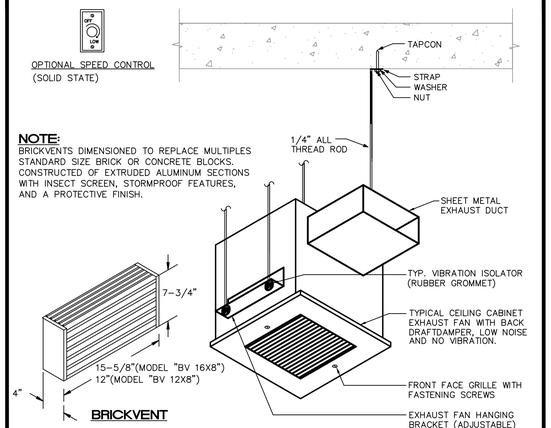
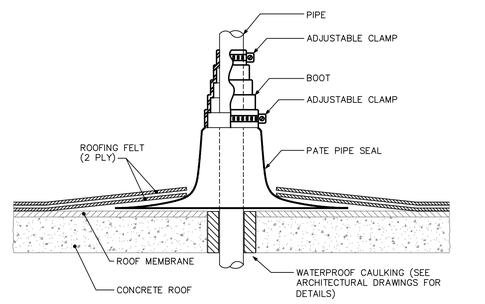
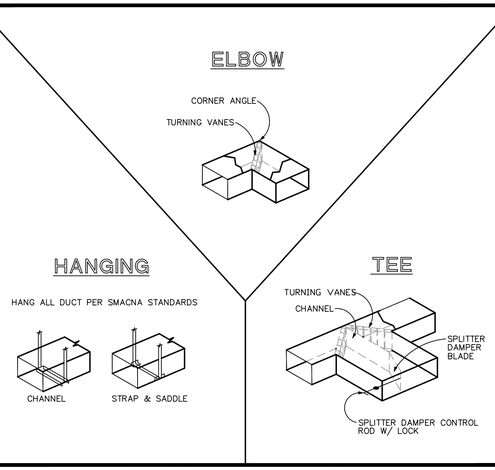


NOTE:
BRICKVENTS DIMENSIONED TO REPLACE MULTIPLES STANDARD SIZE BRICK OR CONCRETE BLOCKS. CONSTRUCTED OF EXTRUDED ALUMINUM SECTIONS WITH INSECT SCREEN, STORMPROOF FEATURES, AND A PROTECTIVE FINISH.

CABINET FAN DETAIL
NOT TO SCALE



PIPE THRU ROOF DETAIL
NOT TO SCALE



HVAC DUCT DETAILS
NOT TO SCALE

MECHANICAL NOTES

1. THE CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY FOR THE INSTALLATION OF A COMPLETE SYSTEM IN ACCORDANCE WITH THESE DRAWINGS, THE FLORIDA BUILDING CODE 2017 AND ALL OTHER APPLICABLE STATE, COUNTY AND LOCAL ORDINANCES AND THE LISTED EDITION OF THE FOLLOWING PUBLICATIONS; SMACNA/ANSI–2005, SMACNA–10, 85; ASHRAE 15–2013; 34–2013 62.1–2013; NFPA 70–2014, 72–2013, 90A–2015, 90B–2015, 91–2010, 96–2014, 101–2015; NEBB–2005; NAIMA–2009; NFRC–100–2010, 200–2010, 400–2010; ANSI Z10.1–98, Z10.3–98, Z21.8–2002, Z21.83–98.
2. THE CONTRACTOR SHALL PAY ALL COSTS OF PERMIT, INSPECTIONS AND ALL OTHER COSTS INCIDENTAL TO THE COMPLETION AND TESTING OF THIS WORK.
3. THE CONTRACTOR SHALL VISIT THE SITE AND COORDINATE WORK WITH OTHER TRADES.
4. THE CONTRACTOR SHALL SUPPLY THE ARCHITECT/ENGINEER WITH "AS–BUILT" DRAWINGS.
5. CONTRACTOR SHALL SUBMIT, FOR APPROVAL FIVE [5] COPIES OF A COMPLETE SET OF SHOP DWGS, MANUFACTURER'S SUBMITTALS FOR EACH PIECE OF EQUIPMENT & CONTROLS INCLUDED IN CONTRACT.
6. ALL MATERIAL SHALL BE NEW OF U.S. MANUFACTURER OF GOOD QUALITY.
   ALL WORK SHALL BE PERFORMED AT INDUSTRY STANDARD QUALITY LEVEL BY CERTIFIED PROFESSIONALS.
   ALL EQUIPMENT SHALL BE UL OR ETL LISTED.
   ALL INSTALLATIONS SHALL COMPLY WITH FMC 2017, CH. 3, GENERAL REGULATIONS.

   FOR BUILDINGS LOCATED WITHIN 3,000 FT FROM THE OCEAN, CONTRACTOR SHALL UTILIZE NON–FERROUS MATERIALS OR PROVIDE CORROSION COATING FOR ALL OUTDOOR EXPOSED METAL/STEEL EQUIPMENT, SUPPORTS, STANDS, FASTENERS, ETC. BY 3RD PARTY AS APPLIED BY BLYGOLD, LUVATA, ADVANCOAT (ENSEAL CR) OR APPROVED EQUAL WITH STANDARD 5–YEAR WARRANTY.
7. DUCTWORK:
   DUCTWORK CONSTRUCTION, INSTALLATION AND MINIMUM INSULATION R–VALUES SHALL COMPLY WITH FEC 2017, SEC. C403.2.7 AND TABLE C403.2.7.1, S.M.A.C.N.A. MANUAL FOR MEANS AND METHODS AND MANUFACTURER'S INSTRUCTIONS.
   DUCT SIZING IS COMPLIANT WITH FBC SEC. 603.2 BASED ON ASHRAE "EQUAL FRICTION" METHOD, UNLESS SPECIFICALLY NOTICED OTHERWISE ON PLANS.

   A. ALL AIR CONDITIONING DUCT WORK SHALL BE OF 1" (R–4.2) STANDARD DUTY FOIL REINFORCED FIBERGLASS WITH MANUFACTURER'S LOGO PRINTED ON VAPOR BARRIER ALL FLEXIBLE DUCT TO BE R–4.2 WITH A MAX. TOTAL LENGTH NOT TO EXCEED 15 FT. INSTALL UL LISTED FOR PLENUM, FLEXIBLE DUCTWORK ELBOW SUPPORTS AT EACH DIFFUSER, GRILLE, AND REGISTER EQUAL TO "FLEXRIGHT" BY TITUS OR "FLEXFLOW ELBOW" AS MANUFACTURED BY "THERMAFLEX".

   AA. ALL AIR CONDITIONING DUCT WORK SHALL BE OF 1" (R–4.2) SPECIAL DUTY FSK FOIL REINFORCED FIBERGLASS WITH MANUFACTURER'S LOGO PRINTED ON VAPOR BARRIER, WITH A HIGH–TENSILE, RESISTANT MAT COATING, EQUAL TO "SUPERDUCT" BY MANVILLE OR "TOUGHGARD" BY CERTAINTEED, AND ANTI–MICROBIAL PROPERTIES. FLEXIBLE DUCT TO BE R–4.2 WITH A MAX. TOTAL LENGTH NOT TO EXCEED 15 FT. INSTALL UL LISTED FOR PLENUM, FLEXIBLE DUCTWORK ELBOW SUPPORTS AT EACH DIFFUSER, GRILLE, AND REGISTER EQUAL TO "FLEXFLOW ELBOW" AS MANUFACTURED BY "THERMAFLEX".

   AAA. ALL AIR CONDITIONING DUCT WORK ENCLOSED IN A CHASE SHALL BE SHEETMETAL GALVANIZED WITH EXTERNAL BLANKET INSULATION R–6 MIN. PROVIDE INNER LINER FOR THE FIRST 10 FEET OF THE MAIN TRUNKS CONNECTING TO THE UNIT AND INCLUDING THE FIRST ELBOW OR AS INDICATED ON THE PLANS.

   B. ALL AIR CONDITIONING DUCT WORK SHALL BE OF 1–1/2" (R–6) HEAVY DUTY FOIL REINFORCED FIBERGLASS WITH MANUFACTURER'S LOGO PRINTED ON VAPOR BARRIER ALL FLEXIBLE DUCT TO BE R–6 WITH A MAX. TOTAL LENGTH NOT TO EXCEED 15 FT. INSTALL UL LISTED FOR PLENUM, FLEXIBLE DUCTWORK ELBOW SUPPORTS AT EACH DIFFUSER, GRILLE, AND REGISTER EQUAL TO "FLEXFLOW ELBOW" AS MANUFACTURED BY "THERMAFLEX".

