



City of Belle Isle

Universal Engineering Sciences 3532 Maggie Blvd., Orlando, FL 32811
 Tel 407-581-8161 * Fax 407-581-0313 * www.universalengineering.com

PERMIT CARD – PLEASE POST AT JOB SITE

THIS DOCUMENT BECOMES YOUR PERMIT WHEN PROPERLY VALIDATED

Per FBC 105.3.3: An enforcing authority may not issue a building permit for any building construction, erection, alteration, modification, repair or addition unless the permit either includes on its face or there is attached to the permit the following statement: "NOTICE: In addition to the requirements of this permit, there may be additional restrictions applicable to this property that may be found in the public records of this county, and there may be additional permits required from other governmental entities such as water management districts, state agencies, or federal agencies." The issuance of this permit does not grant permission to violate any applicable City, Orange County, State of Florida and/or Federal codes and/or ordinances. Separate permits are required for Signs, Roofing, Electrical, Gas, Plumbing and Mechanical services. This permit becomes VOID if the work authorized is not commenced within 6 months, or is suspended or abandoned for a period of 6 months after commencement. **WORK SHALL BE CONSIDERED SUSPENDED IF AN APPROVED INSPECTION HAS NOT BEEN MADE WITHIN A 6 MONTH PERIOD. PERMISSION IS GRANTED TO DO THE FOLLOWING WORK ACCORDING TO THE CONDITIONS HEREON AND THE APPROVED PLANS AND SPECIFICATIONS, SUBJECT TO COMPLIANCE WITH THE ORDINANCES OF THE CITY OF BELLE ISLE, FLORIDA.**

Scope of Work: MECHANICAL: one 2.5 ton change out Comments: None Project Information Address: 7211 Matchett Rd, Belle Isle, FL 32809 Parcel ID: 19-23-30-5888-03-250 Property Owner: Staff, Brandon Phone Number: None ***** Company Name: Gary Munson Heat & AC Contractor Name: Munson, Gay License Number: CAC1814337 Address: 1215 Stevens Ave, Orlando, FL 32806 Phone Number: 407 859 1494	Permit Number: 2015-04-053 Date of Application: 04/22/2015 Date Permit Issued: 04/30/2015 WARNING TO OWNER: "YOUR FAILURE TO RECORD A NOTICE OF COMMENCEMENT MAY RESULT IN YOU PAYING TWICE FOR IMPROVEMENTS TO YOUR PROPERTY. IF YOU INTEND TO OBTAIN FINANCING, CONSULT WITH YOUR LENDER OR AN ATTORNEY BEFORE RECORDING YOUR NOTICE OF COMMENCEMENT." ON THE JOB INSPECTION(S) MUST BE MADE BEFORE PROCEEDING WITH SUBSEQUENT WORK. THIS CARD MUST BE DISPLAYED OUTSIDE AND BE PROTECTED FROM THE WEATHER WHILE BEING VISIBLE FROM THE STREET UNTIL THE FINAL INSPECTIONS HAVE BEEN APPROVED.
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BUILDING FEATURES

