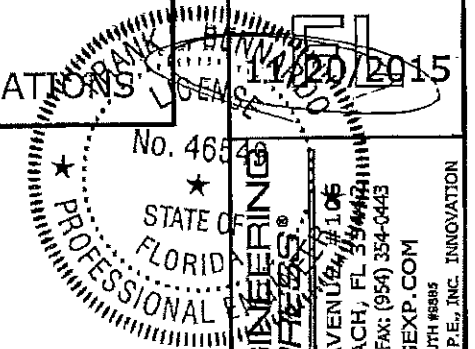




# RHEEM SALES COMPANY, INC.

WIND LOAD CERTIFICATION OF MECHANICAL UNIT CABINETY AND STEEL/ALUMINUM TIE-DOWN CLIPS: AT GRADE MOUNTED APPLICATIONS

FRANK BENNARDO, P.E.  
#PE46549



**ENGINEERING EXPERTS**  
160 SW 12th Avenue, Suite 1106  
Deerfield Beach, FL 33441  
Ph: (954) 354-0660 Fax: (954) 354-0443  
WWW.ENGINEXP.COM  
CERT. OF AUTH. #8989  
A. FRANK L. BENNARDO, P.E., INC. INNOVATION

**RHEEM SALES COMPANY, INC.**  
5600 OLD GREENWOOD RD  
FORT SMITH, AZ 72908 | PH: (770) 351-3000  
GROUND MOUNTED MECH. CABINET AND TIE-DOWNS

DRWN	CHKD	DATE
JAC	TSS	05/14/15

REMARKS: INIT ISSUE

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**15-2543GA**

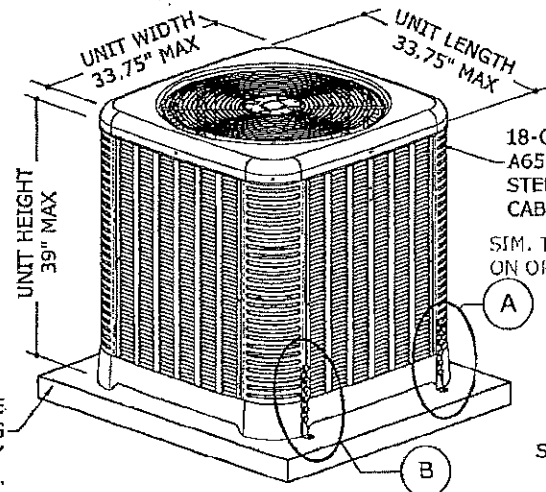
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PAGE DESCRIPTION: 39" TALL UNITS

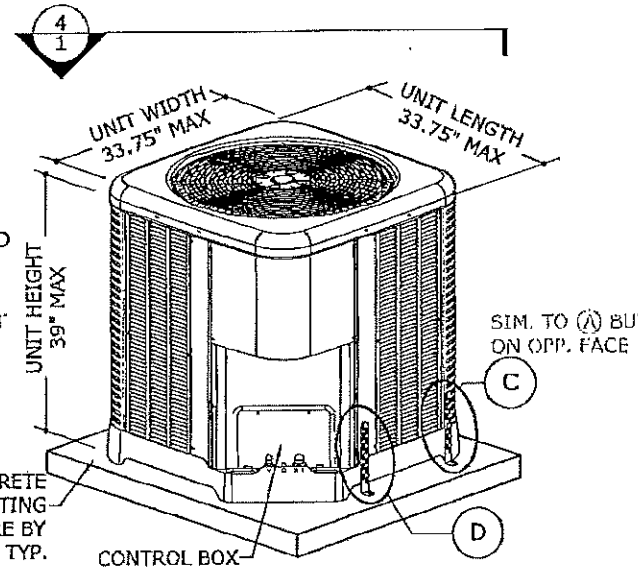
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OF 7

