_

## Compliance Summary

Component	Design	Criteria	Result
Gross Energy Cost (in \$)	118,159.0	99,192.0	<b>FAILED</b>
LIGHTING CONTROLS			<b>FAILS</b>
EXTERNAL LIGHTING			<b>FAILS</b>
HVAC SYSTEM			<b>PASSES</b>
PLANT			<b>No Entry</b>
WATER HEATING SYSTEMS			<b>PASSES</b>
PIPING SYSTEMS			<b>No Entry</b>
Met all required compliance from Check List?			<b>Yes/No/NA</b>

### IMPORTANT MESSAGE

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

## CERTIFICATIONS

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

Prepared By: \_\_\_\_\_

Building Official: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

I certify that this building is in compliance with the FLorida Energy Efficiency Code

Owner Agent: \_\_\_\_\_

Date: \_\_\_\_\_

If Required by Florida law, I hereby certify (\*) that the system design is in compliance with the Florida Energy Efficiency Code

Architect: \_\_\_\_\_

Reg No: \_\_\_\_\_

Electrical Designer: \_\_\_\_\_

Reg No: \_\_\_\_\_

Lighting Designer: \_\_\_\_\_

Reg No: \_\_\_\_\_

Mechanical Designer: \_\_\_\_\_

Reg No: \_\_\_\_\_

Plumbing Designer: \_\_\_\_\_

Reg No: \_\_\_\_\_

(\*) Signature is required where Florida Law requires design to be performed by registered design professionals. Typed names and registration numbers may be used where all relevant information is contained on signed/sealed plans.



Project: Building C1 CZ2 Man  
 Title: TAM Building C1  
 Type: Manufacturing Facility  
 (WEA File: Orlando.TMY)

### Building End Uses

	1) Proposed	2) Baseline
<b>Total</b>	<b>8,011.90</b>	<b>8,034.70</b>
	<b>\$118,159</b>	<b>\$116,697</b>
<b>ELECTRICITY(MBtu/kWh/\$)</b>	7,335.70	7,227.60
	2149406	2117697
	<b>\$114,778</b>	<b>\$112,661</b>
<b>AREA LIGHTS</b>	1,672.30	2,174.10
	489992	637010
	<b>\$26,166</b>	<b>\$33,889</b>
<b>MISC EQUIPMT</b>	1,600.10	1,600.10
	468840	468840
	<b>\$25,036</b>	<b>\$24,942</b>
<b>PUMPS &amp; MISC</b>	0.50	6.50
	149	1909
	<b>\$8</b>	<b>\$102</b>
<b>SPACE COOL</b>	1,394.30	2,292.70
	408542	671770
	<b>\$21,816</b>	<b>\$35,738</b>
<b>SPACE HEAT</b>	135.80	36.30
	39797	10623
	<b>\$2,125</b>	<b>\$565</b>
<b>VENT FANS</b>	2,532.70	1,117.90
	742086	327545
	<b>\$39,627</b>	<b>\$17,425</b>
<b>NATURAL-GAS(MBtu/therm/\$)</b>	676.20	807.10
	6762	8071
	<b>\$3,381</b>	<b>\$4,036</b>
<b>SPACE HEAT</b>	676.20	807.10
	6762	8071
	<b>\$3,381</b>	<b>\$4,036</b>

Credits Applied: None

**FAILS**

Passing Criteria = 99192

Design (including any credits) = 118159

Passing requires Proposed Building cost to be at most 85% of Baseline cost. This Proposed Building is at 101.3%

Project: Building C1 CZ2 Man

Title: TAM Building C1

Type: Manufacturing Facility

(WEA File: Orlando.TMY)

### 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 2	Walk way less than 10 feet wide	Yes	1.00	400.0	400	224
Ext Light 3	Main entries	Yes	30.00			600

Tradable Surfaces: 824 (W) Allowance for Tradable: 420 (W)

**FAILS**

All External Lighting: 824 (W)

Compliance check includes a excess/Base allowance of 20.00(W)

Project: Building C1 CZ2 Man

Title: TAM Building C1

Type: Manufacturing Facility

(WEA File: Orlando.TMY)

### Lighting Controls Compliance

Acronym	Ashrae ID	Description	Area (sq.ft)	Design CP	Min CP	Compliance
Interior	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	37,000	4	4	PASSES
Pr0Zo2Sp1	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	5,775	3	3	PASSES
Pr0Zo3Sp1	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	5,775	1	3	FAILS
Pr0Zo4Sp1	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	5,775	1	3	FAILS
Pr0Zo5Sp1	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	5,775	1	3	FAILS
Interior	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	37,000	4	4	PASSES
Interior	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	37,000	4	4	PASSES
Interior	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	25,900	3	3	PASSES

**FAILS**

**Project: Building C1 CZ2 Man**  
**Title: TAM Building C1**  
**Type: Manufacturing Facility**  
**(WEA File: Orlando.TMY)**

**System Report Compliance**

<b>Pr0Sy1</b>	<b>System 1</b>	<b>Constant Volume Packaged System--902</b>	<b>No. of Units</b> <b>1</b>
---------------	-----------------	---------------------------------------------	---------------------------------

Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Compliance
Cooling System	Air Conditioners Air Cooled > 760000 Btu/h Cooling Capacity	7487544	12.20	9.70	12.30	9.80	<b>PASSES</b>
Heating System	Warm Air Gas Furnace >= 225000 Btu/h	13107540	90.00	80.00			<b>PASSES</b>
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	242732	0.80	0.82			<b>PASSES</b>

<b>Pr0Sy2</b>	<b>System 2</b>	<b>Constant Volume Packaged System--902</b>	<b>No. of Units</b> <b>1</b>
---------------	-----------------	---------------------------------------------	---------------------------------

Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Compliance
Cooling System	Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity	499642	12.20	10.00	12.30	10.10	<b>PASSES</b>
Heating System	Warm Air Gas Furnace >= 225000 Btu/h	934050	90.00	80.00			<b>PASSES</b>
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	17297	0.80	0.82			<b>PASSES</b>

<b>Pr0Sy3</b>	<b>System 3</b>	<b>Constant Volume Packaged System--902</b>	<b>No. of Units</b> <b>1</b>
---------------	-----------------	---------------------------------------------	---------------------------------

Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Compliance
Cooling System	Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity	515018	12.20	10.00	12.30	10.10	<b>PASSES</b>
Heating System	Warm Air Gas Furnace >= 225000 Btu/h	966500	90.00	80.00			<b>PASSES</b>
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	17898	0.80	0.82			<b>PASSES</b>

Pr0Sy4		System 4		Constant Volume Packaged System--902			No. of Units 1	
Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Compliance	
Cooling System	Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity	460540	12.20	10.00	12.30	10.10	PASSES	
Heating System	Warm Air Gas Furnace >= 225000 Btu/h	854520	90.00	80.00			PASSES	
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	15824	0.80	0.82			PASSES	
Pr0Sy5		System 5		Constant Volume Packaged System--902			No. of Units 1	
Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Compliance	
Cooling System	Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity	530705	12.20	10.00	12.30	10.10	PASSES	
Heating System	Warm Air Gas Furnace >= 225000 Btu/h	987430	90.00	80.00			PASSES	
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	18286	0.80	0.82			PASSES	
<b>PASSES</b>								

Plant Compliance								
Description	Installed No	Size	Design Eff	Min Eff	Design IPLV	Min IPLV	Category	Compliance
<b>None</b>								

Project: Building C1 CZ2 Man  
 Title: TAM Building C1  
 Type: Manufacturing Facility  
 (WEA File: Orlando.TMY)

### Water Heater Compliance

Description	Type	Category	Design Eff	Min Eff	Design Loss	Max Loss	Compliance
Water Heater 1	Gas Storage water heater	>75000 & <=155000 Btu/h; < 4000 (Btu/h)/gal	84.00	0.80		1,080.1	<b>PASSES</b>
<b>PASSES</b>							

### 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]	Compliance
<b>None</b>							

Project: Building C1 CZ2 Man  
 Title: TAM Building C1  
 Type: Manufacturing Facility  
 (WEA File: Orlando.TMY)

### Other Required Compliance

Category	Section	Requirement (write N/A in box if not applicable)	Check
			<input type="checkbox"/>

**Project: Building C1 CZ2 Man**

# 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 - Prescriptive Compliance 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 Miscellaneous report generated by the software at the end of the compliance report

## PROJECT SUMMARY

**Short Desc:** Building C1 CZ2 Man

**Description:** TAM Building C1

**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:** Manufacturing Facility

**Class:** New Finished building

**Jurisdiction:** ORLANDO, ORANGE COUNTY, FL (582100)

**Conditioned Area:** 160000 SF

**Conditioned & UnConditioned Area:** 160000 SF

**No of Stories:** 1

**Area entered from Plans** 160000 SF

**Permit No:** 0

**Max Tonnage** 624

**If different, write in:** \_\_\_\_\_

### Compliance Summary

Component	Design	Criteria	Result
ENVELOPE PRESCRIPTIVE			<b>FAILS</b>
LIGHTING POWER	160,001.0	177,600.0	<b>PASSES</b>
LIGHTING CONTROLS			<b>FAILS</b>
EXTERNAL LIGHTING			<b>FAILS</b>
HVAC SYSTEM			<b>PASSES</b>
PLANT			<b>No Entry</b>
WATER HEATING SYSTEMS			<b>PASSES</b>
PIPING SYSTEMS			<b>No Entry</b>
Met all required compliance from Check List?			<b>Yes/No/NA</b>

#### IMPORTANT MESSAGE

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

## CERTIFICATIONS

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

Prepared By: \_\_\_\_\_

Building Official: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

I certify that this building is in compliance with the FLorida Energy Efficiency Code

Owner Agent: \_\_\_\_\_

Date: \_\_\_\_\_

If Required by Florida law, I hereby certify (\*) that the system design is in compliance with the Florida Energy Efficiency Code

Architect: \_\_\_\_\_

Reg No: \_\_\_\_\_

Electrical Designer: \_\_\_\_\_

Reg No: \_\_\_\_\_

Lighting Designer: \_\_\_\_\_

Reg No: \_\_\_\_\_

Mechanical Designer: \_\_\_\_\_

Reg No: \_\_\_\_\_

Plumbing Designer: \_\_\_\_\_

Reg No: \_\_\_\_\_

(\*) Signature is required where Florida Law requires design to be performed by registered design professionals. Typed names and registration numbers may be used where all relevant information is contained on signed/sealed plans.



