



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.

<p>Scope of Work: MECHANICAL: c/o 1.5ton HVAC with no ductwork</p> <p>Comments: None</p> <p>Project Information Address: 3715 Rothbury Drive, Belle Isle, FL 32812 Parcel ID: 20-23-30-9375-00-060 Property Owner: Taubee, Manuel Phone Number: None ***** Company Name: Armstrong A/C & Heating of Central FL, Inc. Contractor Name: Richards, Paul License Number: CAC057235 Address: 671 Business Park Blvd, Winter Garden, FL 34787 Phone Number: 407-877-8090</p>	<p align="center">Permit Number: 2014-08-071</p> <p>Date of Application: 08/18/2014 Date Permit Issued: 08/19/2014</p> <p>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.</p>
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BUILDING FEATURES

<p>IMPACT FEES</p> <p>Traffic \$ School \$</p> <p>ZONING FEES</p> <p>Zoning Fee \$</p> <p>UNIVERSAL ENG - BUILDING FEES</p> <p>Boat Dock \$ Boat House \$ Building \$ Demo \$ Door(s) \$ Driveway \$ Electrical \$ Fence \$ Gas \$ Irrigation \$ Low Voltage \$ Mechanical \$73.50 Plumbing \$ Pool \$ Roofing \$ Screen Encl \$ Shed \$ Temp Pole \$ Window(s) \$</p> <p>SURCHARGE FEES</p> <p>Surcharge Fee \$2.00 Surcharge Fee \$2.00</p> <p align="center">TOTAL FEES \$77.50</p> <p>Date Paid 8-19-14</p> <p>CC or Check # mc 5600</p> <p>Amount Paid 77.50</p> <p>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).</p>	<p align="center">BUILDING INSPECTOR USE ONLY</p> <p>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</p> <p>€ BUILDING 1st _____ (Footing/Foundation) Survey specific foundation plan must be onsite before slab pour. Approved Plan on Site? _____ 2nd _____ (Slab) 3rd _____ (Lintel)(Wall Reinforcing on Masonry Building) 4th _____ (Exterior Framing)(Roof/Wall Sheathing) 5th _____ (Framing) (To be made after Plumbing/Mechanical/Electrical Rough-Ins & Windows/Doors Installed) 6th _____ (Insulation to be Made After Roof Installed) 7th _____ (Drywall) 8th _____ (Sidewalk/Driveway) 9th _____ (Other) 10th _____ (Final - After MEP and Other Applicable Finals)</p> <p>€ ROOFING OSHA APPROVED ACCESS MUST BE MADE AVAILABLE TO INSPECTOR 1ST ROOFING Deck Nailing/Dry-in/Flashing _____ 2nd ROOFING Covering In-Progress _____ 3rd ROOFING Covering Final _____</p> <p>€ PLUMBING (Pool-Piping, Solar, Irrigation, Water Treatment Equip, Etc...) € _____ 1st _____ (Underground) 2nd _____ (Sewer) 3rd _____ (Rough-In/Tub Set) 4th _____ (Final)</p> <p>CHECK APPROPRIATE BOX € GAS ___ Natural ___ LP € MECHANICAL € ELECTRICAL € LOW VOLTAGE 1st _____ (Rough-In) 2nd _____ (Final)</p>
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Inspection requests are to be emailed to IDScheduling@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.



City of Belle Isle
Universal Engineering Sciences 3532 Maggie Blvd., Orlando, FL 32811
Tel 407-581-8161 * Fax 407-581-0313 * www.universaleengineering.com

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.

2014-08-071

PERMIT NUMBER 2014-06-003

DATE OF APPLICATION: 8-15-2014
PLEASE PRINT. The undersigned hereby applies for a permit to make installations as indicated below.

Project Address 3716 Rothbury Dr. Belle Isle FL 32809 X 32812
Property Owner Manuel J. Touibe Phone
Property Owner's Mailing Address 3715 Rothbury Dr. City Belle Isle
State FL Zip Code 32812 Parcel Id Number 20-23-30-9375-00-060
To obtain this information, please visit <http://www.ocoball.com/Searches/ParcelSearch.aspx>

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

- **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 1.5 Total Tons 1.5
Type of System: Water to Air Chiller Split System Package Heat Pump x
Heating: # of Units KWS Per Unit 5 Total KWS 5 BTUs
Oil Electric x Boiler Gas

Estimated Cost \$ 2475.00
Estimated Cost \$

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 1 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 X
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 Paul L. Richards LICENSE # CAC057235

LICENSE HOLDER NAME Paul L. Richards COMPANY NAME Armstrong Air & Heating

Street Address 671 Business Park Blvd State FL Zip Code 34787 Phone Number 407-877-8090

City Winter Garden Email Address ipattiluocho@armstrongairinc.com

Building Official: Angel A. Perez Date 8-18-2014
Verified Contractor's Licenses & Insurance are on file sq Date 8-19-14

Permit Fee \$ 49.
Review Fee \$ 24.50
3% Florida Surcharge \$ 4.00
Total Permit Fee \$ 77.50

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 2014-06-003

CITY OF BELLE GLA
Permit Application Review Sheet

Permit Number	2014-08-071
Property Owner	Taulbee, Manuel
Address	3715 Rothbury Dr
Nature of Improvement	Mechanical - AC
Received Application	8/15/14
Sent for Stormwater Review	N/A
Stormwater Approved	
Sent for Zoning Review	
Zoning Approved	N/A
Applied for Variance	
Variance Approved	
Sent to BO for Review	
Building Official Approved	8-18-2014
Comments	
1.	8-15-14 Sent Email we need insurance, license & regard docs for AC installation
2.	
3.	8-15-14 Received license, tie down & manual J
4.	
5.	8-19-14 sq Still need insurance - Received 8-18-14 emailed contr its ready
6.	
7.	
8.	
9.	
10.	
11.	
12.	



COBI Permit Fee Calculation Form



Reviewer Signature: AP. Date: 8-18-2014

Permit Type:	<u>Mechanical</u>	Job Cost:	\$ _____
Permit Fee:	<u>98 49</u>		
Plans Review Fee:	<u>49 24.50</u>		(50% of permit fee - excluding ReRoofs)
1.5% State Fee:	<u>2.205</u>		
1.5% State Fee:	<u>2.205</u>		
TOTAL BUILDING FEE:	<u>157.41 \$77.50 Total</u>		(does not include Zoning fees or Deposits)

Note: Total gets doubled for SWO/AFT permits

~~377 (\$6 x 2) = 12 + 37 = \$49~~

~~\$49 x 2 = \$98 (Condenser + Air handler)~~

~~\$98 x 50% = 49 + 98 = \$147~~

37 + 12 = \$49

49 x 50% = $\frac{24.50}{\$73.50 + 4} = \77.50



Load Short Form Entire House

Job: 3715 ROTHSBURY DR
Date: Jun 16, 2014
By: DON VERGARA

Project Information

For: TAULBEE HOME

Design Information

Outside db (°F)	Htg	Clg	Infiltration	Simplified
Inside db (°F)	42	92	Method	Average
Design TD (°F)	70	75	Construction quality	0
Daily range	28	17	Fireplaces	
Inside humidity (%)	-	M		
Moisture difference (gr/lb)	50	50		
	23	47		

HEATING EQUIPMENT

Make Lennox
Trade 14HPX SERIES
Model 14HPX-018-230-13
AHRI ref 4636739

Efficiency 8.2 HSPF
Heating input 16700 Btuh @ 47°F
Heating output 24 °F
Temperature rise 630 cfm
Actual air flow 0.050 cfm/Btuh
Air flow factor 0.50 in H2O
Static pressure
Space thermostat