   SPECIAL NOTE:
   SMACNA DUCT PRESSURE CLASSES BASED ON OPERATING PRESSURE ARE; 1/2", 1", 2", 3", 4", 6", AND 10". EACH DUCT SYSTEM SHALL BE CONSTRUCTED FOR THE SPECIFIC DUCT PRESSURE CLASS SHOWN ON PLANS. WHERE NO PRESSURE CLASS IS SPECIFIED FOR CONSTANT VOLUME SYSTEMS, 1" W.G. PRESSURE CLASS IS THE BASIS OF COMPLIANCE WITH THE SMACNA STANDARDS REGARDLESS OF VELOCITY. WHERE NO PRESSURE CLASS IS SPECIFIED FOR VARIABLE VOLUME SYSTEMS, 2" W.G. PRESSURE CLASS IS THE BASIS OF COMPLIANCE WITH THE SMACNA STANDARDS FOR DUCTWORK UPSTREAM OF VAV BOXES. ALL DUCTWORK SHALL BE SEALED TO SMACNA "HVAC DUCT CONSTRUCTION STANDARDS" FOR ITS PRESSURE CLASS SEALING METHODS.
8. ALL EXHAUST DUCTS AND OUTSIDE AIR DUCTS SHALL BE GALVANIZED SHEET METAL WITH SEALED SEAMS AND JOINTS. ALL OUTSIDE AIR DUCT SHALL BE INSULATED WITH EXTERNAL BLANKET INSULATION R–6 MIN. ALL METAL EXHAUST, MAKE–UP OR OTHERWISE DUCTS INSTALLED IN LOCATIONS WHERE DEWPOINT CONDITIONS CAN OCCUR INSIDE THE DUCT SHALL BE EXTERNALLY INSULATED WITH R–6 MIN. AIR INTAKE AND EXHAUST OPENINGS SHALL BE SCREENED WITH A CORROSION RESISTANT MATERIAL PER FMC 2017, TABLE 401.5. AND 501.3.2. LOUVERS THAT PROTECT EXHAUST OPENINGS IN STRUCTURES LOCATED IN HURRICANE–PRONE REGIONS, AS DEFINED IN THE FLORIDA BUILDING CODE (BUILDING) SHALL COMPLY WITH AMCA STANDARD 550. OUTDOOR OPENINGS LOCATED IN EXTERIOR WALLS SHALL MEET THE PROVISIONS FOR EXTERIOR WALL OPENING PROTECTIVES IN ACCORDANCE WITH THE FLORIDA BUILDING CODE (BUILDING).
9. O/A INTAKES SHALL NOT BE TAKEN FROM A LOCATION CLOSER THAN 10 FT FROM ANY CHIMNEY, VENT OUTLET OR SANITARY SEWER VENT OUTLET PER FMC 2017, SEC. 401.4. OUTSIDE AIR INTAKE VENTS LOCATED ON ROOFS WILL BE PROPERLY MARKED WITH A UNIVERSAL MARKING "INTAKE", PERMANENTLY ATTACHED.
10. DUCT SIZES SHOWN ON PLANS ARE INSIDE DIMENSIONS.
11. ALL AIR DEVICES (DIFFUSERS, REGISTERS AND GRILLES) SHALL BE ALL ALUMINUM CONSTRUCTION WITH EXPOSED SURFACE OFF WHITE BAKED ENAMEL FINISH OR AS SPECIFIED BY ARCHITECT. DEVICES SHALL BE AS SPECIFIED OR EQUAL TO TITUS, PRICE OR METALAIRE. PROVIDE OPPOSED BLADE DAMPERS AT ALL DIFFUSERS AND REGISTERS AS INDICATED ON PLANS. PROVIDE BALANCING DAMPERS FOR ALL SUPPLY AND RETURN DIFFUSERS AND REGISTERS AND TO ENSURE COMPLIANCE WITH FMC 2017 PAR.601.5 FOR BALANCED RETURN/TRANSFER AIR FLOW.
12. BUILDING/TEMPERATURE CONTROLS: CONTRACTOR SHALL PROVIDE A FULLY INTEGRATED BUILDING CONTROL SYSTEM. WHERE APPLICABLE, PROVIDE BAS/EMS INTERFACE FOR ALL HVAC EQUIPMENT, AS REQUIRED BY THE EXISTING CONTROLS OR DESIGN DOCUMENTS. IN ADDITION AND AS APPLICABLE:

    A. FOR NEW, STANDALONE UNITS: THERMOSTAT SHALL BE COMBINATION COOLING/HEATING, WITH SYSTEM "COOL–AUTO– HEAT–OFF" AND FAN "ON–AUTO" SELECTOR SWITCHES. PROVIDE PROGRAMMABLE TYPE AS RECOMMENDED BY MANUFACTURER, HONEYWELL OR EQUAL. PROVIDE SOFTWARE LOCK AND/OR TAMPER PROOF COVERS AS COORDINATED WITH OWNER/END CLIENT.

    B. POWER PROVISIONS: SHALL BE FURNISHED AND INSTALLED BY ELEC. CONTRACTOR UNLESS OTHERWISE NOTED, CONTROL WIRING BY MECH/CONTROL CONTRACTOR.
       a. 24V TRANSFORMER SHALL BE PROVIDED BY MANUFACTURER FOR ALL UNITS/EQUIPMENT THAT REQUIRE CONTROL POWER FOR UNITARY CONTROLLERS, IF NOT OTHERWISE NOTED.
       b. 120V POWER AS REQUIRED BY SYSTEM CONTROLLERS SHALL BE PROVIDED/COORDINATED BY ELEC. CONTRACTOR WITH MECH. AND CONTROLS CONTRACTORS.
13. THERMOSTAT LOCATION SHALL BE APPROVED BY OWNER AND ENGINEER BEFORE INSTALLATION. INSTALL THERMOSTAT PER A.D.A REQUIREMENTS WHERE APPLICABLE; MAX. 48" HIGH FOR FORWARD REACH, MAX. 48" HIGH FOR SIDE REACH. MECHANICAL CONTRACTOR SHALL COORDINATE WITH ELECTRICAL CONTRACTOR ALL REQUIREMENTS FOR JUNCTION BOXES, CONDUITS, CONTROL WIRING, POWER, ETC. AND DEFINE RESPONSIBILITIES AND SCOPE OF WORK FOR EACH TRADE PRIOR TO PURCHASING/INSTALLATION.

    SPECIAL NOTE:
    WHENEVER THERE ARE MORE THAN ONE SENSOR OR THERMOSTAT, SIDE BY SIDE, THEY SHALL BE GANGED TOGETHER WITHIN THE SAME COVER PLATE WHEREVER POSSIBLE. CONTRACTOR SHALL COORDINATE THIS ISSUE WITH ARCHITECT/OWNER PRIOR TO INSTALLATION AND SHALL BRING ANY DISCREPANCY TO THE ENGINEER'S ATTENTION.
14. REFRIGERANT LINES SHALL BE COPPER, TYPE "L" HARD DRAWN WITH WROUGHT COPPER BRAZING–JOINT TYPE FITTINGS, USE BRAZING MATERIALS FOR HIGH PRESSURE PIPING PER AWS A5.8: BCuP SERIES COPPER–PHOSPHORUS ALLOY OR BAg1 SILVER ALLOY. REFRIGERANT LINES SHALL BE SIZED PER MANUFACTURER'S RECOMMENDATIONS. SOFT COPPER TYPE "M" SHALL BE ALLOWED FOR RISER PIPING INSIDE CHASE TO LIMIT NUMBER OF JOINTS. COORDINATE WITH ENGINEER FOR PRIOR APPROVAL. ALL EXPOSED INSULATION SHALL BE PROTECTED WITH A PROTECTIVE, PUNCTURE AND TEAR RESISTANT JACKETING SYSTEM EQUAL TO "VENTURE CLAD" AND COMPLY WITH FMC 2014, SEC.1101.3 PROTECTION.
15. "ARMAFLEX" OR EQUAL INSULATION SHALL BE USED FOR SUCTION REFRIGERANT LINES WITH THICKNESS PER FLORIDA ENERGY CODE TABLE C403.2.8. FILTER/DRYER AND SIGHT GLASS SHALL BE PROVIDED AT LIQUID LINES.
16. ALL BRANCH TAKE–OFFS TO BE PROVIDED W/ MANUAL VOLUME DAMPERS. PROVIDE RADIUS ELBOWS WHERE FEASIBLE, SQUARE ELBOWS AND TEE'S SHALL BE FURNISHED W/SINGLE FOIL TURNING VANES. PROVIDE MANUAL VOLUME DAMPERS WITH EXTRACTOR AT ALL FLEX TAKE–OFFS. PROVIDE REMOTE, CABLE OPERATED VOLUME DAMPERS IN INACCESIBLE AND HARD CEILING AREAS, "YOUNG REGULATOR" OR EQUAL.
17. PROVIDE NEW FILTERS FOR ALL AIR CONDITIONING EQUIPMENT BEFORE START–UP, REPLACE PRIOR TO FINAL ACCEPTANCE BY OWNER.
18. PROVIDE SMOKE DETECTORS WITH SERVICE ACCESS DOORS IN ALL AIR DISTRIBUTION SYSTEMS WITH A DESIGN CAPACITY GREATER THAN 2,000 CFM COMPLIANT WITH FMC 2017, SEC 606.2. FOR SMOKE DETECTORS NOT VISIBLE, IN CONCEALED SPACES, PROVIDE REMOTE ANNUNCIATION/TEST STATION AS REQUIRED BY AUTHORITY HAVING JURISDICTION, COORDINATE PRIOR TO INSTALLATION. DETECTORS SHALL BE BY ONE MANUFACTURER, COORDINATE VOLTAGE ETC. WITH ELECTRICAL CONTRACTOR AND FIRE ALARM SYSTEM BEFORE ORDERING. UPON DETECTION, SMOKE DETECTORS SHUT DOWN ASSOCIATED AIR MOVING EQUIPMENT AND ALL AIR MOVING EQUIPMENT SERVING THAT COMMON PLENUM.

    SPECIAL NOTE:
    ALL INSTALLED ELECTRICAL DEVICES, ACTUATORS, APPURTENANCES, AUXILIARY EQUIPMENT, ETC. REQUIRING ENVIRONMENTAL PROTECTION SHALL BE PROVIDED WITH ADEQUATE NEMA ENCLOSURES FOR THE CONDITIONS WHERE INSTALLED, WEATHER INDOORS OR OUTDOORS, EVEN IF NOT SPECIFICALLY INDICATED ON PLANS.
19. PROVIDE TYPE "B" DYNAMIC FIRE DAMPERS WITH SERVICE ACCESS DOORS IN ALL DUCTS AND OPENINGS PENETRATING FIRE RATED WALLS, MECHANICAL AND ELECTRICAL EQUIPMENT ROOMS, TENANT SEPARATION, PARTITIONS, FLOOR OR ROOF SLABS AND AT OUTSIDE AIR INTAKES AS REQUIRED. PROVIDE RADIATION DAMPERS IN RATED CEILINGS FOR ALL CEILING OPENINGS, CEILING FANS, DIFFUSERS OR GRILLES RATED FOR USE IN THE CEILING ASSEMBLY. PROVIDE LOW–LEAKAGE CLASS DAMPERS FOR ALL SITUATIONS WHERE THE AIRFLOW CFM HAS TO BE CONTROLLED. VERIFY AND REPLACE AS REQUIRED FOR EXISTING SYSTEMS.
20. A LISTED SMOKE–DAMPER DESIGNED TO RESIST THE PASSAGE OF SMOKE SHALL BE PROVIDED AT EACH PENETRATION OF A SMOKE BARRIER IN COMPLIANCE WITH FMC 2017, SEC. 607.5.4 AND CONTROLLED AS REQUIRED BY SEC. 607.5.4.1. PROVIDE SERVICE ACCESS AS REQUIRED.
21. HVAC CONTRACTOR SHALL PROVIDE A T & B REPORT PER FEC 2017, SEC. C 408.2.2. FOR SYSTEMS OVER 15 TONS, THE T & B SHALL BE PERFORMED BY A CERTIFIED, INDEPENDENT COMPANY FOR ALL MECHANICAL EQUIPMENT, AIR DEVICES, DAMPERS, AND ANY AIR MOVING SYSTEMS. THE TEST AND BALANCE REPORT SHALL BE IN ACCORDANCE WITH THE AABC OR NEBB STANDARDS AND PROCEDURES AND SHALL INCLUDE AIR QUANTITIES FOR ALL SUPPLY GRILLES, RETURN GRILLES AND EXHAUST GRILLES AND THE LEAVING AND ENTERING AIR TEMPERATURE (T°) FROM SUPPLY GRILLES, EVAPORATORS, ENERGY RECOVERY UNITS AND ANY TYPE OF HEAT EXCHANGERS.

