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Florida Energy Efficiency Code For Building Construction

EnergyGauge Summit® Fla/Com-2010, Effective Date: March 15, 2012 -- Form 506-2010
Prescriptive Compliance for Renovations, Occupancy Change, etc.

PROJECT SUMMARY

Short Desc: 13.1176-11435

Owner: TMX Finance

Address1: 2496 US HWY 90 W

Address2:

Type: Retail

Jurisdiction: LAKE CITY, COLUMBIA COUNTY, FL (221200)

Conditioned Area: 2310 SF

No of Stories: 1

Permit No: 0

Description: Installoan

City: Lake City

State: Florida

Zip: 32055

Class: Renovation to existing buildi

Conditioned & UnConditioned Area: 2310 SF

Area entered from Plans: 2310 SF

Max Tonnage: 0

If different, write in: _____



Compliance Summary			
Component	Design	Criteria	Result
RENOVATED ENVELOPE PRESCRIPTIVE			PASSES
LIGHTING POWER	1,878.0	3,927.0	PASSES
LIGHTING CONTROLS			PASSES
EXTERNAL LIGHTING			None Entered
HVAC SYSTEM			None Entered
PLANT			None Entered
WATER HEATING SYSTEMS			None Entered
PIPING SYSTEMS			None Entered
Met all required compliance from Check List?			Yes/No/NA
IMPORTANT MESSAGE			
Info 5009 -- -- -- An input report of this design building must be submitted along with this Compliance Report			

CERTIFICATIONS

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

Prepared By: Malcolm G Russo

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: David Boyce

Reg No: AR-11595

Electrical Designer: Malcolm G Russo

Reg No: FL PE-16836

Lighting Designer: Malcolm G Russo

Reg No: FL PE-16836

Mechanical Designer: _____

Reg No: _____

Plumbing Designer: _____

Reg No: _____

(*) Signature is required where Florida Law requires design to be performed by registered design professionals.

Project: 13.1176-11435

Title: Instaloan

Type: Retail

(WEA File: FL_JACKSONVILLE_INTL_ARPT.tm3)

Prescriptive Envelope Compliance

Item	Zone	Description	Design	Criteria Meet Req.
Glass	Sales	Percent glass Max allowed	.000	50.000 Yes
Skylights	Sales	Percent Skylight Max allowed	.000	5.000 Yes

Meets Shell Envelope Requirements -- PASSES



External Lighting Compliance						
Description	Category	Tradable?	Allowance (W/Unit)	Area or Length or No. of Units (Sqft or ft)	ELPA (W)	CLP (W)
None						

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Lighting Power Compliance								
Space	Ashrae ID	Description	Area (sq.ft)	Height (ft)	No. of Spaces	Design (W)	Effective (W)	Allowance (W)
Sales	25,001	Sales Area	2,310	10.0	1	1878	1878	3,927
Design : 1878 (W) Effective: 1878 (W) Allowance: 3927 (W)							PASSES	
Passing requires Design to be at most 100% of Criteria								

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Lighting Controls Compliance						
Acronym	Ashrae ID	Description	Area (sq.ft)	Design CP	Min CP	Compli- ance
Sales	25,001	Sales Area	2,310	2	1	PASSES
PASSES						

System Report Compliance								No. of Units
Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Compliance	
								None

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

Water Heater Compliance								
Description	Type	Category	Design Eff	Min Eff	Design Loss	Max Loss	Compliance	
								None

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	
								None

Project: 13.1176-11435

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Other Required Compliance

Category	Section	Requirement (write N/A in box if not applicable)	Check
Report	506.4.2	Input Report Print-Out from EnergyGauge FlaCom attached	☒
Operations Manual	303.3.1, 503.2.9.3, 505.7.4.2	Operations manual provided to owner	☐
Windows & Doors	502.3.2	Glazed swinging entrance & revolving doors: max. 1.0 cfm/ft ² ; all other products: 0.3 cfm/ft ²	☐
Joints/Cracks	502.3.3	To be caulked, gasketed, weather-stripped or otherwise sealed	☐
Dropped Ceiling Cavity	502.3	Vented: seal & insulated ceiling. Unvented seal & insulate roof & side walls	☐
HVAC Efficiency	503.2.3	Minimum efficiencies: Tables 503.2.3(1)-(8)	☐
HVAC Controls	503.2.4	Zone controls prevent reheat (exceptions); separate thermostatic control per zone;	☐
Ventilation	503.2.5	Outdoor air supply & exhaust ducts shall have dampers that automatically shut when systems or spaces served are not in use. Exhaust air energy recovery required for cooling systems (Exceptions).	☐
ADS	503.2.7.5	Duct sizing and Design have been performed	☐
HVAC Ducts	503.2.7	Air ducts, fittings, mechanical equipment & plenum chambers shall be mechanically attached, sealed, insulated & installed per Table 503.2.7.2. Fan power limitations.	☐
Balancing	503.2.9.1	HVAC distribution system(s) tested & balanced. Report in construction documents.	☐
Piping Insulation	503.2.8	HAC and service hot water. In accordance with Table 503.2.8.	☐
Water Heaters	504	Performance requirements in accordance with Table 504.2. Heat trap required.	☐
Swimming Pools	504.7	Vapor-retardant or liquid cover or other means proven to reduce heat loss on heated pools; Time switch (exceptions); readily accessible on/off switch.	☐
Motors	505.7.5	Motor efficiency criteria have been met	☐
Lighting Controls	505.2, 502.3	Automatic control required for interior lighting in buildings >5,000 s.f.; Space control; Exterior photo sensor; Tandem wiring with 1 or 3 linear fluorescent lamps>30W	☐

