

Scope of Work:

None

application on file and construction shall conform to the requirements of

the Florida Building Code (FS 553).

Comments:

# 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

Permit Number: 2015-07-035

Date of Application: <u>07/16/2015</u> Date Permit Issued: <u>08/11/2015</u>

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. PERMISSIC 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.

MECHANICAL: one 2.5-ton change out

Address: 2311 Cross Lake Rd, Belle Isle, FL 32809 Parcel ID: 18-23-30-7164-00-121 Property Owner: Phone Number: None  Company Name: Company Name: Contractor Name: License Number: Address: 531 Codisco Way, Sanford, FL 32771 Phone Number: 407-585-3004	YOUR CING, RNEY OF
Phone Number: Skariupka, Marjorie Phone Number: None  PROPERTY. IF YOU INTEND TO OBTAIN FINANCE CONSULT WITH YOUR LENDER OR AN ATTOR BEFORE RECORDING YOUR NOTICE COMMENCEMENT." ON THE JOB INSPECTION(S) N BE MADE BEFORE PROCEEDING WITH SUBSEQUENCE. License Number: CAC032448 Address: 531 Codisco Way, Sanford, FL 32771  Phone Number: 407 595 3004	CING, RNEY OF
Company Name: Del-Air Heating, A/C & Refrigeration Inc Contractor Name: License Number: CAC032448 Address: 531 Codisco Way, Sanford, FL 32771  Phone Number: 407 595 3004	OF
Company Name: Del-Air Heating, A/C & Refrigeration Inc Contractor Name: Del Russo, Robert License Number: CAC032448 Address: 531 Codisco Way, Sanford, FL 32771  Phone Number: 407 585 3004	MILIOT
Contractor Name: Del Russo, Robert License Number: CAC032448 Address: 531 Codisco Way, Sanford, FL 32771  Phone Number: 407 585 3004	
Address: 531 Codisco Way, Sanford, FL 32771  Phone Number: 407 585 3004  BE PROTECTED FROM THE WEATHER WHILE BY VISIBLE FROM THE STREET UNTIL THE F	
Phone Number 407 585 3004 VISIBLE FROM THE STREET UNTIL THE F	
	FINAL
INSPECTIONS HAVE BEEN APPROVED.  BUILDING FEATURES	4
IMPACT FEES BUILDING INSPECTOR USE ONLY	
School \$	
Traffic \$ IF APPLICABLE: Have Zoning Approval Conditions Been Met? YES NO Have Stormwater Approval Conditions	ons
ZONING FEES	
Zorining Fice w	,
UNIVERSAL ENG - BUILDING FEES 1st (Footing/Foundation)	
Cert of Occ \$ Survey specific foundation plan must be onsite before slab pour. Approved Plan on Site?	
Demo \$ Building \$ 2 <sup>nd</sup> (Slab)	
Fence \$	
Building \$ 2"d (Slab) Fence \$ Driveway \$ 3rd (Lintel)(Wall Reinforcing on Masonry Building) Shed \$	
Shed \$ Window(s) \$ 4 <sup>th</sup> (Exterior Framing)(Roof/Wall Sheathing)	
Window(s) \$ 4 <sup>in</sup> (Exterior Framing)(Roof/Wall Sheathing)  Door(s) \$ 5 <sup>th</sup> (Framing) (To be made after Plumbing/ Mechanic Electrical \$ Electrical Rough-Ins & Windows/Doors Installed)	cal/
Electrical \$ Electrical Rough-Ins & Windows/Doors Installed)	
Temp Pole \$ Plumbing \$ 6 <sup>th</sup> (Insulation to be Made After Roof Installed)	
Mechanical \$82.50	
Gas \$ 7 <sup>th</sup> (Drywall) Roofing \$	
Boat Dock \$ 8 <sup>th</sup> (Sidewalk/Driveway)	
Screen Encl \$ Swimming Pool \$ 9 <sup>th</sup> (Other)	
Sign \$	
SURCHARGE FEES (Final – After MEP and Other Applicable Finals)	
ROOFING	
Surcharge Fee \$2.00   1 <sup>st</sup> ROOFING Deck Nailing/Dry-in/Flashing	
2 <sup>nd</sup> ROOFING Covering In-Progress	
TOTAL FEES \$86.50  3rd ROOFING Covering Final	
Date Paid 8-12-15 PLUMBING (Pool-Piping, Solar, Irrigation, Water Treatment Equip, Etc)	
CC or Check # USA 5994 1st (Underground) 2 <sup>nd</sup> (Sewer)	
Amount Paid 3 <sup>rd</sup> (Rough-In/Tub Set) 4 <sup>th</sup> (Final)	

Inspection requests are to be emailed to BIDscheduling@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.

(Final)

(Rough-In)

# CITY OF BELLE ISLE Permit Application Review Sheet

Permit Number	2015-07-035	
Property Owner	SKAR LUDKA, MARjoriE	
Address	2311 CROSS LAKE Rd. (32809)	
Nature of Improvement	MECHANICAL: ONE, 2.5 ton C/O	
Received Application	7/16/15	
Sent for Stormwater Review		
Stormwater Approved		
Sent for Zoning Review		
Zoning Approved		
Applied for Variance		
Variance Approved		
Sent to BO for Review	7/16/15	
Building Official Approved		
1. Joseth 7/16/15	Logged in, Created Proj. # + TASK,	
2 11 11	SENT to J. CONNEll For Keview, WOH	541
3.	Waiting for Product Apprl. Code Vension 2	014.
1505an 8-145	down Ecaded 2014 From H. blder org	
55 Sugar 5-11-15	wo 55501	
Sisne 801-15	emailed it's ready	
7.		
8,		
9.		
10.		
11.		
12.		





Permit has been issued.