    EXCEPTIONS:
    1. BUILDINGS WITH COOLING OR HEATING SYSTEM CAPACITIES OF 15 TONS OR LESS PER SYSTEM MAY BE TESTED AND BALANCED BY A MECHANICAL CONTRACTOR LICENSED TO DESIGN AND INSTALL SUCH SYSTEM(S).
    2. BUILDINGS WITH COOLING OR HEATING SYSTEM CAPACITIES OF 65,000 BTU/H OR LESS PER SYSTEM ARE EXEMPT FROM THE REQUIREMENTS OF THIS SECTION.

    BUILDING ENVELOPE SHALL BE POSITIVELY PRESSURIZED TO PREVENT INFILTRATION PER FEC 2017, SEC. C 408.2.2.1.
22. RUN INSULATED FIRE RATED CONDENSATE DRAINS AS REQUIRED. AUXILARY DRAIN PANS SHALL BE INSTALLED UNDER ALL COILS ON WHICH CONDENSATION CAN OCCUR AND UNDER ALL UNITS IN CONCEALED SPACES OR ANY AREA WHERE BLDG. DAMAGE CAN OCCUR AS A RESULT OF AN OVERFLOW, TO COMPLY WITH FMC 2017, PAR. 307.2. AN ALTERNATE WATER–DETECTION LEVEL DEVICE TO SHUT DOWN THE EQUIPMENT IS ACCEPTABLE.
23. ALL DUCT INSULATION SHALL HAVE A FLAME SPREAD INDEX NOT MORE THAN 25 AND A SMOKE DEVELOPED INDEX NOT MORE THAN 50, WHEN TESTED IN ACCORDANCE WITH ASTM E 84 OR UL 723.
25. MECHANICAL EQUIPMENT ON ROOF OR ELEVATED STRUCTURES SHALL COMPLY WITH FMC 2017 PAR. 306.5 IF INSTALLED HIGHER THAN 16 FEET A.F.F. MECHANICAL EQUIPMENT INSTALLED IN ATTICS SHALL MEET THE REQUIREMENTS OF FMC 2017 PAR. 306.3 IF THE EQUIPMENT CAN NOT BE SERVICED/REMOVED THROUGH REQUIRED OPENING. MECHANICAL EQUIPMENT SHALL BE PROTECTED WITH MECHANICAL BARRIERS IF EXPOSED TO MECH. DAMAGE. ALL EQUIPMENT SHALL BE INSTALLED ON CONCRETE PADS AT GRADE LEVEL, SIZED PER STRUCTURAL PLANS.

    SPECIAL NOTE:
    ALL WIND LOAD AND OTHER COMPLIANCE CALCULATIONS AND/OR INSTALLATION DETAILS FOR OUTDOOR MOUNTED MECHANICAL EQUIPMENT AS REQUIRED BY FBC 2017, SEC. 1509, 1522 AND CHAPTER 16, SHALL BE PROVIDED BY A STRUCTURAL ENGINEER AND ARE SHOWN ON THESE PLANS FOR REFERENCE ONLY. SUCH CALCULATIONS SHALL BE PROVIDED BY THE EQUIPMENT MANUFACTURER OR BY THE GENERAL OR MECHANICAL CONTRACTOR ON BEHALF OF CLIENT.
    CONTRACTOR TO PROVIDE WIND LOAD CALCULATIONS SIGNED AND SEALED BY A FLORIDA REGISTERED STRUCTURAL ENGINEER IN ORIGINAL FOR COMPLIANCE WITH SEC. 301.15 OF FMC 2014, INCLUDING ANY DOCUMENTATION REQUIRED BY LOCAL JURISDICTION FOR PERMIT PURPOSES.
26. PROVIDE A MIN. OF 36" CLEARANCE IN FRONT OF ALL 120–208/240 VOLT PANELS AND MIN. 42" CLEARANCE IN FRONT OF ANY 277–480 VOLT PANEL. PROVIDE ADEQUATE SIDE CLEARANCE PER NEC 110.26.
27. MECHANICAL PLANS IN GENERAL, ARE DIAGRAMMATIC IN NATURE, AND ARE TO BE READ IN CONJUNCTION WITH ARCHITECTURAL, PLUMBING, ELECTRICAL, FIRE SPRINKLER, AND STRUCTURAL PLANS AND SHALL BE CONSIDERED AS ONE SET OF DOCUMENTS. DUCT AND PIPING OFFSETS, BENDS AND TRANSITIONS SHALL BE REQUIRED TO PROVIDE AND INSTALL A COMPLETE FUNCTIONAL SYSTEM AND SHALL BE PROVIDED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. CHANGES IN DUCTWORK SIZE AND ROUTE WILL BE REQUIRED TO AVOID STRUCTURAL, PLUMBING, FIRE SPRINKLER AND ARCHITECTURAL BUILDING FEATURES. DUCTWORK CHANGES MAY BE MADE BY CONTRACTOR USING EQUIVALENT SIZED DUCT. CONTACT ENGINEER IF DUCT AREA WILL NOT FIT.
28. THE CONTRACTOR SHALL VERIFY EXISTING CONDITIONS PRIOR TO BIDDING, ORDERING, FABRICATION OR INSTALLATION OF MATERIALS OR EQUIPMENT, IN ORDER TO PROVIDE A FULLY INTEGRATED MECHANICAL AND CONTROLS SYSTEMS WITH THE EXISTING ONES. ANY DISCREPANCY BETWEEN EXISTING CONDITIONS AND PLANS, OR ADDITIONAL CLARIFICATION REQ'D SHALL BE BROUGHT TO THE ATTENTION OF ENGINEER PRIOR TO FINAL BIDDING AND WORK.
29. MATERIALS ALLOWED IN RETURN AIR PLENUMS OR ABOVE CEILINGS USED AS RETURN AIR PLENUM SHALL COMPLY WITH FMC 2017, SEC. 602.2.1. IF SPACE WITH RETURN AIR PLENUM HAS ANY DECK TO DECK PARTITIONS, AIR TRANSFER DUCTS MUST BE INSTALLED. WHEN CPVC PIPING IS USED FOR FIRE SPRINKLER SYSTEMS, THE R/A GRILLES LAYOUT SHALL BE (FIELD) COORDINATED WITH SUCH PIPING SO THAT NO PORTION OF THE GRILLES WILL BE DIRECTLY BELOW THE CPVC PIPING. STUD CAVITIES AND JOIST SPACE PLENUMS SHALL COMPLY WITH FMC 2017, SEC. 602.3.
30. CONDENSATE DRAIN PIPING TO BE AS SPECIFIED PER PLUMBING PLANS. IF NOT SPECIFIED THEY SHALL BE TYPE "L" COPPER OR PVC WHERE ALLOWED BY CODE WITH INSULATION THICKNESS PER FEC 2017 TABLE C403.2.8. PROVIDE APPROVED WATER LEVEL DETECTOR OR FLOAT SWITCH TO AUTOMATICALLY SHUT DOWN THE AIR COND. UNIT, AS A SECONDARY DRAIN SYSTEM TO COMPLY WITH FMC 2017, SEC. 307 SUPPLY CONDENSATE PUMP WHERE NECESSARY AS IMPOSED BY FIELD CONDITIONS OR INSTALLATION CHANGES AND PIPE TO CONDENSATE DRAIN PER PLUMBING PLANS.
32. MANUFACTURER'S WARRANTY: CONTRACTOR SHALL PROVIDE WARRANTY FOR A PERIOD OF (1) ONE YEAR AFTER BUILDING C.O. FOR ALL MECHANICAL SYSTEMS, DUCTWORK, CONTROLS ACCESSORIES AND ALL OTHER EQUIPMENT, PARTS AND LABOR UNDER THESE DRAWINGS AND AND SPECIFICATIONS. CONTRACTOR SHALL PROVIDE WARRANTY FOR COMPRESSORS FOR (5) FIVE YEARS. ANY REPAIRS REQUIRING SYSTEM SHUTDOWN WILL BE DONE DURING NON–OPERATIONAL PERIODS OR AS AGREED WITH OWNER.
31. CLEARANCE FOR MAINTENANCE, SERVICE, REPAIRS, AND REPLACEMENT FOR ALL MECHANICAL EQUIPMENT SHALL BE PROVIDED TO COMPLY WITH FMC 2017, SEC. 306. SERVICE ACCESS PANELS FOR MECH EQUIPMENT IN CONCEALED SPACES SHALL BE PROVIDED TO COMPLY WITH THE REQUIREMENTS OF SEC. 306.
37. CORROSION COATING: CONTRACTOR SHALL PROVIDE CORROSION COATING TO CONDENSER/EVAPORATOR COILS, EQUIPMENT CASINGS/CABINETS AND ALL EXPOSED COPPER PIPING/ COMPRESSORS/ CONDENSER SECTION, AS WELL AS, ANY EXPOSED METAL WITHIN AIRSTREAM BY 3RD PARTY AS APPLIED BY BLYGOLD, LUVATA, ADVANCOAT OR APPROVED EQUAL WITH STANDARD 5–YEAR WARRANTY.