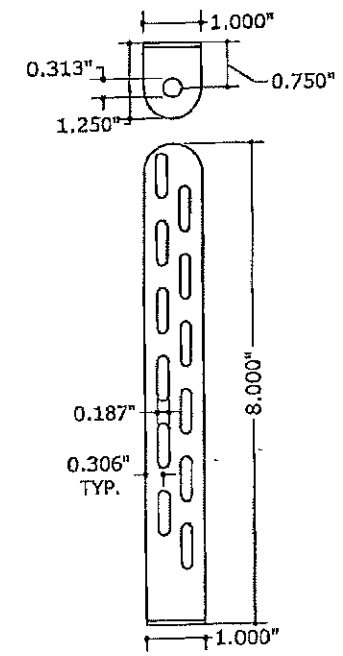
**2**



**1 MECHANICAL UNIT**  
1 N.T.S. FRONT ISOMETRIC



**2 MECHANICAL UNIT**  
1 N.T.S. BACK ISOMETRIC

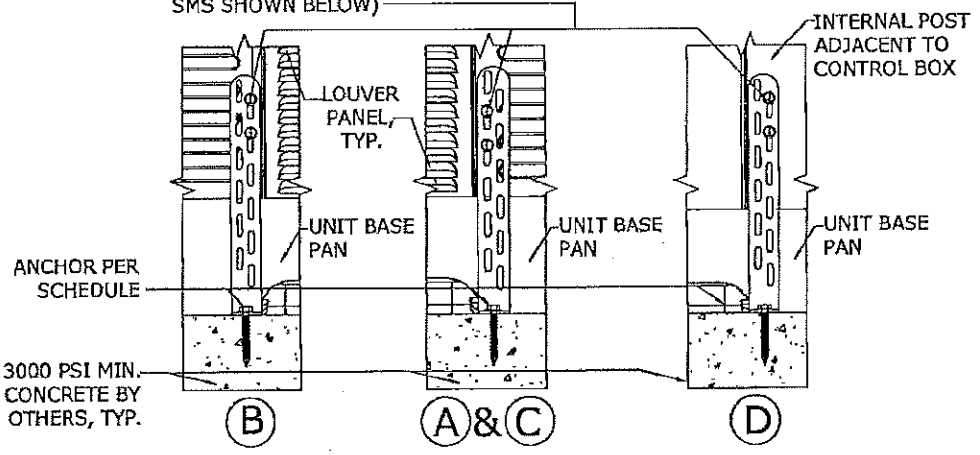


**TIE-DOWN CLIP**

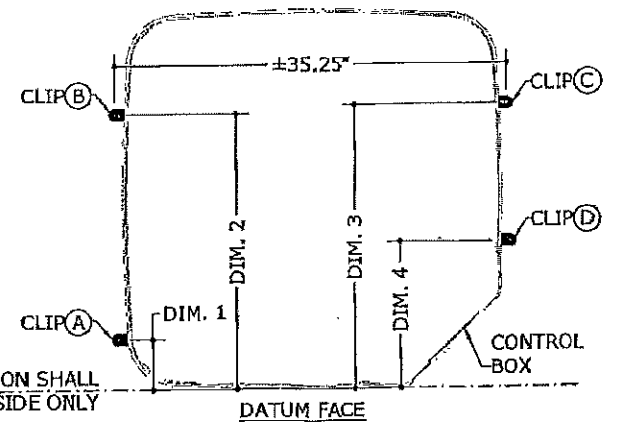
MIAMI TECH CLIP: 14GA (0.07")  
ASTM A653 Fu=90 KSI STEEL (CUTD8) OR 0.080" 5052-H32 ALUMINUM (CUTDA8), MIAMI TECH KIT # RRCUTDSMK OR RRCUTDASMK

(2)-#10 SMS PER CLIP FOR UNITS UP TO 35" TALL. (3)-#10 SMS PER CLIP FOR UNITS UP TO 39" TALL (ONLY (2) SMS SHOWN BELOW)