City of Belle Isle
Universal Engineering Sciences 3532 Maggie Blvd., Orlando, FL 32811
Tel 407-581-8161 \* Fax 407-581-0313 \* www.universalengineering.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: 4114115	PERMIT NUMBER 2015-07-035
PLEASE PRINT. The undersigned hereby applies for a permit to make install	ations as indicated below:
	Belle Isle FL 32809 32812  Phone  City Selle Isle FL 32809 32812
Class of Building: Old  New  Type of Building: Residential  Addition  Repair  Addition	Commercial Other
REQUIRED certified Tie Down Engineering documentation (can be found at your continuous).	<del></del>
<ul> <li>REQUIRED: If adding A/C to new space, provide Energy Calculations &amp; Equ</li> <li>REQUIRED: If replacing unit with no duct work, Duct Certification as per FB</li> </ul>	
14	101.4.7.1, must be posted on anno
Please indicate the nature of work by completing the information below	
Air Conditioning: # of Units Tons Per Unit Total Tons Type of System: Water to Air Chiller Split System Package	Heat Pump Estimated Cost \$
Heating: # of Units KWS Per Unit Total KWS 1.5 BTU's	Estimated Cost \$
OilElectric Boiler Gas	(A) Estimated Cost Fee S
Fees for items below are based on valuation of all units, equipment, materials an Ventilation:	d labor supplied by owner or contractor.
(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? YesNoI hereby certify that the above is true and correct to the best of my knowledge same is granted I agree to conform to all Florida Building Code Regulations and City submitted. The issuance of this permit does not grant permission to violate any approximately.	Ordinances regulating same and in accordance with plans
LICENSE HOLDED CICNATURE	LICENSE# CACOS CLES
LICENSE HOLDER SIGNATURE  LICENSE HOLDER NAME COM  COM	MPANY NAME DO CUY HOLLING EDIC
Street Address 521 COCHTO WOUL	
City State C Zip Code	2.77   Phone Number 4 (7-33) 2005
Email Address Sale Slos @ Clara Gradon	
IN THE REAL PROPERTY OF THE PROPERTY OF THE PARTY OF THE	TC.
valual .	Permit Fee 55000
Building Official: Date 8-11	Review Fee \$ 27.50
Verified Contractor's Licenses & Insurance are on file Date	3% Florida Surcharge \$
Ų-i	Total Permit Fee \$ 86.50
NOTE: The Building Permit Number is required if the Mechanical Installation is as	sociated with any construction or alteration where a Building

Building Permit Number \_\_

# Susan Manchester

From:

John Connell

Sent:

Tuesday, August 11, 2015 2:15 PM

To:

Susan Manchester

Subject:

RE: 2311 Cross Lake Rd - app for mechanical permit 2015-07-035 - Del-Air

## **Approved**

From: Susan Manchester

Sent: Tuesday, August 11, 2015 1:56 PM

To: John Connell Cc: BIDReviews

Subject: 2311 Cross Lake Rd - app for mechanical permit 2015-07-035 - Del-Air

Project 0115.1500999.0000 task 01

WO 55501

Thank you 😊



Susan Manchester

Universal Engineering Sciences, Inc.

3532 Maggie Blvd. Orlando, FL 32811 Phone: 407-581-8161

Fax: 407-581-0313

Email: smanchester@universalengineering.com

ORLANDO BUSINESS JOURNAL



2015 BEST PLACES TO WORK

# DEL-AIR HEATING - AIR CONDITIONING REFRIGERATION, INC.

Date

City Of Belle Isle Building Division

Dear Sir:

This letter is written to give authorization for Exple Dalm to pull the mechanical permit for Del-Air Heating, Air Conditioning & Refrigeration, Inc. for 231 0705 (100 Ref

Thank You,

Robert G. Dello Russo, President

DEL-AIR HEATING, AIR CONDITIONING & REFRIGERATION, INC.

RGDR/jd

Sworn to before me by Robert G. Dello Russo

on this

day of July ,2009

NOTARY PUBLIC

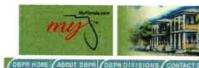
MY COMMISSION EXPIRES

MIRINDA C. TURNER
MY COMMISSION # FF 223790
EXPIRES: June 14, 2019
Bonded Thru Notary Public Underwriters

P.O. Box 520522 Longwood, FL 32752-0522 Phone (407)333-COOL (2665) (407)831-COOL (2665)

SALES SERVICE INSTALLATION

# **Business & Professional Regulation**





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efficiently. Regulate fairly.

Product Approval Menu > Product or Application Search > Application List > Application Detail

FL14239-R3 Application Type Revision Code Version 2014 Application Status Approved

Comments Archived

Product Manufacturer Address/Phone/Email

BMP International Inc. 4710 28th Street N St. Petersburg, FL 33714 (727) 458-0544 benmeng8@yahoo.com

Authorized Signature

Xianbin Meng

benmeng8@yahoo.com

Technical Representative Address/Phone/Email

Quality Assurance Representative Address/Phone/Email

Category Subcategory Structural Components

Frank L. Bennardo, P.E.

Anchors

E

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 Evaluation Report

PE-0046549

Florida License Quality Assurance Entity

National Accreditation & Management Institute

Quality Assurance Contract Expiration Date

Validated By

12/31/2018 Ted Berman, PE

✓ Validation Checklist - Hardcopy Received

Certificate of Independence

FL14239 R3 COI Indep.pdf

Referenced Standard and Year (of Standard)

Standard <u>Year</u> ASTM D1761-06 2006 ASTM D1761-88 2000

Equivalence of Product Standards

Certified By

Florida Licensed Professional Engineer or Architect

FL14239 R3 Equiv Equiv.pdf

https://www.floridabuilding.org/pr/pr\_app\_dtl.aspx?param=wGEVXQwtDquDEJErt0SCei... 8/11/2015

Sections from the Code

Product Approval Method

Method 1 Option D

Date Submitted04/23/2015Date Validated04/30/2015Date Pending FBC Approval05/06/2015Date Approved06/23/2015

Summary of Product					
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)			
system. The required	utside HVHZ: Yes N/A	Installation Instructions  FL14239 R3 II Dwq.pdf  Verified By: Frank L. Bennardo, P.E. 0046549  Created by Independent Third Party: Yes  Evaluation Reports  FL14239 R3 AE Eval.pdf  Created by Independent Third Party: Yes			

Back Next

Contact Us :: 1940 North Monroe Street, Tallahassee FL 32399 Phone: 850-487-1824

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Under Florida law, email addresses are public records. If you do not want your e-mail address released in response to a public-records request, do not send electronic mail to this entity. Instead, contact the office by phone or by traditional mail. If you have any questions, please contact 850.487.1395.