MECHANICAL SHEET INDEX

MECHANICAL LEGEND

- NEW S/A CEILING DIFFUSER
- NEW R/A CEILING GRILLE
- WALL LOUVER / WALL DIFFUSER.
- VOLUME CONTROL DAMPER
- REDUCER OR INCREASER
- NEW FLEX DUCT
- NEW DUCTWORK
- BELLMOUTH TAP
- SHOE TAP DAMPER
- DUCT SMOKE DETECTOR
- CEILING EXHAUST FAN
- SUPPLY AIR DIFFUSER OR GRILLE DESIGNATION
- RETURN/EXHAUST AIR DIFFUSER OR GRILLE DESIGNATION
- EQP - X EQUIPMENT TAG
- THERMOSTAT
- HUMIDISTAT
- SUPPLY AIR
- RETURN AIR
- DOOR UNDER CUT
- AP – ACCESS PANEL

NOT ALL SYMBOLS MAY APPLY TO THESE PLANS

ISSUED FOR PERMIT -
ISSUED FOR CONSTRUCTION -

KAMM CONSULTING PROJECT #: 2019-0577
PROJECT MANAGER: Rick Gonzalez

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02-05-20
date

signed

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PROPOSED TOWNHOUSES ADDRESS 700 BRINY
AV, POMPANO BEACH, 33062

OWNER : CARLO TREE LP
GREENPARK GROUP
5600 N Federal Highway
Fort Lauderadale - FL - 33308

PROJECT NUMBER 4/2018

MECHANICAL NOTES

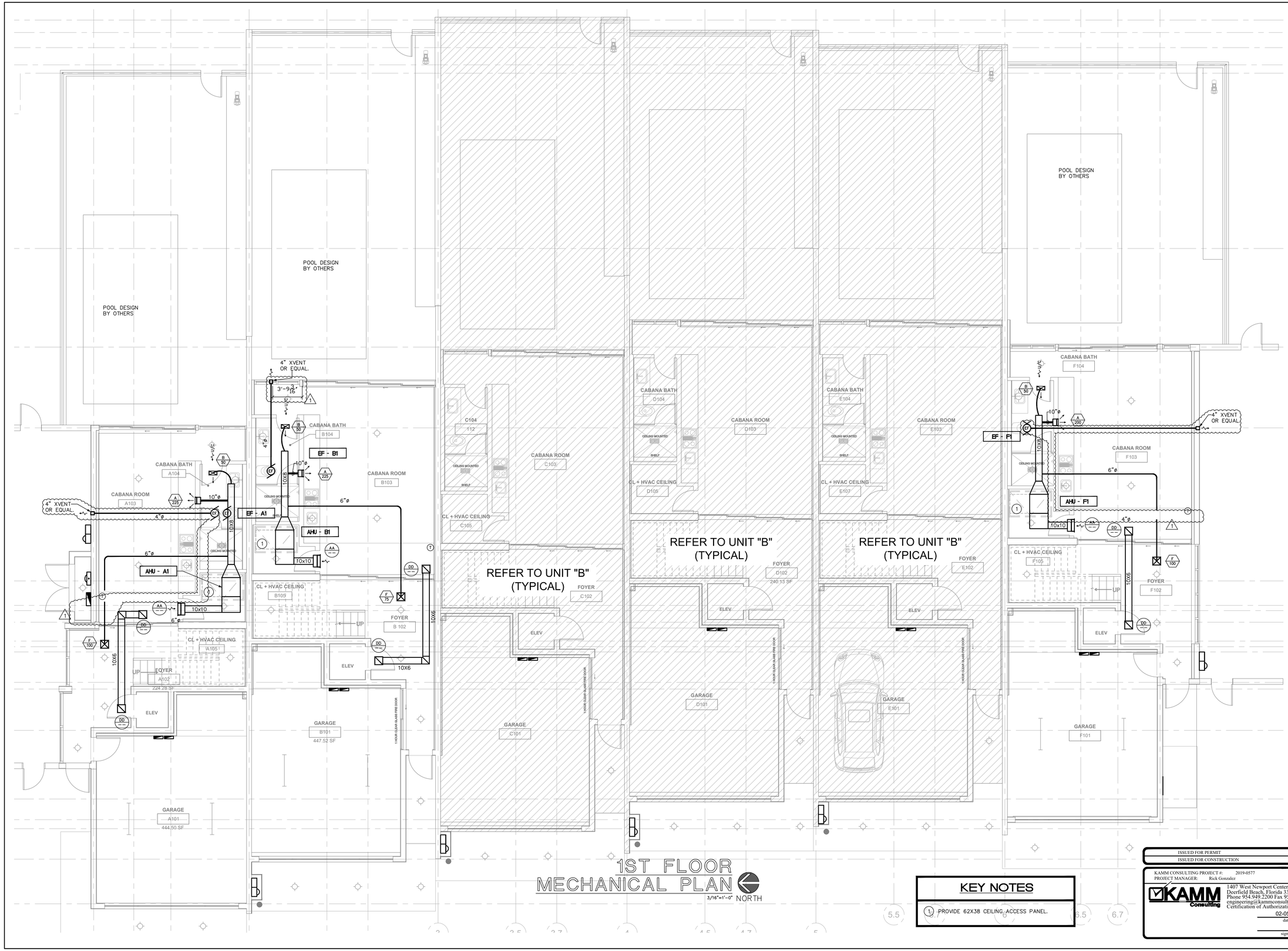
DESIGNED BY:
Alex Penna & Rex Nichols

DATE:
JUNE 12TH 2019

ISSUED FOR
- [ ] REVIEW & COMMENTS
- [ ] BIDDING
- [ ] NOT FOR CONSTRUCTION
- [x] PERMIT
- [ ] CONSTRUCTION

PERMIT APPLICATION

M0.1



1ST FLOOR MECHANICAL PLAN

3/16"=1'-0" NORTH

KEY NOTES

1. PROVIDE 62X38 CEILING ACCESS PANEL.

ISSUED FOR PERMIT	-
ISSUED FOR CONSTRUCTION	-

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GREENPARK GROUP
5600 N Federal Highway
Fort Lauderadale - FL - 33308

1 BLDG. DEPT. COMMENTS 1/17/20

PROJECT NUMBER 4/2018

MECHANICAL PLAN
1ST FLOOR

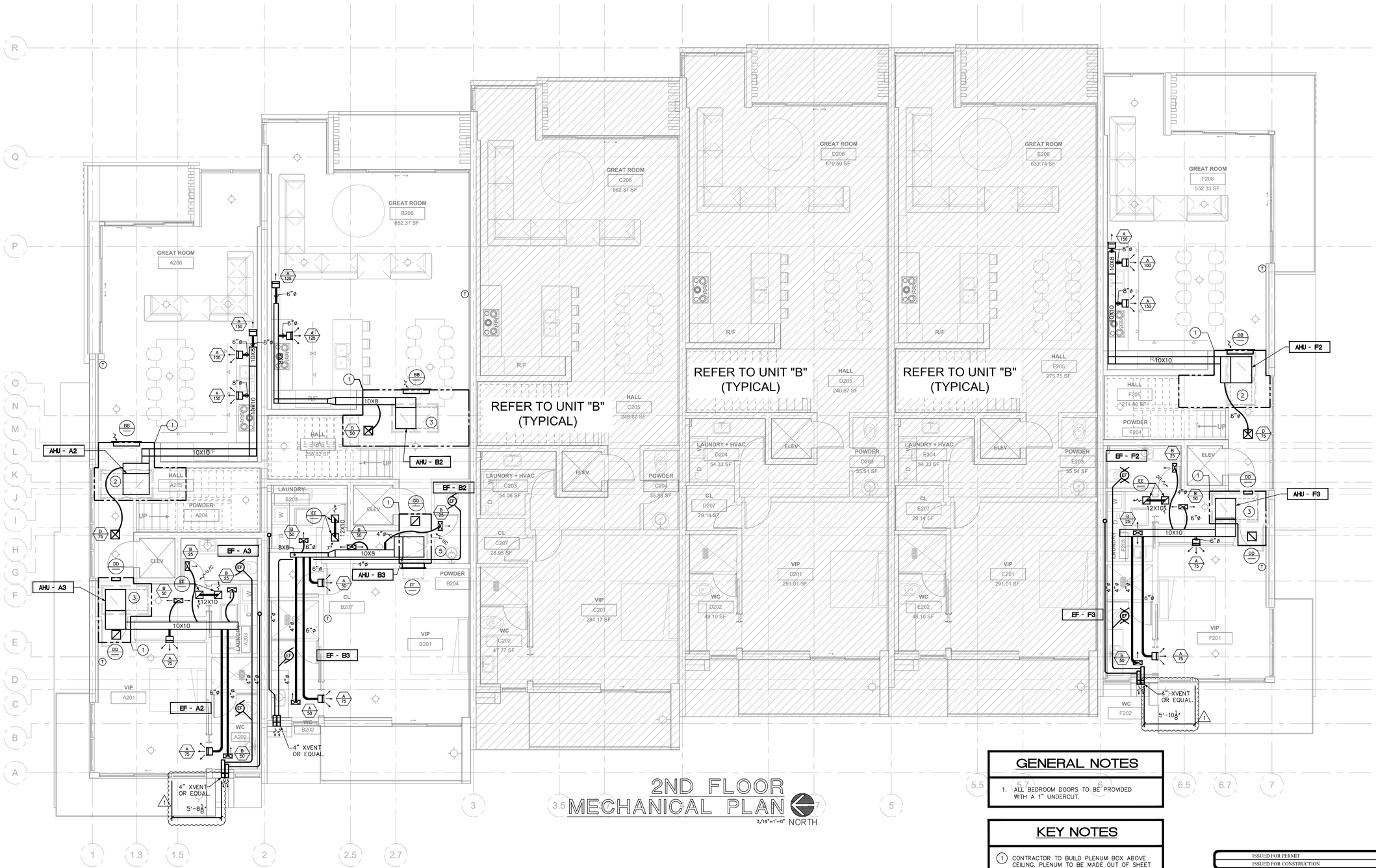
DESIGNED BY:
Alex Penna & Rex Nichols

DATE:
JUNE 12TH 2019

ISSUED FOR
- [ ] REVIEW & COMMENTS
- [ ] BIDDING
- [ ] NOT FOR CONSTRUCTION
- [x] PERMIT
- [ ] CONSTRUCTION

PERMIT APPLICATION

M2.1



2ND FLOOR MECHANICAL PLAN

3/16"=1'-0" NORTH

GENERAL NOTES

1. ALL BEDROOM DOORS TO BE PROVIDED WITH A 1" UNDERCUT.

KEY NOTES

1. CONTRACTOR TO BUILD PLENUM BOX ABOVE CEILING. PLENUM TO BE MADE OUT OF SHEET METAL SEALED AIR TIGHT.
2. PROVIDE 70X38 CEILING ACCESS PANEL.
3. PROVIDE 62X38 CEILING ACCESS PANEL.
4. 4"ø DRYER EXHAUST DUCT UP ABOVE CEILING TO XVENT EXHAUST CAP.
5. PROVIDE 36X36 CEILING ACCESS PANEL.

