

# AIR CONDITIONING GENERAL NOTES

PROVIDE ( FURNISH AND INSTALL ) ALL NECESSARY MATERIALS AND LABOR FOR A COMPLETELY OPERATIONAL AIR CONDITIONING, HEATING AND VENTILATING SYSTEM AS SHOWN ON THE DRAWINGS AND HEREIN SPECIFIED INSTALL IN ACCORDANCE WITH THE FLORIDA BUILDING CODE, ASHRAE, SMACNA, NFPA, AND LOCAL ORDINANCES.

PAY FOR ALL FEES, INSPECTIONS AND CONNECTION CHARGES REQUIRED

VERIFY AT JOB SITE ALL SPACE CONDITIONS, DIMENSIONS AND EQUIPMENT SIZES PRIOR TO DUCT FABRICATION OR INSTALLATION. COORDINATE REQUIREMENTS TO AVOID INTERFERENCE WITH OTHER TRADES.

GUARANTEE ALL WORK FREE OF DEFECTS IN MATERIALS AND WORKMANSHIP FOR A PERIOD OF ONE YEAR FROM DATE OF ACCEPTANCE.

## MATERIALS

### DUCTWORK

GENERAL ALL DUCT SIZES SHOWN ARE CLEAR INSIDE DIMENSIONS.

### INSTALLATION

INSTALL ALL EQUIPMENT IN ACCORDANCE TO THE MANUFACTURER'S MANUAL AND RECOMMENDATIONS PAYING SPECIAL ATTENTION TO REQUIRED CLEARANCES FOR INSTALLATION, OPERATION AND SERVICE.

PROVIDE DOUBLE THICKNESS TURNING VANES AT ALL SQUARE ELBOWS, WHERE THE ELBOWS ARE RECTANGULAR. INSTALL SINGLE THICKNESS INSTEAD.

REFRIGERANT PIPING: SEAMLESS COPPER TYPE "L" AND HARD DR. SFT DRAWN ON ACR COPPER TUBING WITH WROUGHT COPPER SOLDER JOINT FITTINGS. SOLDER SHALL BE 95/5 APPLIED WITH SUITABLE FLUX.

INSULATE ALL REFRIGERANT SUCTION PIPING WITH 1/2" CLOSED CELL POLYETHYLENE PREMOULDED PIPE INSULATION, WITH AN APPROVED PIPE AND SMOKE JACKET. PAINT ALL EXPOSED INSULATION WITH TWO COATS OF WHITE LATEX PAINT.

PROVIDE AIR CONDITIONING UNITS WITH MATCHING LOW VOLTAGE HEAT COIL THERMOSTATS WITH ON/OFF AUTO SUB-BASE SWITCH, FURNISHED BY THE EQUIPMENT MANUFACTURER.

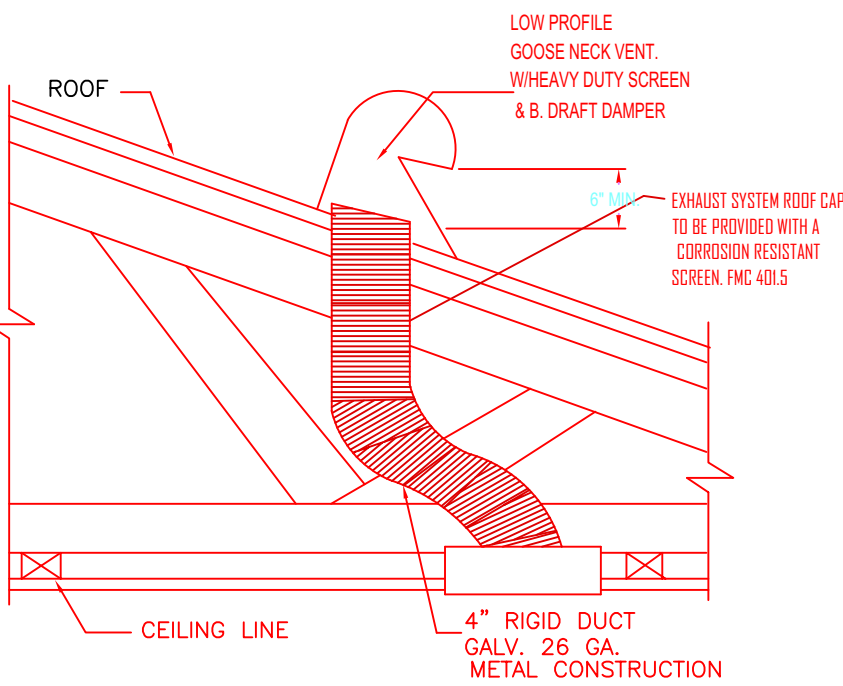
ALL AIR CONDITIONING COMPRESSORS SHALL BE WARRANTED FOR A MINIMUM OF FIVE YEARS AFTER DATE OF ACCEPTANCE OF THE PROJECT.