\*Pursuant to Section 455.275(1), Florida Statutes, effective October 1, 2012, licensees licensed under Chapter 455, F.S. must provide the Department with an email address if they have one. The emails provided may be used for official communication with the licensee. However email addresses are public record. If you do not wish to supply a personal address, please provide the Department with an email address which can be made available to the public.

To determine if you are a licensee under Chapter 455, F.S., please click here.

Product Approval Accepts:

SecurityMETRICS
Credit Card
SAFE



This combination qualifies for a Federal Energy Efficiency Tax Credit when placed in service between Feb 17, 2009 and Dec 31, 2014.

# **Certificate of Product Ratings**

AHRI Certified Reference Number: 6937467

Date: 7/14/2015

Product: Split System: Air-Cooled Condensing Unit, Coil with Blower

Outdoor Unit Model Number: 24ABC630A\*\*30 Indoor Unit Model Number: FX4DN(B,F)037L Manufacturer: CARRIER AIR CONDITIONING

Trade/Brand name: CARRIER

Region: Southeast and North (AL, AR, DC, DE, FL, GA, HI, KY, LA, MD, MS, NC, OK, SC, TN, TX, VA AK, CO, CT, ID, IL, IA, IN, KS, MA, ME, MI, MN, MO, MT, ND, NE, NH, NJ, NY, OH, OR, PA, RI, SD, UT, VT, WA, WV, WI, WY, U.S. Territories)

Region Note: Central air conditioners manufactured prior to January 1, 2015, are eligible to be installed in all regions until June 30, 2016. Beginning July 1, 2016, central air conditioners can only be installed in region(s) for which they meet the regional efficiency requirement.

Series name: COMFORT SERIES PURON AC

Manufacturer responsible for the rating of this system combination is CARRIER AIR CONDITIONING

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 (Bluh):

28800

EER Rating (Cooling):

13.00

SEER Rating (Cooling):

16.00

IEER Rating (Cooling):

AHRI does not endorse the product(s) listed on this Certificate and makes no representations, warranties or guarantees as to, and assumes no responsibility for, the product(s) listed on this Certificate. AHRI expressly disclaims all liability for damages of any kind arising out of the use or performance of the product(s), or the unauthorized alteration of data listed on this Certificate. Certified ratings are valid only for models and configurations listed in the directory at www.ahrldlrectory.org.

# TERMS AND CONDITIONS

This Certificate and its contents are proprietary products of AHRI. This Certificate shall only be used for individual, personal and confidential reference purposes. The contents of this Certificate may not, in whole or in part, be reproduced; copied; disseminated; entered into a computer database; or otherwise utilized, in any form or manner or by any means, except for the user's individual, personal and confidential reference.



The information for the model cited on this certificate can be verified at www.ahrldirectory.org, click on "Verify Certificate" link and enter the AHRI Certifled 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.

© 2014 Air-Conditioning, Heating, and Refrigeration Institute

**CERTIFICATE NO.:** 

130813690734748240

& REFRIGERATION INSTITUTE

we make life better"

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

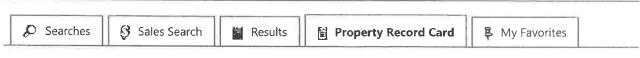
# BMP International

# 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.



# 2311 Cross Lake Rd < 18-23-30-7164-00-121 >

Name(s)

Skarlupka Marjorie S Patiry

Mailing Address On File 2311 Cross Lake Rd

Belle Isle, FL 32809-3508

Incorrect Mailing Address?

Physical Street Address

2311 Cross Lake Rd

Postal City and Zipcode Orlando, Fl 32809

Property Use

0103 - Single Fam Class III

Municipality Belle Isle

Values, Exemptions and Taxes

Property Features

Sales Analysis

**Location Info** 

# **Property Description**

REPLAT PLEASURE ISLAND H/71 THE E 60.5 FT OF W 125.5 FT OF LOTS 12 &~13

**Total Land Area** 6,049 sqft (+/-) | 0.14 acres (+/-)

GIS Calculated

Notice

# Land (includes working values)

Land Use Code	Zoning	Land Units	Unit Price	Land Value
0100 - Single Family	R-1-A	1 LOT(S)	\$40,000.00	\$40,000

Page 1 of 1 (1 total records)

# **Buildings (includes working values)**

	Important Information		Structure	
12	Model Code:	01 - Single Fam Residence	Actual Year Built:	1954
More	Type Code:	0103 - Single Fam Class III	Beds:	3
Details	Building Value:	\$105,766	Baths:	2.0
	Estimated New Cost:	\$138,801	Floors:	2

Page 1 of 1 (1 total records)

# Extra Features (includes working values)

Description	Date Built	Units
There are no extra features associate	ed with this parcel	

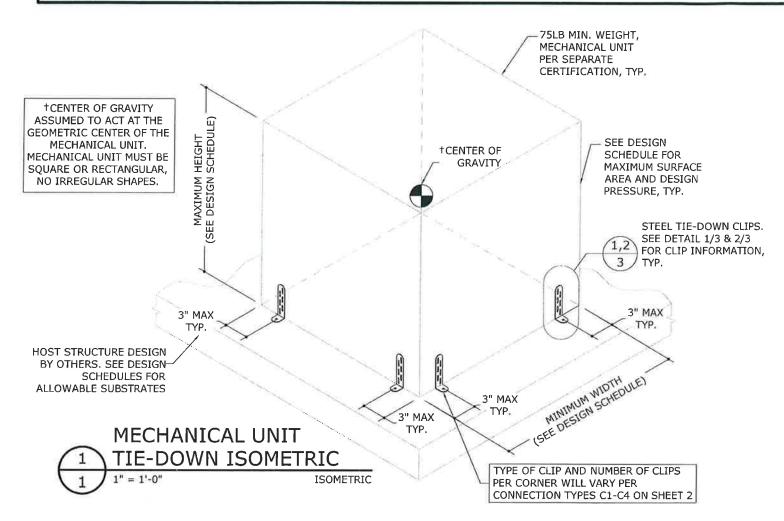
This Data Printed on 07/14/2015 and System Data Last Refreshed on 07

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https://www.ocpafl.org/searches/ParcelSearch.aspx

7/14/2015

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



# TIE-DOWN CLIP DIRECTIVE EXAMPLE

(THE FOLLOWING EXAMPLE ILLUSTRATES THE PROCEDURE USED TO DETERMINE THE MAXIMUM ALLOWABLE ROOF-TOP INSTALLATION HEIGHT, H, FOR ANY GIVEN MECHANICAL UNIT THAT CONFORMS TO THE DIMENSION RESTRICTIONS AND DESIGN CRITERIA LISTED HEREIN. SEE SHEETS 4-5 FOR DESIGN SCHEDULES.)