ISSUED FOR PERMIT -
ISSUED FOR CONSTRUCTION -

KAMM CONSULTING PROJECT #: 2019-0577
PROJECT MANAGER: Rick Gonzalez

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Certification of Authorization #8189

02-05-20
date

signed

RNA

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POMPANO BEACH - FL 330621600
WWW.REXNICHOLSARCHITECTS.COM
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T-964.951.6101

REX NICHOLS AIA
AR007415

PROPOSED TOWNHOUSES ADDRESS 700 BRINY
AV, POMPANO BEACH, 33062

OWNER : CARLO TREE LP
GREENPARK GROUP
5600 N Federal Highway
Fort Lauderadale - FL - 33308

1 BLDG. DEPT. COMMENTS 1/17/20

PROJECT NUMBER 4/2018

MECHANICAL PLAN
2ND FLOOR

DESIGNED BY:
Alex Penna & Rex Nichols

DATE:
JUNE 12TH 2019

ISSUED FOR
- [ ] REVIEW & COMMENTS
- [ ] BIDDING
- [ ] NOT FOR CONSTRUCTION
- [x] PERMIT
- [ ] CONSTRUCTION

PERMIT APPLICATION

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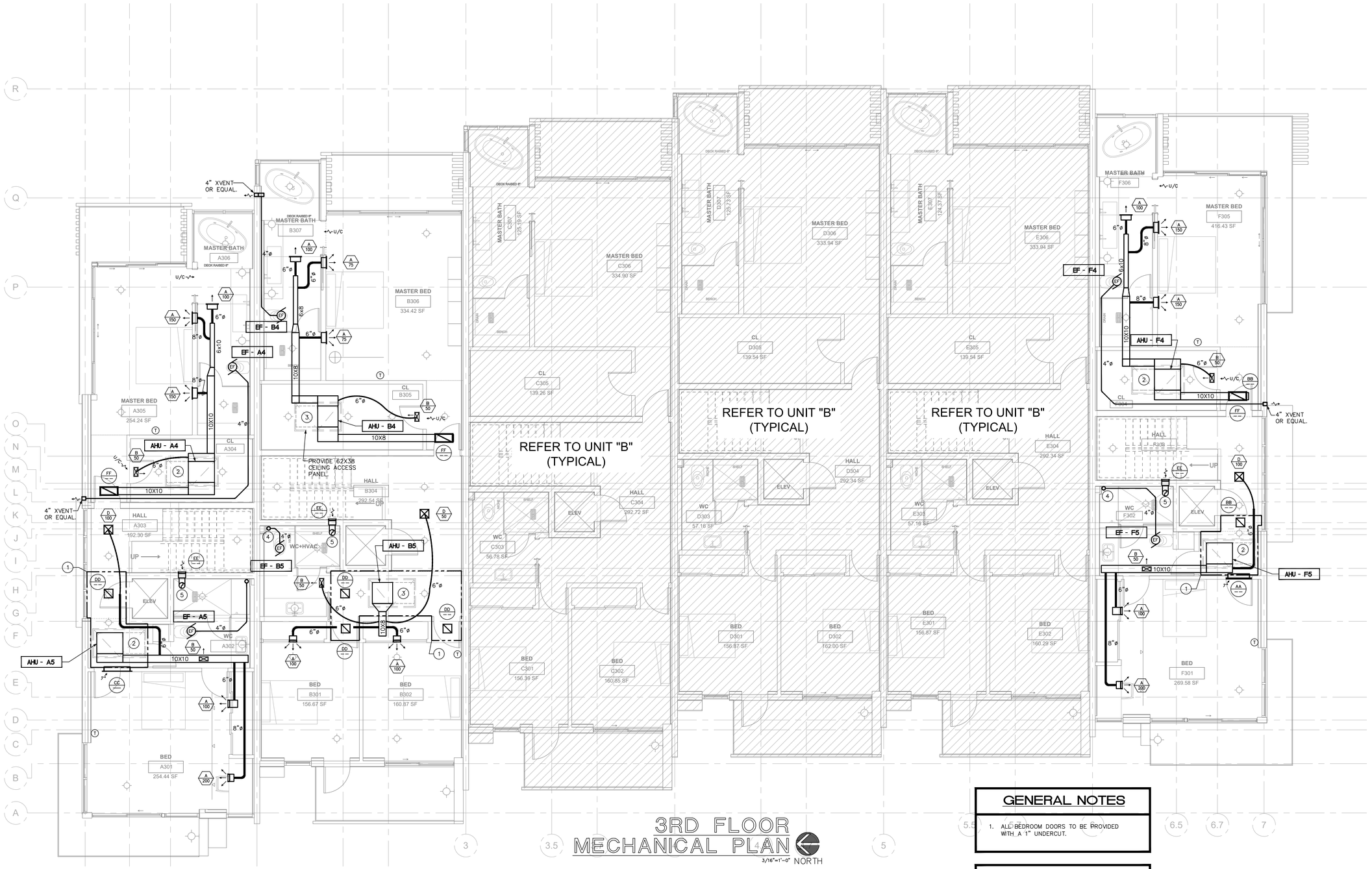

3RD FLOOR MECHANICAL PLAN

3/16"=1'-0" NORTH

GENERAL NOTES

1. ALL BEDROOM DOORS TO BE PROVIDED WITH A 1" UNDERCUT.

KEY NOTES

1. CONTRACTOR TO BUILD PLENUM BOX ABOVE CEILING. PLENUM TO BE MADE OUT OF SHEET METAL SEALED AIR TIGHT.
2. PROVIDE 70X38 CEILING ACCESS PANEL.
3. PROVIDE 62X38 CEILING ACCESS PANEL.
4. 4"ø EXHAUST DUCT UP TO EXHAUST ROOF CAP.
5. 8"ø RETURN AIR DUCT DOWN FROM DEHUMIDIFIER ON FLOOR ABOVE.

ISSUED FOR PERMIT	-
ISSUED FOR CONSTRUCTION	-

KAMM CONSULTING PROJECT #: 2019-0577
PROJECT MANAGER: Rick Gonzalez

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Deerfield Beach, Florida 33442
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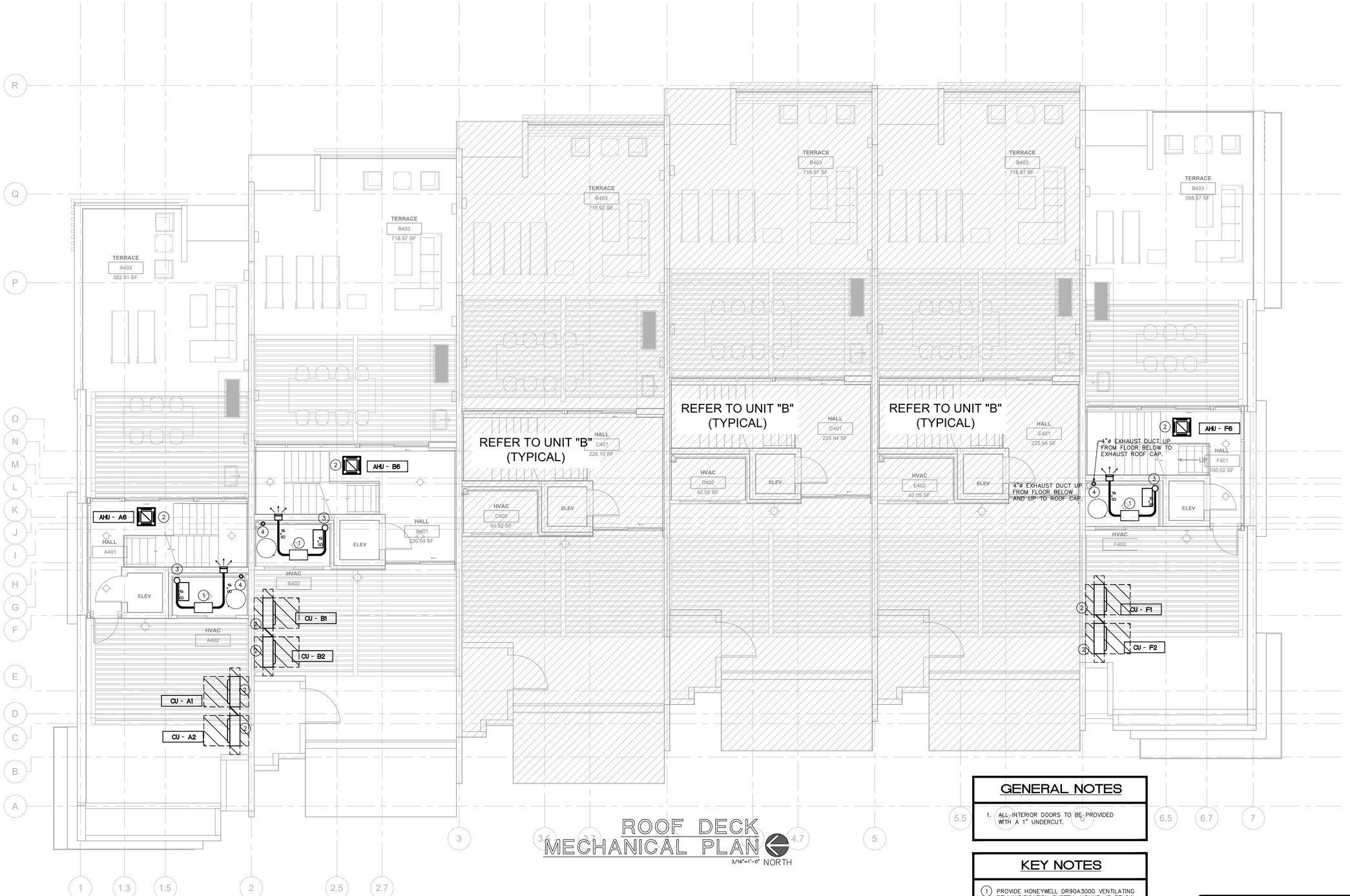

ROOF DECK MECHANICAL PLAN

3/16"=1'-0" NORTH

GENERAL NOTES

1. ALL INTERIOR DOORS TO BE PROVIDED WITH A 1" UNDERCUT.

KEY NOTES

1. PROVIDE HONEYWELL DR90A3000 VENTILATING DEHUMIDIFICATION SYSTEM. MOUNT UP BELOW CEILING. PROVIDE 120V, 5.3A. MAINTAIN PROPER SERVICE CLEARANCE.
2. PROVIDE SERVICE CLEARANCE PER MANUFACTURER'S REQUIREMENTS AND NEC.
3. 8"ø RETURN DUCT FOR DEHUMIDIFIER DOWN TO 3RD FLOOR.
4. 4"ø EXHAUST DUCT FROM FLOOR BELOW UP TO EXHAUST ROOF CAP.