AIR DISTRIBUTION PRODUCTS :  
PROVIDE SUPPLY AND DIFFUSERS  
AS INDICATED ON THE DRAWINGS.

PROVIDE FINISHES AND TYPES OF MOUNTING WITH THE CEILING TYPES AS SHOWN ON ARCHITECTURAL DRAWINGS.

## EXHAUST FAN SCHEDULE

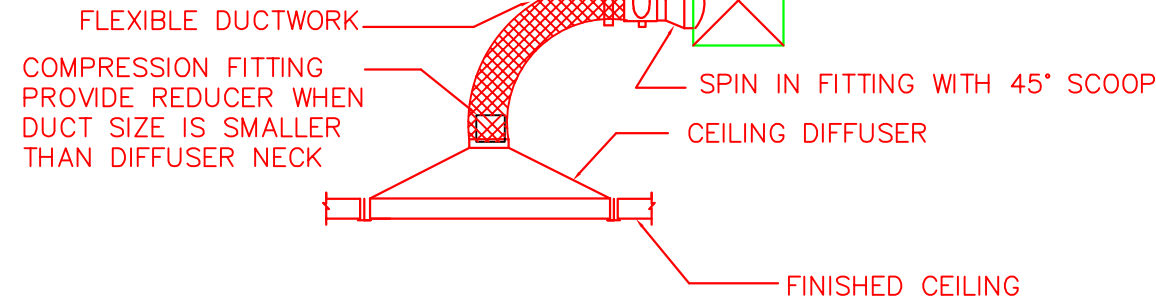
BRAND	NUTONE
MOD:	696 N
RPM:	1600
AMPS :	0.76
ELEC. CHARACTER.	115/Ø1/60
CFM:	50



## EXHAUST DUCT DETAIL @TOILET EXH.

N.T.S.

1" DUCT STRAP SUPPORT EVERY 48" OC AND AT EACH ELBOW ATTACH EACH STRAP WITH 1/4" RED HEAD OR CONC. NAIL WITH 1" SLAB PENETRATION