IMPACT FEES School \$ Traffic \$ ZONING FEES Zoning Fee \$ UNIVERSAL ENG - BUILDING FEES Cert of Occ \$ Demo \$ Building \$ Fence \$ Driveway \$ Shed \$ Window(s) \$ Door(s) \$ PrePower \$ Electrical \$ Temp Pole \$ Plumbing \$ Mechanical \$73.50 Gas \$ Roofing \$ Boat Dock \$ Screen Encl \$ Swimming Pool \$ Sign \$ SURCHARGE FEES Surcharge Fee \$2.00 Surcharge Fee \$2.00 TOTAL FEES \$77.50 Date Paid <u>4-30-15</u> CC or Check # <u>MC 7343</u> Amount Paid <u>77.50</u> The person accepting this permit shall conform to the terms of the application on file and construction shall conform to the requirements of the Florida Building Code (FS 553).	BUILDING INSPECTOR USE ONLY IF APPLICABLE: Have Zoning Approval Conditions Been Met? YES NO Have Stormwater Approval Conditions Been Met? YES NO Silt fencing in place? YES NO Turbidity Barrier in place? YES NO <input type="checkbox"/> BUILDING 1 st _____ (Footing/Foundation) Survey specific foundation plan must be onsite before slab pour. Approved Plan on Site? ____ 2 nd _____ (Slab) 3 rd _____ (Lintel)(Wall Reinforcing on Masonry Building) 4 th _____ (Exterior Framing)(Roof/Wall Sheathing) 5 th _____ (Framing) (To be made after Plumbing/ Mechanical/ Electrical Rough-Ins & Windows/Doors Installed) 6 th _____ (Insulation to be Made After Roof Installed) 7 th _____ (Drywall) 8 th _____ (Sidewalk/Driveway) 9 th _____ (Other) 10 th _____ (Final – After MEP and Other Applicable Finals) <input type="checkbox"/> ROOFING 1 ST ROOFING Deck Nailing/Dry-in/Flashing _____ 2 nd ROOFING Covering In-Progress _____ 3 rd ROOFING Covering Final _____ <input type="checkbox"/> PLUMBING (Pool-Piping, Solar, Irrigation, Water Treatment Equip, Etc...) <input type="checkbox"/> 1 ST _____ (Underground) 2 nd _____ (Sewer) 3 rd _____ (Rough-In/Tub Set) 4 th _____ (Final) CHECK APPROPRIATE BOX <input type="checkbox"/> GAS ___Natural___LP <input type="checkbox"/> MECHANICAL <input type="checkbox"/> ELECTRICAL <input type="checkbox"/> LOW VOLTAGE 1 st _____ (Rough-In) 2 nd _____ (Final)
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Inspection requests are to be emailed to BDscheduling@UniversalEngineering.com; a confirmation email will be sent back to you upon scheduling. **Next-Day Inspection requests must be made by 1pm.** Please include the following in your request: Permit #, project address, type of inspection, date of the requested inspection, a contact name & a contact phone number. AM or PM may be requested but cannot be guaranteed.

For a copy of your permit, or to check inspection results, please visit <https://universalengineering.sharefile.com/f/fo94edc4-832d-44bd-9809-ecf32f9e2e63>

login ID = cobi@universalengineering.com

password = universal13

CITY OF BELLE ISLE
Permit Application Review Sheet

Permit Number	2015-04-053
Property Owner	Staff Brandon
Address	7211 Matchett Rd
Nature of Improvement	Mechanical one 2.5 ton changeout
Received Application	4-23-15
Sent for Stormwater Review	/
Stormwater Approved	/
Sent for Zoning Review	/
Zoning Approved	/
Applied for Variance	
Variance Approved	
Sent to BO for Review	4-23-15
Building Official Approved	4-24-15 [Signature]
Comments	
1.	Submit 4-23-15 review w/ #50217
2.	tie down ✓ all credentials ✓
3.	
4.	
5.	
6.	
7.	
8.	
9.	
10.	
11.	
12.	



City of Belle Isle

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RECEIVED
4-22-15

APPLICATION FOR MECHANICAL PERMIT

WARNING TO OWNER: YOUR FAILURE TO RECORD A NOTICE OF COMMENCEMENT MAY RESULT IN YOUR PAYING TWICE FOR IMPROVEMENTS TO YOUR PROPERTY. A NOTICE OF COMMENCEMENT MUST BE RECORDED AND POSTED ON THE JOB SITE BEFORE THE FIRST INSPECTION. IF YOU INTEND TO OBTAIN FINANCING, CONSULT WITH YOUR LENDER OR AN ATTORNEY BEFORE RECORDING YOUR NOTICE OF COMMENCEMENT.

DATE OF APPLICATION: 4/3/15 PERMIT NUMBER 2015.04-053
PLEASE PRINT. The undersigned hereby applies for a permit to make installations as indicated below:

Project Address 7211 Matchett Rd Belle Isle FL 32809 32812
Property Owner Brandon D. Staff Phone _____
Property Owner's Mailing Address 7211 Matchett Rd City Belle Isle
State FL Zip Code 32809 Parcel Id Number: 25-23-29-5884-20-112
To obtain this information, please visit <http://www.ocpafl.org/Searches/ParcelSearch.aspx>

Class of Building: Old New Type of Building: Residential Commercial Other
Type of Work: New Alteration Addition Repair Replace HVAC system

- REQUIRED: Tie Down Engineering
- REQUIRED: If adding A/C to new space, provide Energy Calculations & Equipment Sizing Calculations
- REQUIRED: If replacing unit with no duct work, Duct Certification as per FB 101.4.7.1, must be posted on unit

Please indicate the nature of work by completing the information below:

Air Conditioning: # of Units 1 Tons Per Unit 2.5 Total Tons 2.5
Type of System: Water to Air Chiller Split System Package Heat Pump Estimated Cost \$ 6945.00
Heating: # of Units KWS Per Unit 1 @ 5KW Total KWS 5 BTU's _____
Oil Electric Boiler Gas Estimated Cost \$ _____
(A) Estimated Cost Fee \$ _____

Fees for items below are based on valuation of all units, equipment, materials and labor supplied by owner or contractor.