Project: Building C1 CZ2 Man  
 Title: TAM Building C1  
 Type: Manufacturing Facility  
 (WEA File: Orlando.TMY)

### Prescriptive Envelope Compliance

Item	Zone	Description	Design	Criteria	Meet Req.
Glass	Building C1 CZZ	East glass area must be less than or equal to South glass area	.000	1,280.000	Yes
Glass	Building C1 CZZ	West glass area must be less than or equal to South glass area	.000	1,280.000	Yes
Glass	IntA	Percent glass Max allowed (%)	.000	40.000	Yes
Skylights	IntA	Percent Skylight Max allowed (%)	8.649	5.000	No
Pr0Zo1Rf1	IntA	Exterior Roof UValue Max allowed	.040	0.048	Yes
Pr0Zo1Rf1Sk1	Pr0Zo1Rf1	Skylight: SHGC Max allowed	.250	0.190	No
Pr0Zo1Rf1Sk1	Pr0Zo1Rf1Sk1	Skylight: UValue Max allowed	1.000	1.360	Yes
Glass	PerA	Percent glass Max allowed (%)	13.333	40.000	Yes
Pr0Zo2Wa1	PerA	Exterior Wall: UValue Max allowed	.350	0.089	No
Pr0Zo2Wa1Wi1	Pr0Zo2Wa1	Exterior Window: SHGC Max allowed	.176	0.250	Yes
Pr0Zo2Wa1Wi1	Pr0Zo2Wa1	Exterior Window: UValue Max allowed	.600	0.750	Yes
Skylights	PerA	Percent Skylight Max allowed (%)	.000	5.000	Yes
Pr0Zo2Rf1	PerA	Exterior Roof UValue Max allowed	.040	0.048	Yes
Glass	PerB	Percent glass Max allowed (%)	.000	40.000	Yes
Pr0Zo3Wa1	PerB	Exterior Wall: UValue Max allowed	.350	0.089	No
Skylights	PerB	Percent Skylight Max allowed (%)	.000	5.000	Yes
Pr0Zo3Rf1	PerB	Exterior Roof UValue Max allowed	.040	0.048	Yes
Glass	PerC	Percent glass Max allowed (%)	.000	40.000	Yes
Pr0Zo4Wa1	PerC	Exterior Wall: UValue Max allowed	.350	0.089	No
Skylights	PerC	Percent Skylight Max allowed (%)	.000	5.000	Yes
Pr0Zo4Rf1	PerC	Exterior Roof UValue Max allowed	.040	0.048	Yes
Glass	PerD	Percent glass Max allowed (%)	.000	40.000	Yes
Pr0Zo5Wa1	PerD	Exterior Wall: UValue Max allowed	.350	0.089	No
Skylights	PerD	Percent Skylight Max allowed (%)	.000	5.000	Yes
Pr0Zo5Rf1	PerD	Exterior Roof UValue Max allowed	.040	0.048	Yes
Glass	IntB	Percent glass Max allowed (%)	.000	40.000	Yes
Skylights	IntB	Percent Skylight Max allowed (%)	.000	5.000	Yes
Pr0Zo1Rf1	IntB	Exterior Roof UValue Max allowed	.040	0.048	Yes
Glass	IntC	Percent glass Max allowed (%)	.000	40.000	Yes
Skylights	IntC	Percent Skylight Max allowed (%)	.000	5.000	Yes
Pr0Zo1Rf1	IntC	Exterior Roof UValue Max allowed	.040	0.048	Yes
Glass	IntD	Percent glass Max allowed (%)	.000	40.000	Yes
Skylights	IntD	Percent Skylight Max allowed (%)	.000	5.000	Yes
Pr0Zo1Rf1	IntD	Exterior Roof UValue Max allowed	.040	0.048	Yes

**DOES NOT meet Prescriptive Envelope Requirements -- FAILS**

**Project: Building C1 CZ2 Man**  
**Title: TAM Building C1**  
**Type: Manufacturing Facility**  
**(WEA File: Orlando.TMY)**

**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 2	Walk way less than 10 feet wide	Yes	1.00	400.0	400	224
Ext Light 3	Main entries	Yes	30.00			600

**Tradable Surfaces: 824 (W) Allowance for Tradable: 420 (W)**

**FAILS**

**All External Lighting: 824 (W)**

**Compliance check includes a excess/Base allowance of 20.00(W)**

**Project: Building C1 CZ2 Man**  
**Title: TAM Building C1**  
**Type: Manufacturing Facility**  
**(WEA File: Orlando.TMY)**

### Lighting Power Compliance

Space	Ashrae ID	Description	Area (sq.ft)	Height (ft)	No. of Spaces	Design (W)	Effective (W)	Allowance (W)
Interior	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	37,000	24.0	1	37000	37000	41,070
Pr0Zo2Sp1	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	5,775	24.0	1	5775	5775	6,410
Pr0Zo3Sp1	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	5,775	24.0	1	5776	5776	6,410
Pr0Zo4Sp1	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	5,775	24.0	1	5775	5775	6,410
Pr0Zo5Sp1	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	5,775	24.0	1	5775	5775	6,410
Interior	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	37,000	24.0	1	37000	37000	41,070
Interior	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	37,000	24.0	1	37000	37000	41,070
Interior	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	25,900	24.0	1	25900	25900	28,749

**Design : 160001 (W)**  
**Effective: 160001 (W)**  
**Allowance: 177600 (W)**

<b>PASSES</b>
---------------

**Passing requires Design to be at most 100% of Criteria**

Project: Building C1 CZ2 Man  
 Title: TAM Building C1  
 Type: Manufacturing Facility  
 (WEA File: Orlando.TMY)

### Lighting Controls Compliance

Acronym	Ashrae ID	Description	Area (sq.ft)	Design CP	Min CP	Compliance
Interior	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	37,000	4	4	PASSES
Pr0Zo2Sp1	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	5,775	3	3	PASSES
Pr0Zo3Sp1	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	5,775	1	3	FAILS
Pr0Zo4Sp1	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	5,775	1	3	FAILS
Pr0Zo5Sp1	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	5,775	1	3	FAILS
Interior	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	37,000	4	4	PASSES
Interior	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	37,000	4	4	PASSES
Interior	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	25,900	3	3	PASSES

**FAILS**

Project: Building C1 CZ2 Man  
 Title: TAM Building C1  
 Type: Manufacturing Facility  
 (WEA File: Orlando.TMY)

### System Report Compliance

**Pr0Sy1      System 1      Constant Volume Packaged System--902      No. of Units 1**

Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Compliance
Cooling System	Air Conditioners Air Cooled > 760000 Btu/h Cooling Capacity	7487544	12.20	9.50	12.30	9.60	PASSES
Heating System	Warm Air Gas Furnace >= 225000 Btu/h	13107540	90.00	80.00			PASSES
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	242732	0.80	0.82			PASSES

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

Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Compliance
Cooling System	Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity	499642	12.20	9.80	12.30	9.90	PASSES
Heating System	Warm Air Gas Furnace >= 225000 Btu/h	934050	90.00	80.00			PASSES
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	17297	0.80	0.82			PASSES

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

Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Compliance
Cooling System	Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity	515018	12.20	9.80	12.30	9.90	PASSES
Heating System	Warm Air Gas Furnace >= 225000 Btu/h	966500	90.00	80.00			PASSES
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	17898	0.80	0.82			PASSES

Pr0Sy4		System 4		Constant Volume Packaged System--902			No. of Units 1	
Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Compliance	
Cooling System	Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity	460540	12.20	9.80	12.30	9.90	PASSES	
Heating System	Warm Air Gas Furnace >= 225000 Btu/h	854520	90.00	80.00			PASSES	
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	15824	0.80	0.82			PASSES	
Pr0Sy5		System 5		Constant Volume Packaged System--902			No. of Units 1	
Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Compliance	
Cooling System	Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity	530705	12.20	9.80	12.30	9.90	PASSES	
Heating System	Warm Air Gas Furnace >= 225000 Btu/h	987430	90.00	80.00			PASSES	
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	18286	0.80	0.82			PASSES	
<b>PASSES</b>								

Plant Compliance								
Description	Installed No	Size	Design Eff	Min Eff	Design IPLV	Min IPLV	Category	Compliance
<b>None</b>								

Project: Building C1 CZ2 Man  
 Title: TAM Building C1  
 Type: Manufacturing Facility  
 (WEA File: Orlando.TMY)

### Water Heater Compliance

Description	Type	Category	Design Eff	Min Eff	Design Loss	Max Loss	Compliance
Water Heater 1	Gas Storage water heater	>75000 & <=155000 Btu/h; < 4000 (Btu/h)/gal	84.00	0.80		1,080.1	<b>PASSES</b>
<b>PASSES</b>							

### 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]	Compliance
<b>None</b>							

Project: Building C1 CZ2 Man  
 Title: TAM Building C1  
 Type: Manufacturing Facility  
 (WEA File: Orlando.TMY)

### Other Required Compliance

Category	Section	Requirement (write N/A in box if not applicable)	Check
			<input type="checkbox"/>

**Project: Building C1 CZ2 Man**

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

EnergyGauge Summit® Fla/Com-2015, Effective Date: June 30, 2015 -- Form 506-2014  
IECC 2012 - Prescriptive Compliance 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 Miscellaneous report generated by the software at the end of the compliance report



## PROJECT SUMMARY

**Short Desc:** Building C1 CZ2 Man

**Description:** TAM Building C1

**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:** Manufacturing Facility

**Class:** New Finished building

**Jurisdiction:** ORLANDO, ORANGE COUNTY, FL (582100)

**Conditioned Area:** 160000 SF

**Conditioned & UnConditioned Area:** 160000 SF

**No of Stories:** 1

**Area entered from Plans** 160000 SF

**Permit No:** 0

**Max Tonnage** 624

**If different, write in:** \_\_\_\_\_

## Compliance Summary

Component	Design	Criteria	Result
ENVELOPE PRESCRIPTIVE			<b>FAILS</b>
Additional Efficiency Prescriptive Option			<b>Failed</b>
LIGHTING POWER	160,001.0	208,000.0	<b>PASSES</b>
LIGHTING CONTROLS			<b>FAILS</b>
EXTERNAL LIGHTING			<b>FAILS</b>
HVAC SYSTEM			<b>PASSES</b>
PLANT			<b>No Entry</b>
WATER HEATING SYSTEMS			<b>PASSES</b>
PIPING SYSTEMS			<b>No Entry</b>
Met all required compliance from Check List?			<b>Yes/No/NA</b>
<b>IMPORTANT MESSAGE</b>			
Info 5009 -- -- -- An input report of this design building must be submitted along with this Compliance Report			

## CERTIFICATIONS

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

Prepared By: \_\_\_\_\_

Building Official: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

I certify that this building is in compliance with the FLorida Energy Efficiency Code

Owner Agent: \_\_\_\_\_

Date: \_\_\_\_\_

If Required by Florida law, I hereby certify (\*) that the system design is in compliance with the Florida Energy Efficiency Code

Architect: \_\_\_\_\_

Reg No: \_\_\_\_\_

Electrical Designer: \_\_\_\_\_

Reg No: \_\_\_\_\_

Lighting Designer: \_\_\_\_\_

Reg No: \_\_\_\_\_

Mechanical Designer: \_\_\_\_\_

Reg No: \_\_\_\_\_

Plumbing Designer: \_\_\_\_\_

Reg No: \_\_\_\_\_

(\*) Signature is required where Florida Law requires design to be performed by registered design professionals. Typed names and registration numbers may be used where all relevant information is contained on signed/sealed plans.