### MECHANICAL UNIT CRITERIA:

CONSIDER THE INSTALLATION OF (1) MECHANICAL UNIT WITH THE FOLLOWING CRITERIA=

- 48" TALL x 48" DEEP x 48" WIDE, 100 LB (WEIGHT AS VERIFIED BY OTHERS)
- INSTALLED TO 3000 PSI MIN CONCRETE WITH (1)-2" CLIP AT EACH CORNER OF UNIT (TOTAL OF (4) CLIPS)

#### PROCEDURE:

	PROCEDURE STEP	RESULT
1	DETERMINE THE CONNECTION TYPE BASED ON THE DIAGRAMS ON SHEET 2	CONNECTION TYPE 3
2	DETERMINE WHICH DESIGN SCHEDULE TABLE TO USE	THIS INSTALLATION IS INTENDED FOR A Vult=170 MPH, EXPOSURE 'B'. THIS DESIGN CRITERIA CORRESPONDS TO TABLE 5
3	DETERMINE LARGEST FACE AREA OF MECHANICAL UNIT TO BE INSTALLED	48"x48"=16FT <sup>2</sup>
4	CHECK MAXIMUM UNIT HEIGHT RESTRICTION	THIS UNIT HEIGHT OF 48" IS EQUAL TO THE MAXIMUM ALLOWABLE HEIGHT OF 48".  NOTE: THIS PRODUCT APPROVAL ALLOWS THE UNIT TO BE INSTALLED ON TOP  OF AN A/C STAND THAT IS A MAXIMUM 30" TALL. IF AN A/C STAND IS UTILIZED,  CHECK TO SEE THAT THE STAND DOES NOT EXCEED 30" IN HEIGHT
5	CHECK MINIMUM UNIT WIDTH RESTRICTION	UNIT WIDTH IS 48" WHICH IS GREATER THAN THE MINIMUM ALLOWABLE WIDTH OF 24"
6	DETERMINE THE ALLOWABLE ROOF-TOP HEIGHT OF THE INSTALLATION	THIS UNIT MAY BE INSTALLED AT ROOF HEIGHTS LESS THAN OR EQUAL TO 15 FT. ADDITIONALLY, THIS UNIT MAY BE INSTALLED ON ROOF-TOP HEIGHTS GREATER THAN 60FT AND LESS THAN 100 FT. SEE (*) ON TABLE 5 FOR THE NUMERICAL VALUES OF THIS DESIGN EXAMPLE

# **DESIGN NOTES:**

THIS PRODUCT HAS BEEN DESIGNED IN ACCORDANCE WITH ASCE 7-10 AND THE FLORIDAY THIS PRODUCT HAS BEEN DESIGNED IN ACCORDANCE WITH ASCE /- 10 AND THE FLOKAGE BUILDING CODE FOR USE WITHIN AND OUTSIDE THE HIGH VELOCITY HURRICANE ZONE SINDICATED IN THE ACCOMPANYING DESIGN SCHEDULES. THE DESIGN CRITERIA USED TO CALCULATE THE ALLOWABLE ROOF-TOP HEIGHTS CONSIDERS ASCE 7-10 SECTION 29.5.1 FOR ROOF TOP HEIGHTS (H) ≤60 FT AND SECTION 29.5 FOR ROOF TOP HEIGHTS (H)>60 FT & SECTION 29.4.1 FOR INSTALLATIONS AT GRADE. ( $GC_f$ )<sub>Lateral</sub>=3.10 WITHIN THE HVHZ, ( $GC_f$ )<sub>Lateral</sub>=1.90 OUTSIDE THE HVHZ, ( $GC_f$ )<sub>Lateral</sub>=1.5 FOR ALL LOCATIONS (CONCURRENT). ALL OTHER DESIGN VARIABLES ARE IN ACCORDANCE WITH ASCE 7-10 CHAPTERS 26 & 29. THE HEIGHTS LISTED IN THE DESIGN SCHEDULES REPRESENT THE ALLOWABLE HEIGHT OF THE BUILDING. THIS PRODUCT APPROVAL ALLOWS FOR EACH UNIT TO BE INSTALLED ON A MAXIMUM 30" TALL A/C STAND (CERTIFICATION BY OTHERS) ON TOP OF THE HEIGHTS LISTED IN THE DESIGN SCHEDULES.

# **GENERAL NOTES:**

- 1. THIS PRODUCT HAS BEEN DESIGNED AND SHALL BE FABRICATED IN ACCORDANCE WITH THE REQUIREMENTS OF THE FLORIDA BUILDING CODE & ASCE 7-10. THIS PRODUCT MAY BE USED WITHIN AND OUTSIDE THE HIGH VELOCITY HURRICANE ZONE.
- NO 33-1/3% INCREASE IN ALLOWABLE STRESS HAS BEEN USED IN THE DESIGN OF THIS
- DESIGN IS BASED ON CLIENT PROVIDED PRODUCT AND DIE SHEETS FROM TEST REPORTS #TEL 01970387A, #TEL 01970387B BY TESTING EVALUATION LABORATORIES, INC.. NO SUBSTITUTIONS WITHOUT WRITTEN APPROVAL BY THIS ENGINEER SHALL BE
- 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 3/4" OR GREATER SAE GRADE 5 UNLESS NOTED OTHERWISE. TAPCONS REFERRED TO HEREIN SHALL BE ITW BUILDEX BRAND, CARBON STEEL ONLY, INSTALLED TO 3000 PSI MIN CONCRETE. SEE ANCHOR SCHEDULE FOR ANCHOR REQUIREMENTS. ALL FASTENERS SHALL HAVE APPROPRIATE CORROSION PROTECTION TO PREVENT ELECTROLYSIS.
- ALL STEEL CLIPS SHALL BE ASTM A283 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. G90-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 3000 PSI, UNLESS NOTED OTHERWISE.
- THE CONTRACTOR IS RESPONSIBLE TO INSULATE ALL MEMBERS FROM DISSIMILAR MATERIALS TO PREVENT ELECTROLYSIS.
- ELECTRICAL GROUND, WHEN REQUIRED, TO BE DESIGNED & INSTALLED BY OTHERS. 10. THE ADEQUACY OF ANY EXISTING STRUCTURE TO WITHSTAND SUPERIMPOSED LOADS SHALL BE VERIFIED BY THE ONSITE DESIGN PROFESSIONAL AND IS NOT INCLUDED IN THIS CERTIFICATION. EXCEPT AS EXPRESSLY PROVIDED HEREIN, NO ADDITIONAL CERTIFICATIONS OR AFFIRMATIONS ARE INTENDED.
- . THE SYSTEM DETAILED 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 CONJUNCTION WITH THIS DOCUMENT.
- 12. 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
- 13. FOR AN EXPLANATION OF EXPOSURE CATEGORIES THAT ACCOMPANY THE Vult WIND SPEEDS USED IN THIS APPROVAL, SEE SECTION 26.7.3 OF ASCE 7-10.





