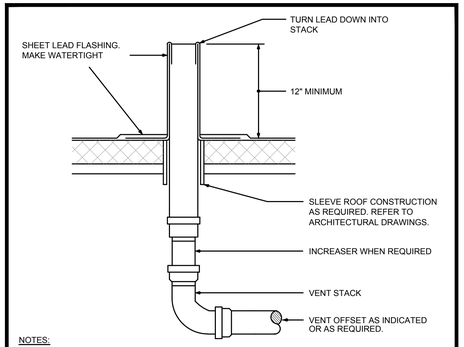
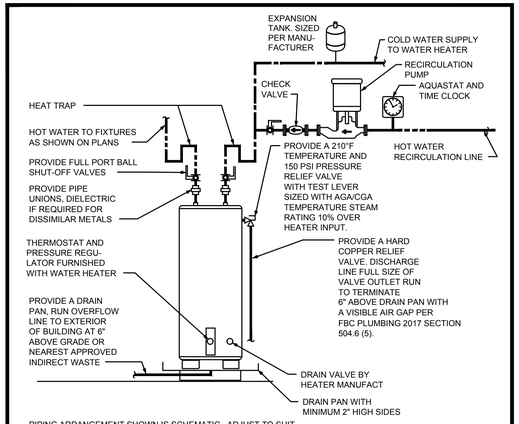
THE ARCHITECT HEREBY EXPRESSLY RESERVES THE COPYRIGHT AND PROPERTY RIGHTS IN THESE PLANS. DRAWINGS ARE NOT TO BE REPRODUCED, CHANGED, OR COPIED IN ANY FORM OR MANNER WHATSOEVER WITHOUT FIRST OBTAINING WRITTEN PERMISSION AND CONSENT. NOR ARE THEY TO BE ASSIGNED TO ANY PARTY WITHOUT FIRST OBTAINING SAID WRITTEN PERMISSION AND CONSENT.



NOTES:
1) SIZE OF OPENING IN ROOF DECK TO BE AS SMALL AS POSSIBLE. COORDINATE WITH STRUCTURAL DWGS.
2) FOR ROOF CONSTRUCTION TYPE REFER TO ARCHITECTURAL DWGS.
3) VENT STACK THRU ROOF SHALL BE LOCATED AT A MINIMUM OF 2'-0" AWAY FROM VERTICAL STRUCTURES OR PARAPETS. CONTRACTOR SHALL COORDINATE WITH OTHER TRADES PRIOR TO CONSTRUCTION.
4) VENT STACK THRU ROOF SHALL BE LOCATED AT A MINIMUM OF 10'-0" AWAY FROM ANY OUTSIDE AIR OPENINGS PER FBC-PLBG, SECTION 903.5. CONTRACTOR SHALL COORDINATE WITH OTHER TRADES PRIOR TO CONSTRUCTION.

VENT THROUGH ROOF
NOT TO SCALE



PIPING ARRANGEMENT SHOWN IS SCHEMATIC. ADJUST TO SUIT FIELD CONDITIONS. REFER TO ISOMETRIC RISER FOR PIPE SIZES. SET HEATER THERMOSTAT AT 110° F.