THESE ISOMETRICS ARE INTENDED FOR DIAGRAMMATICAL PURPOSES ONLY; ALTERNATE RHEEM UNITS LISTED HEREIN MAY VARY IN APPEARANCE



**3 TIE-DOWN CLIPS**  
1 N.T.S. ELEVATION



CLIP OFFSET DIMENSION SHALL BE TAKEN FROM THIS SIDE ONLY

**4 TIE-DOWN CLIP LAYOUT**  
1 N.T.S. PLAN

**ANCHOR SCHEDULE:**

SUBSTRATE	DESCRIPTION
CONCRETE: (4" THICK MIN, 3000 PSI MIN.)	(1)-1/4"Ø ITW BUILDEX TAPCON ATT CARBON STEEL, 1 3/4" FULL EMBED TO CONCRETE, 3" MIN. EDGE DISTANCE, 3" MIN. SPACING TO ANY ADJACENT ANCHOR.

**TIE-DOWN CLIP OFFSETS:**

DIM. 1	4.50" MAX OFFSET FROM DATUM FACE
DIM. 2	28.00" MIN OFFSET FROM DATUM FACE
DIM. 3	29.00" MIN OFFSET FROM DATUM FACE
DIM. 4	13.00" MAX OFFSET FROM DATUM FACE

APPLICABLE MODELS:  
RA1348, RA1436, RA1442B, RA1624, RA1636B, RA1642B, RP1336, RP1348, RP1436, RP1442, RP1448, RP1530, RD1430, RP1536, RD1436, RP1542, RD1442, RA/UA1724, RA/UA2036, RA/UA2024 RP/UP1724, RP/UP1736, RA/UA1736, RP/UP2024

**PRODUCT REVISED**  
as complying with the Florida Building Code  
NOA-No. **16-0712.07**  
Expiration Date **02/25/2021**  
By *[Signature]*  
Miami-Dade Product Control

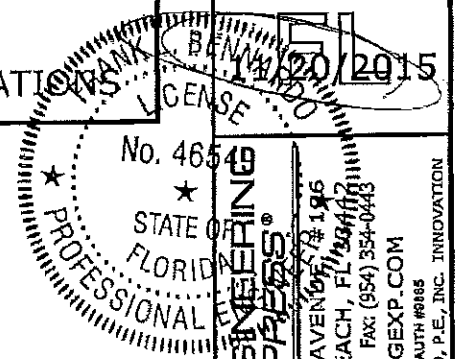
Approved as complying with the Florida Building Code  
Date **02/25/2016**  
NOA# **15-0903.08**  
Miami-Dade Product Control  
By *[Signature]*

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# RHEEM SALES COMPANY, INC.

WIND LOAD CERTIFICATION OF MECHANICAL UNIT CABINETY AND STEEL/ALUMINUM TIE-DOWN CLIPS: AT GRADE MOUNTED APPLICATION

FRANK BENNARDO, P.E.  
#PE46549



**ENGINEERING EXPERTS**  
160 SW 12th Avenue, Suite 195  
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Ph: (954) 354-0660 Fax: (954) 354-0443  
WWW.ENGINEXP.COM  
CERT. OF AUTH. #9885  
A. FRANK L. BENNARDO, P.E., INC. INNOVATION

