

FOR BRANCH DUCT SIZE

| CFM RANGE | RECTANGULAR DUCT SIZE (WIDTH X HEIGHT @ 2'0" IN. W.C. / 100' FT.) |
|-----------|--|
| 0-135 | 6" X 6" 6.56" EQ. DIA. |
| 140-175 | 8" X 6" 7.55" EQ. DIA. |
| 180-230 | 8" X 8" 8.15" EQ. DIA. |
| 235-400 | 10" X 8" 9.16" EQ. DIA. |
| 405-695 | 12" X 12" 13.12" EQ. DIA. |
| 860-1230 | 14" X 14" 15.30" EQ. DIA. |

NOTES:
1. PROVIDE RECTANGULAR DUCTS TAKE-OFF, TRANSITION TO ROUND DUCT USE TABLE THIS SHEET FOR ROUND DUCT.

ROUND DUCT SIZE

| CFM RANGE | MINIMUM INTERNAL DIA. @ 2'0" IN. W.C. / 100' FT.) |
|-----------|---|
| 0-110 | 6" |
| 115-145 | 7" |
| 150-230 | 8" |
| 235-455 | 10" |
| 460-685 | 12" |
| 690-1015 | 14" |

NOTES:
1. PROVIDE ROUND DUCTS UNLESS OTHERWISE NOTED ON FLOOR PLAN.
2. "DIAMETER" MEANS INSIDE DUCT DIAMETER.

ABBREVIATIONS

| | |
|----------|---|
| ACU | AIR CONDITIONING UNIT |
| AD | ACCESS DOOR |
| AFB | ABOVE FINISHED FLOOR |
| AHU* | AIR HANDLING UNIT |
| AP | ACCESS PANEL |
| BDD | BACKDRAFT DAMPER |
| BLDG | BUILDING |
| BOD | BOTTOM OF DUCT |
| C | CONDENSATE |
| CBDD | COUNTER BALANCED DAMPER |
| CD | CEILING DIFFUSER |
| CFE | CAFFED FOR FUTURE |
| CFM | CUBIC FEET PER MINUTE |
| CLG | CEILING |
| CONT | CONTINUATION |
| COORD | COORDINATE |
| CTE | CONNECT TO EXISTING |
| CRD | CEILING RADIATION DAMPER |
| CU | COPPER |
| CU* | CONDENSING UNIT |
| DC | DOUBLE CONTAINED |
| DIA | DIAMETER |
| DIW | DOWN IN WALL |
| DN | DOWN |
| DWG | DRAWING |
| EA | EXHAUST AIR |
| EF | EXHAUST FAN |
| ENC | ENCLOSURE |
| ER | EXHAUST REGISTER |
| FBC | FLORIDA BUILDING CODE 2011 |
| FC | FLEXIBLE CONNECTION |
| FD | FIRE DAMPER |
| GALV. | GALVANIZED |
| GC OR GC | GENERAL CONTRACTOR |
| H | HUMIDISTAT |
| H & V | HEATING AND VENTILATION |
| HVAC | HEATING, VENTILATING AND AIR CONDITIONING |
| MAX | MAXIMUM |
| MBH | 1000 BTU/HR |
| MFR | MANUFACTURER |
| MIN | MINIMUM |
| MD | MOTOR OPERATED DAMPER |
| MTD | MOUNTED |
| MUA | MAKE UP AIR |
| NTS | NOT TO SCALE |
| OA | OUTSIDE AIR |
| OBD | OPPOSED BLADE DAMPER |
| OED | OPEN ENDED DUCT |
| RA | RETURN AIR |
| RD | ROOF DRAIN |
| REQ'D | REQUIRED |
| RF | RETURN FAN |
| RG | RETURN GRILLE |
| RM | ROOM |
| RR | RETURN REGISTER |
| SA | SUPPLY AIR |
| S | SMOKE DETECTOR |
| SD | SMOKE DAMPER |
| SF | SUPPLY FAN |
| SG | SUPPLY GRILLE |
| SR | SUPPLY REGISTER |
| SS | STAINLESS STEEL |
| WO | WITHOUT |
| *" | INCHES, DIAMETER |