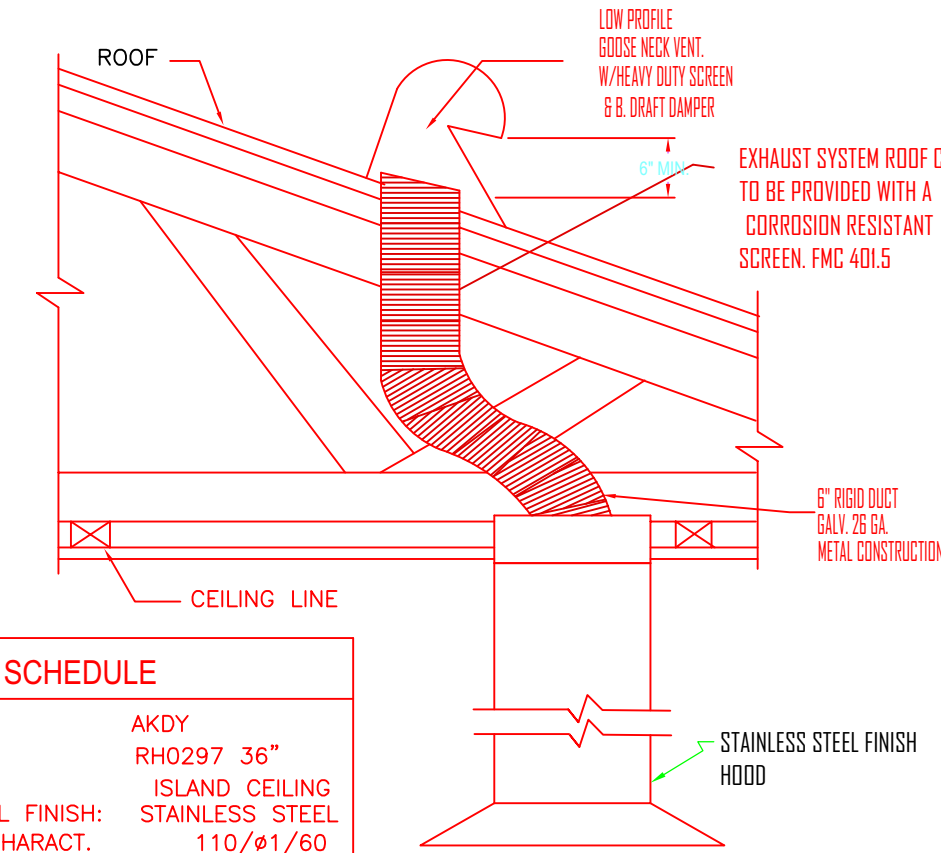


## DIFFUSER BRANCH OFF DETAIL

N.T.S.

## HOOD SCHEDULE

BRAND	AKDY
MOD:	RH0297 36"
MOUNT:	ISLAND CEILING
MATERIAL FINISH:	STAINLESS STEEL
ELEC. CHARACTER.	110/Ø1/60
CFM:	400 CFM



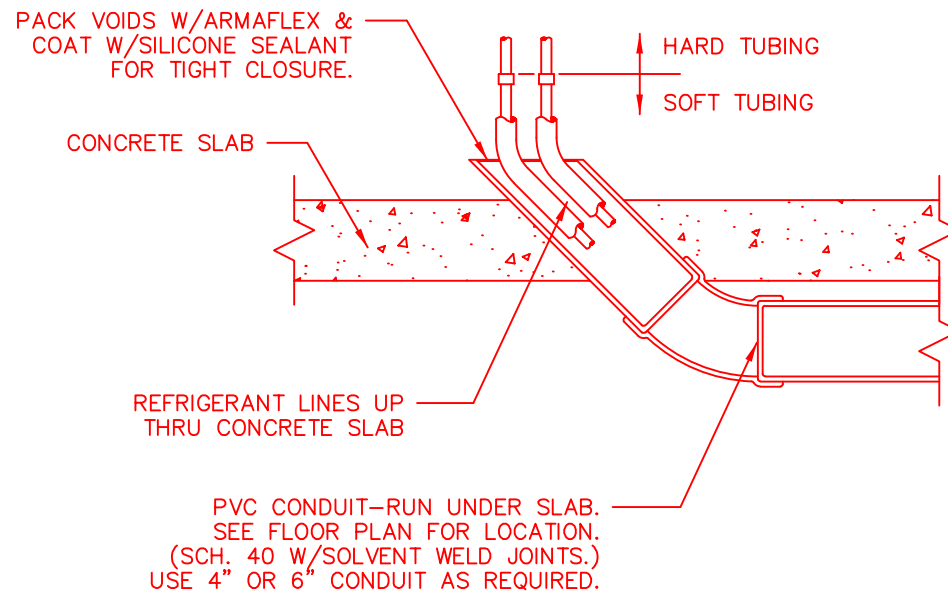
NOTE: PLEASE SEE ATTACHED ISLAND RANGE HOOD SPECIFICATIONS.

## EXHAUST DUCT DETAIL @KITCHEN HOOD

N.T.S.