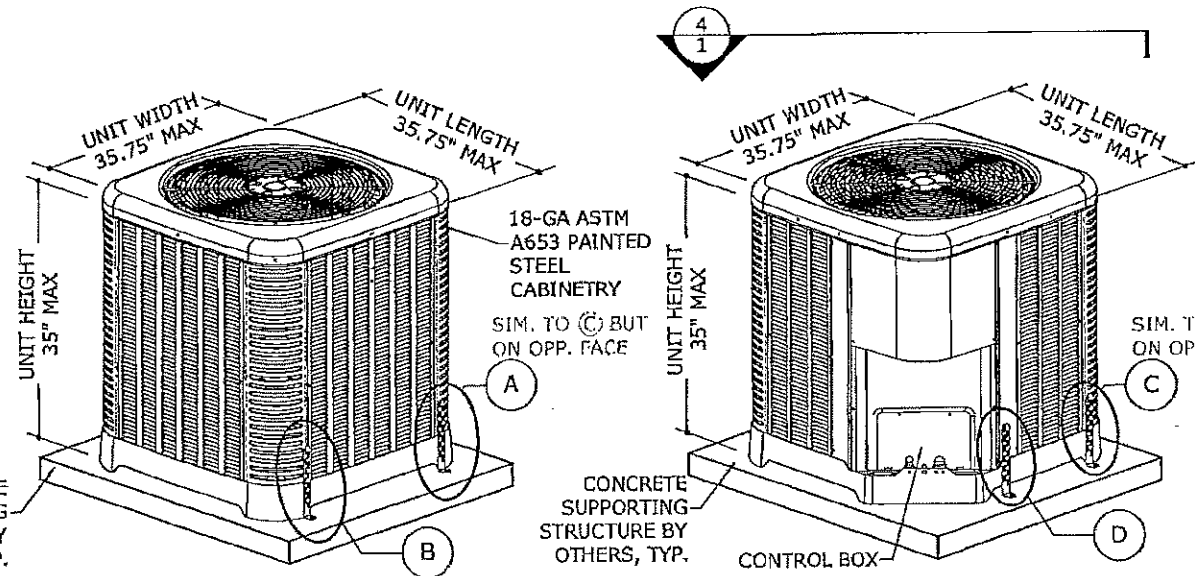
**RHEEM SALES COMPANY, INC.**  
5600 OLD GREENWOOD RD  
FORT SMITH, AZ 72908 | PH: (770) 351-3000  
GROUND MOUNTED MECH. CABINET AND TIE-DOWNS

DRWN	CHKD	DATE
JAC	TSB	05/14/15

REMARKS: INT ISSUE

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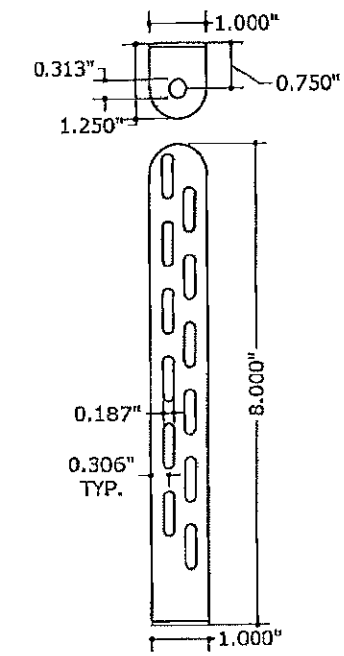
COPYRIGHT FRANK L. BENNARDO P.E.  
**15-2543GA**  
SCALE: N.T.S.  
**PAGE DESCRIPTION:**  
35" TALL UNITS  
35.75" x 35.75" FOOT PRINT  
OF 7  
**3**