HVAC GENERAL NOTES

- PIPE AND DUCT ROUTING SHOWN IS SCHEMATIC IN DESIGN. HVAC CONTRACTOR SHALL PROVIDE ANY ADDITIONAL OFFSETS AND FITTINGS, INCLUDING DIVIDED DUCTS REQUIRED FOR PROPER INSTALLATION AND TO MAINTAIN CLEARANCES AS ENCOUNTERED IN THE FIELD. WORK SHALL BE COORDINATED WITH EXISTING UTILITIES WHICH ARE TO REMAIN IN PLACE.
- COORDINATE WITH ALL OTHER TRADES PRIOR TO PURCHASING OR INSTALLING EQUIPMENT AND MATERIALS.
- COORDINATE DIFFUSER, REGISTER AND GRILLE LOCATIONS WITH ARCHITECTURAL REFLECTED CEILING PLAN AND OTHER TRADES.
- SEE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS TO COORDINATE ROOF PENETRATIONS WITH PROPER INSTALLATION DETAILS.
- ALL DUCT SHALL BE GALVANIZED SHEETMETAL DUCT PER SMACNA GUIDELINES, LATEST EDITION. CONTRACTOR SHALL COMPLY WITH FBC 2011, MECHANICAL 6071.3 EXCEPTION CONDITIONS.
- ALL SUPPLY AIR RETURN AIR AND OUTSIDE AIR DUCT SHALL BE EXTERNALLY INSULATED WITH R6.4, 1 1/2" THICK DUCT URAP. CONTRACTOR SHALL COMPLY WITH ALL SMACNA GUIDELINES, LATEST EDITION.
- THERMOSTATS SHALL BE PROGRAMMABLE WITH HUMIDITY CONTROL AND MOUNTED 48" ABOVE FINISHED FLOOR AND PER ADA REQUIREMENTS. ALL THERMOSTATS LOCATED WITHIN THE COMMON AREAS SHALL BE INSTALLED INSIDE A LOCKABLE BOX.
- EXHAUST FANS SHALL HAVE FACTORY INSTALLED INTEGRAL DISCONNECTS, DIRECT DRIVE FANS TO HAVE SPEED CONTROL AND BACKDRAFT DAMPER.
- DUCT SIZES ARE SHOWN MINIMUM INSIDE DIMENSIONS. COORDINATE FOR DUCT THICKNESS AT POINT OF INTERSECTION WITH OTHER TRADES PRIOR TO INSTALLATION.
- EXHAUST FAN OUTLETS, VENTS, GAS VENTS, OR DRYER EXHAUST SHALL BE INSTALLED A MINIMUM 25'-0" FROM OUTSIDE AIR INTAKES.
- DUCT MOUNTED SMOKE DETECTORS SHALL BE FURNISHED BY MECHANICAL CONTRACTOR AND INSTALLED AND POWERED BY ELECTRICAL CONTRACTOR.
- ALL FIBROUS GLASS INSULATION JOINTS, BEAMS AND CONNECTIONS SHALL BE SEALED WITH MASTIC. HEAT AND PRESSURE SENSITIVE TAPES ARE NOT ACCEPTABLE AS FINAL CLOSURE.
- SEAL ALL DUCTWORK JOINTS WITH DUCT SEALANT PER PROJECT SPECIFICATIONS.
- ALL PENETRATIONS, DUCT, PIPING AND CONTROL CONDUIT IN FIRE AND SMOKE PARTITIONS SHALL BE PROPERLY SEALED PER DETAILS IN ARCHITECTURAL SPECIFICATIONS, DIVISION 6.
- FIRE DAMPERS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATION AND SHALL BE UL 555 LISTED.
- TEST AND BALANCE CONTRACTOR SHALL TAKE AIR PRESSURE DIFFERENTIAL ACROSS DUCT SMOKE DETECTOR SAMPLING TUBES. RESULTS SHALL BE INCORPORATED IN FINAL TEST AND BALANCE REPORT AND SHALL BE AVAILABLE FOR INSPECTION AT FINAL INSPECTION.
- TEST AND BALANCE CONTRACTOR SHALL HAVE A COPY OF FINAL TEST AND BALANCE REPORT AVAILABLE AT FINAL INSPECTION.
- INTERLOCK OPERATION OF EXHAUST FANS WITH OPERATION OF CORRESPONDING HVAC EQUIPMENT PER EXHAUST FAN SCHEDULE.
- ALTERNATE MANUFACTURERS AND MODELS WILL BE REVIEWED PER PROJECT SPECIFICATIONS. THERE MAY BE ARCHITECTURAL, STRUCTURAL AND ELECTRICAL CHANGES RESULTING FROM THE ALTERNATES. THE COST AND COORDINATION OF IMPLEMENTING AND ENGINEERING THESE CHANGES SHALL BE BORNE BY THE SUBCONTRACTOR REQUESTING THE CHANGES EVEN IF SHOP DRAWINGS HAVE BEEN APPROVED BY THE ENGINEER.
- ALL KITCHEN GREASE EXHAUST DUCTWORK SHALL BE UL LISTED, WELDED, DOUBLE WALL STAINLESS STEEL DUCT WITH INSULATION, MANUFACTURED ACCORDING TO F.B.C. MECHANICAL 2011 AND NFPA 96.
- THE MECHANICAL NOTES ARE PART OF THE DESIGN SET AND IF THERE IS ANY CONFLICT BETWEEN THE DESIGN SPECIFICATIONS AND THE FLORIDA BUILDING CODE 2011 OR ACHA GUIDELINES 2011, THE MORE STRICT REQUIREMENT SHALL TAKE SUPERPRIORITY.
- ANY DUCT PENETRATING A FIRE RATED WALL OR CEILING SHALL HAVE A FIRE DAMPER AND CEILING ACCESS PANEL AT WALL PENETRATION. WHETHER SHOWN ON THE DRAWING OR NOT, OR MUST FILL EXCEPTION CONDITIONS OF FLORIDA BUILDING CODE 2011, MECHANICAL 6071.3.3.
- ALL DIFFUSERS SHALL HAVE MANUAL VOLUME DAMPER AT DUCT CONNECTION WHETHER SHOWN ON THE DRAWING OR NOT. SEE DETAILS.
- REFER TO MANUFACTURER RECOMMENDATION FOR EQUIPMENT AND AHU'S CEILING ACCESS PANEL OR DOOR SIZE, DIMENSION AND LOCATION. REFER TO EQUIPMENT MANUFACTURER RECOMMENDED CLEARANCE AND INSTALLATION RECOMMENDATIONS.
- CONNECT ALL CONDENSATE DRAIN TO STORM DRAIN OR OUTDOOR LANDSCAPE.
- ALL DOOR UNDERCUT SHALL BE MINIMUM 3/4" UNLESS OTHERWISE NOTED. REFER TO ARCHITECTURAL SPECIFICATIONS.
- INSTALL CEILING ACCESS DOOR FOR EVERY DAMPER IF IT IS NOT ACCESSIBLE FROM THE CEILING TILES.
- INSTALL ACCESS DOOR(S) IN GREASE EXHAUST DUCT EVERY 20' HORIZONTALLY, AT EVERY CHANGE IN DIRECTION AND AT EVERY FLOOR LEVEL FOR CLEAN OUT.
- ALL 9/4 12" OR HIGHER 45', 90' DUCT ELBOWS SHALL HAVE TURNING VANES IN THEM.
- ALL DRYER EXHAUST DUCT SHALL BE ROUND GALVANIZED RIGID SHEET METAL DUCT WITH RADIUS ELBOWS, CORRUGATED OR FLEX DUCT IS NOT PERMITTED.
- PROVIDE ALL OUTSIDE AIR INTAKE DUCT WITH MOTORIZED DAMPER AND MANUAL VOLUME DAMPER.
- CONDENSATE DRAIN PIPING SHALL BE PVC, INSULATED WITH 1/2" THICK ARMAFLEX AND SLOPED 1/8" PER LINEAR FOOT.
- PROVIDE ALL MECHANICAL EQUIPMENT ON ROOF AND LOUVERS WITH MIAMI DADE NOTICE OF ACCEPTANCE (NOA) OR FLORIDA PRODUCT APPROVAL.
- ANY OUTSIDE AIR INTAKE INCLUDING ROOFTOP UNIT OUTSIDE AIR INTAKE SHALL BE A MINIMUM OF 36" AFF.
- PROVIDE WITH ALL NECESSARY AND OPTIONAL HARDWARE, FITTINGS, ESCUTCHEONS, ETC. TO ASSURE SYSTEM WORK PROPERLY. FOR ANY DISCREPANCY CONSULT WITH ENGINEER PRIOR TO BIDDING. NO CHANGE ORDER SHALL BE ACCEPTED AFTER CONTRACT IS AWARDED FOR THE SPECIFIED WORK.
- CAPTURE AND CONTAINMENT PERFORMANCE TEST FOR THE KITCHEN HOOD SHALL BE CONDUCTED BY THE TEST AND BALANCE CONTRACTOR IN ACCORDANCE WITH FBC, 2011 MECHANICAL 6071.6.1 PRIOR TO COMPLETION.
- ALL GREASE EXHAUST DUCT IN THE COMMERCIAL KITCHEN SHALL BE UL LISTED, OR BLACK IRON 16 GA. SHEET METAL DUCTWORK.
- REFER TO STRUCTURAL DRAWINGS FOR ROOF TOP MECHANICAL EQUIPMENT INSTALLATION.
- CONTRACTOR SHALL COORDINATE AHU ACCESS PANEL LOCATION AND DIMENSIONS WITH UNIT MANUFACTURER INSTALLATION MANUAL PRIOR TO CONSTRUCTION.
- ALL WORK SHALL BE IN ACCORDANCE WITH ALL APPLICABLE CODES AND STANDARDS AND THEIR RESPECTIVE EDITION DATES TO REFLECT THOSE ADOPTED BY THE FLORIDA STATE FIRE MARSHALL'S RULE CHAPTER 69A-3.012 AND 69A-60 FLORIDA ADMINISTRATIVE CODE (F.A.C.) INCLUDING BUT NOT LIMITED TO, THE NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) CODE 101 (2015 EDITION) WITH THE FLORIDA BUILDING CODE (FBC, 6TH EDITION (2011) AND THE GUIDELINES FOR DESIGN AND CONSTRUCTION OF HOSPITALS AND OUTPATIENT FACILITIES (THE GUIDELINES, 2014 EDITION). UPDATE THIS PROJECT DESIGN TO BRING INTO FULL COMPLIANCE WITH ALL APPLICABLE ADOPTED CODES AND STANDARDS EFFECTIVE DECEMBER 31ST, 2011. NOTE: FOR ALL FACILITIES PARTICIPATING IN THE FEDERAL MEDICARE/MEDICAID PROGRAM MUST ALSO COMPLIANCE WITH NFPA 101 (EDITION 2012).