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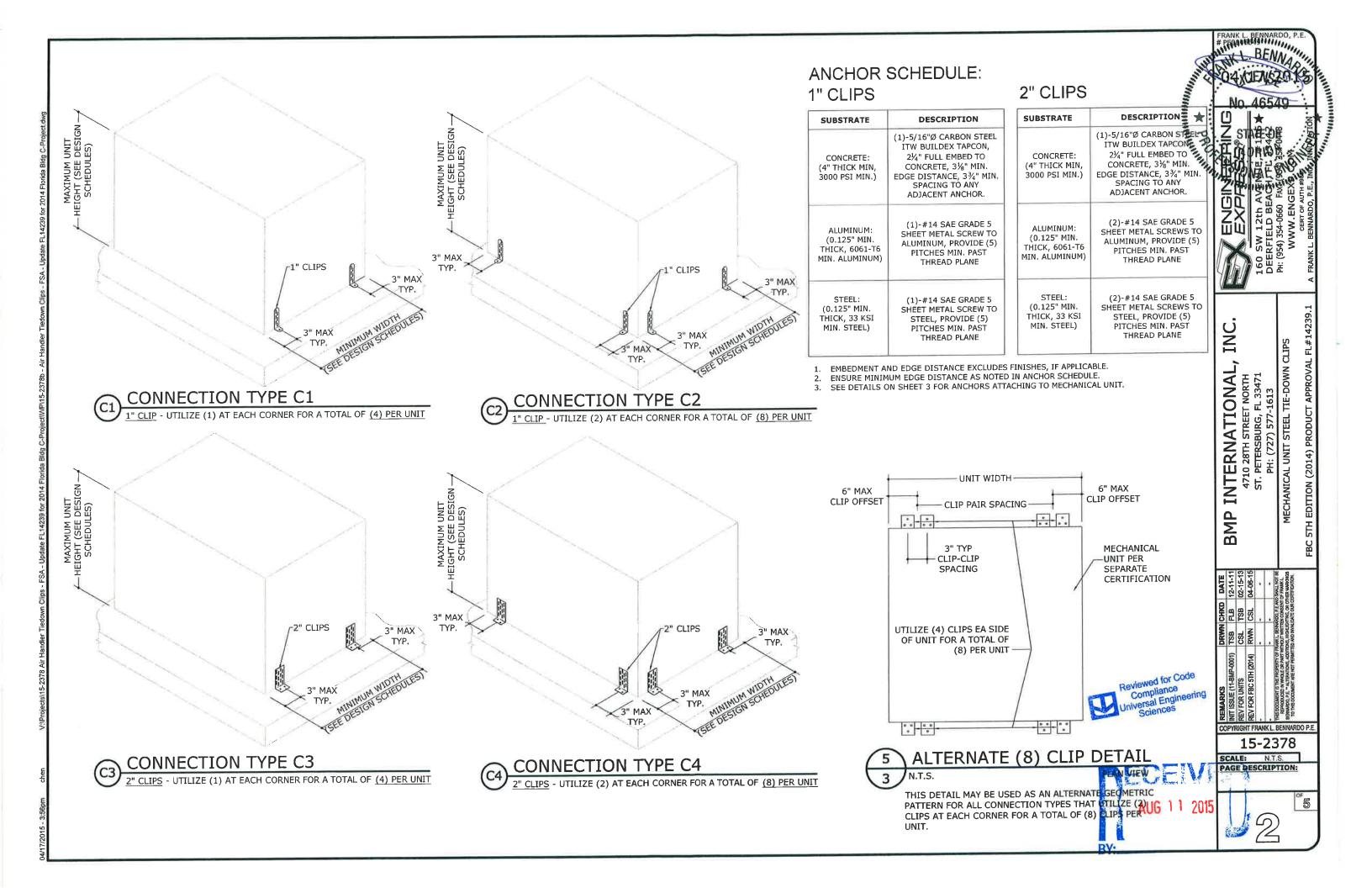
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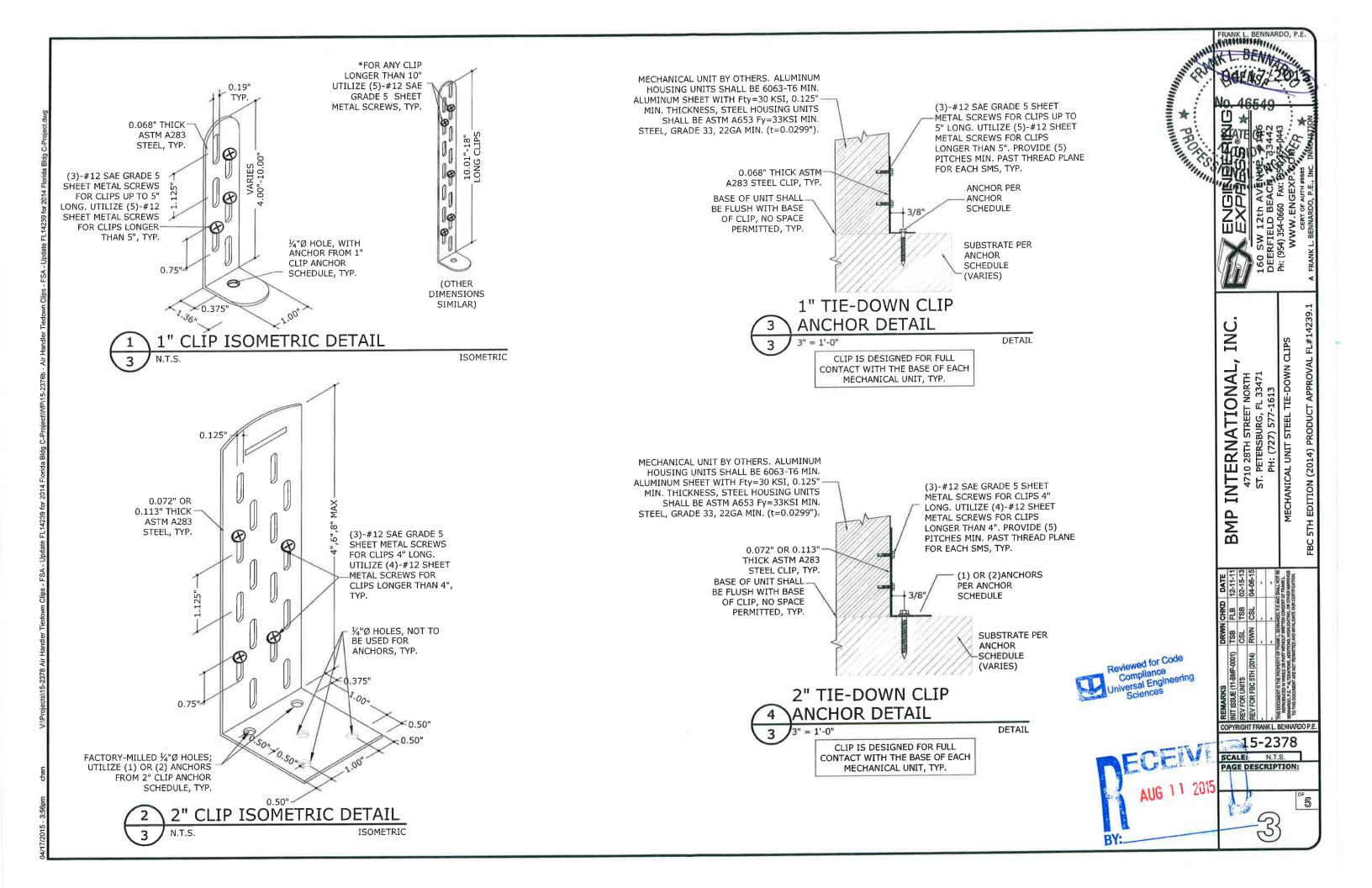
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# TABLE 1: Vult=175 MPH, EXPOSURE C

