



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: c/o 2-ton HVAC with no ductwork
Comments: None

Project Information
 Address: 5130 Belleville Ave, Belle Isle, FL 32812
 Parcel ID: 17-23-30-4379-01-980
 Property Owner: Huddleston, Samuel
 Phone Number: 407-851-9735

 Company Name: Certified Climate Control LLC
 Contractor Name: Hill, David
 License Number: CAC1816634
 Address: 690 A East Rhode Island Ave, Orange City, FL 32763
 Phone Number: 386-675-6963

Permit Number: 2016-08-004
Date of Application: 07/29/2016
Date Permit Issued: 08/01/2016

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.

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 8-2-16

CC or Check # ALEX 9200

Amount Paid 77.50

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

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)

ROOFING

1ST ROOFING Deck Nailing/Dry-in/Flashing _____

2nd ROOFING Covering In-Progress _____

3rd ROOFING Covering Final _____

PLUMBING (Pool-Piping, Solar, Irrigation, Water Treatment Equip, Etc...)

1ST _____ (Underground) 2nd _____ (Sewer)

3rd _____ (Rough-In/Tub Set) 4th _____ (Final)

CHECK APPROPRIATE BOX

GAS ___ Natural ___ LP MECHANICAL ELECTRICAL LOW VOLTAGE

1st _____ (Rough-In) 2nd _____ (Final)

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 4pm.** 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>
 login ID = cobi@universalengineering.com password = universal13



RECEIVED
JUL 29 2016

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

DATE OF APPLICATION: 7/29/16 PERMIT NUMBER 2016-08-004
PLEASE PRINT. The undersigned hereby applies for a permit to make installations as indicated below:

Project Address 5130 Belleville Ave Belle Isle FL 32809 32812
Property Owner Samuel Huddleston Phone 407-851-9735
Property Owner's Mailing Address 5130 Belleville Ave City Belle Isle
State FL Zip Code 32812 Parcel Id Number: 17-23-30-4379-01-980
To obtain this information, please visit <http://www.gsnfl.org/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 2 Total Tons 2 Estimated Cost \$ _____
Type of System: Water to Air _____ Chiller _____ Split System _____ Package _____ Heat Pump
Heating: # of Units KWS Per Unit 5 Total KWS 5 BTU's _____ Estimated Cost \$ _____
Oil _____ Electric _____ Boiler _____ Gas _____ (A) Estimated Cost Fee \$ 4257.00

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 # CAC1816634
LICENSE HOLDER NAME David Hill COMPANY NAME Certified Climate Control
Street Address 690 A. East Rhode Island Ave
City Orange City State FL Zip Code 32763 Phone Number 386 675 6963
Email Address Jennifer@CertifiedClimate.com

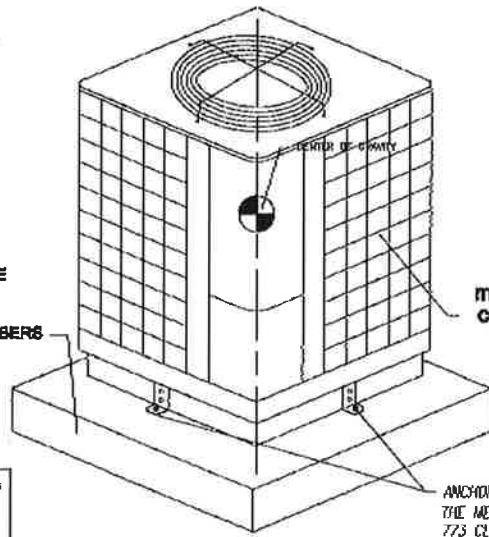
Building Official: <u>[Signature]</u> Date <u>8-1-16</u>	Permit Fee	\$ <u>49.-</u>
Verified Contractor's Licenses & Insurance are on file <u>[Signature]</u> Date <u>7-29-16</u>	Review Fee	\$ <u>24.50</u>
	3% Florida Surcharge	\$ <u>4.00</u>
	Total Permit Fee	\$ <u>77.50</u>