COOLING EQUIPMENT

Make Lennox
Trade 14HPX SERIES
Cond 14HPX-018-230-13
Coil CBX27UH-024-230*++TDR
AHRI ref 4636739
Efficiency 12.5 EER, 15 SEER
Sensible cooling 13230 Btuh
Latent cooling 5670 Btuh
Total cooling 18900 Btuh
Actual air flow 630 cfm
Air flow factor 0.055 cfm/Btuh
Static pressure 0.50 in H2O
Load sensible heat ratio 0.82

ROOM NAME	Area (ft²)	Htg load (Btuh)	Clg load (Btuh)	Htg AVF (cfm)	Clg AVF (cfm)
KITCHEN	148	3456	3387	174	187
BDRM	199	3272	2388	165	132
LIVING	114	2911	3932	147	217
BATH	55	659	632	33	35
STUDY	88	2204	1086	111	60
AC	10	0	0	0	0
Entire House	615	12501	11425	630	630
Other equip loads		631	391		
Equip. @ 0.97 RSM			11508		
Latent cooling			2587		
TOTALS	615	13132	14095	630	630

Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.



wrightsoft
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Right-Suite® Universal 2013 13.0.10 RSU15393



Building Analysis Entire House

Job: 3715 ROTHSBURY DR
Date: Jun 16, 2014
By: DON VERGARA

Project Information

For: TAULBEE HOME

Design Conditions

Location:
Orlando Int'l AP, FL, US
Elevation: 105 ft
Latitude: 28°N

Outdoor:
Dry bulb (°F)
Daily range (°F)
Wet bulb (°F)
Wind speed (mph)

Heating 42
-
-
15.0

Cooling 92
17 (M)
76
7.5

Indoor:
Indoor temperature (°F)
Design TD (°F)
Relative humidity (%)
Moisture difference (gr/lb)

Heating 70
28
50
23.4

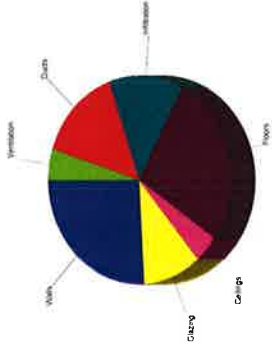
Cooling 75
17
50
46.6

Infiltration:
Method
Construction quality
Fireplaces

Simplified
Average
0

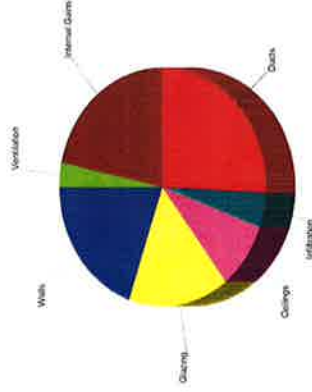
Heating

Component	Btuh/ft²	Btuh	% of load
Walls	4.0	3398	25.9
Glazing	13.5	1377	10.5
Doors	0	0	0
Ceilings	0.9	553	4.2
Floors	5.7	3493	26.6
Infiltration	1.8	1732	13.2
Ducts		1949	14.8
Piping		0	0
Humidification		0	0
Ventilation		631	4.8
Adjustments		0	0
Total		13132	100.0



Cooling

Component	Btuh/ft²	Btuh	% of load
Walls	2.8	2328	19.7
Glazing	18.3	1870	15.8
Doors	0	0	0
Ceilings	1.7	1061	9.0
Floors	0	0	0
Infiltration	0.6	563	4.8
Ducts		3042	25.7
Ventilation		391	3.3
Internal gains		2560	21.7
Blower		0	0
Adjustments		0	0
Total		11815	100.0



Latent Cooling Load = 2587 Btuh
Overall U-value = 0.144 Btuh/ft²·°F

Data entries checked.





Component Constructions Entire House

Job: 3715 ROTHSBURY DR
Date: Jun 16, 2014
By: DON VERGARA

Project Information

For: TAULBEE HOME

Design Conditions

Location:
Orlando Intl AP, FL, US
Elevation: 105 ft
Latitude: 28°N

Indoor:
Indoor temperature (°F)
Design TD (°F)
Relative humidity (%)
Moisture difference (gr/lb)

Outdoor:
Dry bulb (°F)
Daily range (°F)
Wet bulb (°F)
Wind speed (mph)

Heating
42
-
-
15.0

Cooling
92
17 (M)
76
7.5

Heating
70
28
50
23.4

Cooling
75
17
50
46.6

Infiltration:
Method
Construction quality
Fireplaces

Simplified
Average
0

Construction descriptions

	Or	Area ft ²	U-value Btu/ft ² ·h·°F	Insul R ft ² ·h/Btu	Htg HTM Btu/ft ²	Loss Btu/h	Cig HTM Btu/ft ²	Gain Btu/h
Walls 13A-4ocs: Blk wall, stucco ext, r-4 ext bd ins, 8" thk, 1/2" gypsum board int fnsh	n	234	0.143	4.0	4.02	942	2.75	645
	e	202	0.143	4.0	4.02	811	2.75	556
	s	247	0.143	4.0	4.02	993	2.75	680
	w	162	0.143	4.0	4.02	652	2.75	447
	all	846	0.143	4.0	4.02	3398	2.75	2328

Partitions (none)

Windows
2 glazing, clr low-e outr, air gas, vnl frm mat, clr innr, 1/4" gap, 1/4" thk;
2 glazing, clr low-e outr, air gas, vnl frm mat, clr innr, 1/4" gap, 1/4" thk;
50% blinds 45°, medium; 50% outdoor insect screen; 1.2 ft overhang
(5.3 ft window ht, 1 ft sep.); 6.67 ft head ht

2 glazing, clr low-e outr, air gas, vnl frm mat, clr innr, 1/4" gap, 1/4" thk;
2 glazing, clr low-e outr, air gas, vnl frm mat, clr innr, 1/4" gap, 1/4" thk;
50% blinds 45°, medium; 50% outdoor insect screen; 1.2 ft overhang
(3.2 ft window ht, 1 ft sep.); 6.67 ft head ht

2 glazing, clr low-e outr, air gas, vnl frm mat, clr innr, 1/4" gap, 1/4" thk;
2 glazing, clr low-e outr, air gas, vnl frm mat, clr innr, 1/4" gap, 1/4" thk;
50% blinds 45°, medium; 50% outdoor insect screen; 1.2 ft overhang
(4.2 ft window ht, 1 ft sep.); 6.67 ft head ht

10D-v: 2 glazing, clr low-e outr, air gas, vnl frm mat, clr innr, 1/4" gap, 1/4" thk; 50% blinds 45°, medium; 50% outdoor insect screen; 5.33 ft overhang (8 ft window ht, 0 ft sep.); 6.67 ft head ht

Doors (none)



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Ceilings

16B-30ad: Attic ceiling, asphalt shingles roof mat, r-30 cell ins, 1/2" gypsum board int fnsh 615 0.032 30.0 0.90 553 1.73 1061

Floors

22A-cpm: Bg floor, heavy dry or light damp soil, on grade depth, carpet fir fnsh 105 1.180 0 33.2 3493 0 0



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Project Summary Entire House

Job: 3715 ROTHSBURY DR
Date: Jun 16, 2014
By: DON VERGARA

Project Information

For: TAULBEE HOME

Notes:

Design Information

Weather: Orlando Intl/AP, FL, US

Winter Design Conditions

Outside db 42 °F
Inside db 70 °F
Design TD 28 °F

Summer Design Conditions

Outside db 92 °F
Inside db 75 °F
Design TD 17 °F
Daily range M
Relative humidity 50 %
Moisture difference 47 gr/lb

Heating Summary

Structure 10553 Btuh
Ducts 1949 Btuh
Central vent (20 cfm) 631 Btuh
Humidification 0 Btuh
Piping 0 Btuh
Equipment load 13132 Btuh

Infiltration

Method Construction quality Simplified Average
Fireplaces 0

Area (ft²) Heating 615 Cooling 615
Volume (ft³) 5533 5533
Air changes/hour 0.61 0.32
Equiv. AVF (cfm) 56 30