(FOR USE WITH A RISK CATEGORY II STRUCTURE IN THE HIGH VELOCITY HURRICANE ZONE\*)

				LOWABLE ROO E-DOWN CONF		
MAXIMUM SURFACE AREA OF UNIT'S LARGEST FACE	UNIT HEIGHT	UNIT WIDTH	C1	C2	C3	C4
6 FT²	24" MAX	12" MIN	N/A	AT GRADE	AT GRADE	H ≤ 200 FT
9 FT <sup>2</sup>	32" MAX	15" MIN	N/A	AT GRADE	AT GRADE	H ≤ 60 FT
4 FT <sup>2</sup>			AT GRADE	H ≤ 200 FT	H ≤ 30 FT	H ≤ 200 FT
6 FT <sup>2</sup>			AT GRADE	H ≤ 40 FT	AT GRADE	H ≤ 200 FT
9 FT <sup>2</sup>	48" MAX	24" MIN	N/A	AT GRADE	AT GRADE	H ≤ 160 FT
12 FT <sup>2</sup>			N/A	AT GRADE	AT GRADE	H ≤ 40 FT
16 FT <sup>2</sup>			N/A	AT GRADE	N/A	AT GRADE
20 FT <sup>2</sup>			N/A	AT GRADE	N/A	AT GRADE
25 FT <sup>2</sup>	60" MAX	4 Olf & 4 IN	N/A	AT GRADE	N/A	AT GRADE
30 FT <sup>2</sup>		48" MIN	N/A	N/A	N/A	AT GRADE
36 FT <sup>2</sup>			N/A	N/A	N/A	AT GRADE

<sup>\*</sup>THIS TABLE IS PERMISSIBLE TO BE USED WITHIN THE HVHZ WHICH CONTAINS BROWARD AND MIAMI-DADE COUNTIES. CHECK WITH LOCAL AUTHORITY HAVING JURISDICTION FOR THE APPLICABILITY OF THIS TABLE WITHIN CERTAIN FLORIDA COUNTIES.

# TABLE 3: Vult=170 MPH, EXPOSURE C

(FOR USE WITH A RISK CATEGORY II STRUCTURE\*)

					FIGURATION TYPE																		
MAXIMUM SURFACE AREA OF UNIT'S LARGEST FACE	UNIT HEIGHT	UNIT WIDTH	C1	C2	C3	C4																	
6 FT²	24" MAX	12" MIN	N/A	H ≤ 200 FT	AT GRADE 60 FT < H ≤ 160 FT	H ≤ 200 FT																	
9 FT²	32" MAX	15" MIN	N/A	H ≤ 15 FT 60 FT < H ≤ 200 FT	AT GRADE	H ≤ 200 FT																	
4 FT <sup>2</sup>			AT GRADE 60 FT < H ≤ 200 FT	H ≤ 200 FT	H ≤ 200 FT	H ≤ 200 FT																	
6 FT²			AT GRADE	H ≤ 200 FT	H ≤ 40 FT 60 FT < H ≤ 200 FT	H ≤ 200 FT																	
9 FT²	48" MAX	24" MIN	N/A	H ≤ 200 FT	AT GRADE 60 FT < H ≤ 80 FT	H ≤ 200 FT																	
12 FT²				N/A	AT GRADE 60 FT < H ≤ 200 FT	N/A	H ≤ 200 FT																
16 FT²																				N/A	AT GRADE	N/A	H ≤ 200 FT
20 FT <sup>2</sup>			N/A	AT GRADE	N/A	H ≤ 200 FT																	
25 FT²	60" MAX	AOU NAINI	N/A	N/A	N/A	H ≤ 30 FT 60 FT < H ≤ 200 FT																	
30 FT²		48" MIN	N/A	N/A	N/A	AT GRADE 60 FT < H ≤ 180 FT																	
36 FT²			N/A	N/A	N/A	AT GRADE																	