Ventilation: (Number of) Grease _____ Heat _____ Hoods, Air Intakes _____ Exhaust Fans _____ Dryer Vents _____ Estimated Cost \$ _____

Refrigeration: Number of units _____ Estimated Cost \$ _____

Piping: Air _____ Vacuum _____ Steam _____ Chill Water _____ Estimated Cost \$ _____

Others: (Specify) _____ Estimated Cost \$ _____
Was the space previously Air Conditioned? Yes No (B) Estimated Cost Fee \$ _____

I hereby certify that the above is true and correct to the best of my knowledge and make Application for Permit as outlined above, and if same is granted I agree to conform to all Florida Building Code Regulations and City Ordinances regulating same and in accordance with plans submitted. The issuance of this permit does not grant permission to violate any applicable Town and/or State of Florida codes and/or ordinances.

LICENSE HOLDER SIGNATURE [Signature] LICENSE # CAC1814337
LICENSE HOLDER NAME GARY E. MUNSON COMPANY NAME GARY MUNSON HGV A/C
Street Address 1215 Stevens Ave
City Orlando State FL Zip Code 32806 Phone Number 407-859-1494
Email Address gmunsona83@aol.com

Building Official: [Signature] Date 4-24-15
Verified Contractor's Licenses & Insurance are on file _____ Date _____

Permit Fee	\$	<u>49.00</u>
Review Fee	\$	<u>24.50</u>
3% Florida Surcharge	\$	<u>4.00</u>
Total Permit Fee	\$	<u>77.50</u>

NOTE: The Building Permit Number is required if the Mechanical Installation is associated with any construction or alteration where a Building Permit has been issued. Building Permit Number _____



DesignStar Load Calculation

Results are intended for use with Rheem heating and cooling systems

The New Degree of Comfort™

Customer Information

Street Address	7211 matchett Rd, Orlando, FL 32809
Latitude, Longitude	29.1462°, -81.0534°
House Square Footage:	1600 sq. ft.
Name:	brandon staff
Phone:	
Email:	

House Information

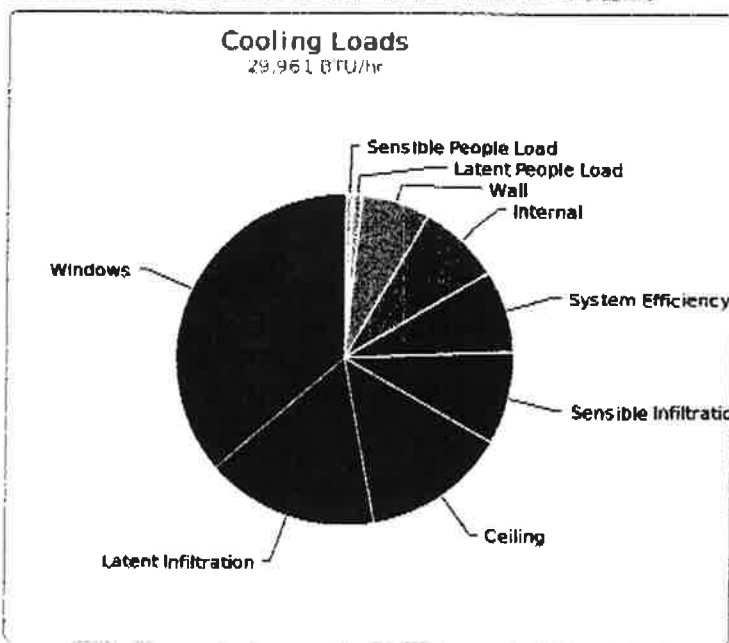
SHR	.75
Number of residents	1
Ceiling height	8.5
Wall U-value R-value	0.0833 12
Floor U-value R-value	0.125 8
Ceiling U-value R-value	0.0503 20
Window U-value	0.5
Window SHGF	0.85
Moisture grains	58
Duct loss %	10
Duct gain %	10
Cooling infiltration (ACH)	0.6
Heating infiltration (ACH)	0.8
Winter ventilation	0
Summer ventilation	0