Sensible Cooling Equipment Load Sizing

Structure 8382 Btuh
Ducts 3042 Btuh
Central vent (20 cfm) 391 Btuh
Blower 0 Btuh

Use manufacturer's data
Rate/swing multiplier n
Equipment sensible load 11508 Btuh

Latent Cooling Equipment Load Sizing

Structure 1331 Btuh
Ducts 609 Btuh
Central vent (20 cfm) 647 Btuh
Equipment latent load 2587 Btuh

Equipment total load 14095 Btuh
Req. total capacity at 0.70 SHR 1.4 ton

Heating Equipment Summary

Make Lennox
Trade 14HPX SERIES
Model 14HPX-018-230-13
AHRI ref 4636739

Efficiency 8.2 HSPF
Heating input 16700 Btuh @ 47°F
Heating output 24 °F
Temperature rise 630 cfm
Actual air flow 0.050 cfm/Btuh
Air flow factor 0.50 in H2O
Static pressure
Space thermostat

Cooling Equipment Summary

Make Lennox
Trade 14HPX SERIES
Cond 14HPX-018-230-13
Coil CBX27UH-024-230+++TDR
AHRI ref 4636739

Efficiency 12.5 EER, 15 SEER
Sensible cooling 13230 Btuh
Latent cooling 5670 Btuh
Total cooling 18900 Btuh
Actual air flow 630 cfm
Air flow factor 0.055 cfm/Btuh
Static pressure 0.50 in H2O
Load sensible heat ratio 0.82

Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.



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AED Assessment Entire House

Job: 3715 ROTHSBURY DR
Date: Jun 16, 2014
By: DON VERGARA

Project Information

For: TAULBEE HOME

Design Conditions

Location:
Orlando Intl AP, FL, US
Elevation: 105 ft
Latitude: 28°N

Outdoor:
Dry bulb (°F)
Daily range (°F)
Wet bulb (°F)
Wind speed (mph)

Heating 42
-
-
15.0

Cooling 92
17 (M)
76
7.5

Indoor:
Indoor temperature (°F)
Design TD (°F)
Relative humidity (%)
Moisture difference (gr/lb)

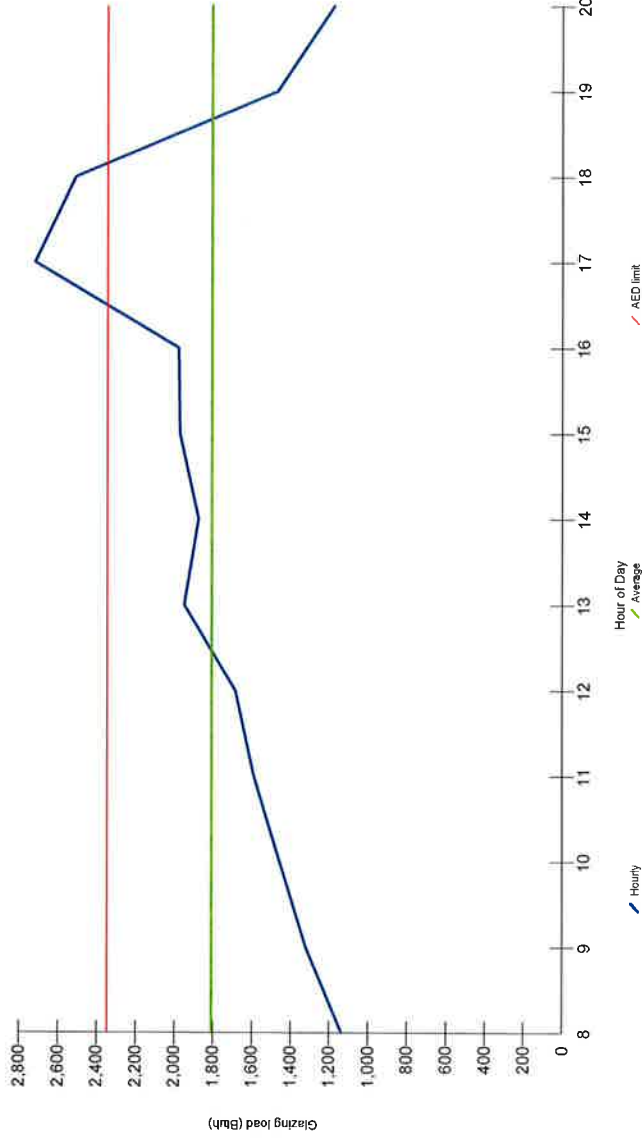
Heating 70
28
50
23.4

Cooling 75
17
50
46.6

Infiltration:

Test for Adequate Exposure Diversity

Hourly Glazing Load



Maximum hourly glazing load exceeds average by 50.7%.

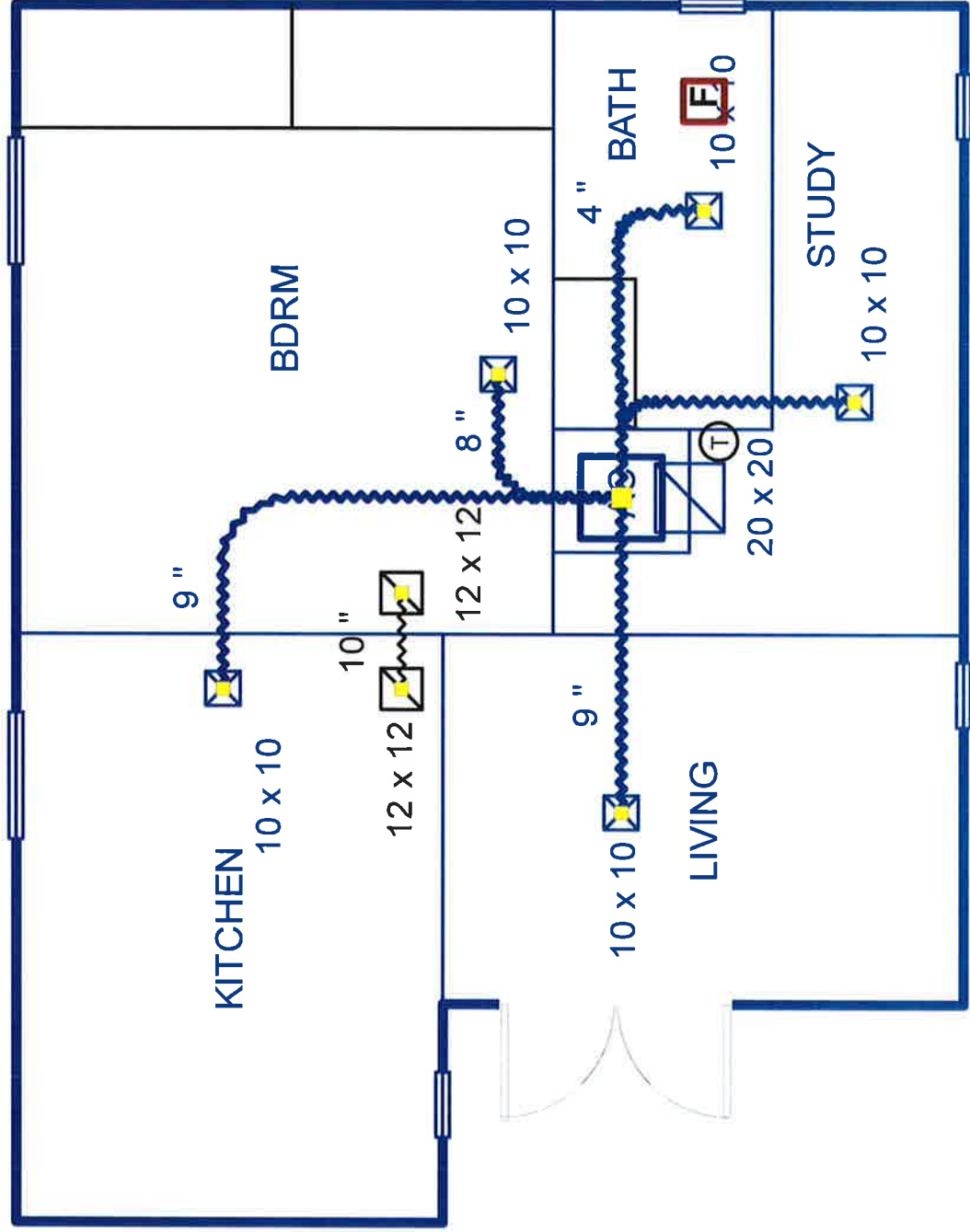
House does not have adequate exposure diversity (AED), based on AED limit of 30%.