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 _____

WO 70480
\$6x2
37
12
49.50
24.50
73.50

CENTER OF GRAVITY OF UNIT IS ASSUMED TO BE AT THE GEOMETRIC CENTER OF THE MECHANICAL UNIT. ANCHORING IS FOR REGULAR SHAPED UNITS I.E. SQUARE OR RECTANGULAR. NO IRREGULAR SHAPED UNITS

CONCRETE BASE OR HOST STRUCTURE TO BE DESIGNED BY OTHERS. CONCRETE MUST BE 2000 PSI MINIMUM. SEE SITE SPECIFIC ENGINEERING FOR ROOF TOP APPLICATIONS OR WOOD SUPPORT MEMBERS



minimum unit weight: 130lbs condensor unit

ANCHOR CLIPS: THE METAL SHOP 1" CLIP MODEL 771 OR 773 CLIP ANCHOR AND FASTENERS. ONE ANCHOR CLIP PER SIDE OF UNIT. (4) TOTAL (16 GA.) ATTACH: USING #14x3/4" SELF TAPPING SHEET METAL SCREWS TO BASE OF COMPRESSOR. ATTACH TO CONCRETE PAD/SLAB USING 1/4"x1 3/4" TAPCON

THIS ANCHORING DETAIL WILL WITHSTAND A MAXIMUM DESIGN WINDSPEED OF: 170 MPH Exp C, Cat II STRUCTURES MAY WITHSTAND OF: 143 MPH for Exp D, Cat III or IV STRUCTURES

EXTERIOR EQUIPMENT TIE DOWN

SCALE: N.T.S.

STANDARD ANCHOR SCHEDULE

SUBSTRATE	ANCHOR
CONCRETE (4" THICK MIN, 5125KSI MIN)	1)-1/4" x1 3/4" IN BULDEX OR ELOD TAPCON, 1 3/4" FULL EMBED TO CONCRETE, 3-1/2" MIN EMBED DISTANCE, 3" MIN. SPACING TO ANY ADJACENT ANCHOR.

MAXIMUM ALLOWABLE LATERAL WIND PRESSURE (ANCHOR TO CONCRETE PAD) (1) CLIP AT EACH CORNER (TOTAL OF 4 CLIPS PER UNIT)

MAXIMUM SURFACE AREA OF UNIT'S LARGEST FACE	UNIT HEIGHT	UNIT WIDTH	1) CLIP AT EACH CORNER TOTAL OF 4 CLIPS	
			1/4" TAPCON TO CONCRETE BASE	PSF
6 FT ²	24" MAX	12" MIN	43	PSF
9 FT ²	32" MAX	15" MIN	57	PSF
4 FT ²	48" MAX	24" MIN	60	PSF
5 FT ²			60	PSF
9 FT ²			40	PSF
12 FT ²	60" MAX	48" MIN	30	PSF
16 FT ²			25	PSF
20 FT ²			25	PSF
25 FT ²	60" MAX	48" MIN	25	PSF
36 FT ²			25	PSF

- TIE-DOWN CLIPS SHALL BE FASTENED TO MECHANICAL HOUSING UNIT WITH (2)-#14x3/4" STS GRADE 8 SHEET METAL SCREWS.
- MECHANICAL HOUSING UNIT SHALL CONFORM TO THE FOLLOWING:
 - ALUMINUM FRAME OR EXTERIOR HOUSING SHALL BE 6063-T5 MIN ALUMINUM SHEET WITH F_y=30 KSI, 0.0025" MIN. THICKNESS.
 - STEEL HOUSING UNITS SHALL BE 33KSI MIN. STEEL, GRADE 33, 22GA MIN. (1=0.0299").
- MAXIMUM ALLOWABLE WIND PRESSURES MAY BE EQUIVALENT DUE TO THE LIMITING CAPACITY OF THE 1" CLIP.
- A MAXIMUM ALLOWABLE VALUE OF 200 PSF HAS BEEN UTILIZED; FOR HIGHER DEMAND CAPACITIES CONTACT THIS ENGINEER FOR SITE-SPECIFIC ENGINEERING.