EnergyGauge Summit® v4.10
INPUT DATA REPORT

Project Information

Project Name: 13.1176-11435	Orientation: North
Project Title: Instaloan	Building Type: Retail
Address: 2496 US HWY 90 W	Building Classification: Renovation to existing building
State: Florida	No. of Stories: 1
Zip: 32055	GrossArea: 2310 SF
Owner: TMX Finance	

Zones

No	Acronym	Description	Type	Area [sf]	Multiplier	Total Area [sf]
1	Sales	Sales	CONDITIONED	2310.0	1	2310.0

☐

Spaces

No	Acronym	Description	Type	Depth [ft]	Width [ft]	Height [ft]	Multi plier	Total Area [sf]	Total Volume [cf]
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In Zone: Sales		Sales Area		1.00	2310.00	10.00	1	2310.0	23100.0	☐
1	Sales									

Lighting									
No	Type	Category	No. of Luminaires	Watts per Luminaire	Power [W]	Control Type	No. of Ctrl pts		
In Zone: Sales									
In Space: Sales									
1	Recessed Fluorescent - No vent	General Lighting	18	96	1728	Manual On/Off	1	☐	
2	Incandescent	General Lighting	1	150	150	Manual On/Off	1	☐	

Walls											
No	Description	Type	Width [ft]	H (Effec) [ft]	Multi plier	Area [sf]	Direction	Conductance [Btu/hr. sf. F]	Heat Capacity [Btu/sf.F]	Dens. [lb/cf]	R-Value [h.s.f.F/Btu]
In Zone:											

Windows										
No	Description	Type	Shaded	U [Btu/hr sf F]	SHGC	Vis.Tra	W [ft]	H (Effec) [ft]	Multi plier	Total Area [sf]
In Zone:										
In Wall:										

Doors											
No	Description	Type	Shaded?	Width [ft]	H (Effec) [ft]	Multi plier	Area [sf]	Cond. [Btu/hr. sf. F]	Dens. [lb/cf]	Heat Cap. [Btu/sf. F]	R-Value [h.s.f.F/Btu]
In Zone:											

In Wall:	☐
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Roofs

No	Description	Type	Width [ft]	H (Effec) [ft]	Multi plier	Area [sf]	Tilt [deg]	Cond. [Btu/hr. Sf. F]	Heat Cap [Btu/sf. F]	Dens. [lb/cf]	R-Value [h.sf.F/Btu]
In Zone:											

Skylights

No	Description	Type	U [Btu/hr sf F]	SHGC	Vis.Trans	W [ft]	H (Effec) [ft]	Multiplier	Area [Sf]	Total Area [Sf]
In Zone:										
In Roof:										

Floors

No	Description	Type	Width [ft]	H (Effec) [ft]	Multi plier	Area [sf]	Cond. [Btu/hr. sf. F]	Heat Cap. [Btu/sf. F]	Dens. [lb/cf]	R-Value [h.sf.F/Btu]
In Zone:										

Systems

				No. Of Units
Component	Category	Capacity	Efficiency	IPLV

Plant				
Equipment	Category	Size	Inst.No	Eff.
				IPLV
☐				

Water Heaters			
W-Heater Description	CapacityCap.Unit	I/P Rt.	Efficiency
			Loss
☐			

Ext-Lighting				
Description	Category	No. of Luminaires	Watts per Luminaire	Area/Len/No. of units [sf/ft/No]
				Control Type
				Wattage [W]
☐				

Piping				
No	Type	Operating Temperature [F]	Insulation Conductivity [Btu-in/h.sf.F]	Nomonal pipe Diameter [in]
				Insulation Thickness [in]
				Is Runout?
☐				

Fenestration Used			
Name	Glass Type	No. of Panels	Glass Conductance [Btu/h.sf.F]
			SHGC
			VLT
☐			

Materials Used

Mat No	Acronym	Description	Only R-Value Used	RValue [h.sf.F/Btu]	Thickness [ft]	Conductivity [Btu/h.ft.F]	Density [lb/cf]	SpecificHeat [Btu/lb.F]

Constructs Used

No	Name	Simple Construct	Massless Construct	Conductance [Btu/h.sf.F]	Heat Capacity [Btu/sf.F]	Density [lb/cf]	RValue [h.sf.F/Btu]

Layer	Material No.	Material	Thickness [ft]	Framing Factor