**Project: Building C1 CZ2 Man**  
**Title: TAM Building C1**  
**Type: Manufacturing Facility**  
**(WEA File: Orlando.TMY)**

### Prescriptive Envelope Compliance

Item	Zone	Description	Design	Criteria	Meet Req.
Glass	IntA	Percent glass Max allowed (%)	.000	30.000	Yes
Skylights	IntA	Percent Skylight Max allowed (%)	8.649	3.000	No
Pr0Zo1Rf1	IntA	Exterior Roof UValue Max allowed	.040	0.048	Yes
Pr0Zo1Rf1	IntA	Exterior Roof Absorptance (3-year aged) Max allowed	.400	0.450	Yes
Pr0Zo1Rf1	IntA	Exterior Roof Emissivity (3-year aged) Min Required	.900	0.750	Yes
Pr0Zo1Rf1Sk1	Pr0Zo1Rf1	Skylight: SHGC Max allowed	.250	0.350	Yes
Pr0Zo1Rf1Sk1	Pr0Zo1Rf1Sk1	Skylight: UValue Max allowed	1.000	0.650	No
Glass	PerA	Percent glass Max allowed (%)	13.333	30.000	Yes
Pr0Zo2Wa1	PerA	Exterior Wall: UValue Max allowed	.350	0.064	No
Pr0Zo2Wa1Wi1	Pr0Zo2Wa1	Exterior Window: SHGC Max allowed	.400	0.400	Yes
Pr0Zo2Wa1Wi1	Pr0Zo2Wa1	Exterior Window: UValue Max allowed	.600	0.500	No
Skylights	PerA	Percent Skylight Max allowed (%)	.000	3.000	Yes
Pr0Zo2Rf1	PerA	Exterior Roof UValue Max allowed	.040	0.048	Yes
Pr0Zo2Rf1	PerA	Exterior Roof Absorptance (3-year aged) Max allowed	.400	0.450	Yes
Pr0Zo2Rf1	PerA	Exterior Roof Emissivity (3-year aged) Min Required	.900	0.750	Yes
Glass	PerB	Percent glass Max allowed (%)	.000	30.000	Yes
Pr0Zo3Wa1	PerB	Exterior Wall: UValue Max allowed	.350	0.064	No
Skylights	PerB	Percent Skylight Max allowed (%)	.000	3.000	Yes
Pr0Zo3Rf1	PerB	Exterior Roof UValue Max allowed	.040	0.048	Yes
Pr0Zo3Rf1	PerB	Exterior Roof Absorptance (3-year aged) Max allowed	.400	0.450	Yes
Pr0Zo3Rf1	PerB	Exterior Roof Emissivity (3-year aged) Min Required	.900	0.750	Yes
Glass	PerC	Percent glass Max allowed (%)	.000	30.000	Yes
Pr0Zo4Wa1	PerC	Exterior Wall: UValue Max allowed	.350	0.064	No
Skylights	PerC	Percent Skylight Max allowed (%)	.000	3.000	Yes
Pr0Zo4Rf1	PerC	Exterior Roof UValue Max allowed	.040	0.048	Yes
Pr0Zo4Rf1	PerC	Exterior Roof Absorptance (3-year aged) Max allowed	.400	0.450	Yes
Pr0Zo4Rf1	PerC	Exterior Roof Emissivity (3-year aged) Min Required	.900	0.750	Yes
Glass	PerD	Percent glass Max allowed (%)	.000	30.000	Yes
Pr0Zo5Wa1	PerD	Exterior Wall: UValue Max allowed	.350	0.064	No
Skylights	PerD	Percent Skylight Max allowed (%)	.000	3.000	Yes
Pr0Zo5Rf1	PerD	Exterior Roof UValue Max allowed	.040	0.048	Yes
Pr0Zo5Rf1	PerD	Exterior Roof Absorptance (3-year aged) Max allowed	.400	0.450	Yes
Pr0Zo5Rf1	PerD	Exterior Roof Emissivity (3-year aged) Min Required	.900	0.750	Yes
Glass	IntB	Percent glass Max allowed (%)	.000	30.000	Yes
Skylights	IntB	Percent Skylight Max allowed (%)	.000	3.000	Yes
Pr0Zo1Rf1	IntB	Exterior Roof UValue Max allowed	.040	0.048	Yes

Pr0Zo1Rf1	IntB	Exterior Roof Absorptance (3-year aged) Max allowed	.400	0.450	Yes
Pr0Zo1Rf1	IntB	Exterior Roof Emissivity (3-year aged) Min Required	.900	0.750	Yes
Glass	IntC	Percent glass Max allowed (%)	.000	30.000	Yes
Skylights	IntC	Percent Skylight Max allowed (%)	.000	3.000	Yes
Pr0Zo1Rf1	IntC	Exterior Roof UValue Max allowed	.040	0.048	Yes
Pr0Zo1Rf1	IntC	Exterior Roof Absorptance (3-year aged) Max allowed	.400	0.450	Yes
Pr0Zo1Rf1	IntC	Exterior Roof Emissivity (3-year aged) Min Required	.900	0.750	Yes
Glass	IntD	Percent glass Max allowed (%)	.000	30.000	Yes
Skylights	IntD	Percent Skylight Max allowed (%)	.000	3.000	Yes
Pr0Zo1Rf1	IntD	Exterior Roof UValue Max allowed	.040	0.048	Yes
Pr0Zo1Rf1	IntD	Exterior Roof Absorptance (3-year aged) Max allowed	.400	0.450	Yes
Pr0Zo1Rf1	IntD	Exterior Roof Emissivity (3-year aged) Min Required	.900	0.750	Yes

**DOES NOT meet Prescriptive Envelope Requirements -- FAILS**

**Project: Building C1 CZ2 Man**  
**Title: TAM Building C1**  
**Type: Manufacturing Facility**  
**(WEA File: Orlando.TMY)**

**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 2	Walk way less than 10 feet wide	Yes	1.00	400.0	400	224
Ext Light 3	Main entries	Yes	30.00			600

**Tradable Surfaces: 824 (W) Allowance for Tradable: 420 (W)**

**FAILS**

**All External Lighting: 824 (W)**

**Complicance check includes a excess/Base allowance of 20.00(W)**

**Project: Building C1 CZ2 Man**  
**Title: TAM Building C1**  
**Type: Manufacturing Facility**  
**(WEA File: Orlando.TMY)**

### Lighting Power Compliance

Space	Ashrae ID	Description	Area (sq.ft)	Height (ft)	No. of Spaces	Design (W)	Effective (W)	Allowance (W)
Interior	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	37,000	24.0	1	37000	37000	48,100
Pr0Zo2Sp1	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	5,775	24.0	1	5775	5775	7,508
Pr0Zo3Sp1	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	5,775	24.0	1	5776	5776	7,508
Pr0Zo4Sp1	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	5,775	24.0	1	5775	5775	7,508
Pr0Zo5Sp1	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	5,775	24.0	1	5775	5775	7,508
Interior	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	37,000	24.0	1	37000	37000	48,100
Interior	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	37,000	24.0	1	37000	37000	48,100
Interior	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	25,900	24.0	1	25900	25900	33,670

**Design : 160001 (W)**  
**Effective: 160001 (W)**  
**Allowance: 208000 (W)**

<b>PASSES</b>
---------------

**Passing requires Design to be at most 100% of Criteria**

**Project: Building C1 CZ2 Man**  
**Title: TAM Building C1**  
**Type: Manufacturing Facility**  
**(WEA File: Orlando.TMY)**

### Lighting Controls Compliance

Acronym	Ashrae ID	Description	Area (sq.ft)	Design CP	Min CP	Compliance
Interior	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	37,000	4	4	PASSES
Pr0Zo2Sp1	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	5,775	3	3	PASSES
Pr0Zo3Sp1	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	5,775	1	3	FAILS
Pr0Zo4Sp1	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	5,775	1	3	FAILS
Pr0Zo5Sp1	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	5,775	1	3	FAILS
Interior	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	37,000	4	4	PASSES
Interior	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	37,000	4	4	PASSES
Interior	13,001	General Low Bay < 25 ft floor-to-ceiling (Manufacturing)	25,900	3	3	PASSES

**FAILS**

Project: Building C1 CZ2 Man  
 Title: TAM Building C1  
 Type: Manufacturing Facility  
 (WEA File: Orlando.TMY)

### System Report Compliance

**Pr0Sy1      System 1      Constant Volume Packaged System--902      No. of Units 1**

Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Compliance
Cooling System	Air Conditioners Air Cooled > 760000 Btu/h Cooling Capacity	7487544	12.20	9.70	12.30	9.80	PASSES
Heating System	Warm Air Gas Furnace >= 225000 Btu/h	13107540	90.00	80.00			PASSES
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	242732	0.80	0.82			PASSES

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

Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Compliance
Cooling System	Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity	499642	12.20	10.00	12.30	10.10	PASSES
Heating System	Warm Air Gas Furnace >= 225000 Btu/h	934050	90.00	80.00			PASSES
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	17297	0.80	0.82			PASSES

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

Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Compliance
Cooling System	Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity	515018	12.20	10.00	12.30	10.10	PASSES
Heating System	Warm Air Gas Furnace >= 225000 Btu/h	966500	90.00	80.00			PASSES
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	17898	0.80	0.82			PASSES

<b>Pr0Sy4</b>		<b>System 4</b>		<b>Constant Volume Packaged System--902</b>			<b>No. of Units</b>	
							<b>1</b>	
<b>Component</b>	<b>Category</b>	<b>Capacity</b>	<b>Design Eff</b>	<b>Eff Criteria</b>	<b>Design IPLV</b>	<b>IPLV Criteria</b>	<b>Compliance</b>	
Cooling System	Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity	460540	12.20	10.00	12.30	10.10	<b>PASSES</b>	
Heating System	Warm Air Gas Furnace >= 225000 Btu/h	854520	90.00	80.00			<b>PASSES</b>	
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	15824	0.80	0.82			<b>PASSES</b>	
<b>Pr0Sy5</b>		<b>System 5</b>		<b>Constant Volume Packaged System--902</b>			<b>No. of Units</b>	
							<b>1</b>	
<b>Component</b>	<b>Category</b>	<b>Capacity</b>	<b>Design Eff</b>	<b>Eff Criteria</b>	<b>Design IPLV</b>	<b>IPLV Criteria</b>	<b>Compliance</b>	
Cooling System	Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity	530705	12.20	10.00	12.30	10.10	<b>PASSES</b>	
Heating System	Warm Air Gas Furnace >= 225000 Btu/h	987430	90.00	80.00			<b>PASSES</b>	
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	18286	0.80	0.82			<b>PASSES</b>	
<b>PASSES</b>								