GENERAL NOTES:

- THIS PRODUCT HAS BEEN DESIGNED AND SHALL BE FABRICATED IN ACCORDANCE WITH THE REQUIREMENTS OF THE 2014 FLORIDA BUILDING CODE FOR USE WITH ASCE 7-10. THIS PRODUCT MAY BE USED WITHIN AND OUTSIDE THE HIGH VELOCITY HURRICANE ZONE.
- NO 1/3X INCREASE IN ALLOWABLE STRESS HAS BEEN USED IN THE DESIGN OF THIS ANCHOR SYSTEM.
- ALLOWABLE DESIGN SHOWN ON TABLES IS BASED ON ALLOWABLE SHEAR AND TENSION LOADS OF MECHANICAL FASTENERS.
- MAXIMUM & MINIMUM DIMENSIONS AND WEIGHT UNITS SHALL CONFORM TO SPECIFICATIONS STATED ON THESE ENGINEERING SHEETS
- ALL MECHANICAL SPECIFICATIONS, CLEAR SPACE, TONNAGE, ETC. SHALL BE AS PER THE MANUFACTURER RECOMMENDATIONS AND ARE THE EXPRESS RESPONSIBILITY OF THE CONTRACTOR.
- FASTENERS TO BE #14x3/4" SELF TAPPING SHEET METAL SCREWS, UNLESS NOTED OTHERWISE.
- TAPCONS SHALL BE ITW BULDEX OR ELOD BRAND, AND SHALL BE 1/4"X1 3/4" INSTALLED TO 2000 PSI MINIMUM COMPRESSIVE STRENGTH. SEE ANCHOR SCHEDULE FOR ANCHOR REQUIREMENTS.
- ALL STEEL CLIPS SHALL BE ASTM A283 STEEL WITH F_y = 33 KSI. ALL STEEL MEMBERS SHALL BE PROTECTED AGAINST CORROSION WITH C90-RATED GALVANIZED COATING, SUITABLE FOR ALL COASTAL INSTALLATIONS.
- INSTALL AN ELECTRICAL GROUND, WHEN REQUIRED. ALL ELECTRICAL CONNECTIONS INCLUDING GROUNDS TO BE DESIGNED & INSTALLED BY OTHERS.
- THE ADEQUACY OF ANY EXISTING STRUCTURE TO WITHSTAND SUPERIMPOSED LOADS SHALL BE VERIFIED AND IS NOT INCLUDED IN THIS CERTIFICATION. EXCEPT AS EXPRESSLY PROVIDED HEREIN, NO ADDITIONAL CERTIFICATIONS OR AFFIRMATIONS ARE INTENDED.
- IF THE SYSTEM DETAILED HEREIN IS A GENERIC UNIT INSTALLATION, THIS INSTALLATION DOES NOT PROVIDE INFORMATION FOR A SITE SPECIFIC INSTALLATION. FOR SITE CONDITIONS DIFFERENT FROM THE CONDITIONS DETAILED HEREIN, A LICENSED ENGINEER OR REGISTERED ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE IN CONJUNCTION WITH THIS DOCUMENT.

RECOMMENDED FASTENERS

1/4" x 1 3/4" TAPCON

MAXIMUM ALLOWABLE SHEAR LOAD FOR 1/4" DIA CONCRETE FASTENERS IN 2000 PSI MINIMUM STRENGTH CONCRETE IS: 325 LBS. FULL OUT (TENSION LOAD) STRENGTH OF TAPCON IS 505 LBS WITH 1 3/4" MIN. EMBEDMENT:

SINGLE SHEAR: 325 LBS
TENSION: 505 LBS



DATE: January 29, 2019

REVISIONS

NO. 1

DATE: 1/24/2019

BY: J. HILLER

APP: J. HILLER

SCALE: AS SHOWN

PROJECT: AC Condenser Anchor Clip

THE METAL SHOP

2554 W. Dunwoody Road

Dunwoody, FL 34423

Phone: 888-441-5666 Fax: 888-655-0667

Joseph D. Hiller P.E.