ISSUED FOR PERMIT	-
ISSUED FOR CONSTRUCTION	-

KAMM CONSULTING PROJECT #: 2019-0577
PROJECT MANAGER: Rick Gonzalez

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5600 N Federal Highway
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PROJECT NUMBER 4/2018

MECHANICAL PLAN
ROOF DECK

DESIGNED BY:
Alex Penna & Rex Nichols

DATE:
JUNE 12TH 2019

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SUPPLY / RETURN AIR DIFFUSER SCHEDULE

(TAG / CFM) SUPPLY TAG (TAG / CFM) RETURN TAG

TAG	MANUF. & MODEL	FACE SIZE	NECK SIZE	MATERIAL	FRAME	FINISH	DAMPER	THROW	NC	CFM RANGE	NOTES
A	TITUS 272FS	DUCT SIZE + 1-3/4"	10X6	ALUM.	SURFACE	OFF WHITE	OBD	SEE PLANS	MAX. 25	SEE SCH.	1-8
B	TITUS 250-AA	DUCT SIZE + 1-3/4"	6X4	ALUM.	SURFACE	OFF WHITE	OBD	SEE PLANS	MAX. 25	SEE SCH.	1-8
C	TITUS 272FS	DUCT SIZE + 1-3/4"	6X6	ALUM.	SURFACE	OFF WHITE	OBD	SEE PLANS	MAX. 25	SEE SCH.	1-8
D	TITUS TDC-AA	DUCT SIZE + 1-3/4"	6X6	ALUM.	SURFACE	OFF WHITE	OBD	SEE PLANS	MAX. 25	SEE SCH.	1-8
E	TITUS 272FS	DUCT SIZE + 1-3/4"	12X6	ALUM.	SURFACE	OFF WHITE	OBD	SEE PLANS	MAX. 25	SEE SCH.	1-8
F	TITUS 250-AA	DUCT SIZE + 1-3/4"	8X6	ALUM.	SURFACE	OFF WHITE	OBD	SEE PLANS	MAX. 25	SEE SCH.	1-8
AA	TITUS 4FL	DUCT SIZE + 1-3/4"	18X10	ALUM.	SURFACE	OFF WHITE	-	SEE PLANS	MAX. 25	SEE SCH.	1-8
BB	TITUS 4FFL	DUCT SIZE + 1-3/4"	36X6	ALUM.	SURFACE	OFF WHITE	-	SEE PLANS	MAX. 25	SEE SCH.	1-8
CC	TITUS 4FFL	DUCT SIZE + 1-3/4"	24X6	ALUM.	SURFACE	OFF WHITE	-	SEE PLANS	MAX. 25	SEE SCH.	1-8
DD	TITUS 4FFL	DUCT SIZE + 1-3/4"	12X12	ALUM.	SURFACE	OFF WHITE	-	SEE PLANS	MAX. 25	SEE SCH.	1-8
EE	TITUS 4FL	DUCT SIZE + 1-3/4"	12X12	ALUM.	SURFACE	OFF WHITE	-	SEE PLANS	MAX. 25	SEE SCH.	1-8
FF	TITUS 4FFL	DUCT SIZE + 1-3/4"	24X10	ALUM.	SURFACE	OFF WHITE	-	SEE PLANS	MAX. 25	SEE SCH.	1-8

(*) EQUIVALENT MANUFACTURER: TITUS, METALAIRE, CARNES, T & B, NAILOR

GENERAL NOTES:

1. PROVIDE SPIN-IN COLLAR WITH VOLUME DAMPER AT TRUNK TO FLEX DUCT CONNECTION (SEE DETAIL).
2. PROVIDE TYPICAL 4-WAY DIFFUSION, 2-WAY OR 3-WAY ONLY WHERE INDICATED ON PLANS.
3. REFER TO ARCHITECT PLANS FOR CEILING TYPE.
4. FINAL COLOR SELECTION SUBJECT TO ARCHITECT APPROVAL.
5. FLEX DUCT SIZE TO BE SAME AS DIFFUSER NECK SIZE.
6. PROVIDE INSULATION ON THE BACK OF DIFFUSER IF IN UNCONDITIONED SPACE
7. PROVIDE VOLUME CONTROL DAMPERS FOR ALL RETURN GRILLES OR REGISTERS FOR BALANCED AIRFLOW.
8. ADJUST LENGTHS TO LINE UP WITH INTERIOR DESIGNER'S PLANS.

CONTRACTOR SHALL VERIFY WITH ARCHITECT AND TENANT/OWNER, PRIOR TO ANY PURCHASING OR INSTALLATION, IF A BULDING STANDARD HAS TO BE FOLLOWED REGARDING A SPECIFIC MODEL OR MANUFACTURER AND SHALL BRING ANY DISCREPANCY TO THE ATTENTION OF ENGINEER.

FLEX SCHEDULE	
6ø"	50-125 CFM
8ø"	130-200 CFM
10ø"	205-330 CFM
12ø"	335-450 CFM
14ø"	455-700 CFM

AIR CONDITIONING SPLIT SYSTEM EQUIPMENT SCHEDULE

CONDENSING UNIT

CU TAG	MANUFACTURER & MODEL	NOMINAL TONNAGE	COP/HSPF	(S)EER/IPLV	REFRIG./LBS	LIQ./SUCT.	NO. FANS	FAN FLA(EA)	NO. COMP.	COP/HSPF	VOLTAGE/PH	MCA/MOCP	WEIGHT (LBS)	L x W x H (IN)	NOTES
CU-A1	MITSUBISHI/PUMY-P36NKMU2	3	3.7/11.2	18.3	R410A/10	3/8 / 5/8	2	0.074 KW	1	2.8 KW	208-230/1	29/45	267	14X42X53	SEE BELOW
CU-A2	MITSUBISHI/PUMY-P36NKMU2	3	3.7/11.2	18.3	R410A/10	3/8 / 5/8	2	0.074 KW	1	4.0/12.0	208-230/1	29/45	267	14X42X53	SEE BELOW
CU-B1	MITSUBISHI/PUMY-P36NKMU2	3	3.7/11.2	18.3	R410A/10	3/8 / 5/8	2	0.074 KW	1	4.0/12.0	208-230/1	29/45	267	14X42X53	SEE BELOW
CU-B2	MITSUBISHI/PUMY-P36NKMU2	3	3.7/11.2	18.3	R410A/10	3/8 / 5/8	2	0.074 KW	1	4.0/12.0	208-230/1	29/45	267	14X42X53	SEE BELOW
CU-C1	MITSUBISHI/PUMY-P36NKMU2	3	3.7/11.2	18.3	R410A/10	3/8 / 5/8	2	0.074 KW	1	4.0/12.0	208-230/1	29/45	267	14X42X53	SEE BELOW
CU-C2	MITSUBISHI/PUMY-P36NKMU2	3	3.7/11.2	18.3	R410A/10	3/8 / 5/8	2	0.074 KW	1	4.0/12.0	208-230/1	29/45	267	14X42X53	SEE BELOW
*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	SEE BELOW