<b>Plant Compliance</b>								
<b>Description</b>	<b>Installed No</b>	<b>Size</b>	<b>Design Eff</b>	<b>Min Eff</b>	<b>Design IPLV</b>	<b>Min IPLV</b>	<b>Category</b>	<b>Compliance</b>
								<b>None</b>



Project: Building C1 CZ2 Man  
 Title: TAM Building C1  
 Type: Manufacturing Facility  
 (WEA File: Orlando.TMY)

### Water Heater Compliance

Description	Type	Category	Design Eff	Min Eff	Design Loss	Max Loss	Compliance
Water Heater 1	Gas Storage water heater	>75000 & <=155000 Btu/h; < 4000 (Btu/h)/gal	84.00	0.80		1,080.1	PASSES
<b>PASSES</b>							

### 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]	Compliance
<b>None</b>							

Project: Building C1 CZ2 Man  
 Title: TAM Building C1  
 Type: Manufacturing Facility  
 (WEA File: Orlando.TMY)

### Other Required Compliance

Category	Section	Requirement (write N/A in box if not applicable)	Check
			<input type="checkbox"/>

**Project: Building C1 CZ2 Man**

# DOE Based Sizing

## PROJECT SUMMARY

**Short Desc:** Building C1

**Owner:** Enter Owner's name here

**Address1:** Enter Address here

**Address2:** Enter Address here

**Type:** Manufacturing Facility

**Weather File:** FL\_ORLANDO\_INTL\_ARPT.tm3

**Conditioned Area:** 160000 SF

**No of Stories:** 1

**Permit No:** 0

**Description:** TAM Building C1

**City:** Enter city here

**State:** Enter state here

**Zip:** 0

**Class:** New Finished building

**Conditioned & UnConditioned Area:** 160000 SF

**Area entered from Plans** 160000 SF

**Max Tonnage** 0

**If different, write in:** \_\_\_\_\_

## CERTIFICATIONS

I hereby certify that the plans and specifications covered by this calculation are in compliance as required by the authority of jurisdiction

Prepared By: \_\_\_\_\_

Building Official: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

I certify that this building is in compliance as required by the authority of jurisdiction

Owner Agent: \_\_\_\_\_

Date: \_\_\_\_\_

If required by law, I hereby certify (\*) that the system design is in compliance as required by the authority of jurisdiction

Architect: \_\_\_\_\_

Reg No: \_\_\_\_\_

Electrical Designer: \_\_\_\_\_

Reg No: \_\_\_\_\_

Lighting Designer: \_\_\_\_\_

Reg No: \_\_\_\_\_

Mechanical Designer: \_\_\_\_\_

Reg No: \_\_\_\_\_

Plumbing Designer: \_\_\_\_\_

Reg No: \_\_\_\_\_

(\*) Signature may be required when law requires design to be performed by registered design professionals. Typed names and registration numbers may be used where all relevant information is contained on signed/sealed plans.

**DOE 2.1 E Based Sized Parameters (Beta Feature)**

<u>IdSystem</u>	<u>System Name</u>	<u>System Type</u>		
1	<b>Pr0Sy1</b>	System 1		
	<u>Component</u>	<u>Sized Value</u>	<u>Units</u>	
	Cooling System	7487544	BTU/HR	
	Heating System	1.310754E+07	Btu/h	
	Air Handling System -Supply	242732	CFM	
2	<b>Pr0Sy2</b>	System 2		
	<u>Component</u>	<u>Sized Value</u>	<u>Units</u>	
	Cooling System	499642	BTU/HR	
	Heating System	934050	Btu/h	
	Air Handling System -Supply	17297	CFM	
3	<b>Pr0Sy3</b>	System 3		
	<u>Component</u>	<u>Sized Value</u>	<u>Units</u>	
	Cooling System	515018	BTU/HR	
	Heating System	966500	Btu/h	
	Air Handling System -Supply	17898	CFM	
4	<b>Pr0Sy4</b>	System 4		
	<u>Component</u>	<u>Sized Value</u>	<u>Units</u>	
	Cooling System	460540	BTU/HR	
	Heating System	854520	Btu/h	
	Air Handling System -Supply	15824	CFM	
5	<b>Pr0Sy5</b>	System 5		
	<u>Component</u>	<u>Sized Value</u>	<u>Units</u>	
	Cooling System	530705	BTU/HR	
	Heating System	987430	Btu/h	
	Air Handling System -Supply	18286	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

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 Miscellaneous report generated by the software at the end of the compliance report

## PROJECT SUMMARY

**Short Desc:** Building C1 CZ2 Ware

**Description:** TAM Building C1

**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:** Warehouse

**Class:** New Finished building

**Jurisdiction:** ORLANDO, ORANGE COUNTY, FL (582100)

**Conditioned Area:** 160000 SF

**Conditioned & UnConditioned Area:** 160000 SF

**No of Stories:** 1

**Area entered from Plans** 160000 SF

**Permit No:** 0

**Max Tonnage** 600

**If different, write in:** \_\_\_\_\_

## Compliance Summary

Component	Design	Criteria	Result
Gross Energy Cost (in \$)	100,732.0	76,402.0	<b>FAILED</b>
LIGHTING CONTROLS			<b>FAILS</b>
EXTERNAL LIGHTING			<b>FAILS</b>
HVAC SYSTEM			<b>FAILS</b>
PLANT			<b>No Entry</b>
WATER HEATING SYSTEMS			<b>PASSES</b>
PIPING SYSTEMS			<b>No Entry</b>
Met all required compliance from Check List?			<b>Yes/No/NA</b>

### IMPORTANT MESSAGE

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

## CERTIFICATIONS

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

Prepared By: \_\_\_\_\_

Building Official: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

I certify that this building is in compliance with the FLorida Energy Efficiency Code

Owner Agent: \_\_\_\_\_

Date: \_\_\_\_\_

If Required by Florida law, I hereby certify (\*) that the system design is in compliance with the Florida Energy Efficiency Code

Architect: \_\_\_\_\_

Reg No: \_\_\_\_\_

Electrical Designer: \_\_\_\_\_

Reg No: \_\_\_\_\_

Lighting Designer: \_\_\_\_\_

Reg No: \_\_\_\_\_

Mechanical Designer: \_\_\_\_\_

Reg No: \_\_\_\_\_

Plumbing Designer: \_\_\_\_\_

Reg No: \_\_\_\_\_

(\*) Signature is required where Florida Law requires design to be performed by registered design professionals. Typed names and registration numbers may be used where all relevant information is contained on signed/sealed plans.

Project: Building C1 CZ2 Ware  
 Title: TAM Building C1  
 Type: Warehouse  
 (WEA File: FL\_ORLANDO\_INTL\_ARPT.tm3)

**Building End Uses**

	1) Proposed	2) Baseline
<b>Total</b>	<b>6,378.40</b>	<b>4,883.20</b>
	<b>\$100,732</b>	<b>\$76,402</b>
<b>ELECTRICITY(MBtu/kWh/\$)</b>	<b>6,378.40</b>	<b>4,883.20</b>
	<b>1868876</b>	<b>1430746</b>
	<b>\$100,732</b>	<b>\$76,402</b>
<b>AREA LIGHTS</b>	<b>1,672.30</b>	<b>1,103.80</b>
	<b>489992</b>	<b>323404</b>
	<b>\$26,411</b>	<b>\$17,270</b>
<b>MISC EQUIPMT</b>	<b>320.00</b>	<b>320.00</b>
	<b>93763</b>	<b>93763</b>
	<b>\$5,054</b>	<b>\$5,007</b>
<b>PUMPS &amp; MISC</b>	<b>0.30</b>	<b>0.30</b>
	<b>75</b>	<b>78</b>
	<b>\$4</b>	<b>\$4</b>
<b>SPACE COOL</b>	<b>1,509.40</b>	<b>1,994.40</b>
	<b>442258</b>	<b>584348</b>
	<b>\$23,838</b>	<b>\$31,204</b>
<b>SPACE HEAT</b>	<b>569.40</b>	<b>658.60</b>
	<b>166829</b>	<b>192958</b>
	<b>\$8,992</b>	<b>\$10,304</b>
<b>VENT FANS</b>	<b>2,307.00</b>	<b>806.10</b>
	<b>675959</b>	<b>236195</b>
	<b>\$36,434</b>	<b>\$12,613</b>

Credits Applied: None

Passing Criteria = 76402

Design (including any credits) = 100732

Passing requires Proposed Building cost to be at most 100% of Baseline cost. This Proposed Building is at 131.8%

<b>FAILS</b>
--------------



Project: Building C1 CZ2 Ware  
 Title: TAM Building C1  
 Type: Warehouse  
 (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 2	Walk way less than 10 feet wide	Yes	1.00	400.0	400	224
Ext Light 3	Main entries	Yes	30.00			600

Tradable Surfaces: 824 (W) Allowance for Tradable: 420 (W)

**FAILS**

All External Lighting: 824 (W)

Compliance check includes a excess/Base allowance of 20.00(W)

Project: Building C1 CZ2 Ware  
 Title: TAM Building C1  
 Type: Warehouse  
 (WEA File: FL\_ORLANDO\_INTL\_ARPT.tm3)

**Lighting Controls Compliance**

Acronym	Ashrae ID	Description	Area (sq.ft)	Design CP	Min CP	Compliance
Interior	3	Storage & Warehouse - Bulky Active Storage	37,000	4	4	PASSES
Pr0Zo2Sp1	3	Storage & Warehouse - Bulky Active Storage	5,775	3	3	PASSES
Pr0Zo3Sp1	3	Storage & Warehouse - Bulky Active Storage	5,775	1	3	FAILS
Pr0Zo4Sp1	3	Storage & Warehouse - Bulky Active Storage	5,775	1	3	FAILS
Pr0Zo5Sp1	3	Storage & Warehouse - Bulky Active Storage	5,775	1	3	FAILS
Interior	3	Storage & Warehouse - Bulky Active Storage	37,000	4	4	PASSES
Interior	3	Storage & Warehouse - Bulky Active Storage	37,000	4	4	PASSES
Interior	3	Storage & Warehouse - Bulky Active Storage	25,900	3	3	PASSES