AED excursion: 374 Btuh (PFG - 1.3*AFG)





Level 1



Job #: 3715 ROTHSBURY DR
Performed by DON VERGARA for:
TAULBEE HOME

Scale: 1 : 50
Page 1
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Duct System Summary Entire House

Job: 3715 ROTHSBURY DR
Date: Jun 16, 2014
By: DON VERGARA

Project Information

For: TAULBEE HOME

External static pressure	0.50 in H2O	0.50 in H2O
Pressure losses	0 in H2O	0 in H2O
Available static pressure	0.50 in H2O	0.50 in H2O
Supply / return available pressure	0.250 / 0.250 in H2O	0.250 / 0.250 in H2O
Lowest friction rate	0.437 in/100ft	0.437 in/100ft
Actual air flow	630 cfm	630 cfm
Total effective length (TEL)	114 ft	

Supply Branch Detail Table

Name	Design (Btuh)	Htg (cfm)	Clg (cfm)	Design FR	Diam (in)	H x W (in)	Duct Matl	Actual Ln (ft)	Ftg.Eqv Ln (ft)	Trunk
BATH	c	632	33	0.459	4.0	0x0	VIFx	9.0	100.0	
BDRM	h	3272	165	0.472	8.0	0x0	VIFx	6.0	100.0	
KITCHEN	c	3387	174	0.437	9.0	0x0	VIFx	14.3	100.0	
LIVING	c	3932	147	0.487	9.0	0x0	VIFx	7.7	95.0	
STUDY	h	2204	111	0.463	7.0	0x0	VIFx	8.0	100.0	

Return Branch Detail Table

Name	Grill Size (in)	Htg (cfm)	Clg (cfm)	TEL (ft)	Design FR	Veloc (fpm)	Diam (in)	H x W (in)	Stud/Joist Opening (in)	Duct Matl	Trunk
rb1	0x0	630	630	0	0	0	0	0x0	0	VIFx	



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Product Approval
USER: Public User

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FL # FL14239-R1
Application Type Revision
Code Version 2010
Application Status Approved
Comments
 Archived

Product Manufacturer
 Address/Phone/Email
 BMP International Inc.
 4710 28th Street N
 St. Petersburg, FL 33714
 (727) 458-0544
 benmeng@yahoo.com

Authorized Signature
 Xianbin Meng
 benmeng@yahoo.com

Technical Representative
 Address/Phone/Email

Quality Assurance Representative
 Address/Phone/Email

Category
 Subcategory
 Structural Components
 Anchors

Compliance Method
 Evaluation Report from a Florida Registered Architect or a Licensed Florida Professional Engineer
 Evaluation Report - Hardcopy Received

Florida Engineer or Architect Name who developed the Frank L. Bernardo, P.E.
Evaluation Report
 Florida License PE-0046549
 National Accreditation & Management Institute,
 12/31/2013
Quality Assurance Entity
 Quality Assurance Contract Expiration Date
 Validated By Ryan J. King, P.E.
 Validation Checklist - Hardcopy Received

Certificate of Independence
[EL14239_R1_COI_COL.pdf](#)

Referenced Standard and Year (of Standard)
Standard ASTM D1761-06
 ASTM D1761-88
Year 2006
 2000

Equivalence of Product Standards
 Certified By Florida Licensed Professional Engineer or Architect
[EL14239_R1_Equiv_Equiv.pdf](#)

Sections from the Code

Product Approval Method
 Method 1 Option D

Date Submitted 09/29/2011
Date Validated 12/13/2011
Date Pending FBC Approval 12/18/2011
Date Approved 01/31/2012

Summary of Products

FL #	Model, Number or Name	Description
14239.1	Slotted Steel Tie-Down Clips, 1" and 2" Models	Steel Tie-Down Clip System (For Use with Mechanical Units at Roof or Grade)
Limits of Use Approved for use in HVHZ: Yes Approved for use outside HVHZ: Yes Impact Resistant: N/A Design Pressure: N/A Other: This design provides allowable capacities for the system. The required site-specific design pressure (demand) shall be calculated by others for use with this design.		
Installation Instructions EL14239_R1_IL_Dwg.pdf Verified By: Frank L. Bernardo, P.E. 0046549 Created by Independent Third Party: Yes Evaluation Reports EL14239_R1_AE_Eval.pdf Created by Independent Third Party: Yes		



BMP INTERNATIONAL, INC.

MECHANICAL UNIT STEEL TIE-DOWN CLIP CAPACITIES: AT GRADE & ROOF-TOP MOUNTED APPLICATIONS

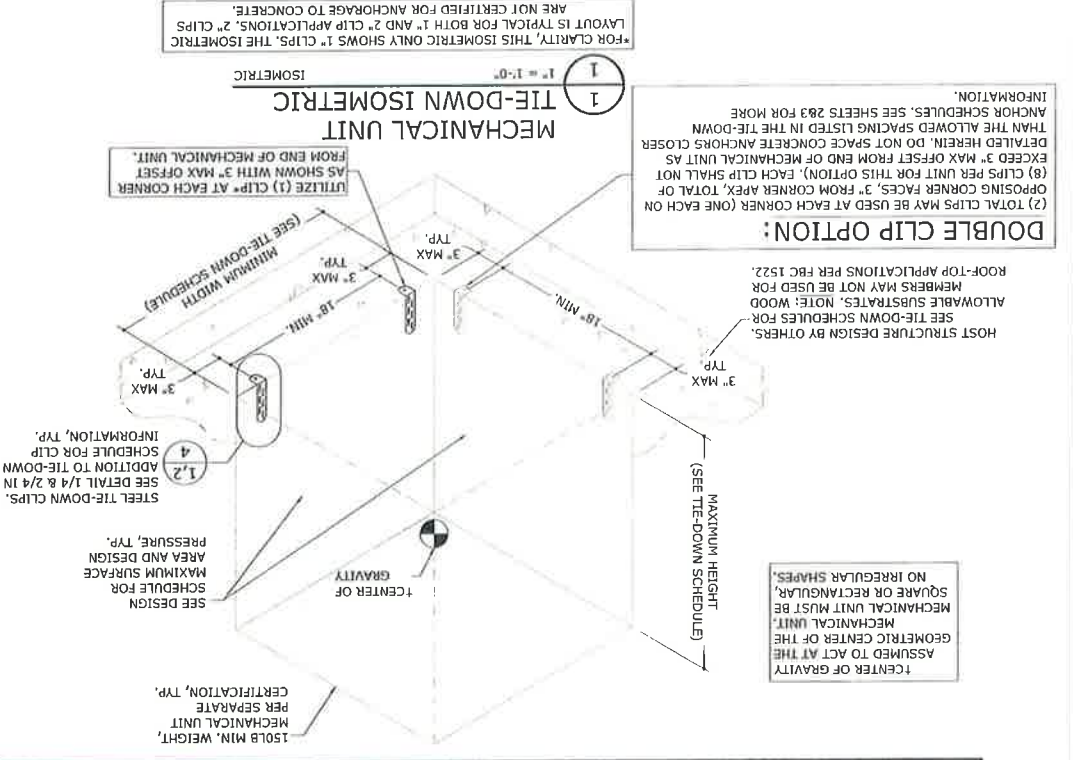
PROCEDURE STEP	
1	LOCATE THE AT GRADE TIE-DOWN SCHEDULE ON SHEET 2 AND SELECT CLIP TYPE
2	DETERMINE LARGEST FACE AREA OF MECHANICAL UNIT TO BE INSTALLED
3	CHECK MAXIMUM UNIT HEIGHT RESTRICTION
4	CHECK MINIMUM UNIT WIDTH RESTRICTION
5	DETERMINE THE NUMBER OF CLIPS TO BE USED AT EACH CORNER OF THE MECHANICAL UNIT

RESULT	
CONSIDER 1" STEEL CLIP	36"x36"x9ft
CONSIDER (1) CLIP AT EACH CORNER, INSTALLED TO THE FOLLOWING SPECIFICATION	

MECHANICAL UNIT CRITERIA:
 CONSIDER THE INSTALLATION OF (1) MECHANICAL UNIT WITH THE FOLLOWING CRITERIA:
 36" TALL X 36" DEEP X 24" WIDE, 130 LB WEIGHT AS VERIFIED BY OTHERS, INSTALLED TO 3192 KSI MIN. CONCRETE AT GRADE AS VERIFIED BY OTHERS.