**1 MECHANICAL UNIT**  
1 N.T.S. FRONT ISOMETRIC

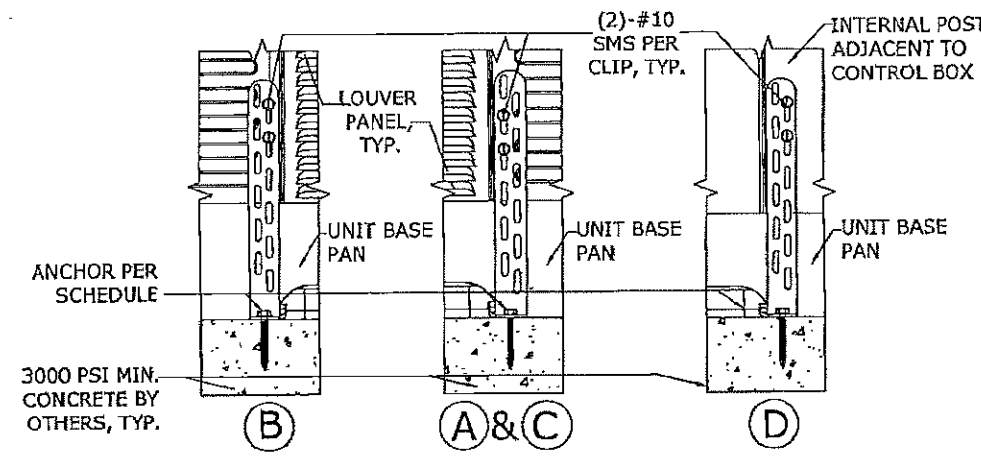
**2 MECHANICAL UNIT**  
1 N.T.S. BACK ISOMETRIC

THESE ISOMETRICS ARE INTENDED FOR DIAGRAMMATICAL PURPOSES ONLY; ALTERNATE RHEEM UNITS LISTED HEREIN MAY VARY IN APPEARANCE

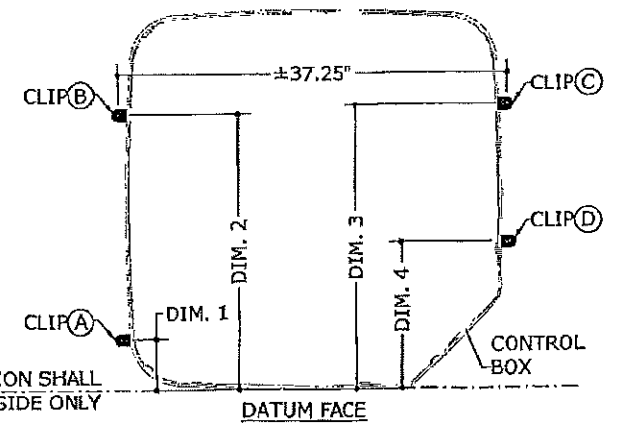


**TIE-DOWN CLIP**

MIAMI TECH CLIP: 14GA (0.07")  
ASTM A653 Fu=90 KSI STEEL (CUTD8) OR 0.080" 5052-H32 ALUMINUM (CUTDA8), MIAMI TECH KIT # RRCUTDSMK OR RRCUTDASMK



**3 TIE-DOWN CLIPS**  
1 N.T.S. ELEVATION



**4 TIE-DOWN CLIP LAYOUT**  
1 N.T.S. PLAN

CLIP OFFSET DIMENSION SHALL BE TAKEN FROM THIS SIDE ONLY

**ANCHOR SCHEDULE:**

SUBSTRATE	DESCRIPTION
CONCRETE: (4" THICK MIN, 3000 PSI MIN.)	(1)-1/4" ITW BUILD EX TAPCON ATT CARBON STEEL, 1 3/4" FULL EMBED TO CONCRETE, 3" MIN. EDGE DISTANCE, 3" MIN. SPACING TO ANY ADJACENT ANCHOR.

**TIE-DOWN CLIP OFFSETS:**

DIM. 1	4.50" MAX OFFSET FROM DATUM FACE
DIM. 2	30.00" MIN OFFSET FROM DATUM FACE
DIM. 3	31.00" MIN OFFSET FROM DATUM FACE
DIM. 4	13.00" MAX OFFSET FROM DATUM FACE

**APPLICABLE MODELS:**

RA1360, RA1442A,  
RA1448, RA1460,  
RA1630, RA1636A,  
RP/UP2036,

**PRODUCT REVISED**  
as complying with the Florida Building Code  
NOA-No. **16-0712.07**

Expiration Date **02/25/2021**

By *[Signature]*  
Miami-Dade Product Control

Approved as complying with the Florida Building Code  
Date **02/25/2016**  
NOA# **15-0902-08**  
Miami-Dade Product Control