Design Conditions

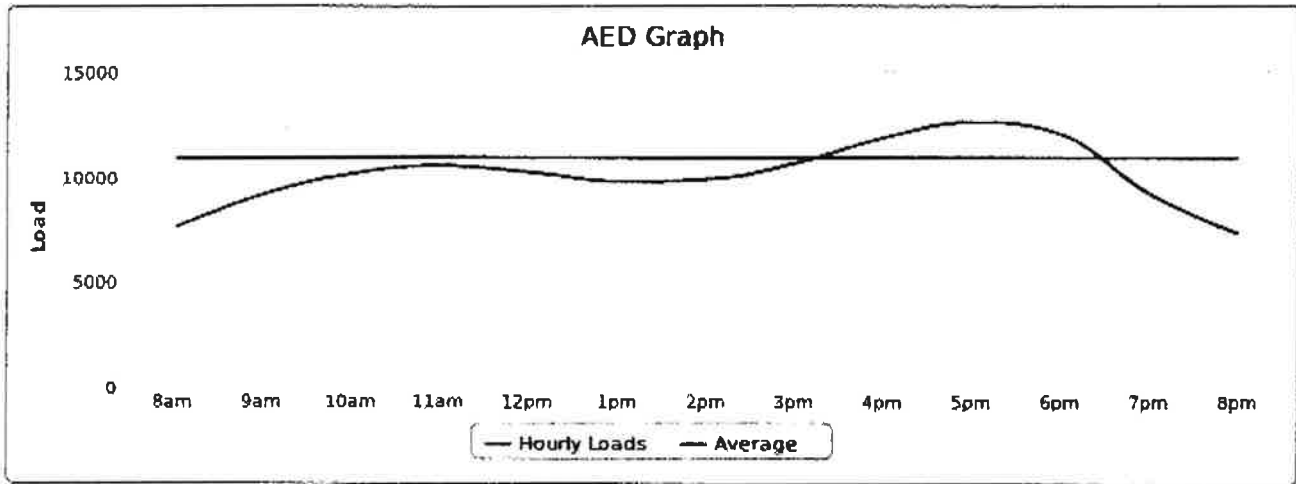
Outdoor	Heating	Cooling
Dry bulb (°F)	37	96
Daily range		L
Relative humidity		50%
Moisture difference		58
Indoor	Heating	Cooling
Indoor temperature (°F)	70	77
Design temperature difference(°F)	33	19

Cooling Loads

Area	Btuh	% of load
Wall	1972	6.6
Ceiling	4165	13.9
Windows	10868	36.3
Sensible Infiltration	2643	8.8
Latent Infiltration	4988	16.6
System Efficiency Gain	2464	8.2
Internal	2400	8
Sensible People Load	230	0.8
Latent People Load	230	0.8
Total:	29961	
Sensible load	24742	
Latent load	5218	
SHR	0.83	
Capacity at .75 SHR	2.75 Tons	



Adequate Exposure Diversity



Equipment selection

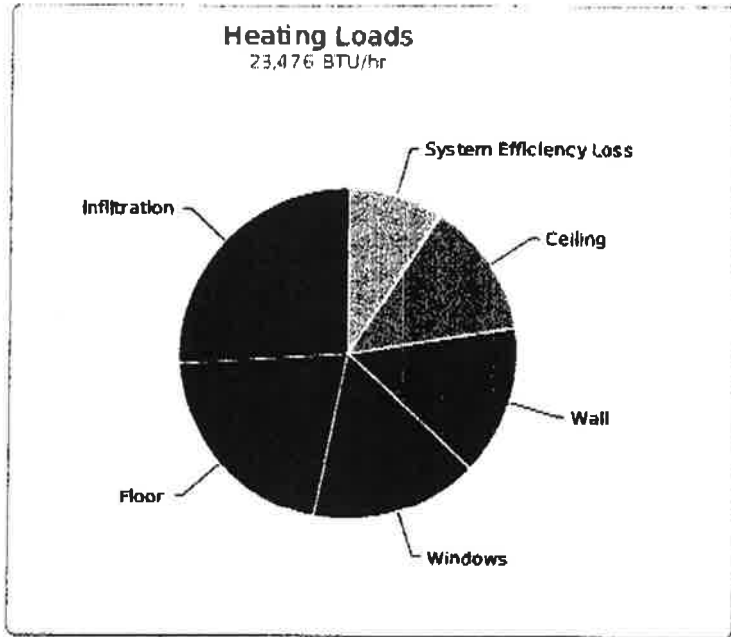
System equipment selection will be made using the following derived values.