PROCEDURE:
 (THE FOLLOWING EXAMPLE ILLUSTRATES THE PROCEDURE USED TO DETERMINE THE MAXIMUM ALLOWABLE WIND PRESSURE FOR ANY GIVEN MECHANICAL UNIT THAT CONFORMS TO THE DIMENSION RESTRICTIONS LISTED HEREIN. SEE SHEETS 2&3 FOR TIE-DOWN SCHEDULES.)

TIE-DOWN CLIP DIRECTIVE EXAMPLE



- GENERAL NOTES:**
- THIS PRODUCT HAS BEEN DESIGNED AND SHALL BE FABRICATED IN ACCORDANCE WITH THE REQUIREMENTS OF THE 2010 FLORIDA BUILDING CODE, FOR USE WITHIN AND OUTSIDE THE HIGH VELOCITY HURRICANE ZONE.
 - NO 33-1/3% INCREASE IN ALLOWABLE STRESS HAS BEEN USED IN THE DESIGN OF THIS SYSTEM.
 - DESIGN IS BASED ON CLIENT PROVIDED PRODUCT AND DIE SHEETS FROM TEST REPORTS TEL#0929087A, #TEL.0929087B BY TESTING EVALUATION LABORATORIES, INC., NO SUBSTITUTIONS WITHOUT WRITTEN APPROVAL BY THIS ENGINEER SHALL BE PERMITTED.
 - ALLOWABLE DESIGN PRESSURES TO QUALIFY CAPACITY OF CLIPS AS LISTED HEREIN ARE DETERMINED THROUGH TESTING REPORT DATA AND RATIONALLY CHECKED FOR CONSISTENCY WITH EACH TEST PERFORMED.
 - REQUIRED LATERAL AND/OR UPLIFT DESIGN PRESSURES CALCULATED FOR USE WITH THIS SYSTEM SHALL BE DETERMINED BY OTHERS ON A SITE-SPECIFIC BASIS IN ACCORDANCE WITH THE GOVERNING CODE.
 - MAXIMUM & MINIMUM DIMENSIONS AND MINIMUM WEIGHT OF MECHANICAL UNIT SHALL CONFORM TO SPECIFICATIONS STATED HEREIN. ALL MECHANICAL SPECIFICATIONS (CLEAR SPACE, TONNAGE, ETC.) SHALL BE AS PER MANUFACTURER RECOMMENDATIONS AND ARE THE EXPRESS RESPONSIBILITY OF THE CONTRACTOR.
 - FASTENERS TO BE # 12 X 1/2" OR GREATER SAE GRADE 5 UNLESS NOTED OTHERWISE. TAPCONS REFERRED TO HEREIN SHALL BE ITW BULDEX BRAND, CARBON STEEL ONLY, INSTALLED TO 3192 KSI MIN CONCRETE. SEE ANCHOR SCHEDULE FOR ANCHOR REQUIREMENTS. ALL FASTENERS SHALL HAVE APPROPRIATE CORROSION PROTECTION TO PREVENT ELECTROLYSIS.
 - ALL STEEL CLIPS SHALL BE ASTM A583 STEEL (GRADE D) WITH Fy = 33 KSI OR BETTER. ALL STEEL MEMBERS SHALL BE PROTECTED AGAINST CORROSION WITH AN APPROVED COAT OF PAINT, ENAMEL OR OTHER APPROVED PROTECTION IN ACCORDANCE WITH THE 2010 FBC SECTIONS 2203.2 AND 2220.690-RATED COATING REQUIRED FOR ALL COASTAL INSTALLATIONS.
 - ALL CONCRETE SPECIFIED HEREIN IS NOT PART OF THIS CERTIFICATION, AS A MINIMUM, ALL CONCRETE SHALL BE STRUCTURAL CONCRETE 4" MIN. THICK AND SHALL HAVE MINIMUM COMPRESSIVE STRENGTH OF 3192 PSI, UNLESS NOTED OTHERWISE.
 - ALL WOOD MEMBERS SHALL BE PRESSURE TREATED SOUTHERN YELLOW PINE GRADE #2 WITH SPECIFIC GRAVITY G = 0.55 OR GREATER. DIRECT CONNECTION TO WOOD MEMBERS/SLEEPERS IS NOT PERMITTED FOR ROOF-TOP APPLICATIONS PER FBC SECTION 1922.
 - THE CONTRACTOR IS RESPONSIBLE TO INSULATE ALL MEMBERS FROM DISSIPILAR MATERIALS TO PREVENT ELECTROLYSIS, I.E. ALUMINUM PER F.B.C. 2003.8.4.
 - ELECTRICAL GROUND, WHEN REQUIRED, TO BE DESIGNED & INSTALLED BY OTHERS.
 - THE ADEQUACY OF ANY EXISTING STRUCTURE TO WITHSTAND SUPERIMPOSED LOADS SHALL BE VERIFIED BY THE ON-SITE DESIGN PROFESSIONAL AND IS NOT INCLUDED IN THIS CERTIFICATION, EXCEPT AS EXPRESSLY PROVIDED HEREIN. NO ADDITIONAL CERTIFICATIONS OR AFFIRMATIONS ARE INTENDED.
 - THE SYSTEM DETAILD HEREIN IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SPECIFIC SITE. FOR SITE CONDITIONS DIFFERENT FROM THE CONDITIONS DETAILED HEREIN, A LICENSED ENGINEER OR REGISTERED ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE IN CONNECTION WITH THIS DOCUMENT.
 - WATER-TIGHTNESS OF EXISTING HOST SUBSTRATE SHALL BE THE FULL RESPONSIBILITY OF THE INSTALLING CONTRACTOR. CONTRACTOR SHALL ENSURE THAT ANY REMOVED OR ALTERED WATERPROOFING MEMBRANE IS RESTORED AFTER FABRICATION AND INSTALLATION OF STRUCTURE PROPOSED HEREIN. THIS ENGINEER SHALL NOT BE RESPONSIBLE FOR ANY WATERPROOFING OR LEAKAGE ISSUES WHICH MAY OCCUR AS WATER-TIGHTNESS SHALL BE THE FULL RESPONSIBILITY OF THE INSTALLING CONTRACTOR.