Florida P.E. License # 74593

P.O. Box 290600

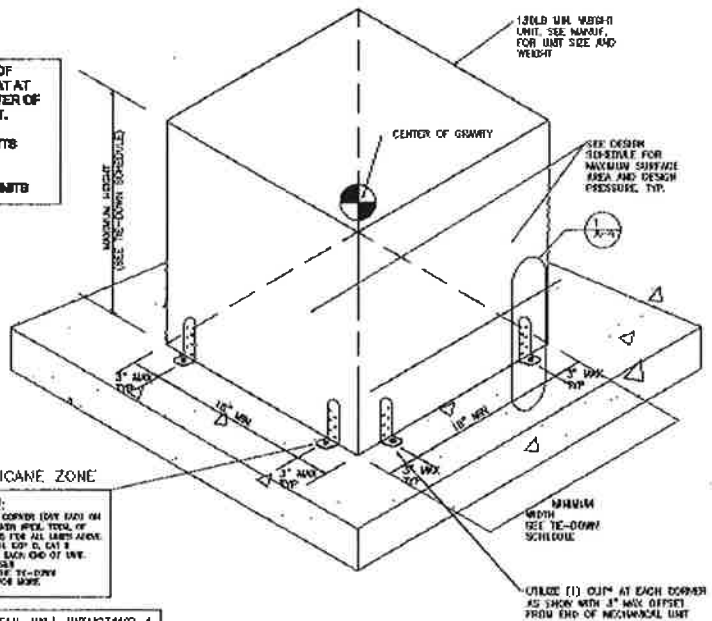
Fort Lauderdale, FL 33309

Email: jhiller@metshop.com

A-2

2 of 4

CENTER OF GRAVITY OF UNIT IS ASSUMED TO AT THE GEOMETRIC CENTER OF THE MECHANICAL UNIT. ANCHORING IS FOR REGULAR SHAPED UNITS I.E. SQUARE OR RECTANGULAR, NO IRREGULAR SHAPED UNITS



DOUBLE CLIP OPTION:
 (1) THIS CLIP MAY BE USED AT EACH CORNER (ONLY CLIP ON OPPOSITE CORNER FACE, 2' FROM CORNER) UPON STEEL OR CONCRETE SURFACE. 2' FROM CORNER UPON STEEL OR CONCRETE SURFACE. THIS INSTALLATION IS FOR ALL UNITS ABOVE 100 LBS. PRESSURE OR ABOVE 1/4\"/>

THIS ANCHORING DETAIL WILL WITHSTAND A MAXIMUM DESIGN WINDSPEED OF:
 100 MPH Exp. C, Col. II STRUCTURES
 Max WINDSPEED OF: 167 MPH for EXP. II, Col. II or IV STRUCTURES

EXTERIOR EQUIPMENT TIE DOWN

SCALE: N.T.S.

STANDARD ANCHOR SCHEDULE

SUBSTRATE	ANCHOR
CONCRETE (4" THICK MIN, 3125 PSI MIN)	(1)-1/4" x 3/4" BULDEX OR EICO TAPCON, 3/4" FULL EMBED TO CONCRETE, 3-1/2" MIN. EDGE DISTANCE, 5" MIN. SPACING TO ANY ADJACENT ANCHOR.

MAXIMUM ALLOWABLE LATERAL WIND PRESSURE (ANCHOR TO CONCRETE PAD)
 (1) CLIP AT EACH CORNER (TOTAL OF 4 CLIPS PER UNIT)

MAXIMUM SURFACE AREA OF UNITS LARGEST FACE	UNIT HEIGHT	UNIT WIDTH	2 CLIPS AT EACH SIDE TOTAL OF 8 CLIPS	
			1/4" TAPCON TO CONCRETE BASE	1/4" TAPCON TO CONCRETE BASE
6 FT ²	24" MAX	12" MIN	81 PSF	81 PSF
8 FT ²	32" MAX	15" MIN	86 PSF	86 PSF
4 FT ²	48" MAX	24" MIN	126 PSF	114 PSF
9 FT ²			75 PSF	75 PSF
12 FT ²			58 PSF	58 PSF
16 FT ²			42 PSF	42 PSF
20 FT ²	80" MAX	48" MIN	52 PSF	44 PSF
25 FT ²			44 PSF	37 PSF
30 FT ²			37 PSF	30 PSF
36 FT ²			30 PSF	30 PSF