Glass (NW)	116 sq. ft.
Glass (NE)	16 sq. ft.
Glass (SW)	16 sq. ft.
Glass (SE)	81 sq. ft.
Summer Outdoor	96°F
Summer Wet Bulb	77°F
Summer Indoor	77°F
Summer Design Grains	50%
Winter Outdoor	37°F
Winter Indoor	70°F
Sensible Cooling	24,742 Btuh
Latent Cooling	5,218 Btuh
Required Cooling Airflow	1,125 CFM
Sensible Heating	23,476 Btuh
Required Heating Airflow	305 CFM

All calculations are based upon approved hvac industry standards and procedures, and comply with all local, state and federal code requirements. All computed results are Estimates. Product provided by Energy Design Systems and Idea Tree

Heating Loads

Area	Btuh	% of load
Wall	3425	14.6
Floor	4892	20.8
Ceiling	3124	13.3
Windows	3779	16.1
Infiltration	6122	26.1
System Efficiency Loss	2134	9.1
Total:	23476	



Certificate of Product Ratings

AHRI Certified Reference Number: 6937313

Date: 4/22/2015

Product: Split System: Heat Pump with Remote Outdoor Unit-Air-Source

Outdoor Unit Model Number: 226ANA036****B

Indoor Unit Model Number: FV4CNF002L

Manufacturer: BRYANT HEATING AND COOLING SYSTEMS

Trade/Brand name: BRYANT HEATING AND COOLING SYSTEMS

Series name: PREFERRED SERIES PURON HP

Manufacturer responsible for the rating of this system combination is BRYANT HEATING AND COOLING SYSTEMS

Rated as follows in accordance with AHRI Standard 210/240-2008 for Unitary Air-Conditioning and Air-Source Heat Pump Equipment and subject to verification of rating accuracy by AHRI-sponsored, independent, third party testing:

Cooling Capacity (Btuh):	35000
EER Rating (Cooling):	12.00
SEER Rating (Cooling):	16.00
Heating Capacity(Btuh) @ 47 F:	35200
Region IV HSPF Rating (Heating):	9.00
Heating Capacity(Btuh) @ 17 F:	22600

* Ratings followed by an asterisk (*) indicate a voluntary rerate of previously published data, unless accompanied with a WAS, which indicates an involuntary rerate.

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CERTIFICATE VERIFICATION

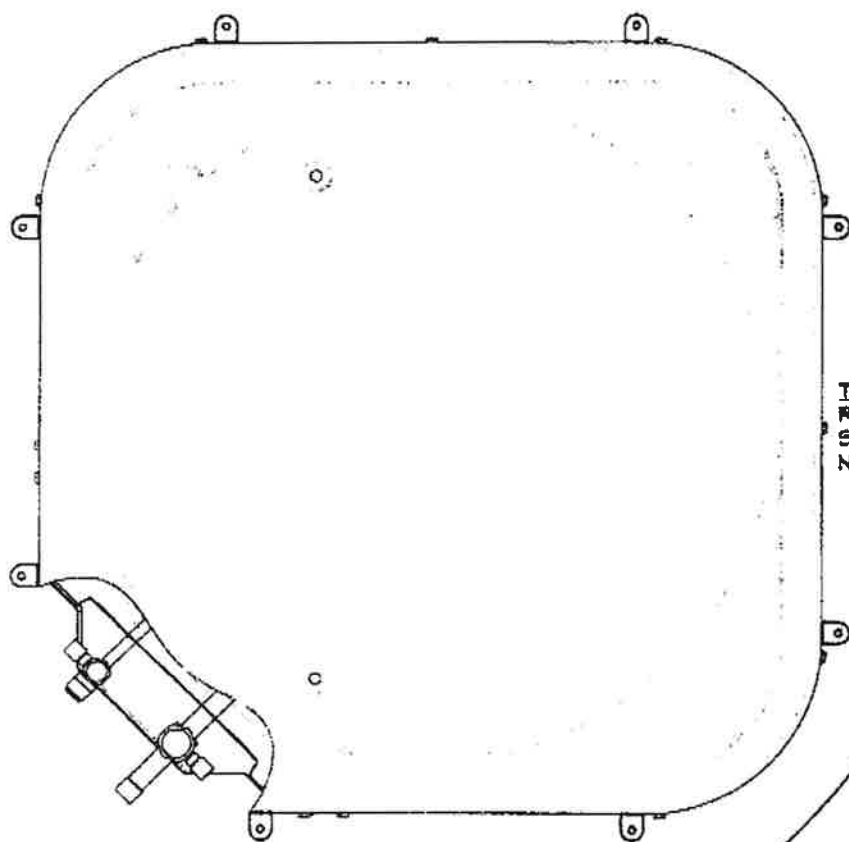
The information for the model cited on this certificate can be verified at www.ahridirectory.org, click on "Verify Certificate" link and enter the AHRI Certified Reference Number and the date on which the certificate was issued, which is listed above, and the Certificate No., which is listed at bottom right.