SCALE: 1/8" = 1'-0"
 11-BMP-001

DATE	DESCRIPTION
12-11-11	ISSUED FOR PERMIT
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BMP INTERNATIONAL, INC.
 4710 28TH STREET NORTH
 ST. PETERSBURG, FL 33471
 PH: (727) 577-1613

MECHANICAL UNIT STEEL TIE-DOWN CLIPS
 FLORIDA STATEWIDE APPROVAL

ENGINEERING
 STATE OF FLORIDA
 LICENSE NO. 45549
 12/11/2013

160 SW 12th Avenue, Suite 200
 Deerfield Beach, FL 33442
 PH: (954) 354-0660 Fax: (954) 354-0661
 WWW.ENGINEER.COM

A FRANK L. BERNARD, P.E., INC. MEMBER

Reviewed for Code Compliance
 General Engineering

130110011-1-030m Title: C:\Users\j\Documents\AutoCAD\130110011-1-030m.dwg, 03m Tie-Down Clip Example

ANCHOR SCHEDULE:

SUBSTRATE	ANCHOR
ALUMINUM: (0.125" MIN. THICK, 6061-T6 MIN. ALUMINUM)	(2)-#14 SAE GRADE 5 SHEET METAL SCREW TO ALUMINUM, PROVIDE (5) PINCHES MIN. PAST THREAD PLANE FOR SHEET METAL SCREW.
STEEL: (0.125" MIN. THICK, 33 KSI MIN. STEEL)	(2)-#14 SAE GRADE 5 SHEET METAL SCREW TO STEEL, PROVIDE (5) PINCHES MIN. PAST

2" STEEL CLIP TIE-DOWN SCHEDULE: ROOF-TOP MOUNTED INSTALLATIONS:

MAXIMUM SURFACE AREA OF UNITS LARGEST FACE	UNIT HEIGHT	UNIT WIDTH	ANCHOR	LOADS
4 FT.	48" MAX	24" MIN	SHEET METAL SCREW TO ALUMINUM SHEET METAL SCREW TO STEEL	100 PSF
6 FT.				100 PSF
9 FT.	60" MAX	48" MIN	SHEET METAL SCREW TO ALUMINUM SHEET METAL SCREW TO STEEL	100 PSF
12 FT.				100 PSF
16 FT.				27 PSF
20 FT.				34 PSF
25 FT.				34 PSF
30 FT.				44 PSF
36 FT.				37 PSF

1. TIE-DOWN CLIPS SHALL BE FASTENED TO MECHANICAL HOUSING UNIT WITH (3)-#12 SAE GRADE 5 SHEET METAL SCREWS.
 2. MECHANICAL HOUSING UNIT SHALL CONFORM TO THE FOLLOWING:
 2.1. ALUMINUM HOUSING UNITS SHALL BE 6061-T6 MIN. ALUMINUM SHEET WITH F_Y=30 KSI, 0.125" MIN. THICKNESS.
 2.2. STEEL HOUSING UNITS SHALL BE 33KSI MIN. STEEL, GRADE 33, 22GA MIN. (I=0.0299").
 3. A MAXIMUM ALLOWABLE VALUE OF 100 PSF HAS BEEN UTILIZED; FOR HIGHER DEMAND CAPACITIES CONTACT THIS ENGINEER FOR SITE-SPECIFIC ENGINEERING.

1. EMBEDMENT AND EDGE DISTANCE EXCLUDES FINISHES, IF APPLICABLE.
 2. ENSURE MINIMUM EDGE DISTANCE AS NOTED IN ANCHOR SCHEDULE.

ANCHOR SCHEDULE:

SUBSTRATE	ANCHOR
CONCRETE: (4" THICK MIN., 312KSI MIN.)	(1)-#3 CARBON STEEL ITW BUTLDEX TAPCON, 1 1/4" FULL EMBED TO CONCRETE, 2 1/4" MIN. EDGE DISTANCE, 3" MIN. SPACING TO ANY ADJACENT ANCHOR.
ALUMINUM: (0.125" MIN. THICK, 6061-T6 MIN. ALUMINUM)	(1)-#14 SAE GRADE 5 SHEET METAL SCREW TO ALUMINUM, PROVIDE (5) PINCHES MIN. PAST THREAD PLANE FOR SHEET METAL SCREW.
STEEL: (0.125" MIN. THICK, 33 KSI MIN. STEEL)	(1)-#14 SAE GRADE 5 SHEET METAL SCREW TO STEEL, PROVIDE (5) PINCHES MIN. PAST

1" STEEL CLIP TIE-DOWN SCHEDULE: ROOF-TOP MOUNTED INSTALLATIONS:

MAXIMUM SURFACE AREA OF UNITS LARGEST FACE	UNIT HEIGHT	UNIT WIDTH	ANCHOR	LOADS
4 FT.	48" MAX	24" MIN	TAPCON TO CONCRETE SHEET METAL SCREW TO ALUMINUM SHEET METAL SCREW TO STEEL	100 PSF
6 FT.				100 PSF
9 FT.	60" MAX	48" MIN	TAPCON TO CONCRETE SHEET METAL SCREW TO ALUMINUM SHEET METAL SCREW TO STEEL	100 PSF
12 FT.				100 PSF
16 FT.				26 PSF
20 FT.				33 PSF
25 FT.				33 PSF
30 FT.				33 PSF
36 FT.				26 PSF

1. TIE-DOWN CLIPS SHALL BE FASTENED TO MECHANICAL HOUSING UNIT WITH (3)-#12 SAE GRADE 5 SHEET METAL SCREWS, ((5)-SHEET METAL SCREWS REQUIRED FOR LONG CLIPS, SEE DETAIL 1.4).
 2. MECHANICAL HOUSING UNIT SHALL CONFORM TO THE FOLLOWING:
 2.1. ALUMINUM HOUSING UNITS SHALL BE 6061-T6 MIN. ALUMINUM SHEET WITH F_Y=30 KSI, 0.125" MIN. THICKNESS.
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4 FT.	48" MAX	24" MIN	SHEET METAL SCREW TO ALUMINUM SHEET METAL SCREW TO STEEL	100 PSF
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SUBSTRATE	ANCHOR
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 2. ENSURE MINIMUM EDGE DISTANCE AS NOTED IN ANCHOR SCHEDULE.

ADDITIONAL ALLOWABLE UPLIFT: 90 LBS/CLIP

ALLOWABLE UPLIFT PER UNIT IS BASED ON THE NUMBER OF CLIPS UTILIZED X 90LB/CLIP
EXAMPLE: 4 CLIPS X 90 LB/CLIP = 360LB

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EXAMPLE: 4 CLIPS X 90 LB/CLIP = 360LB

(DESIGN TABLE ACCOMMODATES MAX 90LB/CLIP AS ADDITIONAL UPLIFT IN COMBINATION WITH UPLIFT CAUSED BY OVERTURNING FROM LATERAL FORCES, SEE ASCE 7-10 SECTION 29.5 FOR MORE INFORMATION.)

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 2. ENSURE MINIMUM EDGE DISTANCE AS NOTED IN ANCHOR SCHEDULE.

TABLE LEGEND:

(REQUIRE UPLIFT DEMAND SHALL BE DETERMINED ON A SITE SPECIFIC BASIS BY LICENSED ENGINEER OR REGISTERED ARCHITECT; NOT INCLUDED IN THIS CERTIFICATION)