WATER HEATER DETAIL

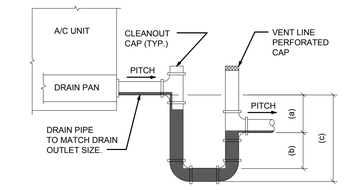
PLUMBING FIXTURE SCHEDULE

LAV	LAVATORY. SELECTED BY OWNER. PROVIDED AND INSTALLED BY CONTRACTOR
WC	WATER CLOSET. SELECTED BY OWNER. PROVIDED AND INSTALLED BY CONTRACTOR
SH	SHOWER. SELECTED BY OWNER. PROVIDED AND INSTALLED BY CONTRACTOR
TUB	TUB. SELECTED BY OWNER. PROVIDED AND INSTALLED BY CONTRACTOR
SK#	SINK. SELECTED BY OWNER. PROVIDED AND INSTALLED BY CONTRACTOR
OB1	WASHING MACHINE OUTLET BOX, GUY GRAY MODEL #B200 WITH LEAD-FREE QUARTER-TURN VALVES, INTEGRAL WATER-HAMMER ARRESTORS, AND 2" DRAIN CONNECTION.
WCO	WALL CLEANOUT, MIFAB C1430-RD WITH BRONZE PLUG, STAINLESS STEEL COVER, AND SCREW.
A.A.V.	OATEY MODEL #39010 SUREVENT AAV WALL BOX AND METAL GRILLE FACEPLATE
EWH1	ELECTRIC WATER HEATER, BRADFORD WHITE MODEL #RE2H50T10, 50 GAL. 240V/1PH/4.5kW. SET UNIT ON A STAND AND PROVIDE WITH RECIRCULATION PUMP - BELL & GOSSETT MODEL #PL-30B AND THERMAL EXPANSION TANK - AMTROL MODEL #ST-12.
WCO	WALL CLEANOUT, MIFAB C1430-RD WITH BRONZE PLUG, STAINLESS STEEL COVER, AND SCREW.

GENERAL NOTES:
(1) - FIXTURES SHALL BE AS SHOWN OR EQUAL.
(2) - ALL FIXTURES SHALL COMPLY WITH TABLE 604.4 OF FBC 2014.
(3) - ALL FIXTURE TRIM PACKAGES INCLUDING BUT NOT LIMITED TO TRAP, ANGLE STOP, FLUSH VALVE, SUPPLY TUBES, AND CLEANOUT COVER PLATES SHALL BE OF THE SAME FINISH AS THE ABOVE SPECIFIED FAUCET AND PER ARCHITECTURAL FINISH SCHEDULE.
(4) - ALL FIXTURES SHALL BE ROUGHED IN PER MANUFACTURER CUT SHEET TO MAINTAIN UNIFORMITY.

PLUMBING LEGEND

CO	CLEAN OUT
S.O.V.	SHUT-OFF VALVE
COTC	CLEAN OUT TO GRADE
FD	FLOOR DRAIN
CW	DOMESTIC COLD WATER
HW	DOMESTIC HOT WATER
HWR	DOMESTIC HOT WATER RECIRCULATING
HB	HOSE BIBB
VTR	VENT THRU ROOF
	GATE VALVE
	GLOBE VALVE
	CHECK VALVE
#	WATER HAMMER ARRESTER (PDI No.)
FD	FLOOR DRAIN
	SANITARY SEWER PIPING
	VENT PIPING
	DOMESTIC COLD WATER PIPING
	HOT WATER PIPING (110°)
CD	CONDENSATE PIPING
T&P	TEMPERATURE AND PRESSURE RELIEF
	PIPE RISE UP
	PIPE DOWN OR DROP
	CAPPED END OF PIPE
	POINT OF CONNECTION
	P-TRAP



NOTES:
1. ALLOW SUFFICIENT SPACE BELOW DRAIN PAN FOR TRAP
2. PITCH DRAIN FOR PROPER RUNOFF.
3. MANUALLY PRIME FILL TRAP BEFORE START-UP TO FORM INITIAL DRAIN SEAL.
4. SUPPORT LENGTHY DRAIN LINES TO PREVENT SAG AND CONDENSATE OVERFLOW.

THIS STANDARD DETAIL MUST BE REVIEWED AND SITE ADAPTED BY CONTRACTOR PRIOR TO USE FOR FINAL EQUIPMENT.

(a) THIS DIMENSION IN INCHES MUST BE EQUAL TO THE MAXIMUM FAN SUCTION (NEGATIVE) STATIC PRESSURE IN INCHES WG (WITH DIRTY FILTERS, COILS, AND MAXIMUM AIR FLOW) + 1" W.G.