AIR HANDLING UNIT

AHU TAG	MANUFACTURER & MODEL	CONDENSER	TOTAL MBH	SENSIBLE MBH	TOTAL CFM	E.S.P.("W.G.)	ENT. DB/WB	LEAV. DB/WB	ROWS/FPI	FAN HP/FLA	HEAT (MBH)	VOLTAGE/PH	MCA/MOCP	WEIGHT (LBS)	L x W x H (IN)	NOTES
AHU-A1	MITSUBISHI/PEFY-P12NMAU	CU-A1	12.0	9.0	375	0.4	80/67	55/54	*	.09 KW	13.5	208-230/1	1.05/15	49	29X28X10	SEE BELOW
AHU-A2	MITSUBISHI/PEFY-P15NMAU	CU-A1	15.0	11.25	494	0.4	80/67	55/54	*	.09 KW	17.0	208-230/1	1.45/15	51	36X29X10	SEE BELOW
AHU-A3	MITSUBISHI/PEFY-P08NMAU	CU-A1	8.17	5.78	300	0.4	80/67	55/54	*	.06 KW	9.0	208-230/1	1.05/15	49	29X28X10	SEE BELOW
AHU-A4	MITSUBISHI/PEFY-P15NMAU	CU-A2	15.0	11.25	494	0.4	80/67	55/54	*	.09 KW	17.0	208-230/1	1.45/15	51	36X29X10	SEE BELOW
AHU-A5	MITSUBISHI/PEFY-P15NMAU	CU-A2	15.0	11.25	494	0.4	80/67	55/54	*	.09 KW	17.0	208-230/1	1.45/15	51	36X29X10	SEE BELOW
AHU-A6	MITSUBISHI/PEFY-P05NFMU	CU-A2	4.3	4.3	280	*	80/67	55/54	*	-	5.6	208-230/1	0.24/15	28.9	23X23X8	SEE BELOW
AHU-B1	MITSUBISHI/PEFY-P12NMAU	CU-B1	12.0	9.0	375	0.4	80/67	55/54	*	.09 KW	13.5	208-230/1	1.05/15	49	29X28X10	SEE BELOW
AHU-B2	MITSUBISHI/PEFY-P08NMAU	CU-B1	8.17	5.78	300	0.4	80/67	55/54	*	.09 KW	9.0	208-230/1	1.05/15	49	29X28X10	SEE BELOW
AHU-B3	MITSUBISHI/PEFY-P08NMAU	CU-B1	8.17	5.78	300	0.4	80/67	55/54	*	.06 KW	9.0	208-230/1	1.05/15	49	29X28X10	SEE BELOW
AHU-B4	MITSUBISHI/PEFY-P08NMAU	CU-B2	8.17	5.78	300	0.4	80/67	55/54	*	.09 KW	9.0	208-230/1	1.05/15	49	29X28X10	SEE BELOW
AHU-B5	MITSUBISHI/PEFY-P08NMAU	CU-B2	8.17	5.78	300	0.4	80/67	55/54	*	.09 KW	9.0	208-230/1	1.05/15	49	29X28X10	SEE BELOW
AHU-B6	MITSUBISHI/PEFY-P05NFMU	CU-B2	4.3	4.3	280	*	80/67	55/54	*	-	5.6	208-230/1	0.24/15	28.9	23X23X8	SEE BELOW
AHU-F1	MITSUBISHI/PEFY-P12NMAU	CU-F1	12.0	9.0	375	0.4	80/67	55/54	*	.09 KW	9.0	208-230/1	1.05/15	49	29X28X10	SEE BELOW
AHU-F2	MITSUBISHI/PEFY-P15NMAU	CU-F1	15.0	11.25	494	0.4	80/67	55/54	*	.09 KW	17.5	208-230/1	1.45/15	51	36X29X10	SEE BELOW
AHU-F3	MITSUBISHI/PEFY-P08NMAU	CU-F1	8.17	5.78	300	0.4	80/67	55/54	*	.06 KW	9.0	208-230/1	1.05/15	49	29X28X10	SEE BELOW
AHU-F4	MITSUBISHI/PEFY-P15NMAU	CU-F2	15.0	11.25	494	0.4	80/67	55/54	*	.09 KW	17.5	208-230/1	1.45/15	51	36X29X10	SEE BELOW
AHU-F5	MITSUBISHI/PEFY-P15NMAU	CU-F2	15.0	11.25	494	0.4	80/67	55/54	*	.09 KW	17.5	208-230/1	1.45/15	51	36X29X10	SEE BELOW
AHU-F6	MITSUBISHI/PLFY-P05NFMU	CU-F2	4.3	4.3	280	*	80/67	55/54	*	-	5.6	208-230/1	0.24/15	28.9	23X23X8	SEE BELOW

NOTES:

1. UNITS RATED PER ARI 210, 240 AND 270, APPROVED EQUAL: AAON, CARRIER, LENNOX, TRANE, YORK
2. PROVIDE WITH THERMAL EXPANSION VALVES, LIQUID LINE FILTER DRYER AND MULTI-USE SERVICE VALVES
3. PROVIDE COMPRESSOR WITH CRANKCASE HEATER AND MIN. 5-YEAR WARRANTY
4. PROVIDE HIGH AND LOW PRESSURE CONTROL AND OVER TEMPERATURE PROTECTION.
5. PROVIDE WEATHERPROOF ELECTRIC CONTROLS AND SINGLE SIDE SERVICE ACCESS
6. PROVIDE SINGLE POINT POWER ENTRY AND HEAVY DUTY NICKEL-CHROMIUM ELEMENT HEATER
7. PROVIDE 1" THROWAWAY, MIN. 30% EFF. FILTER AND VIBRATION ISOLATION FOR AHU
8. PROVIDE SPLIT FACE COIL WITH BOTTOM OF COIL ACTIVE FOR MULTIPLE CIRCUIT SYSTEM
9. PROVIDE COASTAL CORROSION PROTECTION FOR CONDENSING UNIT, FULLY DIPPED COIL (BY MANUFACTURER)
10. PROVIDE HOT GAS RE-HEAT (OR/AND BY-PASS IF REQUIRED), MAX. REFRIGERANT RUN 75 FEET OR AS REQUIRED BY MANUFACTURER.
11. PROVIDE FACTORY MOUNTED FUSIBLE DISCONNECT/STARTER FOR A.H.U., COORDINATE PRIOR TO PURCHASING
12. PROVIDE DISCONNECT FOR C.U. (INSTALLED BY ELECTRICAL) COORDINATE PRIOR TO PURCHASING
13. PROVIDE EMERGENCY POWER, COORDINATE WITH ELECTRICAL
14. PROVIDE FACTORY PROGRAMMABLE THERMOSTAT TO MATCH CAPACITY STAGES.
15. PROVIDE REFRIGERANT LINES SIZE AS RECOMMENDED BY MANUFACTURER, NOT TO EXCEED 150 FT. EQUIV. LENGTH FOR LONGER RUNS COORDINATE WITH MANUFACTURER PRIOR TO PURCHASE OR ANY WORK.
16. PROVIDE A LIQUID LINE SOLENOID VALVE INSTALLED AT THE AHU IF THE INSTALLED LINEAL LENGTH OF THE REFRIGERANT LIQUID LINES EXCEEDS 75 FT (FIELD VERIFY).
17. PROVIDE A SUCTION LINE ACCUMULATOR IF THE INSTALLED LINEAL LENGTH OF THE REFRIGERANT SUCTION LINES EXCEEDS 100 FT (FIELD VERIFY).
18. PROVIDE CORROSION PROTECTION COATING FOR CONDENSER COIL WITH MIN. 5-YEAR WARRANTY COATING BY SURFSIL, LUVATA, THERMOGUARD OR BYGOLD.
19. PROVIDE 3" AUXILLARY DRAIN PAN WITH AUTOMATIC SHUT OFF FLOAT SWITCH OR SENSOR SWITCH IN UNIT'S DRAIN PAN SECONDARY CONNECTION, EQUAL TO "WATER GARD
20. PROVIDE ELECTRIC HEATER WITH MIN. 2 STAGES IF OVER 10 KW CAPACITY.
21. PROVIDE MOTORIZED OUTSIDE AIR DAMPER INTERLOCK WITH COMPRESSOR
22. AS APPLICABLE, MANUFACTURE AND INSTALLATION SHALL COMPLY W/FMC 301.12 FOR WIND RESISTANCE

COORDINATION NOTE:

MECHANICAL CONTRACTOR SHALL COORDINATE ALL ELECTRICAL REQUIREMENTS AND ACCESSORIES WITH ELECTRICAL CONTRACTOR PRIOR TO PURCHASING AND INSTALLATION AND SHALL BRING ANY DISCREPANCIES TO THE ATTENTION OF ENGINEER

FAN SCHEDULE

SELECTION DATA					FAN DATA			MOTOR DATA				GENERAL DATA			
TAG	SERVICE AREA	MANUF.(*)	MODEL	CONFIG.	CFM	ESP ("WG)	SONES	HP	RPM	DRIVE	VOLTAGE	WEIGHT (LBS)	DIMENSIONS L"xW"xH"	CONTROL	ACCESSORIES
EF-1,3,4,5 UNITS A,B,F	RESTROOMS	GREENHECK	SP-A90	CEILING	75	0.25	0.4	16 WATTS	900	DIRECT	115/1/60	12	11X13X9	LIGHT INTERLOCK	SEE NOTES #1-8
EF-2 UNITS A,B,F	RESTROOMS	GREENHECK	SP-A70	CEILING	50	0.25	0.3	13 WATTS	850	DIRECT	115/1/60	12	11X13X9	LIGHT INTERLOCK	SEE NOTES #1-8

(*) APPROVED EQUAL MANUFACTURER: COOK, TWIN-CITY, ACME, PENN

ACCESSORIES NOTES:

1. PROVIDE INTEGRAL GRILLE.
2. PROVIDE BACK DRAFT DAMPER.
3. PROVIDE FACTORY MOUNTED DISCONNECT SWITCH AND INTEGRAL THERMAL OVERLOAD PROTECTION. COORDINATE WITH ELECTRICAL CONTRACTOR PRIOR TO ANY PURCHASING.
4. PROVIDE 277/120 VOLT STEP DOWN TRANSFORMER AS REQUIRED.
5. LOCATE BACK DRAFT DAMPER AT DISCHARGE.
6. SUPPORT FROM STRUCTURE COMPLETE WITH VIBRATION ISOLATORS.
7. PROVIDE BIRD SCREEN.
8. PROVIDE GRILLE COLOR PER ARCH. SPECS.

GENERAL FAN NOTES:

a. MOTOR STARTERS, DISCONNECTS (IF NOT FACTORY PROVIDED) AND ALL EQUIPMENT NORMAL POWER WIRING BY ELEC. CONTRACTOR

b. ALL CONTINUOUS-DUTY MOTORS SHALL BE PROVIDED WITH OVERLOAD PROTECTION ACCORDING TO NATIONAL ELECTRICAL CODE PAR. 430-32.

c. FIELD ADJUST OPENINGS WITH STRUCTURE.

d. ALL OUTDOOR EQUIPMENT SHALL COMPLY WITH LOCAL ZONING NOISE ORDINANCE OR NOT EXCEED A NOISE LEVEL OF 65dB AS MEASURED RADIALLY 30 FT. FROM THE EQUIPMENT IN ALL DIRECTIONS.

e. COORDINATE WITH ELECTRICAL CONTRACTOR BEFORE BIDDING OR ORDERING ANY EQUIPMENT.

f. SEE PROJECT PLANS AND SPECIFICATIONS FOR OTHER FIELD SUPPLIED ITEMS AND ADDITIONAL INFORMATION.

g. ALL FANS ON ROOF SHALL BE PAINTED AS PER ARCHITECTURAL SPECS.