By *[Signature]*

V:\Projects\15-2543 Rheem RA-x Cabinetry Family Ground-Mounted Units-Project\WP\Drawing\15-2543\_m - Rheem RA-x Cabinetry Family-Project.dwg

1/20/2015 - 3:54pm

# RHEEM SALES COMPANY, INC.

WIND LOAD CERTIFICATION OF MECHANICAL UNIT CABINETY AND STEEL/ALUMINUM TIE-DOWN CLIPS: AT GRADE MOUNTED APPLICATIONS

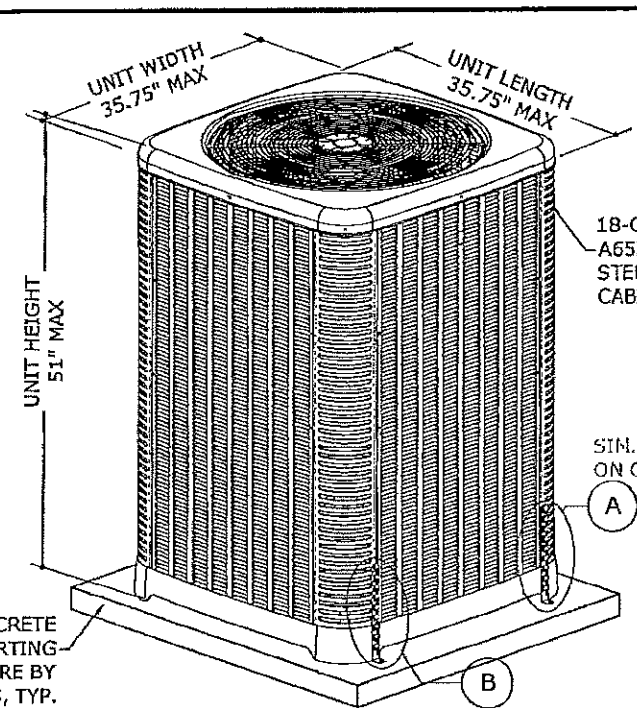
FRANK BERNARDO, P.E.  
PE46549  
No. 46549  
STATE OF FLORIDA  
PROFESSIONAL ENGINEER  
1-12-2015

ENGINEERING EXPRESS  
160 SW 12th AVENUE, SUITE 100  
DEERFIELD BEACH, FL 33441  
Ph: (954) 354-0660 FAX: (954) 354-0443  
WWW.ENGEXP.COM  
CERT OF AUTH #9885  
A FRANK L. BERNARDO, P.E., INC. INNOVATION

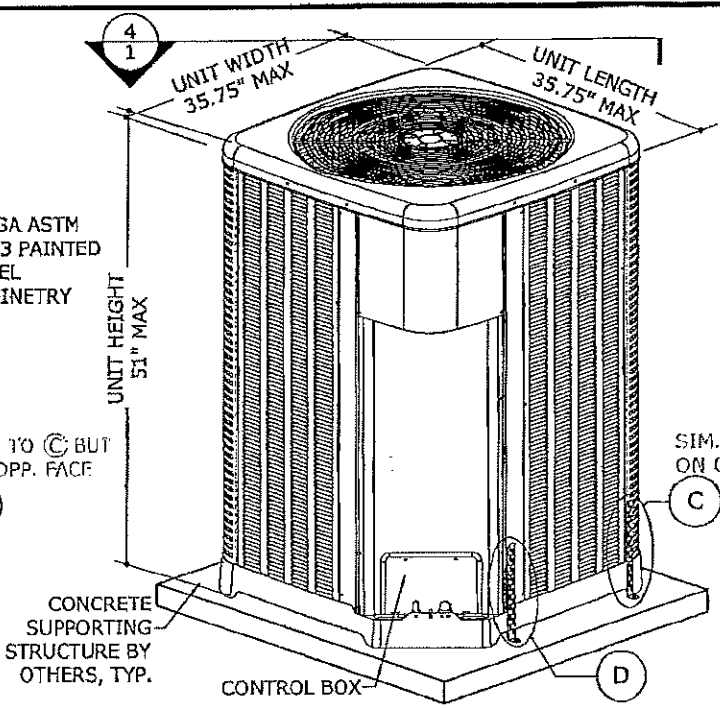
RHEEM SALES COMPANY, INC.  
5600 OLD GREENWOOD RD  
FORT SMITH, AZ 72908 | PH: (770) 351-3000  
GROUND MOUNTED MECH. CABINET AND TIE-DOWNS