<sup>\*</sup>AS AN EXAMPLE, THIS TABLE IS PERMISSIBLE TO BE USED WITHIN PALM BEACH COUNTY. CHECK WITH LOCAL AUTHORITY HAVING JURISDICTION FOR THE APPLICABILITY OF THIS TABLE WITHIN CERTAIN FLORIDA COUNTIES.

# TABLE 2: Vult=175 MPH, EXPOSURE D

(FOR USE WITH A RISK CATEGORY II STRUCTURE IN THE HIGH VELOCITY HURRICANE ZONE\*)

			-		F-TOP HEIGHT (H) IGURATION TYPE		
MAXIMUM SURFACE AREA OF UNIT'S LARGEST FACE	UNIT UNIT HEIGHT WIDTH	C1	C2	C3	C4		
6 FT <sup>2</sup>	24" MAX	12" MIN	N/A	AT GRADE	AT GRADE	H ≤ 200 FT	
9 FT <sup>2</sup>	32" MAX	15" MIN	N/A	AT GRADE	N/A	H ≤ 30 FT	
4 FT <sup>2</sup>	48" MAX		AT GRADE	H ≤ 200 FT	AT GRADE	H ≤ 200 FT	
6 FT <sup>2</sup>		48" MAX 24" MIN		N/A	H ≤ 15 FT	AT GRADE	H ≤ 200 FT
9 FT <sup>2</sup>			24" MIN	N/A	AT GRADE	AT GRADE	H ≤ 80 FT
12 FT <sup>2</sup>				N/A	AT GRADE	N/A	AT GRADE
16 FT <sup>2</sup>			N/A	AT GRADE	N/A	AT GRADE	
20 FT <sup>2</sup>			N/A	AT GRADE	N/A	AT GRADE	
25 FT <sup>2</sup>	60" MAX	48" MIN	N/A	N/A	N/A	AT GRADE	
30 FT <sup>2</sup>		40 IVIIIN	N/A	N/A	N/A	AT GRADE	
36 FT <sup>2</sup>			N/A	N/A	N/A	AT GRADE	

<sup>\*</sup>THIS TABLE IS PERMISSIBLE TO BE USED WITHIN THE HVHZ WHICH CONTAINS BROWARD AND MIAMI-DADE COUNTIES. CHECK WITH LOCAL AUTHORITY HAVING JURISDICTION FOR THE APPLICABILITY OF THIS TABLE WITHIN CERTAIN FLORIDA COUNTIES.

# TABLE 4: Vult=170 MPH, EXPOSURE D

(FOR USE WITH A RISK CATEGORY II STRUCTURE\*)

				ALLOWABLE ROOF-TOP HEIGHT (H) TIE-DOWN CONFIGURATION TYPE			
MAXIMUM SURFACE AREA OF UNIT'S LARGEST FACE	UNIT HEIGHT	UNIT WIDTH	C1	C2	С3	C4	
6 FT²	24" MAX	12" MIN	N/A	H ≤ 200 FT	AT GRADE 60 FT < H ≤ 80 FT	H ≤ 200 FT	
9 FT²	32" MAX	15" MIN	N/A	AT GRADE 60 FT < H ≤ 200 FT	N/A	H ≤ 200 FT	
4 FT²	48" MAX		AT GRADE 60 FT < H ≤ 100 FT	H ≤ 200 FT	H ≤ 200 FT	H ≤ 200 FT	
6 FT²			N/A	H ≤ 200 FT	H ≤ 15 FT 60 FT < H ≤ 200 FT	H ≤ 200 FT	
9 FT²		48" MAX	24" MIN	N/A	H ≤ 15 FT 60 FT < H ≤ 200 FT	AT GRADE	H ≤ 200 FT
12 FT²			N/A	AT GRADE 60 FT < H ≤ 120 FT	N/A	H S 200 F Cod	
16 FT²			N/A	N/A	N/A	Reviewed to Reviewed Figure 60 Person Figure 60 Figure 6	
20 FT <sup>2</sup>	25 FT <sup>2</sup> 60" MAX		N/A	AT GRADE	N/A	H ≤ 40 FT 60 FT < H ≤ 200 F1	
25 FT²		60" MAX 48" MIN	N/A	N/A	N/A	AT GRADE 60 FT < H ≤ 200 FT	
30 FT <sup>2</sup>			N/A	N/A	N/A	AT GRADE	
36 FT <sup>2</sup>			N/A	N/A	N/A	AT GRADE	

<sup>\*</sup>AS AN EXAMPLE, THIS TABLE IS PERMISSIBLE TO BE USED WITHIN PALM BEACH COUNTY. CHECK WITH COCAL AUTHORITY HAVING JURISDICTION FOR THE APPLICABILITY OF THIS TABLE WITHIN CERTAIN FLORIDA COUNTIES.