(b) THIS DIMENSION IN INCHES MUST BE EQUAL TO MIN. 1/2 OF THE (a) ABOVE

(c) EQUALS (a) + (b) + PIPE DIA. + + INSULATION

DRAW THRU UNIT CONDENSATE TRAP
NOT TO SCALE

PLUMBING SHEET INDEX

SHEET#	DESCRIPTION
P1	PLUMBING NOTES, LEGENDS, AND DETAILS
P2	EXISTING PLUMBING PLAN
P3	SANITARY PLAN
P4	DOMESTIC WATER PLAN
P5	SANITARY ISOMETRICS AND CALCULATIONS

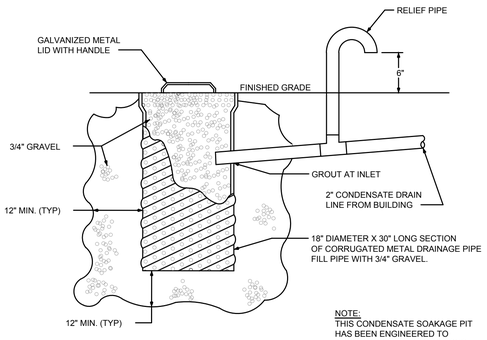
PLUMBING NOTES

1. THE CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY FOR THE INSTALLATION OF A COMPLETE SCOPE OF WORK. ALL WORKMANSHIP AND MATERIALS SHALL BE IN STRICT ACCORDANCE WITH THE FLORIDA BUILDING CODE 7th EDITION (2020) - PLUMBING, APPLICABLE LOCAL CODES, RULES, AND ORDINANCES.
2. THE PLUMBING CONTRACTOR SHALL VISIT THE JOB SITE AND BECOME THOROUGHLY FAMILIAR WITH ALL EXISTING CONDITIONS.
3. ALL MATERIALS SHALL BE NEW AND OF GOOD QUALITY.
4. ALL WORK SHALL BE PERFORMED BY A LICENSED PLUMBING CONTRACTOR IN A FIRST CLASS WORKMANLIKE MANNER. THE COMPLETED SYSTEM SHALL BE FULLY-OPERATIONAL. ALL EXCAVATION AND BACKFILL AS REQUIRED FOR THIS PHASE OF CONSTRUCTION SHALL BE A PART OF THIS CONTRACT.
5. REQUIRED INSURANCE SHALL BE PROVIDED BY THE PLUMBING CONTRACTOR FOR PROTECTION AGAINST PUBLIC LIABILITY AND PROPERTY DAMAGE FOR THE DURATION OF THE WORK.
6. PLUMBING CONTRACTOR SHALL SECURE AND PAY FOR ALL PERMITS, FEES, INSPECTIONS AND TESTS. PLUMBING CONTRACTOR SHALL OBTAIN PERMIT AND APPROVED SUBMITTALS PRIOR TO BEGINNING WORK OR ORDERING EQUIPMENT. PLUMBING CONTRACTOR MUST BE PRESENT FOR ALL INSPECTIONS OF HIS WORK BY REGULATORY AUTHORITIES.
7. CONTRACTOR SHALL SUBMIT TO ARCHITECT/ENGINEER, FOR REVIEW & APPROVAL, FIVE (5) SETS OF MANUFACTURER'S CUT SHEETS FOR EACH FIXTURE, PIPING/FITTING MATERIAL AND EQUIPMENT ITEM WITH ASSOCIATED CONTROLS, THAT ARE INCLUDED IN THE CONTRACT.
8. DRAWINGS ARE DIAGRAMMATIC. DO NOT SCALE FOR THE EXACT LOCATION OF FIXTURES, PIPING, EQUIPMENT, ETC.
9. ALL WORK SHALL BE COORDINATED WITH OTHER TRADES TO AVOID INTERFERENCE WITH THE PROGRESS OF CONSTRUCTION. REPORT ANY DISCREPANCY TO ARCHITECT/ENGINEER PRIOR TO BEGINNING CONSTRUCTION.
10. VERIFY LOCATION, SIZE, DIRECTION OF FLOW AND INVERT ELEVATIONS OF ALL EXISTING UTILITIES PRIOR TO BEGINNING OF CONSTRUCTION. ADVISE ARCHITECT/ENGINEER OF ANY DISCREPANCIES.