REMARKS	INT. ISSUE
DRWN	JAC
CHKD	TSB
DATE	05/14/15

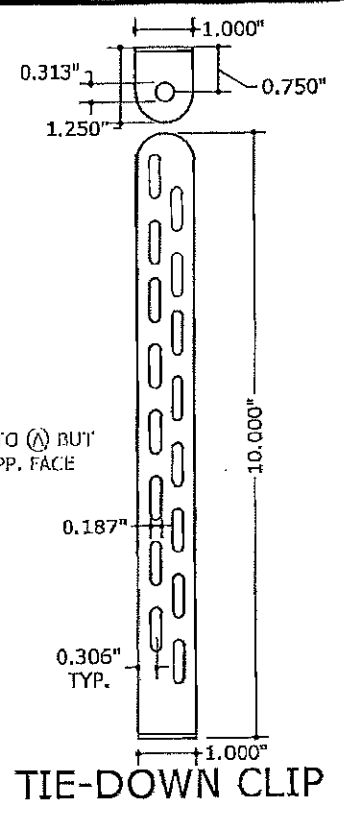
COPYRIGHT FRANK L. BERNARDO P.E.  
15-2543GA  
SCALE: N.T.S.  
PAGE DESCRIPTION:  
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35.75" x 35.75" FOOT PRINT  
4



1 MECHANICAL UNIT  
1 N.T.S. FRONT ISOMETRIC



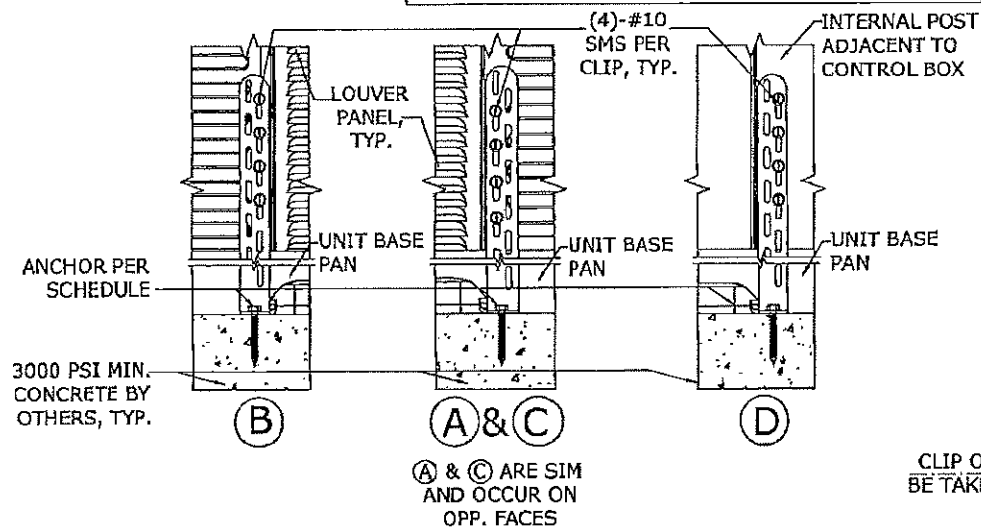
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1 N.T.S. BACK ISOMETRIC