**FAILS**

Project: Building C1 CZ2 Ware  
 Title: TAM Building C1  
 Type: Warehouse  
 (WEA File: FL\_ORLANDO\_INTL\_ARPT.tm3)

### System Report Compliance

**Pr0Sy1      System 1      Constant Volume Packaged System--902      No. of Units 1**

Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Compliance
Cooling System	Air Conditioners Air Cooled > 760000 Btu/h Cooling Capacity	7199740	12.20	9.50	12.30	9.80	<b>PASSES</b>
Heating System	Heat Pumps Air Cooled (Heating Mode) > 135000 Btu/h Cooling Capacity	12522350	3.00	3.20			<b>FAILS</b>
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	231895	0.80	0.82			<b>PASSES</b>

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

Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Compliance
Cooling System	Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity	487043	12.20	9.50	12.30	9.60	<b>PASSES</b>
Heating System	Heat Pumps Air Cooled (Heating Mode) > 135000 Btu/h Cooling Capacity	915200	3.00	3.20			<b>FAILS</b>
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	16948	0.80	0.82			<b>PASSES</b>

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

Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Compliance
Cooling System	Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity	500022	12.20	9.50	12.30	9.60	<b>PASSES</b>
Heating System	Heat Pumps Air Cooled (Heating Mode) > 135000 Btu/h Cooling Capacity	942580	3.00	3.20			<b>FAILS</b>
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	17455	0.80	0.82			<b>PASSES</b>

<b>Pr0Sy4</b>		<b>System 4</b>		<b>Constant Volume Packaged System--902</b>			<b>No. of Units</b>	
							<b>1</b>	
<b>Component</b>	<b>Category</b>	<b>Capacity</b>	<b>Design Eff</b>	<b>Eff Criteria</b>	<b>Design IPLV</b>	<b>IPLV Criteria</b>	<b>Compliance</b>	
Cooling System	Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity	458374	12.20	9.50	12.30	9.60	<b>PASSES</b>	
Heating System	Heat Pumps Air Cooled (Heating Mode) > 135000 Btu/h Cooling Capacity	854680	3.00	3.20			<b>FAILS</b>	
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	15827	0.80	0.82			<b>PASSES</b>	
<b>Pr0Sy5</b>		<b>System 5</b>		<b>Constant Volume Packaged System--902</b>			<b>No. of Units</b>	
							<b>1</b>	
<b>Component</b>	<b>Category</b>	<b>Capacity</b>	<b>Design Eff</b>	<b>Eff Criteria</b>	<b>Design IPLV</b>	<b>IPLV Criteria</b>	<b>Compliance</b>	
Cooling System	Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity	526037	12.20	9.50	12.30	9.60	<b>PASSES</b>	
Heating System	Heat Pumps Air Cooled (Heating Mode) > 135000 Btu/h Cooling Capacity	978770	3.00	3.20			<b>FAILS</b>	
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	18125	0.80	0.82			<b>PASSES</b>	
							<b>FAILS</b>	

<b>Plant Compliance</b>								
<b>Description</b>	<b>Installed No</b>	<b>Size</b>	<b>Design Eff</b>	<b>Min Eff</b>	<b>Design IPLV</b>	<b>Min IPLV</b>	<b>Category</b>	<b>Compliance</b>
								<b>None</b>

Project: Building C1 CZ2 Ware  
 Title: TAM Building C1  
 Type: Warehouse  
 (WEA File: FL\_ORLANDO\_INTL\_ARPT.tm3)

### Water Heater Compliance

Description	Type	Category	Design Eff	Min Eff	Design Loss	Max Loss	Compliance
Water Heater 1	Gas Storage water heater	<= 75000 Btu/h; >= 20 Gal	0.58	0.52			PASSES
<b>PASSES</b>							

### 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]	Compliance
<b>None</b>							

Project: Building C1 CZ2 Ware  
 Title: TAM Building C1  
 Type: Warehouse  
 (WEA File: FL\_ORLANDO\_INTL\_ARPT.tm3)

### Other Required Compliance

Category	Section	Requirement (write N/A in box if not applicable)	Check
			<input type="checkbox"/>

**Project: Building C1 CZ2 Ware**

# 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

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 Miscellaneous report generated by the software at the end of the compliance report

## PROJECT SUMMARY

**Short Desc:** Building C1 CZ2 Ware

**Description:** TAM Building C1

**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:** Warehouse

**Class:** New Finished building

**Jurisdiction:** ORLANDO, ORANGE COUNTY, FL (582100)

**Conditioned Area:** 160000 SF

**Conditioned & UnConditioned Area:** 160000 SF

**No of Stories:** 1

**Area entered from Plans** 160000 SF

**Permit No:** 0

**Max Tonnage** 600

**If different, write in:** \_\_\_\_\_

## Compliance Summary

Component	Design	Criteria	Result
Gross Energy Cost (in \$)	100,125.0	63,883.0	<b>FAILED</b>
LIGHTING CONTROLS			<b>FAILS</b>
EXTERNAL LIGHTING			<b>FAILS</b>
HVAC SYSTEM			<b>FAILS</b>
PLANT			<b>No Entry</b>
WATER HEATING SYSTEMS			<b>PASSES</b>
PIPING SYSTEMS			<b>No Entry</b>
Met all required compliance from Check List?			<b>Yes/No/NA</b>

### IMPORTANT MESSAGE

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

## CERTIFICATIONS

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

Prepared By: \_\_\_\_\_

Building Official: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

I certify that this building is in compliance with the FLorida Energy Efficiency Code

Owner Agent: \_\_\_\_\_

Date: \_\_\_\_\_

If Required by Florida law, I hereby certify (\*) that the system design is in compliance with the Florida Energy Efficiency Code

Architect: \_\_\_\_\_

Reg No: \_\_\_\_\_

Electrical Designer: \_\_\_\_\_

Reg No: \_\_\_\_\_

Lighting Designer: \_\_\_\_\_

Reg No: \_\_\_\_\_

Mechanical Designer: \_\_\_\_\_

Reg No: \_\_\_\_\_

Plumbing Designer: \_\_\_\_\_

Reg No: \_\_\_\_\_

(\*) Signature is required where Florida Law requires design to be performed by registered design professionals. Typed names and registration numbers may be used where all relevant information is contained on signed/sealed plans.

Project: Building C1 CZ2 Ware  
 Title: TAM Building C1  
 Type: Warehouse  
 (WEA File: FL\_ORLANDO\_INTL\_ARPT.tm3)

**Building End Uses**

	1) Proposed	2) Baseline
<b>Total</b>	<b>6,339.90</b>	<b>4,803.50</b>
	<b>\$100,125</b>	<b>\$75,156</b>
ELECTRICITY(MBtu/kWh/\$)	6,339.90	4,803.50
	1857609	1407414
	<b>\$100,125</b>	<b>\$75,156</b>
AREA LIGHTS	1,672.30	1,003.40
	489992	293984
	<b>\$26,411</b>	<b>\$15,699</b>
MISC EQUIPMT	320.00	320.00
	93763	93763
	<b>\$5,054</b>	<b>\$5,007</b>
PUMPS & MISC	0.30	0.30
	75	79
	<b>\$4</b>	<b>\$4</b>
SPACE COOL	1,472.90	2,031.10
	431568	595120
	<b>\$23,262</b>	<b>\$31,779</b>
SPACE HEAT	594.70	629.30
	174261	184386
	<b>\$9,393</b>	<b>\$9,846</b>
VENT FANS	2,279.70	819.40
	667950	240082
	<b>\$36,003</b>	<b>\$12,820</b>

Credits Applied: None  
 Passing Criteria = 63883  
 Design (including any credits) = 100125  
 Passing requires Proposed Building cost to be at most 85% of  
 Baseline cost. This Proposed Building is at 133.2%

**FAILS**



Project: Building C1 CZ2 Ware  
 Title: TAM Building C1  
 Type: Warehouse  
 (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 2	Walk way less than 10 feet wide	Yes	1.00	400.0	400	224
Ext Light 3	Main entries	Yes	30.00			600

Tradable Surfaces: 824 (W) Allowance for Tradable: 420 (W)

**FAILS**

All External Lighting: 824 (W)

Compliance check includes a excess/Base allowance of 20.00(W)

Project: Building C1 CZ2 Ware  
 Title: TAM Building C1  
 Type: Warehouse  
 (WEA File: FL\_ORLANDO\_INTL\_ARPT.tm3)

**Lighting Controls Compliance**

Acronym	Ashrae ID	Description	Area (sq.ft)	Design CP	Min CP	Compliance
Interior	3	Storage & Warehouse - Bulky Active Storage	37,000	4	4	PASSES
Pr0Zo2Sp1	3	Storage & Warehouse - Bulky Active Storage	5,775	3	3	PASSES
Pr0Zo3Sp1	3	Storage & Warehouse - Bulky Active Storage	5,775	1	3	FAILS
Pr0Zo4Sp1	3	Storage & Warehouse - Bulky Active Storage	5,775	1	3	FAILS
Pr0Zo5Sp1	3	Storage & Warehouse - Bulky Active Storage	5,775	1	3	FAILS
Interior	3	Storage & Warehouse - Bulky Active Storage	37,000	4	4	PASSES
Interior	3	Storage & Warehouse - Bulky Active Storage	37,000	4	4	PASSES
Interior	3	Storage & Warehouse - Bulky Active Storage	25,900	3	3	PASSES

**FAILS**

Project: Building C1 CZ2 Ware  
 Title: TAM Building C1  
 Type: Warehouse  
 (WEA File: FL\_ORLANDO\_INTL\_ARPT.tm3)

### System Report Compliance

**Pr0Sy1      System 1      Constant Volume Packaged System--902      No. of Units 1**

Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Compliance
Cooling System	Air Conditioners Air Cooled > 760000 Btu/h Cooling Capacity	7199740	12.20	9.50	12.30	9.80	<b>PASSES</b>
Heating System	Heat Pumps Air Cooled (Heating Mode) > 135000 Btu/h Cooling Capacity	12522350	3.00	3.20			<b>FAILS</b>
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	231895	0.80	0.82			<b>PASSES</b>

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

Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Compliance
Cooling System	Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity	487043	12.20	9.50	12.30	9.60	<b>PASSES</b>
Heating System	Heat Pumps Air Cooled (Heating Mode) > 135000 Btu/h Cooling Capacity	915200	3.00	3.20			<b>FAILS</b>
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	16948	0.80	0.82			<b>PASSES</b>

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

Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Compliance
Cooling System	Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity	500022	12.20	9.50	12.30	9.60	<b>PASSES</b>
Heating System	Heat Pumps Air Cooled (Heating Mode) > 135000 Btu/h Cooling Capacity	942580	3.00	3.20			<b>FAILS</b>
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	17455	0.80	0.82			<b>PASSES</b>