1. TIE-DOWN CLIPS SHALL BE FASTENED TO MECHANICAL HOUSING UNIT WITH (2)-#14x3/4" STS GRADE 5 SHEET METAL SCREWS.
2. MECHANICAL HOUSING UNIT SHALL CONFORM TO THE FOLLOWING:
 - A) ALUMINUM FRAME OR EXTERIOR HOUSING SHALL BE 6063-T6 MIN. ALUMINUM SHEET WITH F_y=30 KSI, 0.0625" MIN. THICKNESS.
 - B) STEEL HOUSING UNITS SHALL BE 33KSI MIN. STEEL, GRADE 33, 22 GAGE MIN. (1=0.030").
3. MAXIMUM ALLOWABLE WIND PRESSURES MAY BE EQUIVALENT DUE TO THE LIMITING CAPACITY OF THE 1" CLIP.
4. A MAXIMUM ALLOWABLE VALUE OF 200 PSF HAS BEEN UTILIZED; FOR HIGHER DEMAND CAPACITIES CONTACT THIS ENGINEER FOR SITE-SPECIFIC ENGINEERING.

GENERAL NOTES:

1. THIS PRODUCT HAS BEEN DESIGNED AND SHALL BE FABRICATED IN ACCORDANCE WITH THE REQUIREMENTS OF THE 2014 FLORIDA BUILDING CODE FOR USE WITH ASCE 7-10. THIS PRODUCT MAY BE USED WITHIN AND OUTSIDE THE HIGH VELOCITY HURRICANE ZONE.
2. NO 1/3% INCREASE IN ALLOWABLE STRESS HAS BEEN USED IN THE DESIGN OF THIS ANCHOR SYSTEM.
3. ALLOWABLE DESIGN SHOWN ON TABLES IS BASED ON ALLOWABLE SHEAR AND TENSION LOADS OF MECHANICAL FASTENERS.
4. MAXIMUM & MINIMUM DIMENSIONS AND WEIGHT UNITS SHALL CONFORM TO SPECIFICATIONS STATED ON THESE ENGINEERING SHEETS
5. ALL MECHANICAL SPECIFICATIONS, CLEAR SPACE, TONNAGE, ETC. SHALL BE AS PER THE MANUFACTURER RECOMMENDATIONS AND ARE THE EXPRESS RESPONSIBILITY OF THE CONTRACTOR.
6. FASTENERS TO BE # 14x3/4" SELF TAPPING SHEET METAL SCREWS, UNLESS NOTED OTHERWISE.
7. TAPCONS SHALL BE ITW BULDEX OR EICO BRAND, AND SHALL BE 1/4" WITH 3/4" MIN. EMBEDMENT. INSTALLED TO 2000 PSI MINIMUM COMPRESSIVE STRENGTH. SEE ANCHOR SCHEDULE FOR ANCHOR REQUIREMENTS.
8. ALL STEEL CLIPS SHALL BE ASTM A283 STEEL WITH F_y = 33 KSI. ALL STEEL MEMBERS SHALL BE PROTECTED AGAINST CORROSION WITH G90-RATED GALVANIZED COATING, SUITABLE FOR ALL COASTAL INSTALLATIONS.
9. INSTALL AN ELECTRICAL GROUND, WHEN REQUIRED. ALL ELECTRICAL CONNECTIONS INCLUDING GROUNDS TO BE DESIGNED & INSTALLED BY OTHERS.
10. THE ADEQUACY OF ANY EXISTING STRUCTURE TO WITHSTAND SUPERIMPOSED LOADS SHALL BE VERIFIED AND IS NOT INCLUDED IN THIS CERTIFICATION EXCEPT AS EXPRESSLY PROVIDED HEREIN. NO ADDITIONAL CERTIFICATIONS OR AFFIRMATIONS ARE INTENDED.
11. THE SYSTEM DETAILED HEREIN IS A GENERIC UNIT INSTALLATION. THIS INSTALLATION DOES NOT PROVIDE INFORMATION FOR A SITE SPECIFIC INSTALLATION. FOR SITE CONDITIONS DIFFERENT FROM THE CONDITIONS DETAILED HEREIN, A LICENSED ENGINEER OR REGISTERED ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE IN CONJUNCTION WITH THIS DOCUMENT.