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# TABLE 5: Vult=140 MPH, EXPOSURE B

(FOR USE WITH A RISK CATEGORY II STRUCTURE\*)

				ALLOWABLE ROOF-TOP HEIGHT (H) TIE-DOWN CONFIGURATION TYPE				
i	MAXIMUM SURFACE AREA OF UNIT'S LARGEST FACE	UNIT HEIGHT	UNIT WIDTH	C1	C2	C3	C4	
	6 FT²	24" MAX	12" MIN	H ≤ 15 FT 60 FT < H ≤ 120 FT	H ≤ 200 FT	H ≤ 200 FT	H ≤ 200 FT	
Ī	9 FT²	32" MAX	15" MIN	AT GRADE	H ≤ 200 FT	H ≤ 200 FT	H ≤ 200 FT	
	4 FT²	48" MAX		H ≤ 200 FT	H ≤ 200 FT	H ≤ 200 FT	H ≤ 200 FT	
Ī	6 FT²		24" MIN	H ≤ 40 FT 60 FT < H ≤ 200 FT	H ≤ 200 FT	H ≤ 200 FT	H ≤ 200 FT	
	9 FT²			AT GRADE 60 FT < H ≤ 80 FT	H ≤ 200 FT	H ≤ 200 FT	H ≤ 200 FT	
	12 FT²			AT GRADE	H ≤ 200 FT	H ≤ 40 FT 60 FT < H ≤ 200 FT	H ≤ 200 FT	
,	16 FT²			N/A	H ≤ 200 FT	H ≤ 15 FT 60 FT < H ≤ 100 FT	H ≤ 200 FT	
	20 FT <sup>2</sup>		MAX 48" MIN	N/A	H ≤ 200 FT	H ≤ 15 FT 60 FT < H ≤ 180 FT	H ≤ 200 FT	
	25 FT <sup>2</sup> 60" N			N/A	H ≤ 40 FT 60 FT < H ≤ 200 FT	AT GRADE 60 FT < H ≤ 80 FT	H ≤ 200 FT	
		60" MAX		N/A	H ≤ 15 FT 60 FT < H ≤ 160 FT	AT GRADE	H ≤ 200 FT	
	36 FT <sup>2</sup>	36 FT²		N/A	AT GRADE 60 FT < H ≤ 80 FT	AT GRADE	H ≤ 200 FT	

TABLE 6: Vult=140 MPH, EXPOSURE C

(FOR USE WITH A RISK CATEGORY II STRUCTURE\*)

			ALLOWABLE ROOF-TOP HEIGHT (H) TIE-DOWN CONFIGURATION TYPE					
MAXIMUM SURFACE AREA OF UNIT'S LARGEST FACE	UNIT HEIGHT	UNIT WIDTH	C1	C2	С3	* PA		
6 FT²	24" MAX	12" MIN	AT GRADE	H ≤ 200 FT	H ≤ 200 FT	H ≤ 200 FT		
9 FT²	32" MAX	15" MIN	N/A	H ≤ 200 FT	H ≤ 15 FT 60 FT < H ≤ 200 FT	H ≤ 200 FT		
4 FT <sup>2</sup>			H ≤ 200 FT	H ≤ 200 FT	H ≤ 200 FT	H ≤ 200 FT		
6 FT²	48" MAX		AT GRADE 60 FT < H ≤ 180 FT	H ≤ 200 FT	H ≤ 200 FT	H ≤ 200 FT		
9 FT²		48" MAX	24" MIN	AT GRADE	H ≤ 200 FT	H ≤ 40 FT 60 FT < H ≤ 200 FT	H ≤ 200 FT	
12 FT²				N/A	H ≤ 200 FT	AT GRADE 60 FT < H ≤ 140 FT	H ≤ 200 FT	
16 FT²			N/A	H ≤ 15 FT 60 FT < H ≤ 200 FT	AT GRADE	H ≤ 200 FT		
20 FT <sup>2</sup>	60" MAX		N/A	H ≤ 30 FT 60 FT < H ≤ 200 FT	AT GRADE	H ≤ 200 FT		
25 FT²		0" MAX 48" MIN	N/A	AT GRADE 60 FT < H ≤ 140 FT	AT GRADE	H ≤ 200 FT		
30 FT <sup>2</sup>			N/A	AT GRADE	N/A	H ≤ 200 FT		
36 FT²			N/A	AT GRADE	N/A	H ≤ 30 FT 60 FT < H ≤ 200 F		

TABLE 7: Vult=140 MPH, EXPOSURE D

(FOR USE WITH A RISK CATEGORY II STRUCTURE\*)

			ALLOWABLE ROOF-TOP HEIGHT (H) TIE-DOWN CONFIGURATION TYPE				
MAXIMUM SURFACE AREA OF UNIT'S LARGEST FACE	UNIT HEIGHT	UNIT WIDTH	C1	C2	C3	C4	
6 FT²	24" MAX	12" MIN	N/A	H ≤ 200 FT	H ≤ 30 FT 60 FT < H ≤ 200 FT	H ≤ 200 FT	
9 FT²	32" MAX	IAX 15" MIN	N/A	H ≤ 200 FT	AT GRADE 60 FT < H ≤ 140 FT	H ≤ 200 FT	
4 FT²	48" MAX		H ≤ 40 FT 60 FT < H ≤ 200 FT	H ≤ 200 FT	H ≤ 200 FT	H ≤ 200 FT	
6 FT²		( 24" MIN	AT GRADE 60 FT < H ≤ 100 FT	H ≤ 200 FT	H ≤ 200 FT	H ≤ 200 FT	
9 FT²			N/A	H ≤ 200 FT	H ≤ 15 FT 60 FT < H ≤ 200 FT	H ≤ 200 FT	
12 FT²			N/A	H ≤ 40 FT 60 FT < H ≤ 200 FT	AT GRADE 60 FT < H ≤ 80 FT	H ≤ 200 FT	
16 FT <sup>2</sup>			N/A	AT GRADE 60 FT < H ≤ 200 FT	N/A	H ≤ 200 FT	
20 FT <sup>2</sup>	60" MAX	D" MAX 48" MIN	N/A	AT GRADE 60 FT < H ≤ 200 FT	AT GRADE	H ≤ 200 FT	
25 FT <sup>2</sup>			N/A	AT GRADE 60 FT < H ≤ 80 FT	N/A	H ≤ 200 FT	
30 FT <sup>2</sup>			N/A	N/A	N/A	H ≤ 40 FT 60 FT < H ≤ 200 FT	
36 FT <sup>2</sup>			N/A	N/A	N/A	AT GRADE 60 FT < H ≤ 200 FT	



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\*AS AN EXAMPLE, THESE TABLES ARE PERMISSIBLE TO BE USED WITHIN BREVARD COUNTY. CHECK WITH LOCAL AUTHORITY HAVING JURISDICTION FOR THE APPLICABILITY OF THIS TABLE WITHIN CERTAIN FLORIDA COUNTIES.

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