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| ISSUED | |
|----------------|------------------------------------|
| DATE: 12-28-23 | ISSUED FOR: CONSTRUCTION DOCUMENTS |

| REVISIONS | | |
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| NO. | DATE | DESCRIPTION |
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PROJECT NO.: 2300200
 DRAWN BY: TAD
 PROJECT MANAGER: KJB
 CHECKED BY: RFB
 DATE: 12-28-23
 SCALE: NOT TO SCALE

M001
MECHANICAL
GENERAL INFORMATION

RESIDENTIAL AIR HANDLER UNIT (FC) SCHEDULE LEVEL 1

| TAG | MFR | MODEL NO. | SUPPLY CFM | ENTERING AIR TEMP (DB / WB) | LEAVING AIR TEMP (DB / WB) | TOTAL CAPACITY (MBH) | HORSE POWER | VOLTAGE | ELECTRIC HEATER DATA (KW) | MCA | MOCP | WIDTH / HEIGHT / LENGTH | CONDENSER MARK | CONDENSER MODEL | CONDENSER MCA | CONDENSER MOCP | SEER 2 | AHRI |
|-------|--------|---------------|------------|-----------------------------|----------------------------|----------------------|-------------|--------------|---------------------------|------|------|-------------------------|----------------|-----------------|---------------|----------------|--------|-----------|
| AHU-1 | ALLIED | BCW1E2505NA4X | 600 | 75.0 / 62.5 | 55.0 / 55.0 | 17000 | .5 | 208 / 1 / 60 | 5.0 / 1 | 24.8 | 30.0 | 22" x 30" x 20.8" | CU-FC-A102 | 4AC17L18P | 12.0 | 15.0 | 17.0 | 209567363 |
| AHU-2 | ALLIED | BCW1E2505NA4X | 600 | 75.0 / 62.5 | 55.0 / 55.0 | 17000 | .5 | 208 / 1 / 60 | 5.0 / 1 | 24.8 | 30.0 | 22" x 30" x 20.8" | CU-FC-A101 | 4AC17L18P | 12.0 | 15.0 | 17.0 | 209567363 |

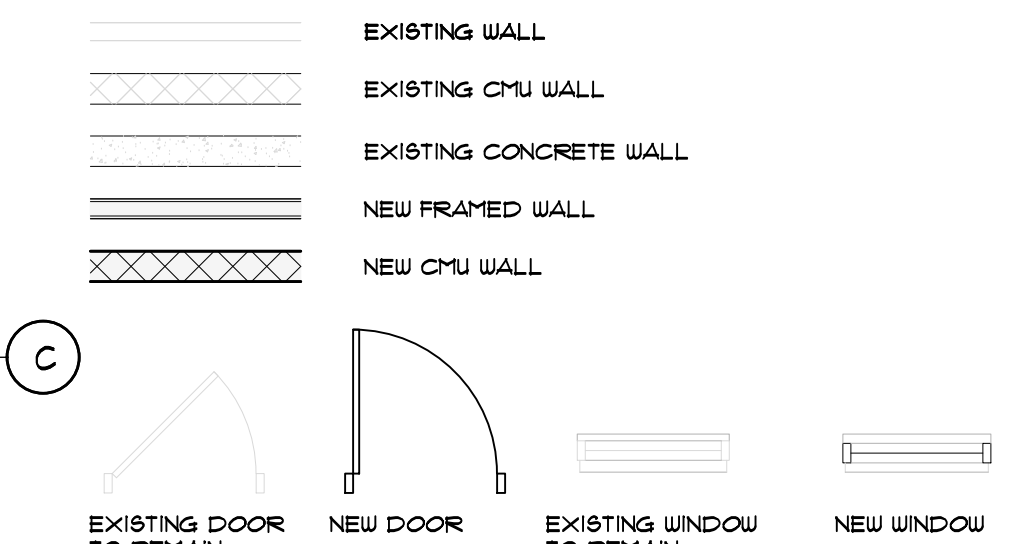
(FC) RESIDENTIAL SCHEDULE NOTES:

- PROVIDE WITH PROGRAMMABLE THERMOSTAT WITH REMOTE SENSOR, HUMIDSTAT.
- COORDINATE MANUFACTURER REQUIREMENTS FOR LONG REFRIGERANT LINES AND ACCESSORIES PRIOR TO CONSTRUCTION.
- AIR HANDLER UNITS CLEARANCE 36" IN FRONT FOR ELECTRICAL PANEL, ACCESS PANEL FOR DRYWALL AND 12" MINIMUM CLEARANCE OTHER THREE SIDES.
- PROVIDE WITH UNITS WITH TWO (2) YEAR WARRANTY ON PARTS AND LABOR AND FIVE (5) YEAR WARRANTY ON THE COMPRESSOR.
- PROVIDE AHU UNITS WITH DISCONNECT SWITCH.
- COORDINATE MANUFACTURER'S INSTALLATION RECOMMENDATIONS.
- TRANE, CARRIER, AAO AND JOHNSON CONTROLS ARE ACCEPTABLE ALTERNATIVE. HOWEVER GENERAL CONTRACTOR IS RESPONSIBLE FOR ALL MODIFICATIONS OF DUCTWORK RESULTING FROM ALTERNATE CHANGE DESIGN.
- CONTRACTOR SHALL COORDINATE EQUIPMENT LOCATION WITH ALL TRADES PRIOR TO INSTALLATION.