RECOMMENDED FASTENERS

1/4" x 3/4" TAPCON

MAXIMUM ALLOWABLE SHEAR LOAD FOR 1/4" DIA CONCRETE FASTENERS IN 2000 PSI MINIMUM STRENGTH CONCRETE IS: 325 LBS. FULL OUT (TENSION LOAD) STRENGTH OF TAPCON IS 505 LBS WITH 1 3/4" MIN. EMBEDMENT:

SINGLE SHEAR: 325 LBS
 TENSION: 505 LBS



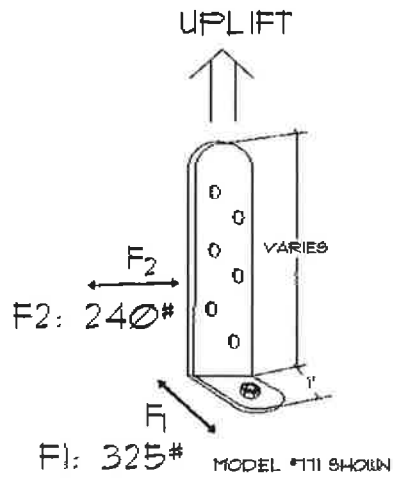
DATE: January 29, 2018

REVISIONS

Joseph D. Hiller P.E.
 Florida P.E. License # 74583
 P.O. Box 288665
 Fort Myers, FL 33909
 Phone: 888-349-1700
 Email: Mjhiller@earthlink.net

PRO. 00017 AC Condenser Anchor Clip
THE METAL SHOP
 2647 W. Dunbar Road
 Dunbar, FL 34443
 www.themetalshop.com
 Phone: 888-349-1700 Fax: 888-349-0887

DATE	1/27/2018
SCALE	AS SHOWN
DRAWN BY	A. HILLER
CHECKED BY	



USE MIN. OF 2- #14x3/4" SCREWS FOR 4' CLIP
 USE MIN. OF 2- #14x3/4" SCREWS FOR 6' CLIP
 USE MIN. OF 2- #14x3/4" SCREWS FOR 8" CLIP
 USE 1/4" x 1 3/4" TAPCON TO CONCRETE PAD

METAL SHOP # 111 - 4' ANCHOR CLIP
 METAL SHOP # 113 - 6" ANCHOR CLIP
 METAL SHOP # 883 - 8' ANCHOR CLIP

MAX UPLIFT: 505#
 WITH 2- #14x3/4" SCREWS PER CLIP

A/C ANCHOR CLIP

SHEET METAL SCREWS



#14x3/4"
 w/
 Neoprene washer

METAL FASTENERS

Tapcon



1/4" x 1 3/4"
 INTO
 CONCRETE
 PAD

RECOMMENDED FASTENERS
 1/4" x 1 3/4" TAPCON

MAXIMUM ALLOWABLE SHEAR LOAD
 FOR 1/4" DIA CONCRETE FASTENERS
 IN 2000 PSI MINIMUM STRENGTH
 CONCRETE IS: 325 LBS. FULL OUT
 (TENSION LOAD) STRENGTH OF TAPCON IS
 505 LBS WITH
 1 3/4" MIN. EMBEDMENT.

SINGLE SHEAR: 325 LBS
 TENSION: 505 LBS

LOAD CAPACITIES FOR TAPCONS

	Anchor Size	Embed. Depth	2,000 psi Concrete	4,000 psi Concrete	6,000 psi Concrete	Concrete Block	Red Brick
Tension Load (lbs.)	1/4"	1"	760	930	1,140	720	940
		1-1/2"	1,090	1,540	1,690	880	1,160
		1-3/4"	1,220	1,850	2,210	1,090	1,320
Shear Load (lbs.)	1/4"	F	725	1,420	2,140	690	1,720
		1-1/4"	1,093	2,150	2,390	925	1,840
		1-1/2"	1,270	2,270	2,580	1,125	1,930
		1-3/4"	1,305	2,390	2,840	1,305	2,130

NOTE:
 The values listed above are ultimate load capacities for TAPCONS which should be reduced by various safety factor of 4 or greater to determine the allowable working load. Refer to the section on product selection guidelines for details. The consistency of hollow block and brick varies greatly. The load capacities listed above for hollow block and brick should be used as guidelines only. Job site tests should be conducted to determine the actual load capacities in these materials.