### NOTES:

1. CONCEALED OR NON REMOVABLE JOINTS SHALL NOT BE INSTALLED BELOW THE SLAB.
2. PVC SCH. 40 SLEEVE SHALL BE 2" LARGER THAN THE PIPE INSULATION ENCASED, HAVING AN ANGLE NO GREATER THAN 45° WITH THE ENCASED REFRIGERANT PIPING REMOVABLE FOR REPLACEMENT.

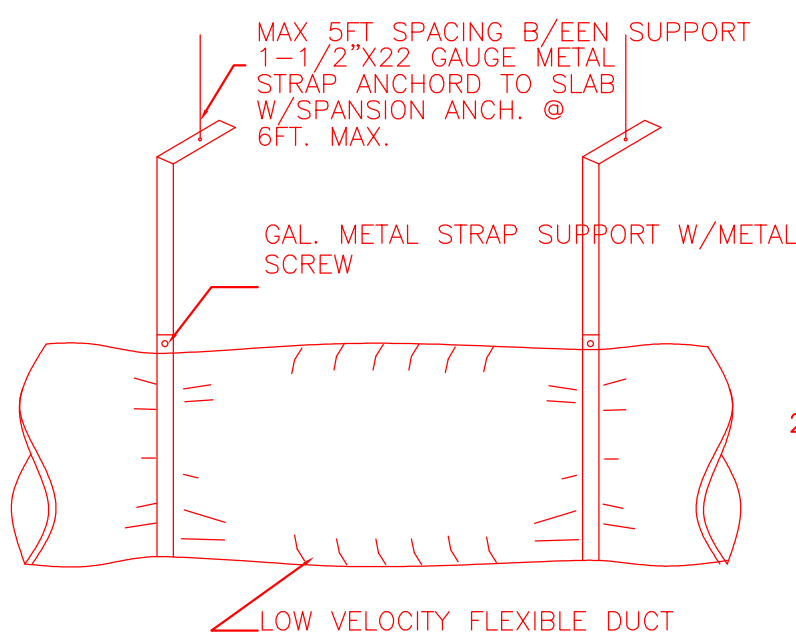


## REFRIGERANT LINE CONDUIT DETAIL

N.T.S.

ALL DRAWINGS MUST COMPLY WITH CODE IN EFFECT: FMC 2020, 7TH EDITION.

HVAC DESIGN REQUIRES:	YES	NO
DUCT SMOKE DETECTOR		✓
FIRE DAMPER(S)		✓
SMOKE DAMPER(S)		✓
FIRE RATED ENCLOSURE		✓
FIRE RATED ROOF/FLOOR		✓
CEILING ASSEMBLY		✓
FIRE STOPPING		✓
SMOKE CONTROL		✓



## DUCT SUPPORT DETAIL

N.T.S.

## HVAC NEW SYSTEM SCHEDULE AHU-1

4 TON  
RHEEM  
OR EQUAL

A/C NUMBER:	#1	VOLTAGE	1-60-240
TOTAL CAPACITY (BTU/HR) :	45,500	MANUFACTURER:	RHEEM or EQUAL
SENS CAPACITY (BTU/HR) :	31,850	AIR HANDLER UNIT MODEL No.	RH3V24821STADN or EQUAL
C.F.M. SUPPLY	1365	COND. MODEL NUMBER:	WA5A248AJ3N or EQUAL
C.F.M. D/AIR	-	SEER2/EER	15.2
HEATING CAPACITY - KBTU/H	24.0		
HEATING CAPACITY - KW	7.0		