GENERAL NOTES:

- FOR ABBREVIATIONS, SYMBOLS, LEGEND, AND GENERAL NOTES, REFER TO SHEET M1001.
- COORDINATE EQUIPMENT INSTALLATION AND LOCATION WITH MANUFACTURER REQUIREMENTS PRIOR TO BIDDING AND CONSTRUCTION.
- SMOKE DETECTORS FOR AIR HANDLING AND ROOFTOP UNITS SHALL PROVIDE AUTOMATIC FAN SHUTDOWN FOR UNIT AND PROVIDE A SUPERVISORY SIGNAL TO THE BUILDING FIRE ALARM SYSTEM. UPON BUILDING GENERAL ALARM ALL AIR HANDLING UNITS (EXCEPT WITHIN RESIDENTIAL UNITS) SHALL SHUT DOWN.
- THE PROJECT'S MECHANICAL DRAWINGS AND SPECIFICATIONS MAKE NO PROVISION(S) FOR THE DIVISION OF GC/SUBCONTRACTOR WORK SCOPE(S). THE GENERAL CONTRACTOR SHALL ENSURE ALL HIS/HER SUBCONTRACTORS HAVE NECESSARY PROVISIONS FOR THE COMPLETE, FUNCTIONING AND WARRANTED WITHOUT EXCEPTION. CONTRACTOR SHALL INCLUDE SUCH PROVISIONS IN HIS/HER BASE BID.

WALL LEGEND



ROUND DUCT SIZE

| CFM RANGE | MINIMUM INTERNAL DIA. @ 0.10 IN. W.C. / 100 FT. |
|-----------|---|
| 0-110 | 6" |
| 115-145 | 7" |
| 150-230 | 8" |
| 235-455 | 10" |
| 460-685 | 12" |
| 690-1015 | 14" |

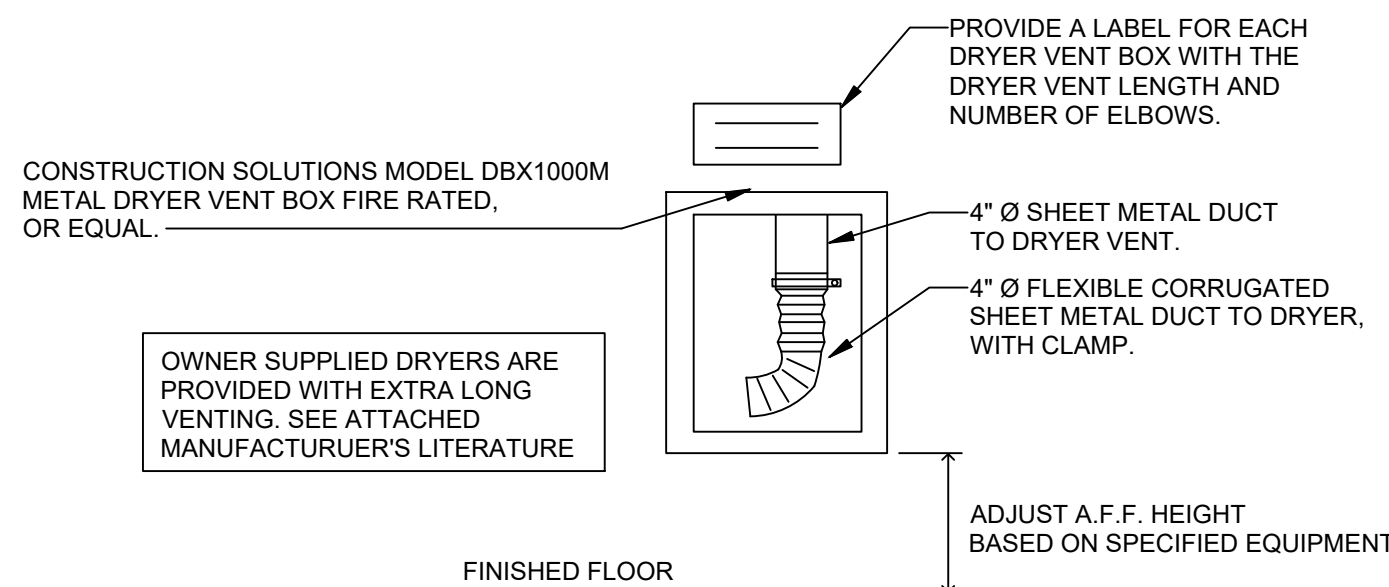
- NOTES:
- PROVIDE ROUND DUCTS UNLESS OTHERWISE NOTED ON FLOOR PLAN.
 - "DIAMETER" MEANS INSIDE DUCT DIAMETER.

FOR BRANCH DUCT SIZE

| CFM RANGE | RECTANGULAR DUCT SIZE (WIDTH x HEIGHT @ 0.10 IN. W.C. / 100 FT.) |
|-----------|--|
| 0-135 | 6" x 6" 6.56" EQ. DIA. |
| 140-175 | 8" x 6" 7.55" EQ. DIA. |
| 180-290 | 8" x 8" 8.16" EQ. DIA. |
| 295-400 | 10" x 8" 9.16" EQ. DIA. |
| 405-855 | 12" x 12" 13.12" EQ. DIA. |
| 860-1290 | 14" x 14" 15.30" EQ. DIA. |

- NOTES:
- PROVIDE RECTANGULAR DUCTS TAKE-OFF TRANSITION TO ROUND DUCT USE TABLE THIS SHEET FOR ROUND DUCT.

| EXHAUST LENGTH FOR LONG VENT MODELS | BASED ON GE ELECTRIC VENT DRYER MODEL #GFV40ESSCMMWW | |
|-------------------------------------|--|--------------------------------------|
| | RECOMMENDED | USE ONLY FOR SHORT RUN INSTALLATIONS |
| NO. OF 90° ELBOWS | RIGID METAL | RIGID METAL |
| 0 | 200 FEET | 175 FEET |
| 1 | 185 FEET | 165 FEET |
| 2 | 175 FEET | 155 FEET |
| 3 | 165 FEET | 145 FEET |
| 4 | 155 FEET | 135 FEET |
| 5 | 145 FEET | 125 FEET |