11. WATER DISTRIBUTION PIPING ABOVE AND BELOW GROUND SHALL BE TYPE "L" COPPER. ALTERNATE PIPING & FITTING MATERIALS MAY BE USED IN ACCORDANCE WITH FLORIDA BUILDING CODE 7th EDITION (2020) - PLUMBING, TABLES 605.3, 605.4 & 605.5, WHEN APPROVED BY ENGINEER OF RECORD AND LOCAL AUTHORITY HAVING JURISDICTION. PROVIDE ALTERNATE FOR CPVC PIPING & FITTINGS EQUAL TO LUBRIZOL CORZAN OR FLOW-GUARD GOLD. PROVIDE ALTERNATE FOR PEX TYPE 'A' PIPING & FITTINGS EQUAL TO UPONOR. ALTERNATES ARE PERTINENT FOR WATER SERVICES KNOWN OR DETERMINED TO HAVE ACIDIC CHARACTERISTICS OR OTHER PARTICULAR CIRCUMSTANCES AS DEEMED APPROPRIATE BY DIRECTIVE FROM THE OWNER. CONTRACTOR SHALL PERFORM A WATER TEST TO DETERMINE WATER CHEMISTRY PRIOR TO ANY WORK OR PIPING INSTALLATION AND SHALL SUBMIT TEST RESULTS TO THE ARCHITECT/ENGINEER FOR REVIEW AND APPROVAL. DISINFECTION OF POTABLE WATER SYSTEM SHALL COMPLY WITH FLORIDA BUILDING CODE 7th EDITION (2020) - PLUMBING, SECTION 610. ALL WATER PIPING & FITTINGS SHALL BE OF DOMESTIC MANUFACTURE; SPECIFICALLY IN THE UNITED STATES OF AMERICA.
12. SOIL, WASTE, VENT, AND RAINWATER (DWV) PIPING & FITTINGS SHALL BE CAST IRON OR PVC, WHERE CODE ALLOWS. PVC SHALL NOT BE USED IN PLENUMS. PVC PIPING SHALL BE SOLID-CORE ONLY; FOAM-CORE PIPING SHALL NOT BE ACCEPTED. CAST IRON PIPING & FITTINGS SHALL BEAR THE CISPI-301 MARK. ALL DWV PIPING & FITTINGS SHALL BE OF DOMESTIC MANUFACTURE; SPECIFICALLY IN THE UNITED STATES OF AMERICA. ALL HORIZONTAL SANITARY PIPING RUN ABOVE FINISHED FLOOR THAT RECEIVES COLD DRAINAGE FROM REFRIGERATION EQUIPMENT SHALL BE INSULATED WITH ARMAFLEX AND A VAPOR-BARRIER JACKET.
13. NATURAL & PROPANE FUEL GAS PIPING SHALL BE THE FOLLOWING: UNDERGROUND - PE PIPE COMPLYING WITH ASTM D2683 OR ASTM D3261 AND ASTM D2513, SDR 11 TRANSITION FITTINGS. ABOVEGROUND - SCHEDULE 40 BLACK STEEL COMPLYING WITH ASTM A53 AND THREADED, WELDED, OR FLANGED FITTINGS. CORRUGATED STAINLESS STEEL TUBING COMPLYING WITH ANSI/IIAS LC1 SHALL BE ALLOWED ONLY WITHIN INTERIOR ACCESSIBLE SPACES.
14. **COMPRESSED AIR PIPING SHALL BE ASTM B241 EXTRUDED ALUMINUM ALLOY COMPLIANT WITH ASME B31.1 OR GALVANIZED BLACK STEEL IN ACCORDANCE WITH DIN EN 10255. ALUMINUM PIPING AND MECHANICAL GROOVED–JOINT FITTINGS SHALL BE AIRNET, TRANSAIR, OR APPROVED EQUAL. STEEL PIPING AND MECHANICAL GROOVED–JOINT FITTINGS SHALL BE VIEGA MEGAPRESS OR APPROVED EQUAL.**
15. ALL FIXTURES MUST BE PROVIDED WITH READILY ACCESSIBLE ANGLE STOPS AND APPROPRIATELY MARKED ACCESS PANELS (WHERE REQUIRED). COORDINATE LOCATIONS WITH GENERAL CONTRACTOR PRIOR TO INSTALLATION.
16. PROVIDE APPROVED WATER HAMMER ARRESTORS FOR ALL (GROUP) PLUMBING FIXTURES, SIZED & LOCATED PER MANUFACTURER'S INSTALLATION INSTRUCTIONS & PDI-WH201.
17. PROVIDE DIELECTRIC COUPLINGS OR FLANGES BETWEEN ALL DISSIMILAR METALS IN PIPING AND EQUIPMENT CONNECTIONS.
18. ISOLATE COPPER PIPING FROM METALLIC HANGERS OR SUPPORTS WITH ISOLATOR PADS OR NON-CONDUCTIVE MATERIAL.