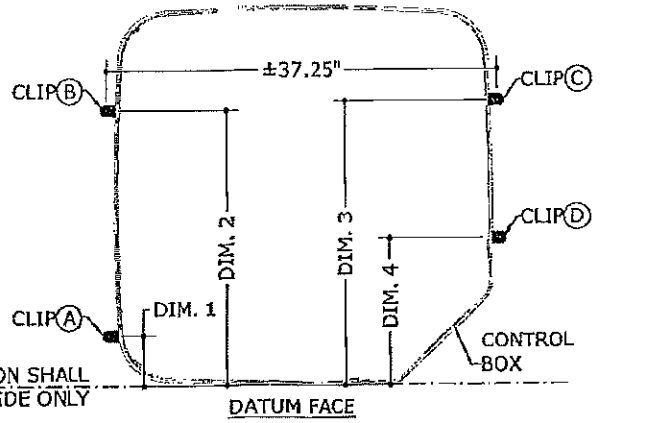
TIE-DOWN CLIP

THESE ISOMETRICS ARE INTENDED FOR DIAGRAMMATICAL PURPOSES ONLY; ALTERNATE RHEEM UNITS LISTED HEREIN MAY VARY IN APPEARANCE

MIAMI TECH CLIP: 14GA (0.07") ASTM A653  
Fu=90 KSI STEEL (CUTD10) OR 0.080"  
5052-H32 ALUMINUM (CUTDA10), MIAMI  
TECH KIT # RRCUTDLK OR RRCUTDALK



3 TIE-DOWN CLIPS  
1 N.T.S. ELEVATION



4 TIE-DOWN CLIP LAYOUT  
1 N.T.S. PLAN

CLIP OFFSET DIMENSION SHALL BE TAKEN FROM THIS SIDE ONLY

ANCHOR SCHEDULE:

SUBSTRATE	DESCRIPTION
CONCRETE: (4" THICK MIN, 3000 PSI MIN.)	(1)-1/4"Ø CARBON STEEL SIMPSON STRONG BOLT 2, 1 3/4" MIN EMBED TO CONCRETE, 3" MIN. EDGE DISTANCE, 3" MIN. SPACING TO ANY ADJACENT ANCHOR. (1)-1/4"Ø CARBON STEEL POWERS WEDGE BOLT+, 2 3/4" EMBED TO CONCRETE, 3" MIN. EDGE DISTANCE, 3" MIN. SPACING TO ANY ADJACENT ANCHOR.

SUPPORTING CONCRETE SUBSTRATE DEPTH SHALL BE A MINIMUM 1.5xANCHOR EMBED. EITHER ANCHOR FROM THIS SCHEDULE MAY BE USED FOR INSTALLATION.

TIE-DOWN CLIP OFFSETS:

DIM. 1	4.50" MAX OFFSET FROM DATUM FACE
DIM. 2	30.00" MIN OFFSET FROM DATUM FACE
DIM. 3	31.00" MIN OFFSET FROM DATUM FACE
DIM. 4	13.00" MAX OFFSET FROM DATUM FACE

APPLICABLE MODELS:  
RA1642A, RA1648, RA1660, RP1360,  
RP1460, RP1548, RD1448, RP1560,  
RD1460, RA/UA1748, RA/UA1760,  
RA/UA2048, RA/UA2060, RP/UP1748,  
RP/UP1760, RP/UP2048, RP/UP2060,

PRODUCT REVISED  
as complying with the Florida  
Building Code  
NOA-No. 16-0712.07  
Expiration Date 02/25/2021  
By *[Signature]*  
Miami-Dade Product Control

Approved as complying with the  
Florida Building Code  
Date 02/25/2016  
NOA# 15-0903.08  
Miami Dade Product Control  
By *[Signature]*

V:\Projects\15-2543 Rheem RA-x Cabinetry Family Ground-Mounted Units-Project\VPDrawings\15-2543\_m - Rheem RA-x Cabinetry Family-Project.dwg 11/20/2015 3:54pm