EXAMPLE: 4 CLIPS X 90 LB/CLIP = 360LB

ALLOWABLE UPLIFT PER UNIT IS BASED ON THE NUMBER OF CLIPS UTILIZED X 90LB/CLIP

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REVISION	DATE	DESCRIPTION

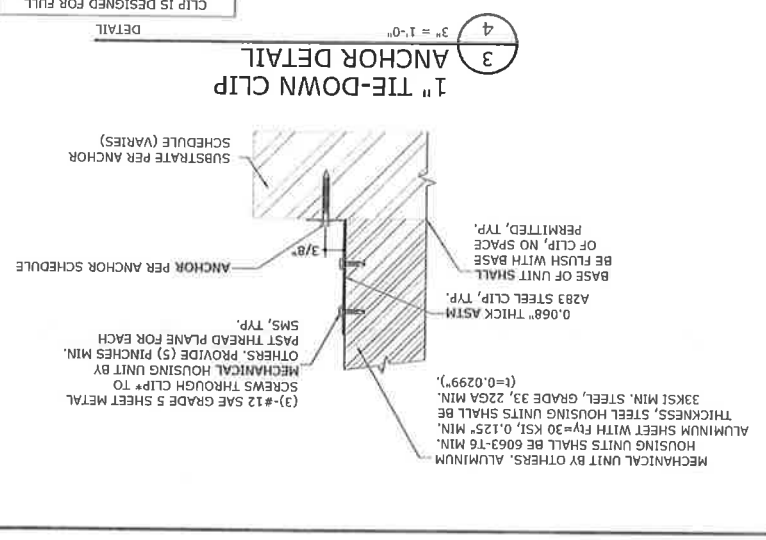
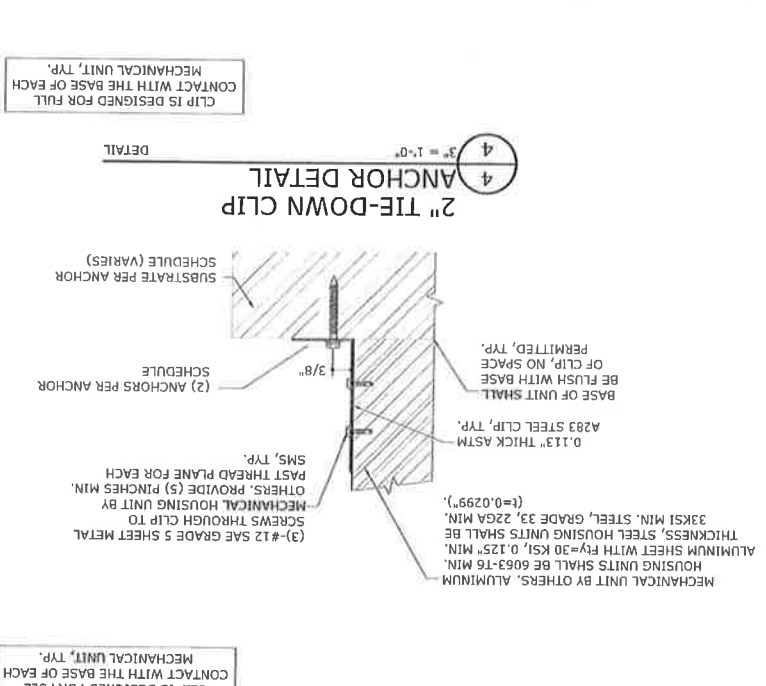
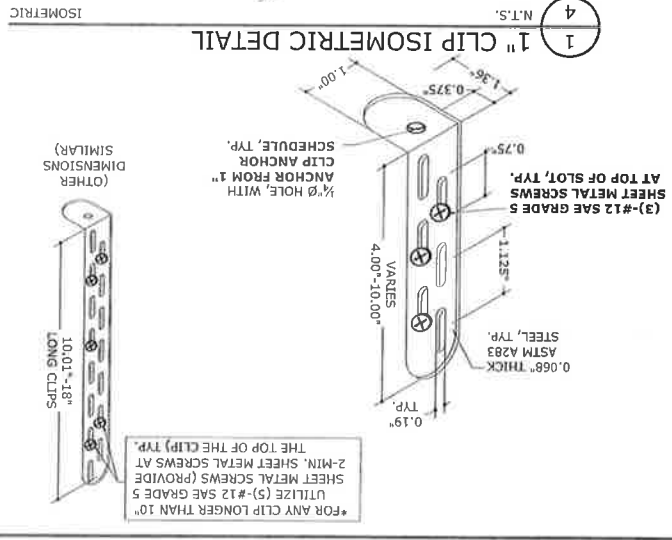
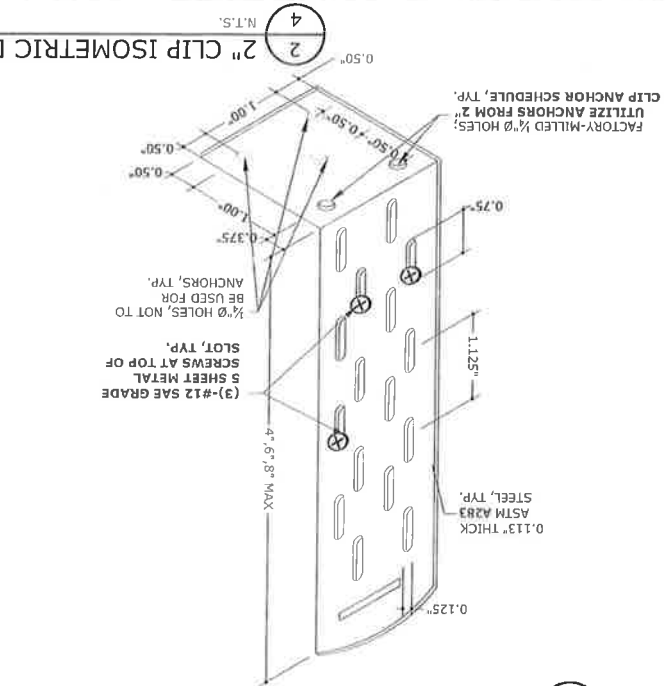
BMP INTERNATIONAL, INC.
 4710 28TH STREET NORTH
 ST. PETERSBURG, FL 33471
 PH: (727) 577-1613

MECHANICAL UNIT STEEL TIE-DOWN CLIPS
 FLORIDA STATEWIDE APPROVAL

ENGINEERING EXPRESS
 160 SW 12th AVENUE, SUITE 405
 DEERFIELD BEACH, FL 33442
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FRANK L. BENNARDO, P.E.
 LICENSED PROFESSIONAL ENGINEER
 NO. 40649
 EXPIRES 11/19/2011





11-BMP-0001

SCALE: N.T.S.

PAGE DESCRIPTION: CLIP IS DESIGNED FOR FULL CONTACT WITH THE BASE OF EACH MECHANICAL UNIT, TYP.

REVISIONS	DATE	DESCRIPTION
1	12-11-11	ISSUED FOR PERMIT
2	12-11-11	ISSUED FOR PERMIT
3	12-11-11	ISSUED FOR PERMIT
4	12-11-11	ISSUED FOR PERMIT

CONTRACTOR: FRANK L. BERNARDINO & SONS, INC.

MECHANICAL UNIT STEEL TIE-DOWN CLIPS

FLORIDA STATEWIDE APPROVAL

BMP INTERNATIONAL, INC.

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WWW.ENGENXP.COM

FRANK L. BERNARDINO, P.E., INC.

PROFESSIONAL ENGINEER

FLORIDA LICENSE NO. 12457

NOV 20 11 10 46 AM

BMP International

2010 Florida Building Code State Approved, FL 14239-R1

EQUIPMENT TIE DOWNS

TD04	1" x 4" Tie Down Clip, Galv/Powder Coat, 4/Bag
TD06	1" x 6" Tie Down Clip, Galv/Powder Coat, 4/Bag
TD08	1" x 8" Tie Down Clip, Galv/Powder Coat, 4/Bag
TD04SS	1" x 4" Tie Down Clip, Stainless Steel, 4/Bag
TD06SS	1" x 6" Tie Down Clip, Stainless Steel, 4/Bag
TD042L	2" x 4" Tie Down Clip, Galv/Powder Coat, 4/Bag
TD062L	2" x 6" Tie Down Clip, Galv/Powder Coat, 4/Bag
TD062	2" x 6" Fat Cat Clip, Galvanized, 4/Bag

BMP International, Inc., 4710 28th St N, St. Petersburg, FL 33714 - 727-458-0544

Note: This file contains approval information from www.floridabuilding.org for BMP tie down clips. Information required by building departments will vary, from listing the approval number, FL14239-R1, on your permit application to submitting copies of the drawings. Consult with the individual building departments for their requirements. This file can be downloaded in PDF format for use. Drawings 1-4 contain the installation instructions.