Pr0Sy4		System 4		Constant Volume Packaged System--902			No. of Units 1	
Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Compliance	
Cooling System	Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity	458374	12.20	9.50	12.30	9.60	<b>PASSES</b>	
Heating System	Heat Pumps Air Cooled (Heating Mode) > 135000 Btu/h Cooling Capacity	854680	3.00	3.20			<b>FAILS</b>	
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	15827	0.80	0.82			<b>PASSES</b>	
Pr0Sy5		System 5		Constant Volume Packaged System--902			No. of Units 1	
Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Compliance	
Cooling System	Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity	526037	12.20	9.50	12.30	9.60	<b>PASSES</b>	
Heating System	Heat Pumps Air Cooled (Heating Mode) > 135000 Btu/h Cooling Capacity	978770	3.00	3.20			<b>FAILS</b>	
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	18125	0.80	0.82			<b>PASSES</b>	
							<b>FAILS</b>	

Plant Compliance								
Description	Installed No	Size	Design Eff	Min Eff	Design IPLV	Min IPLV	Category	Compliance
								<b>None</b>

Project: Building C1 CZ2 Ware  
 Title: TAM Building C1  
 Type: Warehouse  
 (WEA File: FL\_ORLANDO\_INTL\_ARPT.tm3)

### Water Heater Compliance

Description	Type	Category	Design Eff	Min Eff	Design Loss	Max Loss	Compliance
Water Heater 1	Gas Storage water heater	<= 75000 Btu/h; >= 20 Gal	0.58	0.52			PASSES
<b>PASSES</b>							

### 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]	Compliance
<b>None</b>							

Project: Building C1 CZ2 Ware  
 Title: TAM Building C1  
 Type: Warehouse  
 (WEA File: FL\_ORLANDO\_INTL\_ARPT.tm3)

### Other Required Compliance

Category	Section	Requirement (write N/A in box if not applicable)	Check
			<input type="checkbox"/>

**Project: Building C1 CZ2 Ware**

# 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 - Prescriptive Compliance 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 Miscellaneous report generated by the software at the end of the compliance report

## PROJECT SUMMARY

**Short Desc:** Building C1 CZ2 Ware

**Description:** TAM Building C1

**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:** Warehouse

**Class:** New Finished building

**Jurisdiction:** ORLANDO, ORANGE COUNTY, FL (582100)

**Conditioned Area:** 160000 SF

**Conditioned & UnConditioned Area:** 160000 SF

**No of Stories:** 1

**Area entered from Plans** 160000 SF

**Permit No:** 0

**Max Tonnage** 600

**If different, write in:** \_\_\_\_\_

## Compliance Summary

Component	Design	Criteria	Result
ENVELOPE PRESCRIPTIVE			<b>FAILS</b>
LIGHTING POWER	160,001.0	105,600.0	<b>FAILS</b>
LIGHTING CONTROLS			<b>FAILS</b>
EXTERNAL LIGHTING			<b>FAILS</b>
HVAC SYSTEM			<b>FAILS</b>
PLANT			<b>No Entry</b>
WATER HEATING SYSTEMS			<b>PASSES</b>
PIPING SYSTEMS			<b>No Entry</b>
Met all required compliance from Check List?			<b>Yes/No/NA</b>

### IMPORTANT MESSAGE

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

## CERTIFICATIONS

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

Prepared By: \_\_\_\_\_

Building Official: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

I certify that this building is in compliance with the FLorida Energy Efficiency Code

Owner Agent: \_\_\_\_\_

Date: \_\_\_\_\_

If Required by Florida law, I hereby certify (\*) that the system design is in compliance with the Florida Energy Efficiency Code

Architect: \_\_\_\_\_

Reg No: \_\_\_\_\_

Electrical Designer: \_\_\_\_\_

Reg No: \_\_\_\_\_

Lighting Designer: \_\_\_\_\_

Reg No: \_\_\_\_\_

Mechanical Designer: \_\_\_\_\_

Reg No: \_\_\_\_\_

Plumbing Designer: \_\_\_\_\_

Reg No: \_\_\_\_\_

(\*) Signature is required where Florida Law requires design to be performed by registered design professionals. Typed names and registration numbers may be used where all relevant information is contained on signed/sealed plans.

Project: Building C1 CZ2 Ware

Title: TAM Building C1

Type: Warehouse

(WEA File: FL\_ORLANDO\_INTL\_ARPT.tm3)

### Prescriptive Envelope Compliance

Item	Zone	Description	Design	Criteria	Meet Req.
Glass	Building C1 CZZ	East glass area must be less than or equal to South glass area	.000	1,280.000	Yes
Glass	Building C1 CZZ	West glass area must be less than or equal to South glass area	.000	1,280.000	Yes
Glass	IntA	Percent glass Max allowed (%)	.000	40.000	Yes
Skylights	IntA	Percent Skylight Max allowed (%)	8.649	5.000	No
Pr0Zo1Rf1	IntA	Exterior Roof UValue Max allowed	.040	0.048	Yes
Pr0Zo1Rf1Sk1	Pr0Zo1Rf1	Skylight: SHGC Max allowed	.250	0.190	No
Pr0Zo1Rf1Sk1	Pr0Zo1Rf1Sk1	Skylight: UValue Max allowed	1.000	1.360	Yes
Glass	PerA	Percent glass Max allowed (%)	13.333	40.000	Yes
Pr0Zo2Wa1	PerA	Exterior Wall: UValue Max allowed	.350	0.089	No
Pr0Zo2Wa1Wi1	Pr0Zo2Wa1	Exterior Window: SHGC Max allowed	.176	0.250	Yes
Pr0Zo2Wa1Wi1	Pr0Zo2Wa1	Exterior Window: UValue Max allowed	.600	0.750	Yes
Skylights	PerA	Percent Skylight Max allowed (%)	.000	5.000	Yes
Pr0Zo2Rf1	PerA	Exterior Roof UValue Max allowed	.040	0.048	Yes
Glass	PerB	Percent glass Max allowed (%)	.000	40.000	Yes
Pr0Zo3Wa1	PerB	Exterior Wall: UValue Max allowed	.350	0.089	No
Skylights	PerB	Percent Skylight Max allowed (%)	.000	5.000	Yes
Pr0Zo3Rf1	PerB	Exterior Roof UValue Max allowed	.040	0.048	Yes
Glass	PerC	Percent glass Max allowed (%)	.000	40.000	Yes
Pr0Zo4Wa1	PerC	Exterior Wall: UValue Max allowed	.350	0.089	No
Skylights	PerC	Percent Skylight Max allowed (%)	.000	5.000	Yes
Pr0Zo4Rf1	PerC	Exterior Roof UValue Max allowed	.040	0.048	Yes
Glass	PerD	Percent glass Max allowed (%)	.000	40.000	Yes
Pr0Zo5Wa1	PerD	Exterior Wall: UValue Max allowed	.350	0.089	No
Skylights	PerD	Percent Skylight Max allowed (%)	.000	5.000	Yes
Pr0Zo5Rf1	PerD	Exterior Roof UValue Max allowed	.040	0.048	Yes
Glass	IntB	Percent glass Max allowed (%)	.000	40.000	Yes
Skylights	IntB	Percent Skylight Max allowed (%)	.000	5.000	Yes
Pr0Zo1Rf1	IntB	Exterior Roof UValue Max allowed	.040	0.048	Yes
Glass	IntC	Percent glass Max allowed (%)	.000	40.000	Yes
Skylights	IntC	Percent Skylight Max allowed (%)	.000	5.000	Yes
Pr0Zo1Rf1	IntC	Exterior Roof UValue Max allowed	.040	0.048	Yes
Glass	IntD	Percent glass Max allowed (%)	.000	40.000	Yes
Skylights	IntD	Percent Skylight Max allowed (%)	.000	5.000	Yes
Pr0Zo1Rf1	IntD	Exterior Roof UValue Max allowed	.040	0.048	Yes

**DOES NOT meet Prescriptive Envelope Requirements -- FAILS**



Project: Building C1 CZ2 Ware

Title: TAM Building C1

Type: Warehouse

(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 2	Walk way less than 10 feet wide	Yes	1.00	400.0	400	224
Ext Light 3	Main entries	Yes	30.00			600

Tradable Surfaces: 824 (W) Allowance for Tradable: 420 (W)

**FAILS**

All External Lighting: 824 (W)

Compliance check includes a excess/Base allowance of 20.00(W)

Project: Building C1 CZ2 Ware

Title: TAM Building C1

Type: Warehouse

(WEA File: FL\_ORLANDO\_INTL\_ARPT.tm3)

### Lighting Power Compliance

Space	Ashrae ID	Description	Area (sq.ft)	Height (ft)	No. of Spaces	Design (W)	Effective (W)	Allowance (W)
Interior	3	Storage & Warehouse - Bulky Active Storage	37,000	24.0	1	37000	37000	24,420
Pr0Zo2Sp1	3	Storage & Warehouse - Bulky Active Storage	5,775	24.0	1	5775	5775	3,812
Pr0Zo3Sp1	3	Storage & Warehouse - Bulky Active Storage	5,775	24.0	1	5776	5776	3,812
Pr0Zo4Sp1	3	Storage & Warehouse - Bulky Active Storage	5,775	24.0	1	5775	5775	3,812
Pr0Zo5Sp1	3	Storage & Warehouse - Bulky Active Storage	5,775	24.0	1	5775	5775	3,812
Interior	3	Storage & Warehouse - Bulky Active Storage	37,000	24.0	1	37000	37000	24,420
Interior	3	Storage & Warehouse - Bulky Active Storage	37,000	24.0	1	37000	37000	24,420
Interior	3	Storage & Warehouse - Bulky Active Storage	25,900	24.0	1	25900	25900	17,094

Design : 160001 (W)

Effective: 160001 (W)

Allowance: 105600 (W)

Passing requires Design to be at most 100% of Criteria

**FAILS**

**Project: Building C1 CZ2 Ware**  
**Title: TAM Building C1**  
**Type: Warehouse**  
**(WEA File: FL\_ORLANDO\_INTL\_ARPT.tm3)**

### Lighting Controls Compliance

Acronym	Ashrae ID	Description	Area (sq.ft)	Design CP	Min CP	Compliance
Interior	3	Storage & Warehouse - Bulky Active Storage	37,000	4	4	PASSES
Pr0Zo2Sp1	3	Storage & Warehouse - Bulky Active Storage	5,775	3	3	PASSES
Pr0Zo3Sp1	3	Storage & Warehouse - Bulky Active Storage	5,775	1	3	FAILS
Pr0Zo4Sp1	3	Storage & Warehouse - Bulky Active Storage	5,775	1	3	FAILS
Pr0Zo5Sp1	3	Storage & Warehouse - Bulky Active Storage	5,775	1	3	FAILS
Interior	3	Storage & Warehouse - Bulky Active Storage	37,000	4	4	PASSES
Interior	3	Storage & Warehouse - Bulky Active Storage	37,000	4	4	PASSES
Interior	3	Storage & Warehouse - Bulky Active Storage	25,900	3	3	PASSES