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PROJECT MANAGER: Rick Gonzalez

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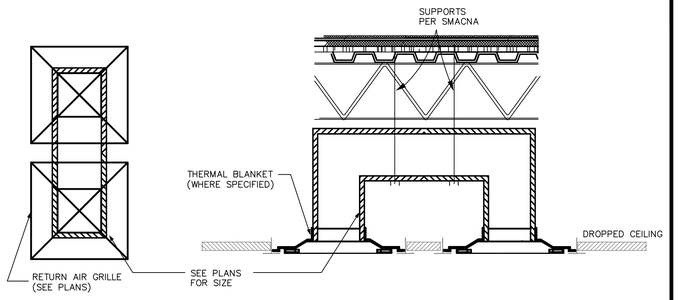
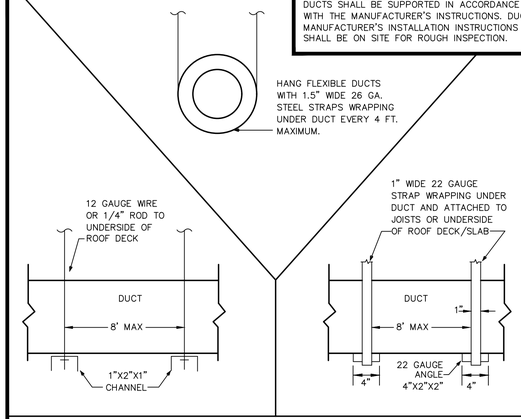


NOTE:
SIZE OF SOUND BOOT (FREE AREA) SHALL COMPLY WITH FLORIDA MECHANICAL CODE 2017 EDITION, PAR. 601.4 "BALANCED RETURN AIR"

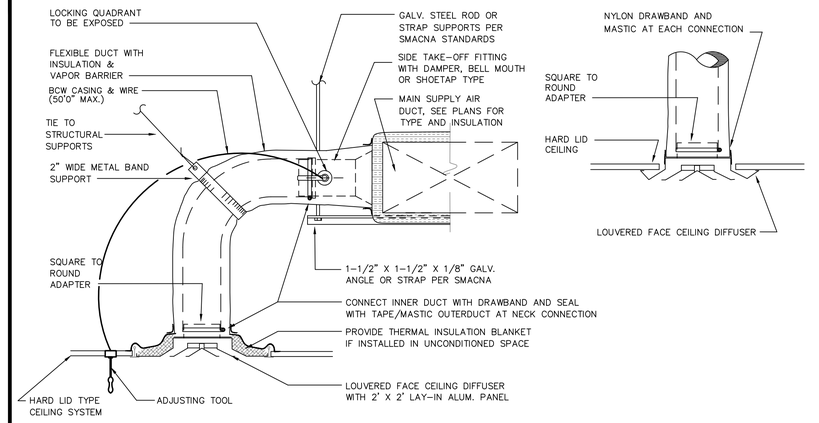
TRANSFER DETAIL (GRILLE)
NOT TO SCALE

CONTRACTOR NOTE:
DUCTS SHALL BE SUPPORTED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. DUCT MANUFACTURER'S INSTALLATION INSTRUCTIONS SHALL BE ON SITE FOR ROUGH INSPECTION.

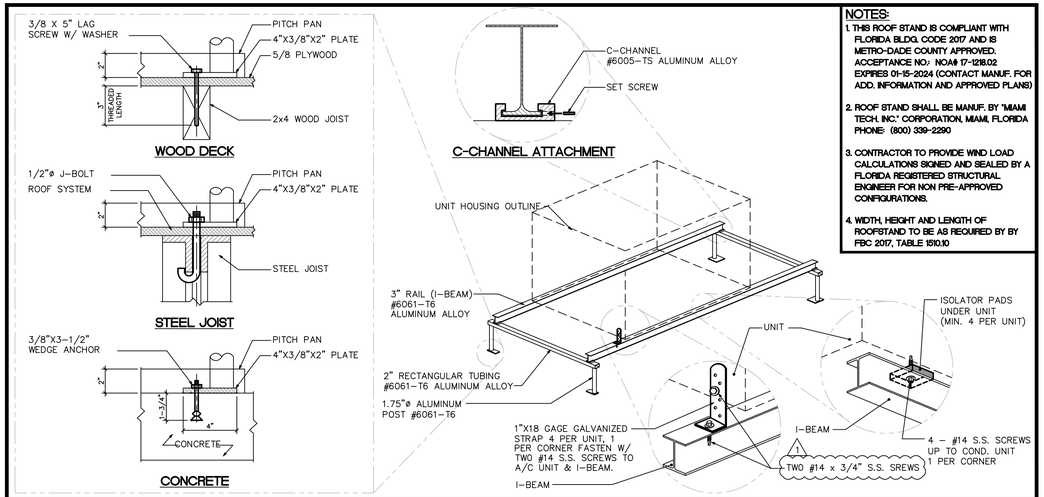


HANG ALL DUCT PER SMACNA STANDARDS

DUCT SUPPORT DETAIL
NOT TO SCALE

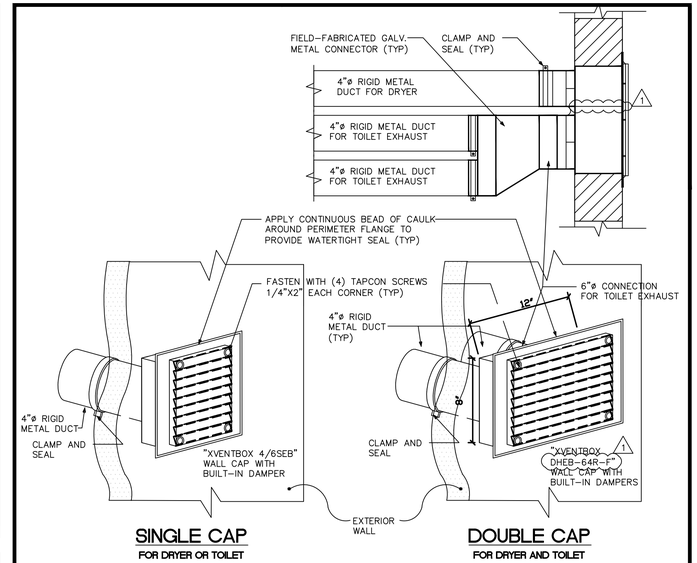


TYPICAL DIFFUSER DETAIL W/ REMOTE CABLE CONTROL
NOT TO SCALE

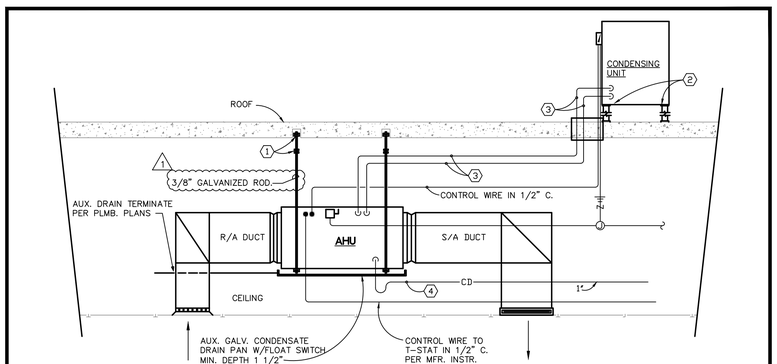


NOTES:
1. THIS ROOF STAND IS COMPLIANT WITH FLORIDA BLDG. CODE 2017 AND IS METRO-DADE COUNTY APPROVED. ACCEPTANCE NO.: NOA# 17-1219.02 EXPIRES 01-15-2024 (CONTACT MANUF. FOR ADD. INFORMATION AND APPROVED PLANS)
2. ROOF STAND SHALL BE MANUF. BY "MIAMI TECH. INC." CORPORATION, MIAMI, FLORIDA PHONE: (800) 339-2290
3. CONTRACTOR TO PROVIDE WIND LOAD CALCULATIONS SIGNED AND SEALED BY A FLORIDA REGISTERED STRUCTURAL ENGINEER FOR NON PRE-APPROVED CONFIGURATIONS.
4. WIDTH, HEIGHT AND LENGTH OF ROOFSTAND TO BE AS REQUIRED BY BY FBC 2017, TABLE 1510.10

A/C ROOF EQUIPMENT MOUNTING DETAIL
NOT TO SCALE



WALL CAP DETAIL
NOT TO SCALE



NOTES:
1. INSTALL AIR HANDLING UNIT PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.
2. INSTALL PREFABRICATED CONDENSER SUPPORT ON ROOF PER DETAIL. MOUNT CONDENSING UNIT ON SUPPORTS.
3. CONNECT REFRIGERANT LIQUID AND SUCTION LINES FROM CONDENSER UNIT THROUGH ROOF PENETRATION TO AIR HANDLING UNIT. USE RUBBER SEAL BOOTS OR PITCH POCKET AND SEAL WATERTIGHT. (REFER TO DETAIL). INSULATE ENTIRE SUCTION LINE AND WRAP EXTERIOR PORTION WITH ALUMINUM JACKET.
4. RUN CONDENSATE LINE TO EXTERIOR OF BUILDING PER PLUMBING PLANS. INSULATE SECTION LOCATED ABOVE CEILING.

HVAC UNIT DETAIL
NOT TO SCALE

ROOFTOP EQUIP. CLEARANCE TABLE
FLORIDA BUILDING CODE 2017, TABLE 1510.10

WIDTH OF MECHANICAL UNIT (INCHES)	MIN. CLEARANCE ABOVE ROOF SURFACE (INCHES)
< 24	14
24 < 36	18
36 < 48	24
48 < 60	30
≥ 60	48

ISSUED FOR PERMIT -
ISSUED FOR CONSTRUCTION -

KAMM CONSULTING PROJECT #: 2019-0577
PROJECT MANAGER: Rick Gonzalez

KAMM Consulting
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Deerfield Beach, Florida 33442
Phone 954.949.2200 Fax 954.949.2201
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Certification of Authorization #8189

02-05-20
date

signed

RNA

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REX NICHOLS AIA
AR007415

PROPOSED TOWNHOUSES ADDRESS 700 BRINY
AV, POMPANO BEACH, 33062

OWNER : CARLO TREE LP
GREENPARK GROUP
5600 N Federal Highway
Fort Lauderadale - FL - 33308

1 BLDG. DEPT. COMMENTS 1/17/20

PROJECT NUMBER 4/2018

MECHANICAL DETAILS

DESIGNED BY:
Alex Penna & Rex Nichols

DATE:
JUNE 12TH 2019

ISSUED FOR
- ☐ REVIEW & COMMENTS
- ☐ BIDDING
- ☐ NOT FOR CONSTRUCTION
- ■ PERMIT
- ☐ CONSTRUCTION

PERMIT APPLICATION

M7.1