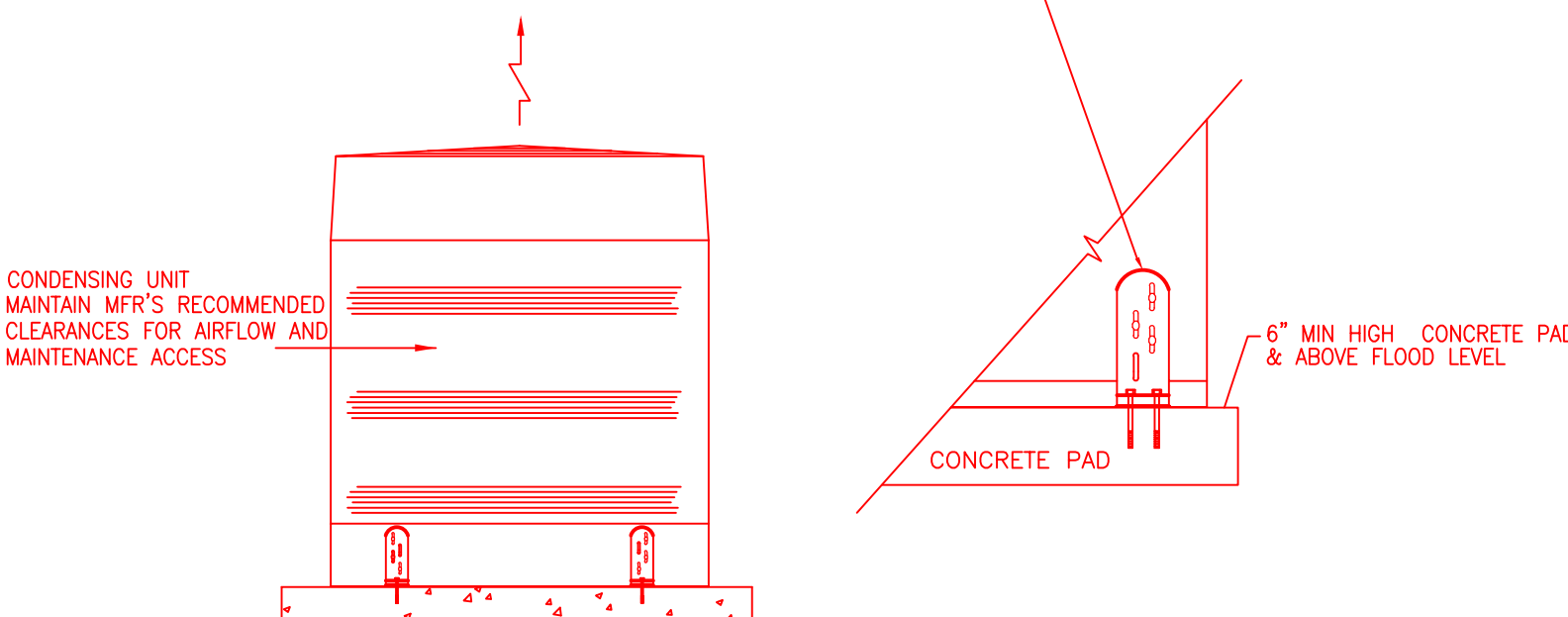
R-19, INSULATION IN ROOF  
AND R-5 IN WALLS  
GARAGE INTERIOR R-11

## HVAC NEW SYSTEM SCHEDULE AHU-2

1.5 TON  
RHEEM  
OR EQUAL

A/C NUMBER:	#2	VOLTAGE	1-60-240
TOTAL CAPACITY (BTU/HR) :	18,000	MANUFACTURER:	RHEEM or EQUAL
SENS CAPACITY (BTU/HR) :	12,600	AIR HANDLER UNIT MODEL No.	RHP21817STANNJ or EQUAL
C.F.M. SUPPLY	540	COND. MODEL NUMBER:	RAHA218AJNA or EQUAL
C.F.M. D/AIR	-	SEER2/EER	15.2
HEATING CAPACITY - KBTU/H	17.0		
HEATING CAPACITY - KW	5.0		

(P.L.S. REF. N.O.A.-N.O.A. 20-1102.09) C.U. SHALL BE ATTACHED TO THE CONC. SLAB WITH (4) GALV. STEEL CLIP 1" WIDE X 1-1/2" TO COMPLY W/ FBC M-301.15, FBC 1620 AND THE INTERPRETATION FROM THE BOARD OF RULES AND APPEALS DATED DECEMBER 13, 2018 BORA INTERPRETATION - WIND RESISTANCE OF MECHANICAL EQUIPMENT.