19. ALL FIRE RATED FLOOR AND WALL PENETRATIONS SHALL BE PROPERLY PROTECTED FROM FIRE, SMOKE AND WATER PENETRATION BY FILLING ANNULAR SPACE BETWEEN PIPING AND SLEEVES WITH INTUMESCENT CAULK, TO ACHIEVE THE SAME RATING AS WALLS OR FLOORS, AS PART OF THE PLUMBING CONTRACTOR'S WORK.
20. PLUMBING CONTRACTOR SHALL GUARANTEE ALL MATERIALS AND WORKMANSHIP FREE FROM DEFECTS FOR A PERIOD OF NOT LESS THAN ONE (1) YEAR FROM DATE OF ACCEPTANCE BY OWNER. CORRECTION OF ANY DEFECTS SHALL BE COMPLETED WITHOUT ADDITIONAL CHARGE AND SHALL INCLUDE REPLACEMENT OR REPAIR OF ANY OTHER PHASE OF THE INSTALLATION WHICH MAY HAVE BEEN DAMAGED.
21. PROVIDE ACCESS PANELS FOR ALL CONCEALED VALVES. ACCESS PANELS IN RATED WALLS SHALL MAINTAIN THE SAME RATING AND SHALL MATCH THE FINISH OF THE WALL IN WHICH IT IS INSTALLED.
22. PROVIDE COMBINATION CLEANOUT PLUG AND COVER PLATE OR ACCESS PANEL FOR ALL WALL CLEANOUTS. FINISH TO MATCH NEARBY FIXTURE TRIM.
23. NO COMBUSTIBLE MATERIAL SHALL BE INSTALLED IN MECHANICAL ROOMS NOR IN CEILING SPACES WHERE USED AS RETURN AIR PLENUMS.
24. NO WATER, SANITARY OR DRAINAGE PIPING SHALL BE INSTALLED IN ELECTRICAL OR ELEVATOR EQUIPMENT ROOMS.
25. ALL CONTROL VALVES SHALL BE TAGGED AND MARKED. A REPRODUCIBLE DIAGRAM LOCATING ALL VALVES SHALL BE FURNISHED FOR OWNER/OPERATOR.
26. CONDENSATE DRAIN PIPING SHALL BE TYPE "L" COPPER WITH ARMAFLEX INSULATION AND A VAPOR-BARRIER JACKET PER FLORIDA BUILDING CODE 7th EDITION (2020) - ENERGY CONSERVATION, TABLE C403.2.8. PVC WITHOUT INSULATION IS ACCEPTABLE FOR RISERS AND BELOW GRADE PIPING. WHEN USED IN A RETURN AIR PLENUM, CPVC PIPING WITH INSULATION IS ACCEPTABLE IN LOCATIONS WHERE ALLOWED BY LOCAL CODES. CONDENSATE PIPING SHALL NOT DRAIN ONTO THE ROOFING SYSTEM NOR ANY OF ITS COMPONENTS. CONDENSATE PIPING ARRANGEMENT IS EXEMPT FROM MINIMUM EQUIPMENT CLEARANCE REQUIREMENTS PER FLORIDA BUILDING CODE 7th EDITION (2020), SECTION 1522.3.5. ALL HORIZONTAL RAINWATER PIPING RUN ABOVE FINISHED FLOOR THAT RECEIVES CONDENSATE DISCHARGE SHALL BE INSULATED WITH ARMAFLEX AND A VAPOR-BARRIER JACKET.
27. HOT WATER PIPING INSULATION SHALL BE PROVIDED IN ACCORDANCE WITH FLORIDA BUILDING CODE 7th EDITION (2020) - PLUMBING, SECTION 607.5 & FLORIDA BUILDING CODE 7th EDITION (2020) - ENERGY CONSERVATION, TABLE C403.2.10. CONTRACTOR SHALL USE ARMAFLEX OR EQUAL WHERE APPLICABLE. WHERE DOMESTIC WATER TEMPERATURES CAN CAUSE SWEATING, ALL COLD WATER PIPING SHALL BE INSULATED WITH ARMAFLEX INSULATION AND A VAPOR-BARRIER JACKET, PER FLORIDA BUILDING CODE 7th EDITION (2020) - ENERGY CONSERVATION, TABLE C403.2.10.
28. AIR ADMITTANCE VALVES MAY BE USED AS AN ALTERNATE TO VENT PIPING THRU ROOF WHERE ACCEPTED BY THE LOCAL AUTHORITY HAVING JURISDICTION. INSTALLATION METHODS SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND REQUIREMENTS.