**FAILS**

Project: Building C1 CZ2 Ware  
 Title: TAM Building C1  
 Type: Warehouse  
 (WEA File: FL\_ORLANDO\_INTL\_ARPT.tm3)

### System Report Compliance

**Pr0Sy1      System 1      Constant Volume Packaged System--902      No. of Units 1**

Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Compliance
Cooling System	Air Conditioners Air Cooled > 760000 Btu/h Cooling Capacity	7199740	12.20	9.50	12.30	9.80	<b>PASSES</b>
Heating System	Heat Pumps Air Cooled (Heating Mode) > 135000 Btu/h Cooling Capacity	12522350	3.00	3.20			<b>FAILS</b>
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	231895	0.80	0.82			<b>PASSES</b>

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

Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Compliance
Cooling System	Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity	487043	12.20	9.50	12.30	9.60	<b>PASSES</b>
Heating System	Heat Pumps Air Cooled (Heating Mode) > 135000 Btu/h Cooling Capacity	915200	3.00	3.20			<b>FAILS</b>
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	16948	0.80	0.82			<b>PASSES</b>

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

Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Compliance
Cooling System	Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity	500022	12.20	9.50	12.30	9.60	<b>PASSES</b>
Heating System	Heat Pumps Air Cooled (Heating Mode) > 135000 Btu/h Cooling Capacity	942580	3.00	3.20			<b>FAILS</b>
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	17455	0.80	0.82			<b>PASSES</b>

Pr0Sy4		System 4		Constant Volume Packaged System--902			No. of Units 1	
Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Compliance	
Cooling System	Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity	458374	12.20	9.50	12.30	9.60	PASSES	
Heating System	Heat Pumps Air Cooled (Heating Mode) > 135000 Btu/h Cooling Capacity	854680	3.00	3.20			FAILS	
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	15827	0.80	0.82			PASSES	
Pr0Sy5		System 5		Constant Volume Packaged System--902			No. of Units 1	
Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Compliance	
Cooling System	Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity	526037	12.20	9.50	12.30	9.60	PASSES	
Heating System	Heat Pumps Air Cooled (Heating Mode) > 135000 Btu/h Cooling Capacity	978770	3.00	3.20			FAILS	
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	18125	0.80	0.82			PASSES	
							<b>FAILS</b>	

Plant Compliance								
Description	Installed No	Size	Design Eff	Min Eff	Design IPLV	Min IPLV	Category	Compliance
								<b>None</b>

Project: Building C1 CZ2 Ware  
 Title: TAM Building C1  
 Type: Warehouse  
 (WEA File: FL\_ORLANDO\_INTL\_ARPT.tm3)

### Water Heater Compliance

Description	Type	Category	Design Eff	Min Eff	Design Loss	Max Loss	Compliance
Water Heater 1	Gas Storage water heater	<= 75000 Btu/h; >= 20 Gal	0.58	0.52			PASSES
<b>PASSES</b>							

### 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]	Compliance
<b>None</b>							

Project: Building C1 CZ2 Ware  
 Title: TAM Building C1  
 Type: Warehouse  
 (WEA File: FL\_ORLANDO\_INTL\_ARPT.tm3)

### Other Required Compliance

Category	Section	Requirement (write N/A in box if not applicable)	Check
			<input type="checkbox"/>

**Project: Building C1 CZ2 Ware**

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

EnergyGauge Summit® Fla/Com-2015, Effective Date: June 30, 2015 -- Form 506-2014  
IECC 2012 - Prescriptive Compliance 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 Miscellaneous report generated by the software at the end of the compliance report

## PROJECT SUMMARY

**Short Desc:** Building C1 CZ2 Ware

**Description:** TAM Building C1

**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:** Warehouse

**Class:** New Finished building

**Jurisdiction:** ORLANDO, ORANGE COUNTY, FL (582100)

**Conditioned Area:** 160000 SF

**Conditioned & UnConditioned Area:** 160000 SF

**No of Stories:** 1

**Area entered from Plans** 160000 SF

**Permit No:** 0

**Max Tonnage** 600

**If different, write in:** \_\_\_\_\_

## Compliance Summary

Component	Design	Criteria	Result
ENVELOPE PRESCRIPTIVE			<b>FAILS</b>
Additional Efficiency Prescriptive Option			<b>Failed</b>
LIGHTING POWER	160,001.0	96,000.0	<b>FAILS</b>
LIGHTING CONTROLS			<b>FAILS</b>
EXTERNAL LIGHTING			<b>FAILS</b>
HVAC SYSTEM			<b>FAILS</b>
PLANT			<b>No Entry</b>
WATER HEATING SYSTEMS			<b>PASSES</b>
PIPING SYSTEMS			<b>No Entry</b>
Met all required compliance from Check List?			<b>Yes/No/NA</b>
<b>IMPORTANT MESSAGE</b>			
Info 5009 -- -- -- An input report of this design building must be submitted along with this Compliance Report			

## CERTIFICATIONS

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

Prepared By: \_\_\_\_\_

Building Official: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

I certify that this building is in compliance with the FLorida Energy Efficiency Code

Owner Agent: \_\_\_\_\_

Date: \_\_\_\_\_

If Required by Florida law, I hereby certify (\*) that the system design is in compliance with the Florida Energy Efficiency Code

Architect: \_\_\_\_\_

Reg No: \_\_\_\_\_

Electrical Designer: \_\_\_\_\_

Reg No: \_\_\_\_\_

Lighting Designer: \_\_\_\_\_

Reg No: \_\_\_\_\_

Mechanical Designer: \_\_\_\_\_

Reg No: \_\_\_\_\_

Plumbing Designer: \_\_\_\_\_

Reg No: \_\_\_\_\_

(\*) Signature is required where Florida Law requires design to be performed by registered design professionals. Typed names and registration numbers may be used where all relevant information is contained on signed/sealed plans.



Project: Building C1 CZ2 Ware  
 Title: TAM Building C1  
 Type: Warehouse  
 (WEA File: FL\_ORLANDO\_INTL\_ARPT.tm3)

### Prescriptive Envelope Compliance

Item	Zone	Description	Design	Criteria	Meet Req.
Glass	IntA	Percent glass Max allowed (%)	.000	30.000	Yes
Skylights	IntA	Percent Skylight Max allowed (%)	8.649	3.000	No
Pr0Zo1Rf1	IntA	Exterior Roof UValue Max allowed	.040	0.048	Yes
Pr0Zo1Rf1	IntA	Exterior Roof Absorptance (3-year aged) Max allowed	.400	0.450	Yes
Pr0Zo1Rf1	IntA	Exterior Roof Emissivity (3-year aged) Min Required	.900	0.750	Yes
Pr0Zo1Rf1Sk1	Pr0Zo1Rf1	Skylight: SHGC Max allowed	.250	0.350	Yes
Pr0Zo1Rf1Sk1	Pr0Zo1Rf1Sk1	Skylight: UValue Max allowed	1.000	0.650	No
Glass	PerA	Percent glass Max allowed (%)	13.333	30.000	Yes
Pr0Zo2Wa1	PerA	Exterior Wall: UValue Max allowed	.350	0.064	No
Pr0Zo2Wa1Wi1	Pr0Zo2Wa1	Exterior Window: SHGC Max allowed	.400	0.400	Yes
Pr0Zo2Wa1Wi1	Pr0Zo2Wa1	Exterior Window: UValue Max allowed	.600	0.500	No
Skylights	PerA	Percent Skylight Max allowed (%)	.000	3.000	Yes
Pr0Zo2Rf1	PerA	Exterior Roof UValue Max allowed	.040	0.048	Yes
Pr0Zo2Rf1	PerA	Exterior Roof Absorptance (3-year aged) Max allowed	.400	0.450	Yes
Pr0Zo2Rf1	PerA	Exterior Roof Emissivity (3-year aged) Min Required	.900	0.750	Yes
Glass	PerB	Percent glass Max allowed (%)	.000	30.000	Yes
Pr0Zo3Wa1	PerB	Exterior Wall: UValue Max allowed	.350	0.064	No
Skylights	PerB	Percent Skylight Max allowed (%)	.000	3.000	Yes
Pr0Zo3Rf1	PerB	Exterior Roof UValue Max allowed	.040	0.048	Yes
Pr0Zo3Rf1	PerB	Exterior Roof Absorptance (3-year aged) Max allowed	.400	0.450	Yes
Pr0Zo3Rf1	PerB	Exterior Roof Emissivity (3-year aged) Min Required	.900	0.750	Yes
Glass	PerC	Percent glass Max allowed (%)	.000	30.000	Yes
Pr0Zo4Wa1	PerC	Exterior Wall: UValue Max allowed	.350	0.064	No
Skylights	PerC	Percent Skylight Max allowed (%)	.000	3.000	Yes
Pr0Zo4Rf1	PerC	Exterior Roof UValue Max allowed	.040	0.048	Yes
Pr0Zo4Rf1	PerC	Exterior Roof Absorptance (3-year aged) Max allowed	.400	0.450	Yes
Pr0Zo4Rf1	PerC	Exterior Roof Emissivity (3-year aged) Min Required	.900	0.750	Yes
Glass	PerD	Percent glass Max allowed (%)	.000	30.000	Yes
Pr0Zo5Wa1	PerD	Exterior Wall: UValue Max allowed	.350	0.064	No
Skylights	PerD	Percent Skylight Max allowed (%)	.000	3.000	Yes
Pr0Zo5Rf1	PerD	Exterior Roof UValue Max allowed	.040	0.048	Yes
Pr0Zo5Rf1	PerD	Exterior Roof Absorptance (3-year aged) Max allowed	.400	0.450	Yes
Pr0Zo5Rf1	PerD	Exterior Roof Emissivity (3-year aged) Min Required	.900	0.750	Yes
Glass	IntB	Percent glass Max allowed (%)	.000	30.000	Yes
Skylights	IntB	Percent Skylight Max allowed (%)	.000	3.000	Yes
Pr0Zo1Rf1	IntB	Exterior Roof UValue Max allowed	.040	0.048	Yes