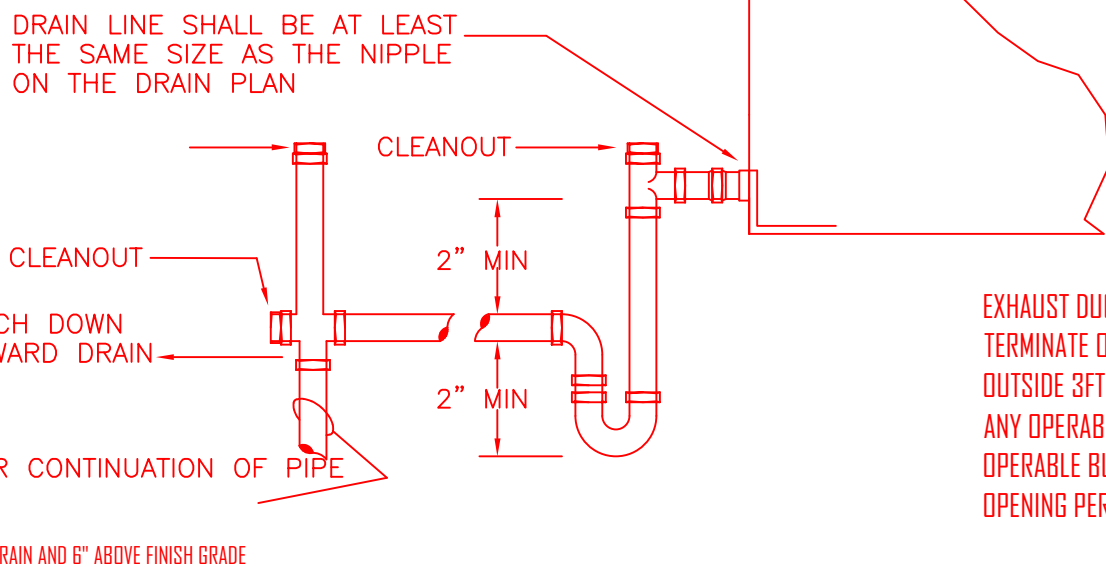


## CONDENSING UNIT INSTALLATION DETAIL

N.T.S.

### NOTES:

- REFRIGERANT CIRCUIT ACCESS PORTS LOCATED OUTDOORS SHALL BE FITTED WITH LOCKING-TYPE TAMPER RESISTANT CAPS OR SHALL BE OTHERWISE SECURED TO PREVENT UNAUTHORIZED ACCESS. TO COMPLIANCE WITH THE FBC, R SECTION M1411.6.
- ALL EXPOSED REFRIGERANT PIPING INSULATION TO BE JACKETED OR PAINTED WITH AV PROTECTIVE PAINT. NOTE ON CONDENSING UNIT MOUNTING DETAIL.