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we make life better™

CERTIFICATE NO.: 130741845363703443



CUBE BASE PAN

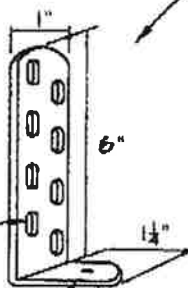
TYPICAL CLIP ATTACHMENT
 RM CLIP-4 BY RM ENTERPRISES OR
 STIFF CLIP CL SERIES BY STEEL
 NETWORKS W/ G-90 HOT DIPPED GALV.

ALTERNATE ATTACHMENT

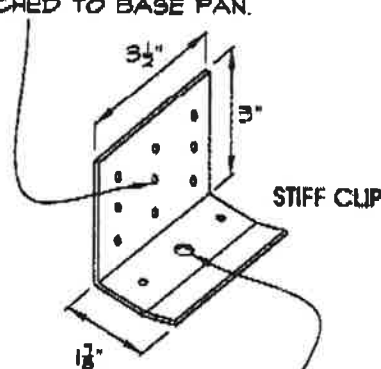
(1) #12-#14 X 3/8" LG HILTI KWIK-FLEX
 SELF DRILLING STEEL SCREW (HWH #3)
 ATTACHED TO BASE PAN.

RM CLIP-4

(1) #12-#14 X 3/8" LG HILTI KWIK-FLEX
 SELF DRILLING STEEL SCREW (HWH #3)
 ATTACHED TO BASE PAN.




1/2" X 2 1/4" HEX HEAD S.S. TAPCON
 ANCHOR (REQUIRED WITHIN 1 MILE OF
 COATAL AREAS), OR 1/2" X 2 1/4" HEX HEAD
 CLIMASEAL COATED TAPCON ANCHOR
 OR KWIK BOLT 3X 3 1/4" LG ATTACHED TO
 CONG. FDN. (MIN. EMB. 1 3/4")



STIFF CLIP

1/2" X 2 1/4" HEX HEAD S.S. TAPCON
 ANCHOR (REQUIRED WITHIN 1 MILE OF
 COATAL AREAS), OR 1/2" X 2 1/4" HEX HEAD
 CLIMASEAL COATED TAPCON ANCHOR
 OR KWIK BOLT 3X 3 1/4" LG ATTACHED TO
 CONG. FDN. (MIN. EMB. 1 3/4")

Rev. Order: 04-20-09

S-1	Job No: 09-11	JOB NAME:	CUBE BASE PAN	 ROBERT E. SAMARA P.E., P.A. Consulting Engineers Structural 7701 43rd Avenue, Miami, Florida 33163 Phone: 305-442-1914 Fax: 305-442-8991
	Date: 03-27-09			
	Drawn By: R. Samara			
	Checked By: A. Barnett	TITLE:	CLIP AND ATTACHMENT LOCATION PLAN	

1215 Stevens Ave
Orlando, FL 32806
407-859-1494 Office
407-894-0746 FAX

**Gary Munson Htg
& A/C Svc., Inc.**

Fax

Universal Engineering

To: *City of Belle Isle* From: *Paula / GARY*
Fax: *407-581-0313* Pages: *11 w/cover*
Phone: _____ Date: *4/22/14*
Re: _____ CC: _____

- Urgent For Review Please Comment Please Reply Please Recycle

Permit 7211 Mabbett