AIR DEVICE SCHEDULE

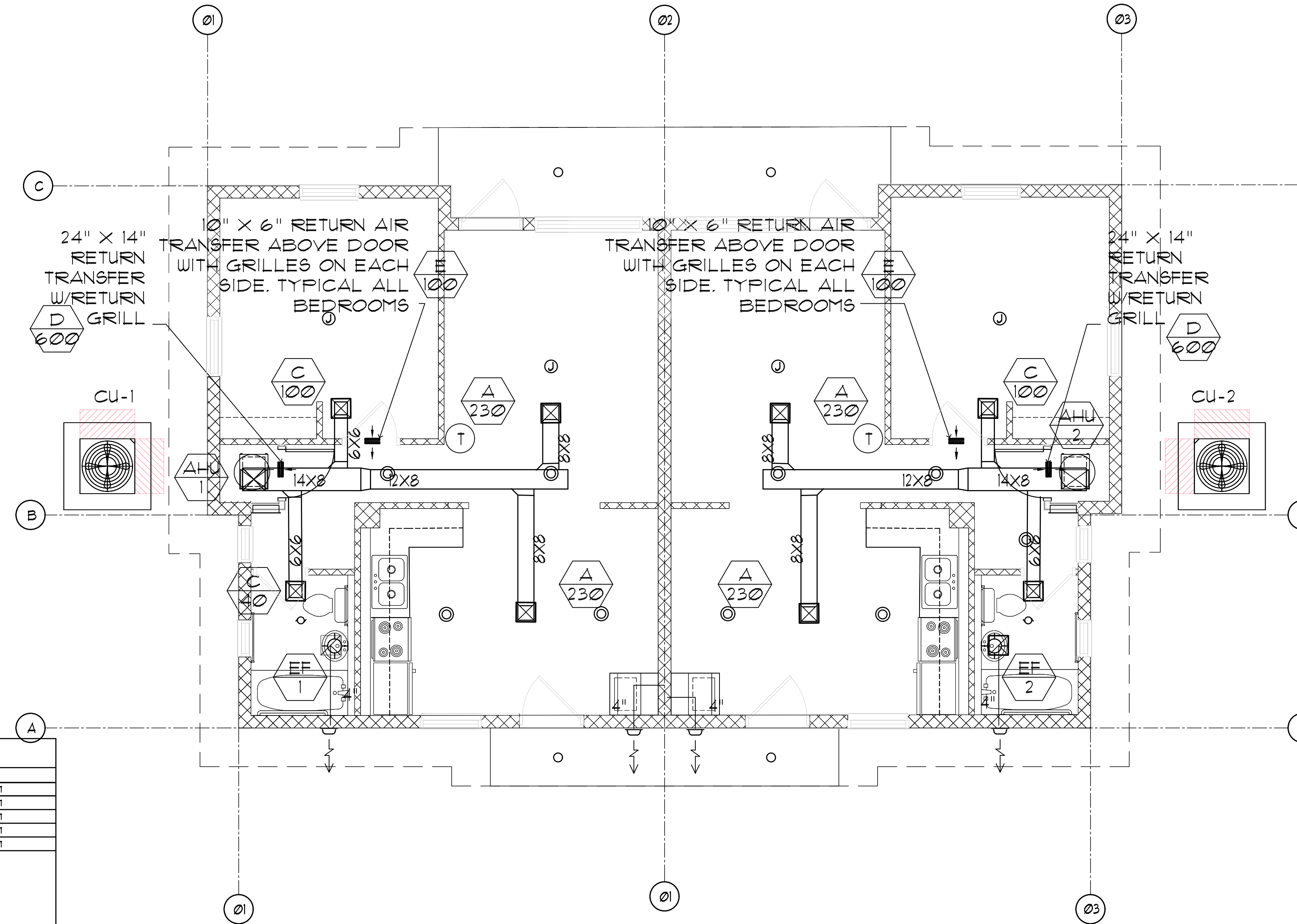
| TAG | MODULE | NECK SIZE | MATERIAL | TYPE | FINISH | MANUFACTURER | MODEL | NOTES |
|-----|--------|-----------|----------|----------|--------|--------------|-------|---------------|
| A | 12x12 | 8x8 | AL | LAT-IN | WHITE | METALAIRE | V4004 | 1, 2, 3, 4, 1 |
| C | 12x12 | 6x6 | AL | LAT-IN | WHITE | METALAIRE | V4004 | 1, 2, 3, 4, 1 |
| D | 24x14 | 22x12 | AL | SIDEWALL | WHITE | METALAIRE | B0F | 1, 2, 3, 4, 1 |
| E | 10x6 | 8x6 | AL | SIDEWALL | WHITE | METALAIRE | R4 | 1, 2, 3, 4, 1 |
| F | 18x12 | 16x6 | AL | SIDEWALL | WHITE | METALAIRE | V4004 | 1, 2, 3, 4, 1 |

- NOTES:
- REFER TO PLANS FOR ALL NECK SIZES
 - ALL OUTLET SHALL BE SELECTED AT A MAXIMUM OF NC 25
 - THE MANUFACTURER SHALL PROVIDE PUBLISHED PERFORMANCE DATA. DATA SHALL BE TESTED IN ACCORDANCE TO ANSI/ASHRAE STANDARD 10 2006.
 - ALL SIDEWALL REGISTERS TO INCLUDE AN ALUMINUM OPPOSED BLADE DAMPER TO BE USED AS FINAL BALANCING

FAN SCHEDULE

| MARK | MANUFACTURER | MODEL | LOCATION | AREA SERVED | TYPE | CFM | E.S.P. | INLET SIZE(S) | ELECTRICAL | | | | NOTES |
|------|--------------|--------|----------|-------------------|---------|-----|--------|---------------|------------|----------|-----|--------|---------|
| | | | | | | | | | POWER | VOLTS/PH | RPM | DRIVE | |
| EF-1 | BROAN | SP-B50 | CEILING | RESIDENTIAL UNITS | CEILING | 50 | 0.60" | 2.5 | 30.6 W | 115/1 | 625 | DIRECT | 2, 3, 4 |
| EF-2 | BROAN | SP-B50 | CEILING | RESIDENTIAL UNITS | CEILING | 50 | 0.60" | 2.5 | 30.6 W | 115/1 | 625 | DIRECT | 2, 3, 4 |

1. INTERLOCK FAN WITH ROOM LIGHTS.
2. PROVIDE WITH INTEGRAL ELECTRIC SERVICE DISCONNECT, FINAL POWER CONNECTION AND PROVIDE WITH INTEGRAL BACKDRAFT DAMPER.
3. MAINTAIN MINIMUM 10 FEET CLEAR BETWEEN FRESH AIR INTAKES AND ANY EXHAUST OUTLET OR VENT. COORDINATE ACCORDINGLY.
4. PROVIDE AND INTERLOCK FAN WITH OCCUPANCY SENSOR (TO BE INSTALLED BY ELECTRICAL CONTRACTOR)



1 FIRST FLOOR PLAN

SCALE: 1/4" = 1'-0"

CONSTRUCTION NORTH

MECHANICAL LINE TYPES

- NEW MECH-DIFFUSER BELOW _____
- NEW MECH-DIFFUSER CEILING _____
- NEW MECH-DUCT EXHAUST _____
- NEW MECH-DUCT OUTSIDE AIR _____
- NEW MECH-DUCT RETURN _____
- NEW MECH-DUCT SUPPLY _____
- NEW MECH-EQUIPMENT _____
- NEW MECH-EQUIPMENT PADS _____
- NEW MECH-EQUIPMENT ROOF _____
- NEW MECH-PIPE CONDENSATE _____
- NEW MECH-PIPE REFRIGERANT _____
- EXISTING DUCT TO REMAIN _____