Notes:

1. Alternative fasteners may be used as shown in the details. All fasteners must meet or exceed the safe working load values specified by the manufacturer, and shall be approved by the building official.



DATE: January 28, 2011

SYSTEMS

Joseph D. Hiller P.E.
 Florida P.E. License # 74583
 P.O. Box 200625
 Fort Orange Rd. 32128
 Phone: 386-246-1700
 Email: jdhiller@jdhillerpe.com

PROJECT: AC Condenser Anchor Clip
 THE METAL SHOP
 2541W. Dunnellon Road
 Dunnellon, FL 34433
 Phone: 352-347-3462 Fax: 352-347-0007

DATE: 1/24/11
 DRAWN: J. Hiller
 CHECKED: J. Hiller

A-4

RICK SCOTT, GOVERNOR

KEN LAWSON, SECRETARY

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

LICENSE NUMBER
CAC1816634

The CLASS B AIR CONDITIONING CONTRACTOR
Named below IS CERTIFIED
Under the provisions of Chapter 489 FS.
Expiration date: AUG 31, 2016



HILL, DAVID BERNARD
CERTIFIED CLIMATE CONTROL, LLC
3053 LAGOON AVENUE
DELTONA FL 32738



ISSUED: 05/31/2014

DISPLAY AS REQUIRED BY LAW

SEQ # L1405070000909



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
5/20/2016

THIS 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 Blackadar Insurance Agency, Inc. 1436 N Ronald Reagan Blvd Longwood FL 32750	CONTACT NAME: Ruth Munoz	
	PHONE (A/C No. Ext): 407-831-3832	FAX (A/C No.): 407-830-4681
	E-MAIL ADDRESS: Ruth@blackadar.com	
	INSURER(S) AFFORDING COVERAGE	NAIC #
INSURED Certified Climate Control, LLC 690 Ste A East Rhode Island Ave. Orange City FL 32763	INSURER A : United Fire & Casualty Company	13021
	INSURER B : FCCI Insurance Company	10178
	INSURER C :	
	INSURER D :	
	INSURER E :	
	INSURER F :	

COVERAGES CERTIFICATE NUMBER: 1022289536 REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	GENERAL LIABILITY <input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PRO-JECT <input checked="" type="checkbox"/> LOC			60383315	5/20/2016	5/20/2017	EACH OCCURRENCE \$1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$100,000 MED EXP (Any one person) \$5,000 PERSONAL & ADV INJURY \$1,000,000 GENERAL AGGREGATE \$2,000,000 PRODUCTS - COMP/OP AGG \$2,000,000 \$
A	AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO ALL OWNED AUTOS <input type="checkbox"/> SCHEDULED AUTOS HIRED AUTOS <input type="checkbox"/> NON-OWNED AUTOS			60383315	5/20/2016	5/20/2017	COMBINED SINGLE LIMIT (Ea accident) \$1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
A	<input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED <input type="checkbox"/> RETENTION \$			60383315	5/20/2016	5/20/2017	EACH OCCURRENCE \$1,000,000 AGGREGATE \$1,000,000 \$
B	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below		Y/N N/A	001WC16A70791	6/23/2016	6/23/2017	WC STATUTORY LIMITS OTH-ER E.L. EACH ACCIDENT \$500,000 E.L. DISEASE - EA EMPLOYEE \$500,000 E.L. DISEASE - POLICY LIMIT \$500,000

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

CERTIFICATE HOLDER

City of Belle Isle
1600 Nela Ave.
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

CITY OF ORANGE CITY LOCAL BUSINESS TAX RECEIPT

LICENSE # LIC-3-15-7899

License Type: Contractor-sub

Amnt. Paid: \$ 148.25

Stipulations: ***Handicapped Parking space must be provided and in compliance with current code***

Date Issued: 08/18/2015

Expires: 09/30/2016

Annual Inspections \$28.00

Contractor Sub - 0250 - FYA \$121.25

Certified Climate Control
680 Rhode Island Avenue A
Orange City FL 32763

CITY OF ORANGE CITY

205 E. Graves Avenue

Orange City, FL 3276