TYPICAL PLUMBING FIXTURE CONNECTION SCHEDULE

TYPE	SOIL / WASTE	VENT	TRAP	CW	HW	REMARKS
2" HUB DRAIN	2"	2"	2"	–	–	PROVIDE ½" CW TRAP PRIMER CONNECTION.
3" HUB DRAIN	3"	2"	3"	–	–	PROVIDE ½" CW TRAP PRIMER CONNECTION.
COFFEE MAKER/WATER FILTER	–	–	–	½"	–	PROVIDE WITH VACUUM BREAKER.
DISHWASHER (RESIDENTIAL TYPE)	1"	–	–	–	½"	CONNECT WASTE TO KITCHEN SINK TAILPIECE. PROVIDE WITH VACUUM BREAKER.
ELECTRIC WATER COOLER	2"	2"	1¼"	½"	–	–
OUTLET BOX	–	–	–	½"	–	PROVIDE w/ INTEGRAL WATER HAMMER ARRESTOR.
WASHING MACHINE OUTLET BOX	3"	2"	2"	½"	½"	PROVIDE w/ INTEGRAL WATER HAMMER ARRESTORS.
SINK	2"	2"	1½"	½"	½"	1.0 GPM AT 60 PSI MAXIMUM.
MOP SINK	3"	2"	3"	½"	½"	PROVIDE HOSE THREAD FAUCET WITH INTEGRAL VACUUM BREAKER
LAVATORY (PUBLIC)	2"	2"	1¼"	½"	½"	0.5 GPM AT 60 PSI MAXIMUM. (0.25 GALLON METERING CYCLE)
REFRIGERATOR	–	–	–	½"	–	PROVIDE WITH VACUUM BREAKER.
WATER CLOSET (FLUSH VALVE)	3" OR 4"	2"	INTEGRAL	1"	–	1.28 GALLONS PER FLUSHING CYCLE MAXIMUM.
WATER CLOSET (FLUSH TANK)	3" OR 4"	2"	INTEGRAL	½"	–	1.28 GALLONS PER FLUSHING CYCLE MAXIMUM.
URINAL	2"	2"	INTEGRAL	¾"	–	0.128 GALLONS PER FLUSHING CYCLE MAXIMUM.