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ISSUED

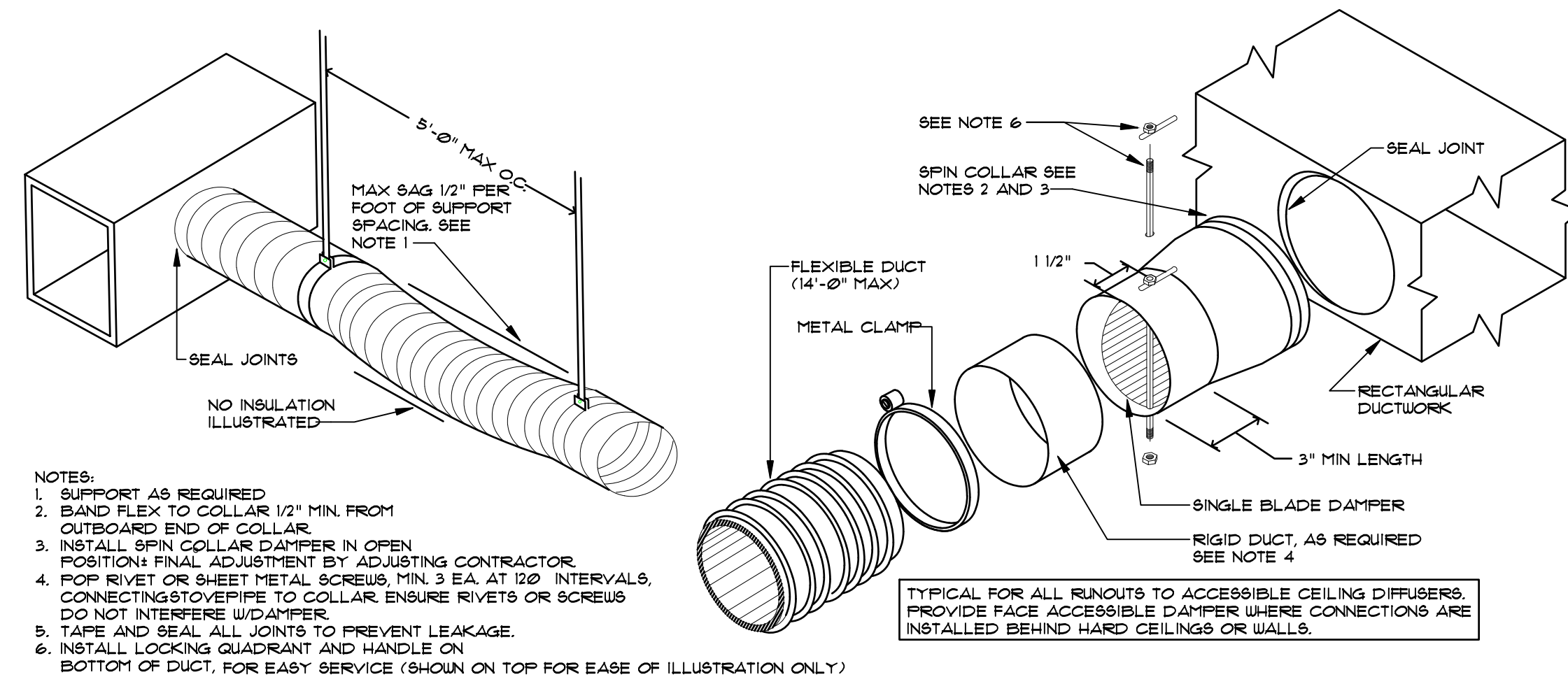
| DATE | ISSUED FOR |
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| 12-28-23 | CONSTRUCTION DOCUMENTS |

REVISIONS

| NO. | DATE | DESCRIPTION |
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PROJECT NO.: 23007200
DRAWN BY: TAD
PROJECT MANAGER: KJB
CHECKED BY: KJB
DATE: 12-28-23
SCALE: 1/4" = 1'-0"