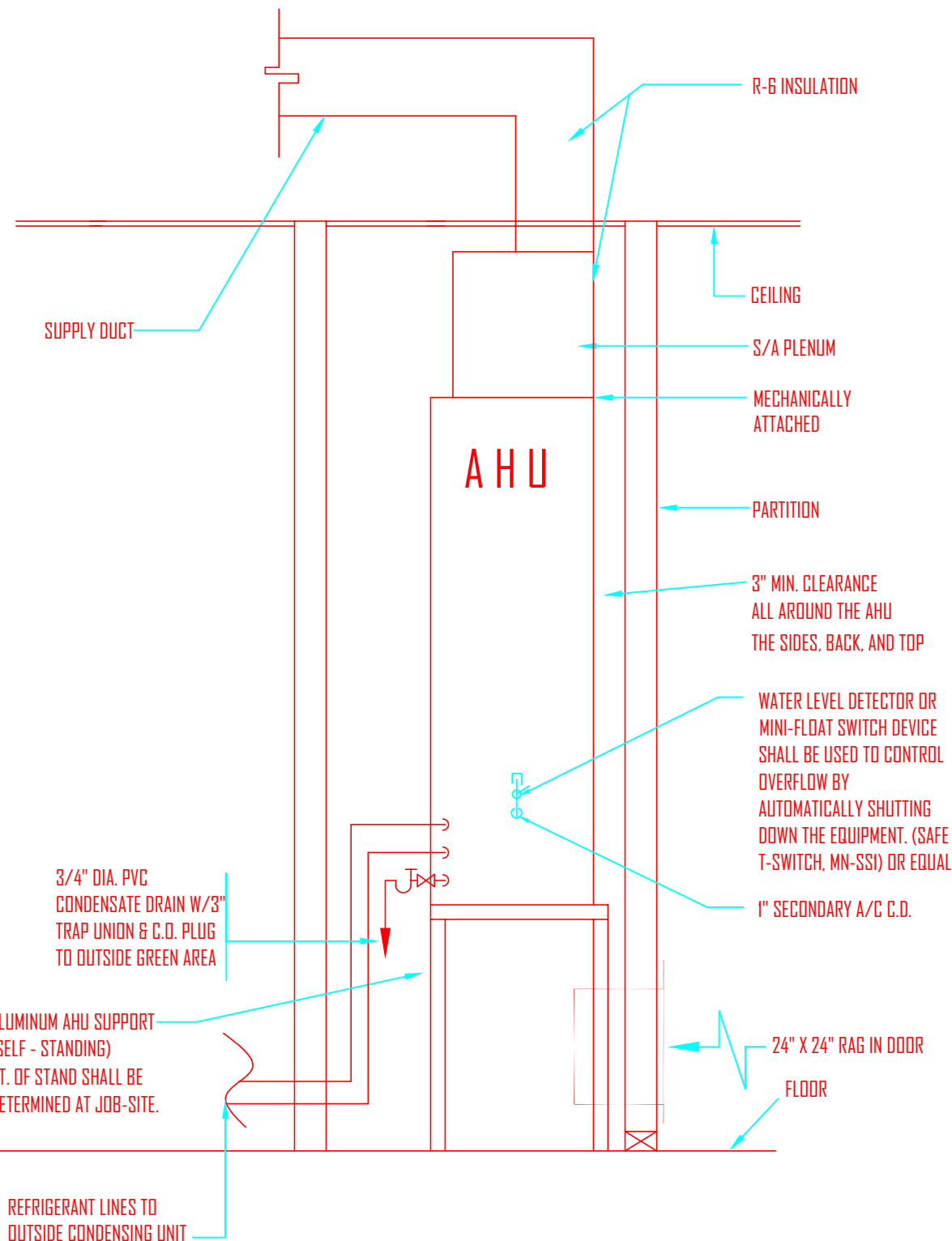


## TYPICAL CONDENSATE DRAIN TRAP DETAIL

SCALE: N.T.S.

EXHAUST DUCTS SHALL TERMINATE ON THE OUTSIDE 3FT AWAY FROM ANY OPERABLE & NON OPERABLE BUILDING OPENING PER FBC R506.2

BALANCING DAMPERS OR OTHER MEANS OF SUPPLY AIR ADJUSTMENT SHALL BE PROVIDED IN BRANCH DUCTS OR AT EACH INDIVIDUAL DUCT REGISTER, GRILLE OR DIFFUSER. FBC-R M601.4.13



## AHU DIAGRAMMATIC CLOSET DETAIL

N.T.S.



REVISIONS	BY
1 05/12/2023	BLDG.

CESAR CASTILLO, PE

Consulting Engineer - FL Reg # 68447  
4908 SW 72nd Ave, Ste. A, Miami, FL 33155  
Phone: (954) 803-8968 - ccastillo@paramecanec.com

2 STORY RESIDENCE  
REMODELING  
680 NE 50TH TERRACE,  
MIAMI, FL 33137

ROBERT LASALLE  
680 NE 50TH TERRACE,  
MIAMI, FL 33137

PROFESSIONAL SEAL:

Digitally signed by Cesar Castillo, PE  
DN: cn=US, ou=Cesar Castillo, PE, email=cesarcastillo@paramecanec.com, c=US  
Date: 2023.08.14 14:38:16 -0400

LAST DATE REV.:  
05-12-2023

MECHANICAL  
PLAN

SHEET: 24 OF 26

M-2