NOTE: PLUMBING FIXTURE CONNECTION SCHEDULE IS SHOWN FOR CONVENIENCE ONLY. PLUMBING CONTRACTOR TO CONFIRM FINAL PLUMBING FIXTURE CONNECTION SIZES WITH PLUMBING FIXTURE MANUFACTURER'S REQUIREMENTS. ALL FIXTURES SHALL COMPLY WITH REQUIREMENTS OF LOCAL WATER–USE EFFICIENCY ORDINANCES.



NOTE:
THIS CONDENSATE SOAKAGE PIT HAS BEEN ENGINEERED TO ACCOMMODATE UP TO 12 TONS OF HVAC EQUIPMENT

CONDENSATE DRYWELL DETAIL (SMALL)
NOT TO SCALE

SHOCK ARRESTOR SCHEDULE

P.D.I. DESIGNATION	MANUF. & MODEL	FIXTURE UNITS	CONNECTION
A	SIOUX CHIEF 652-A	1-11	1/2"
B	SIOUX CHIEF 653-B	12-32	3/4"
C	SIOUX CHIEF 654-C	33-60	1"

SIOUX CHIEF SHOCK ARRESTORS APPROVED FOR INSTALLATION WITH NO ACCESS DOOR REQUIRED. CONFORMS TO ANSI/ASSE 1010 STANDARDS.

SLOPE OF HORIZ. DRAINAGE PIPE

SIZE (inches)	MINIMUM SLOPE (inch per foot)
2-1/2 or less	1/4
3 to 6	1/8
8 or larger	1/16

TABLE 704.1 OF THE FLORIDA PLUMBING CODE 2017

CONDENSATE DRAIN PIPE SIZING

EQUIPMENT CAPABILITY	MINIMUM CONDENSATE PIPE DIAMETER (inch)
UP TO 20 TONS OF REFRIGERATION	1"
OVER 21 TONS TO 40 TONS OF REFRIGERATION	1-1/4"
OVER 41 TONS TO 60 TONS OF REFRIGERATION	1-1/2"
OVER 61 TONS TO 100 TONS OF REFRIGERATION	2"
OVER 101 TONS TO 250 TONS OF REFRIGERATION	3"
OVER 251 TONS & LARGER OF REFRIGERATION	4"

TABLE 307.2.2 OF THE 2017 FLORIDA BUILDING CODE-MECHANICAL

ARKO ARCHITECTURE, LLC
2980 McFARLANE RD. SUITE 200
COCONUT GROVE, FL 33133
edgardo@thearkogroup.com
eduardo@thearkogroup.com
c: 954.647.1447
c: 305.951.6181

ADDITION & RESTORATION FOR:
MAZZINI & MELINE RESIDENCE
10300 SW 70TH AVE,
MIAMI, FL 33156

Digitally signed by Edgardo J Betancourt Santiago
Date: 2024.05.22 16:30:52-04'00'

STATE OF FLORIDA · EDGARDO J BETANCOURT SANTIAGO · AR99726 · REGISTERED ARCHITECT

DRAWN BY
DATE 04.03.23 | CHECKED BY -- | PROJECT 22-84

REVISIONS

PLUMBING NOTES

CONSTRUCTION DOCUMENTS

P1