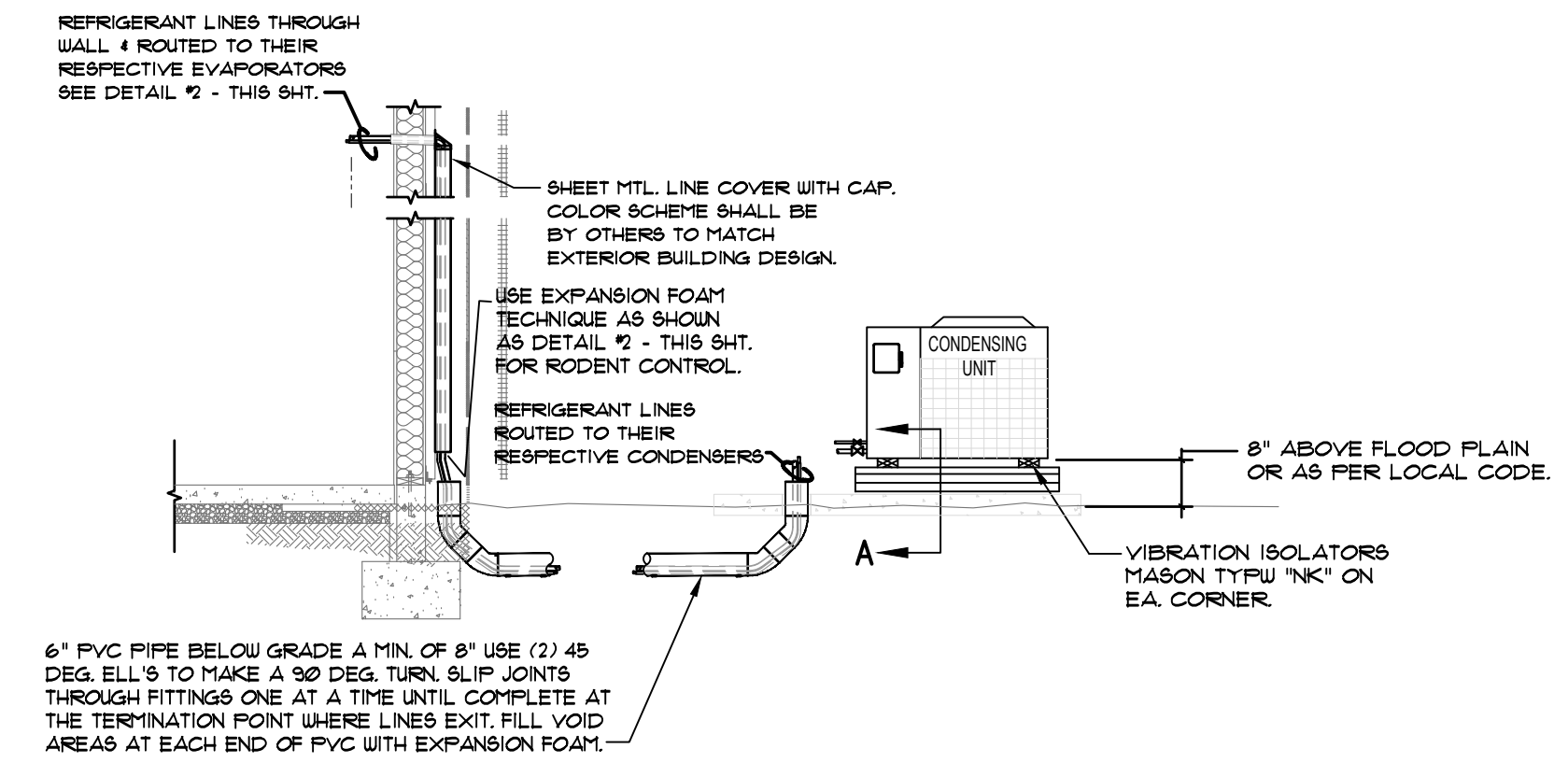
M101
FIRST FLOOR
MECHANICAL PLAN



NOTES:
 1. SUPPORT AS REQUIRED
 2. BAND FLEX TO COLLAR 1/2" MIN. FROM OUTBOARD END OF COLLAR.
 3. INSTALL SPIN COLLAR DAMPER IN OPEN POSITION. FINAL ADJUSTMENT BY ADJUSTING CONTRACTOR.
 4. POP RIVET OR SHEET METAL SCREWS, MIN. 3 EA. AT 120° INTERVALS, CONNECTING TO PIPE TO COLLAR. ENSURE RIVETS OR SCREWS DO NOT INTERFERE WITH DAMPER.
 5. TAPE AND SEAL ALL JOINTS TO PREVENT LEAKAGE.
 6. INSTALL LOCKING QUADRANT AND HANDLE ON BOTTOM OF DUCT, FOR EASY SERVICE (SHOWN ON TOP FOR EASE OF ILLUSTRATION ONLY)

TYPICAL FOR ALL RUNOUTS TO ACCESSIBLE CEILING DIFFUSERS. PROVIDE FACE ACCESSIBLE DAMPER WHERE CONNECTIONS ARE INSTALLED BEHIND HARD CEILING OR WALLS.

NOTES:
 FLEX DUCT SHALL NOT BE ACCEPTABLE PER CODE FOR ALL RETURN OR EXHAUST DUCT.



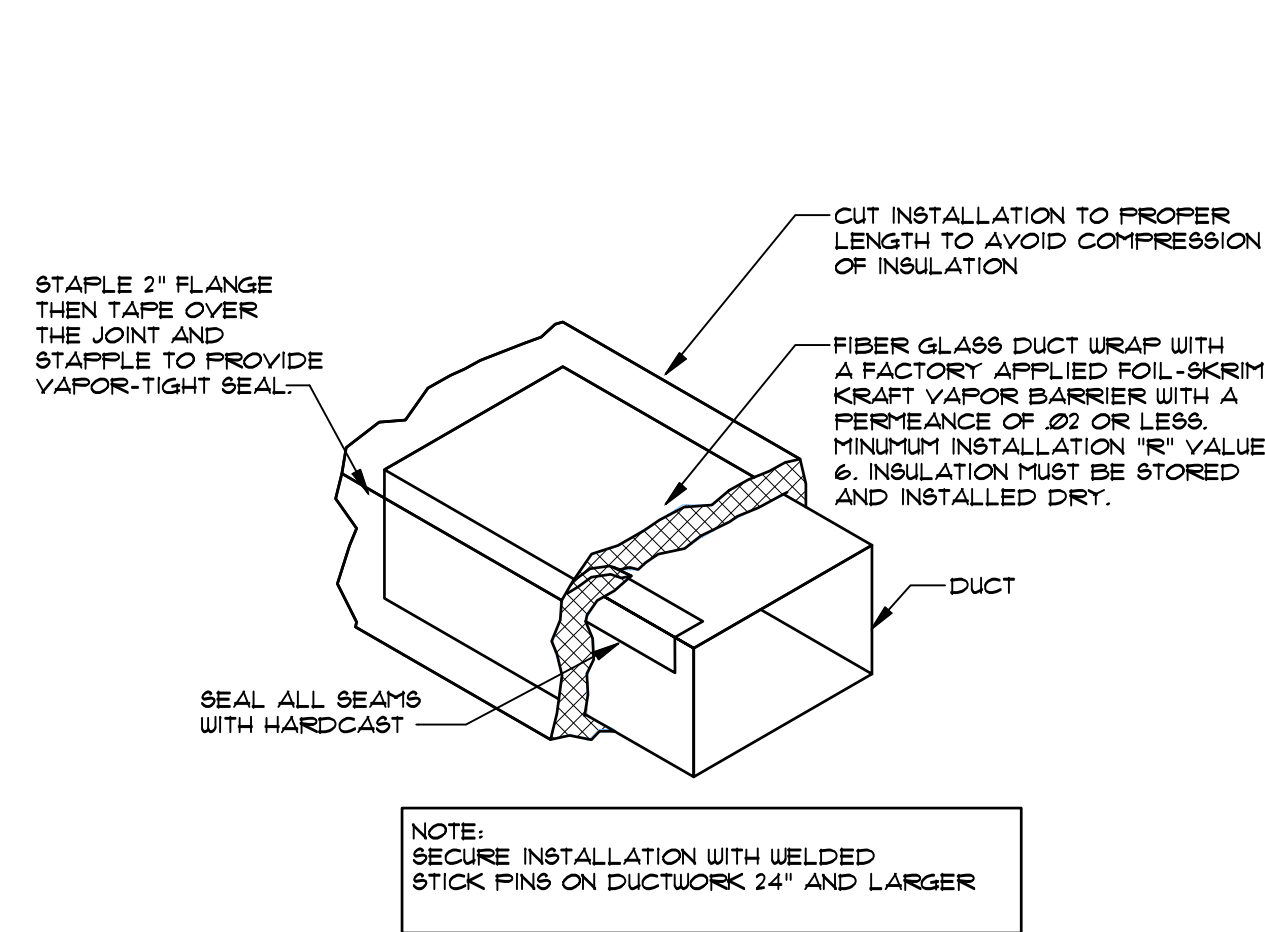
1. REFRIGERANT LINES SHALL BE SIZED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS FOR STATIC LIFTS AND TOTAL LENGTHS REQUIRED, INCLUDING THE LONG - LINE INSTALLATION INSTRUCTIONS. SUBMIT LETTER OF GUARANTEE OF PERFORMANCE OF A/C SYSTEM TO OWNER AND THE ARCHITECT.
 2. EQUIPMENT SUPPORTS SHALL BE LEVELLED TO ALLOW PROPER CONDENSING UNIT OPERATION.