Product Evaluation Report

November 4, 2011

Application Number: FL #14239
FLB Project Number: 11-BMP-0001-01

Product Manufacturer: BMP International

Manufacturer Address: 4710 28th Street North
St. Petersburg, FL 33714

Product Name: Slotted Steel Tie-Down Clips, 1" and 2" Models
Product Description: Steel Tie-Down Clip System (For Use with Mechanical Units at Roof or Grade)

Scope of Evaluation:

This Product Evaluation Report is being issued in accordance with the requirements of the Florida Department of Community Affairs (Florida Building Commission) Rule Chapter 9N-3.005, F.A.C., for statewide acceptance per Method 1(d). The product noted above has been tested and/or evaluated as summarized herein to show compliance with the 2010 Florida Building Code and is, for the purpose intended, at least equivalent to that required by the Code. Re-evaluation of this product shall be required following pertinent Florida Building Code modifications or revisions.

Substantiating Data:

- **PRODUCT EVALUATION DOCUMENTS**

FLB drawing #11-BMP-0001-01 titled "Mechanical Unit Steel Tie-Down Clip Capacities: At-Grade and Roof-Top Mounted Applications", sheets 1-4, prepared by Engineering Express, signed & sealed by Frank L. Bennardo, P.E. is an integral part of this Evaluation Report.

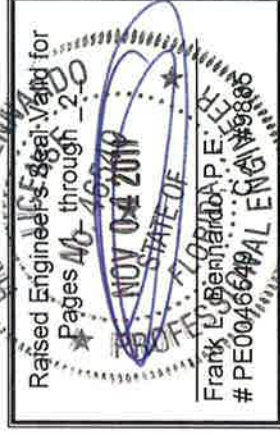
- **TEST REPORTS**

Ultimate test loading structural performance has been tested in accordance with ASTM D1761-88 test standards per test report(s) #TEL_01970387A and #TEL_01970387B by Testing Evaluation Laboratories, Inc.

- **STRUCTURAL ENGINEERING CALCULATIONS**

Structural engineering calculations have been prepared which evaluate the product based on comparative and/or rational analysis to qualify the following design criteria:

1. Maximum Allowable Unit Wind Pressures
2. Minimum Allowable Unit Width
3. Maximum Allowable Unit Height
4. Minimum Unit Weight
5. Maximum Allowable Unit Surface Area
6. Clip Configuration and Anchor Spacing
7. Anchor Capacity for Various Substrates



160 SW 12TH AVENUE #106 DEERFIELD BEACH, FL 33442
PHONE: 954-354-0660 FAX: 954-354-0443
WWW.ENGEXP.COM

8. Maximum Allowable Additional Uplift per Clip in Combination with Lateral Forces (For Use with Rooftop Applications)

No 33% increase in allowable stress has been used in the design of this product.

Impact Resistance:

Not applicable to this product.

Wind Load Resistance

This product has been designed to resist wind loads as indicated in the design schedule(s) on the Product Evaluation Document (i.e. engineering drawing).

Installation

The product listed above shall be installed in strict compliance with the Product Evaluation Document (i.e. engineering drawing), along with all components noted therein.

The product components shall be of the material specified in the Product Evaluation Document (i.e. engineering drawing).

Limitations & Conditions of Use:

Use of this product shall be in strict accordance with the Product Evaluation Document (i.e. engineering drawing) as noted herein.

All supporting host structures shall be designed to resist all superimposed loads and shall be of a material listed in this product's respective anchor schedule. Host structure conditions which are not accounted for in this product's respective anchor schedule shall be designed for on a site-specific basis by a registered professional engineer.

All components which are permanently installed shall be protected against corrosion, contamination, and other such damage at all times.

This product has been designed for use within the High Velocity Hurricane Zone (HVHZ).



CERTIFICATE OF LIABILITY INSURANCE

DATE (MMDDYYYY)
9/17/2013

CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER		CONTACT NAME: Sandi Gleason	
Lassiter-Ware Insurance of Maitland	PHONE (800) 845-8437	FAX (888) 893-8680	
2701 Maitland Center Parkway	EAIC No. EHI: sandig@lassiter-ware.com		
Suite 125	INSURER(S) AFFORDING COVERAGE		NAIC #
Maitland, FL 32751	INSURER A: Amerisure Mutual Insurance Co.		23396
	INSURER B: Amerisure Insurance Company		19488
INSURED	INSURER C:		
Armstrong Air Condition & Heating of Central FL Inc	INSURER D:		
Florida, Inc. D/B/A Armstrong Air & Heating	INSURER E:		
671 Business Park Blvd., Suite 104	INSURER F:		
Winter Garden, FL 34787-5700			

COVERAGES

REVISION NUMBER:

INSR LTR	TYPE OF INSURANCE	ADDL SUBR INSR WVD	POLICY NUMBER	POLICY EFF (MMDDYYYY)	POLICY EXP (MMDDYYYY)	LIMITS
A	GENERAL LIABILITY		CPP206461304	9/20/2013	9/20/2014	EACH OCCURRENCE \$ 1,000,000
	X COMMERCIAL GENERAL LIABILITY	X				DAMAGE TO RENTED PREMISES (Per Occurrence) \$ 100,000
B	CONTRACTUAL LIABILITY		CA206461204	9/20/2013	9/20/2014	MED EXP (Any one person) \$ 5,000
	X ANY AUTO ALL OWNED AUTOS HIRER AUTOS	X				PERSONAL & ADV INJURY \$ 1,000,000
A	UMBRELLA LIAB		CU206461503	9/20/2013	9/20/2014	GENERAL AGGREGATE \$ 2,000,000
	X EXCESS LIAB	X				PRODUCTS - COMPIOP AGG \$ 2,000,000
B	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY		WC2080734	1/1/2013	1/1/2014	COMBINED SINGLE LIMIT (EA accident) \$ 1,000,000
	X ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	N/A				BODILY INJURY (Per person) \$
A	Leased Equipment		CP2206461304	9/20/2013	9/20/2014	Advantage Broad F \$ 5,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

CERTIFICATE HOLDER

City of Belle Isle 1600 Nela Avenue Belle Isle, FL 32809	CANCELLATION
	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
	AUTHORIZED REPRESENTATIVE F. Juarez/ERYNZA

ACORD 25 (2010/05)

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**STATE OF FLORIDA
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION**

**CONSTRUCTION INDUSTRY LICENSING BOARD
1940 NORTH MONROE STREET
TALLAHASSEE FL 32399-0783**

(850) 487-1395

**RICHARDS, PAUL LEONARD
ARMSTRONG AIR CONDITION & HEATING OF CENTRAL FLORIDA INC
671 BUSINESS PARK BLVD
WINTER GARDEN FL 34787**

Congratulations! With this license you become one of the nearly one million Floridians licensed by the Department of Business and Professional Regulation. Our professionals and businesses range from architects to yacht brokers, from boxers to barbeque restaurants, and they keep Florida's economy strong.

Every day we work to improve the way we do business in order to serve you better. For information about our services, please log onto www.myfloridalicense.com. There you can find more information about our divisions and the regulations that impact you, subscribe to department newsletters and learn more about the Department's initiatives.

Our mission at the Department is: License Efficiently, Regulate Fairly. We constantly strive to serve you better so that you can serve your customers. Thank you for doing business in Florida, and congratulations on your new license!



DETACH HERE

RICK SCOTT, GOVERNOR

KEN LAWSON, SECRETARY



**STATE OF FLORIDA
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION
CONSTRUCTION INDUSTRY LICENSING BOARD**

LICENSE NUMBER

CAC057235

The CLASS A AIR CONDITIONING CONTRACTOR

Named below IS CERTIFIED

Under the provisions of Chapter 489 FS.

Expiration date: AUG 31, 2016

**RICHARDS, PAUL LEONARD
ARMSTRONG AIR CONDITION & HEATING OF CENTRAL FLORIDA INC
671 BUSINESS PARK BLVD STE 104
WINTER GARDEN FL 34787**



ISSUED: 07/06/2014

DISPLAY AS REQUIRED BY LAW

SEQ # L1407060000289