Pr0Zo1Rf1	IntB	Exterior Roof Absorptance (3-year aged) Max allowed	.400	0.450	Yes
Pr0Zo1Rf1	IntB	Exterior Roof Emissivity (3-year aged) Min Required	.900	0.750	Yes
Glass	IntC	Percent glass Max allowed (%)	.000	30.000	Yes
Skylights	IntC	Percent Skylight Max allowed (%)	.000	3.000	Yes
Pr0Zo1Rf1	IntC	Exterior Roof UValue Max allowed	.040	0.048	Yes
Pr0Zo1Rf1	IntC	Exterior Roof Absorptance (3-year aged) Max allowed	.400	0.450	Yes
Pr0Zo1Rf1	IntC	Exterior Roof Emissivity (3-year aged) Min Required	.900	0.750	Yes
Glass	IntD	Percent glass Max allowed (%)	.000	30.000	Yes
Skylights	IntD	Percent Skylight Max allowed (%)	.000	3.000	Yes
Pr0Zo1Rf1	IntD	Exterior Roof UValue Max allowed	.040	0.048	Yes
Pr0Zo1Rf1	IntD	Exterior Roof Absorptance (3-year aged) Max allowed	.400	0.450	Yes
Pr0Zo1Rf1	IntD	Exterior Roof Emissivity (3-year aged) Min Required	.900	0.750	Yes

**DOES NOT meet Prescriptive Envelope Requirements -- FAILS**

**Project: Building C1 CZ2 Ware**

**Title: TAM Building C1**

**Type: Warehouse**

**(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 2	Walk way less than 10 feet wide	Yes	1.00	400.0	400	224
Ext Light 3	Main entries	Yes	30.00			600

**Tradable Surfaces: 824 (W) Allowance for Tradable: 420 (W)**

**FAILS**

**All External Lighting: 824 (W)**

**Complicance check includes a excess/Base allowance of 20.00(W)**

Project: Building C1 CZ2 Ware  
 Title: TAM Building C1  
 Type: Warehouse  
 (WEA File: FL\_ORLANDO\_INTL\_ARPT.tm3)

**Lighting Power Compliance**

Space	Ashrae ID	Description	Area (sq.ft)	Height (ft)	No. of Spaces	Design (W)	Effective (W)	Allowance (W)
Interior	3	Storage & Warehouse - Bulky Active Storage	37,000	24.0	1	37000	37000	22,200
Pr0Zo2Sp1	3	Storage & Warehouse - Bulky Active Storage	5,775	24.0	1	5775	5775	3,465
Pr0Zo3Sp1	3	Storage & Warehouse - Bulky Active Storage	5,775	24.0	1	5776	5776	3,465
Pr0Zo4Sp1	3	Storage & Warehouse - Bulky Active Storage	5,775	24.0	1	5775	5775	3,465
Pr0Zo5Sp1	3	Storage & Warehouse - Bulky Active Storage	5,775	24.0	1	5775	5775	3,465
Interior	3	Storage & Warehouse - Bulky Active Storage	37,000	24.0	1	37000	37000	22,200
Interior	3	Storage & Warehouse - Bulky Active Storage	37,000	24.0	1	37000	37000	22,200
Interior	3	Storage & Warehouse - Bulky Active Storage	25,900	24.0	1	25900	25900	15,540

**Design : 160001 (W)**  
**Effective: 160001 (W)**  
**Allowance: 96000 (W)**

**FAILS**

**Passing requires Design to be at most 100% of Criteria**

**Project: Building C1 CZ2 Ware**  
**Title: TAM Building C1**  
**Type: Warehouse**  
**(WEA File: FL\_ORLANDO\_INTL\_ARPT.tm3)**

**Lighting Controls Compliance**

Acronym	Ashrae ID	Description	Area (sq.ft)	Design CP	Min CP	Compliance
Interior	3	Storage & Warehouse - Bulky Active Storage	37,000	4	4	PASSES
Pr0Zo2Sp1	3	Storage & Warehouse - Bulky Active Storage	5,775	3	3	PASSES
Pr0Zo3Sp1	3	Storage & Warehouse - Bulky Active Storage	5,775	1	3	FAILS
Pr0Zo4Sp1	3	Storage & Warehouse - Bulky Active Storage	5,775	1	3	FAILS
Pr0Zo5Sp1	3	Storage & Warehouse - Bulky Active Storage	5,775	1	3	FAILS
Interior	3	Storage & Warehouse - Bulky Active Storage	37,000	4	4	PASSES
Interior	3	Storage & Warehouse - Bulky Active Storage	37,000	4	4	PASSES
Interior	3	Storage & Warehouse - Bulky Active Storage	25,900	3	3	PASSES

**FAILS**

Project: Building C1 CZ2 Ware  
 Title: TAM Building C1  
 Type: Warehouse  
 (WEA File: FL\_ORLANDO\_INTL\_ARPT.tm3)

### System Report Compliance

**Pr0Sy1      System 1      Constant Volume Packaged System--902      No. of Units 1**

Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Compliance
Cooling System	Air Conditioners Air Cooled > 760000 Btu/h Cooling Capacity	7199740	12.20	9.50	12.30	9.80	<b>PASSES</b>
Heating System	Heat Pumps Air Cooled (Heating Mode) > 135000 Btu/h Cooling Capacity	12522350	3.00	3.20			<b>FAILS</b>
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	231895	0.80	0.82			<b>PASSES</b>

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

Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Compliance
Cooling System	Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity	487043	12.20	9.50	12.30	9.60	<b>PASSES</b>
Heating System	Heat Pumps Air Cooled (Heating Mode) > 135000 Btu/h Cooling Capacity	915200	3.00	3.20			<b>FAILS</b>
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	16948	0.80	0.82			<b>PASSES</b>

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

Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Compliance
Cooling System	Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity	500022	12.20	9.50	12.30	9.60	<b>PASSES</b>
Heating System	Heat Pumps Air Cooled (Heating Mode) > 135000 Btu/h Cooling Capacity	942580	3.00	3.20			<b>FAILS</b>
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	17455	0.80	0.82			<b>PASSES</b>

Pr0Sy4		System 4		Constant Volume Packaged System--902			No. of Units 1	
Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Compliance	
Cooling System	Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity	458374	12.20	9.50	12.30	9.60	PASSES	
Heating System	Heat Pumps Air Cooled (Heating Mode) > 135000 Btu/h Cooling Capacity	854680	3.00	3.20			FAILS	
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	15827	0.80	0.82			PASSES	
Pr0Sy5		System 5		Constant Volume Packaged System--902			No. of Units 1	
Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Compliance	
Cooling System	Air Conditioners Air Cooled 240000 to 760000 Btu/h Cooling Capacity	526037	12.20	9.50	12.30	9.60	PASSES	
Heating System	Heat Pumps Air Cooled (Heating Mode) > 135000 Btu/h Cooling Capacity	978770	3.00	3.20			FAILS	
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	18125	0.80	0.82			PASSES	
							<b>FAILS</b>	

Plant Compliance								
Description	Installed No	Size	Design Eff	Min Eff	Design IPLV	Min IPLV	Category	Compliance
								<b>None</b>

Project: Building C1 CZ2 Ware  
 Title: TAM Building C1  
 Type: Warehouse  
 (WEA File: FL\_ORLANDO\_INTL\_ARPT.tm3)

### Water Heater Compliance

Description	Type	Category	Design Eff	Min Eff	Design Loss	Max Loss	Compliance
Water Heater 1	Gas Storage water heater	<= 75000 Btu/h; >= 20 Gal	0.58	0.52			PASSES
<b>PASSES</b>							

### 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]	Compliance
<b>None</b>							

Project: Building C1 CZ2 Ware  
 Title: TAM Building C1  
 Type: Warehouse  
 (WEA File: FL\_ORLANDO\_INTL\_ARPT.tm3)

### Other Required Compliance

Category	Section	Requirement (write N/A in box if not applicable)	Check
			<input type="checkbox"/>

**Project: Building C1 CZ2 Ware**

# DOE Based Sizing

## PROJECT SUMMARY

**Short Desc:** Building C1

**Owner:** Enter Owner's name here

**Address1:** Enter Address here

**Address2:** Enter Address here

**Type:** Warehouse

**Weather File:** FL\_ORLANDO\_INTL\_ARPT.tm3

**Conditioned Area:** 160000 SF

**No of Stories:** 1

**Permit No:** 0

**Description:** TAM Building C1

**City:** Enter city here

**State:** Enter state here

**Zip:** 0

**Class:** New Finished building

**Conditioned & UnConditioned Area:** 160000 SF

**Area entered from Plans** 160000 SF

**Max Tonnage** 0

**If different, write in:** \_\_\_\_\_



## CERTIFICATIONS

I hereby certify that the plans and specifications covered by this calculation are in compliance as required by the authority of jurisdiction

Prepared By: \_\_\_\_\_

Building Official: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

I certify that this building is in compliance as required by the authority of jurisdiction

Owner Agent: \_\_\_\_\_

Date: \_\_\_\_\_

If required by law, I hereby certify (\*) that the system design is in compliance as required by the authority of jurisdiction

Architect: \_\_\_\_\_

Reg No: \_\_\_\_\_

Electrical Designer: \_\_\_\_\_

Reg No: \_\_\_\_\_

Lighting Designer: \_\_\_\_\_

Reg No: \_\_\_\_\_

Mechanical Designer: \_\_\_\_\_

Reg No: \_\_\_\_\_

Plumbing Designer: \_\_\_\_\_

Reg No: \_\_\_\_\_

(\*) Signature may be required when law requires design to be performed by registered design professionals. Typed names and registration numbers may be used where all relevant information is contained on signed/sealed plans.

**DOE 2.1 E Based Sized Parameters (Beta Feature)**

<u>IdSystem</u>	<u>System Name</u>	<u>System Type</u>		
1	<b>Pr0Sy1</b>	System 1		
	<u>Component</u>	<u>Sized Value</u>	<u>Units</u>	
	Cooling System	7199740	BTU/HR	
	Heating System	1.252235E+07	Btu/h	
	Air Handling System -Supply	231895	CFM	
2	<b>Pr0Sy2</b>	System 2		
	<u>Component</u>	<u>Sized Value</u>	<u>Units</u>	
	Cooling System	487043	BTU/HR	
	Heating System	915200	Btu/h	
	Air Handling System -Supply	16948	CFM	
3	<b>Pr0Sy3</b>	System 3		
	<u>Component</u>	<u>Sized Value</u>	<u>Units</u>	
	Cooling System	500022	BTU/HR	
	Heating System	942580	Btu/h	
	Air Handling System -Supply	17455	CFM	
4	<b>Pr0Sy4</b>	System 4		
	<u>Component</u>	<u>Sized Value</u>	<u>Units</u>	
	Cooling System	458374	BTU/HR	
	Heating System	854680	Btu/h	
	Air Handling System -Supply	15827	CFM	
5	<b>Pr0Sy5</b>	System 5		
	<u>Component</u>	<u>Sized Value</u>	<u>Units</u>	
	Cooling System	526037	BTU/HR	
	Heating System	978770	Btu/h	
	Air Handling System -Supply	18125	CFM	