1 FLEXIBLE DUCT AND TAP

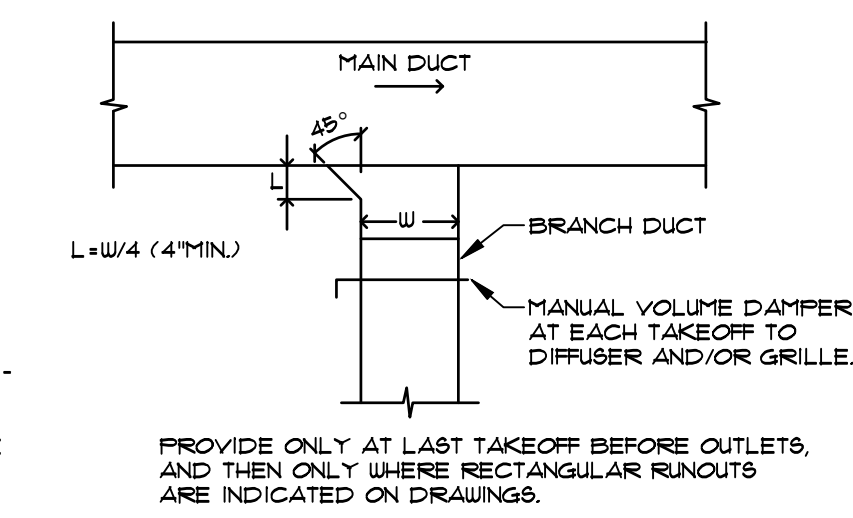
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2 REFRIGERANT LINE PIPING BELOW GRADE

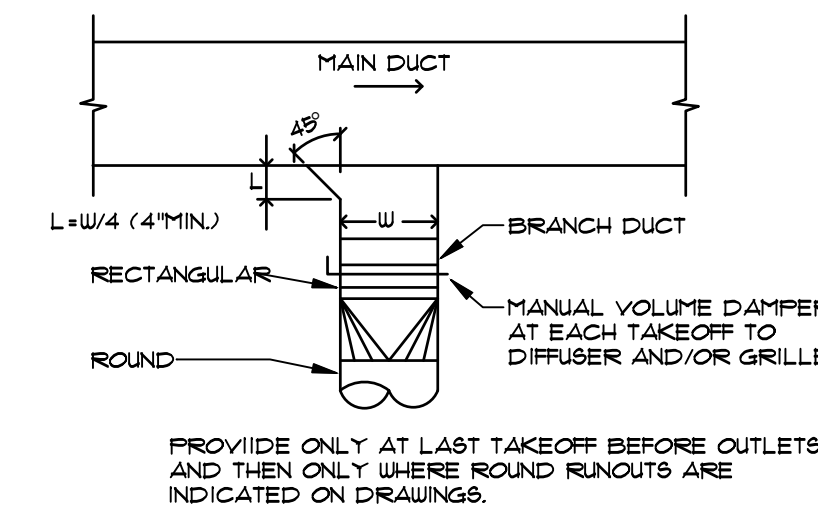
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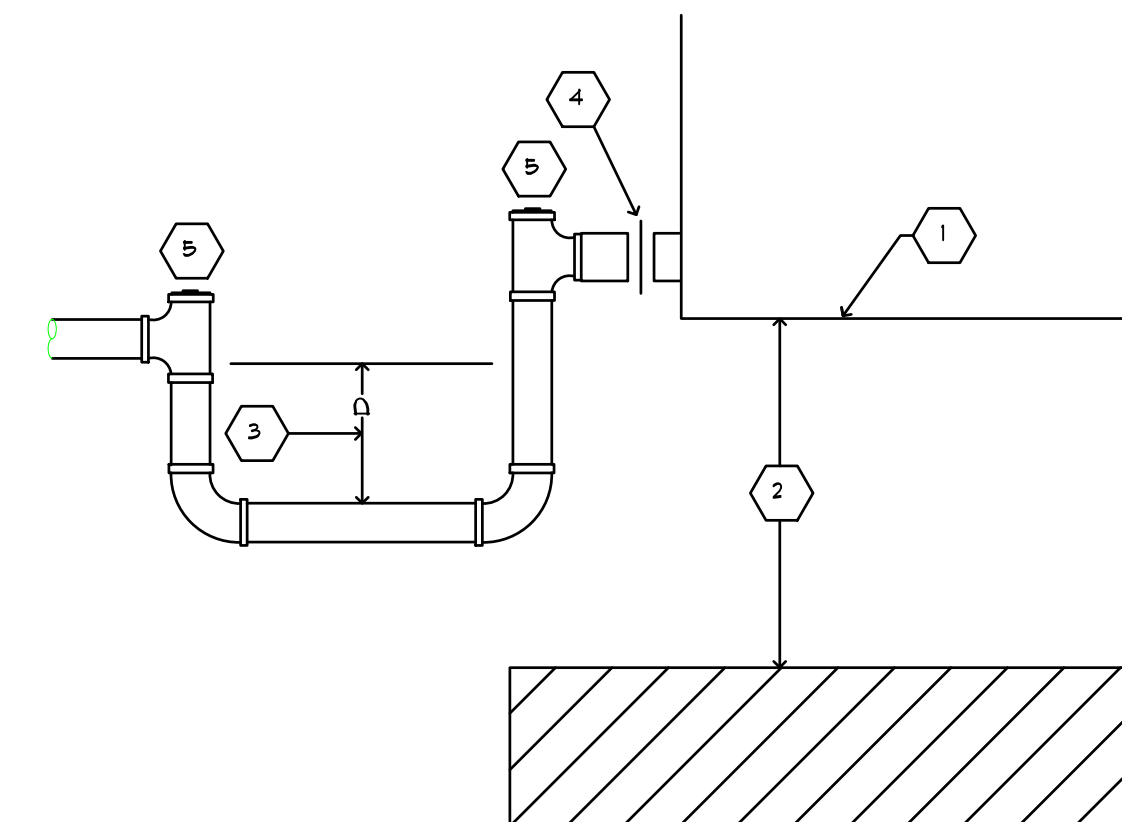
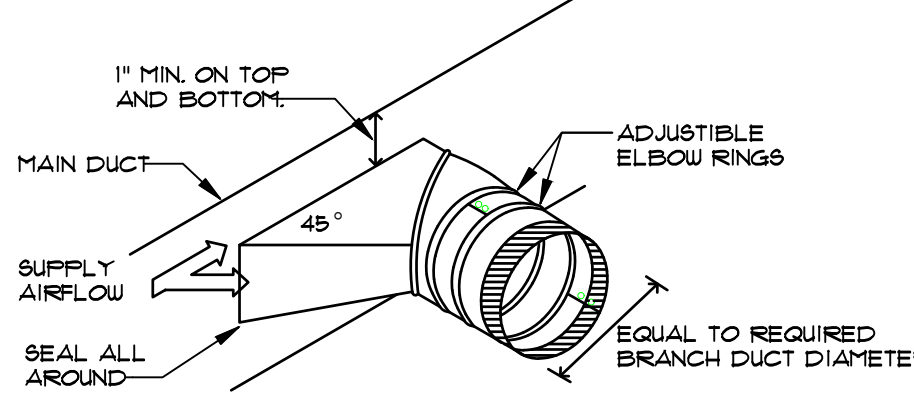
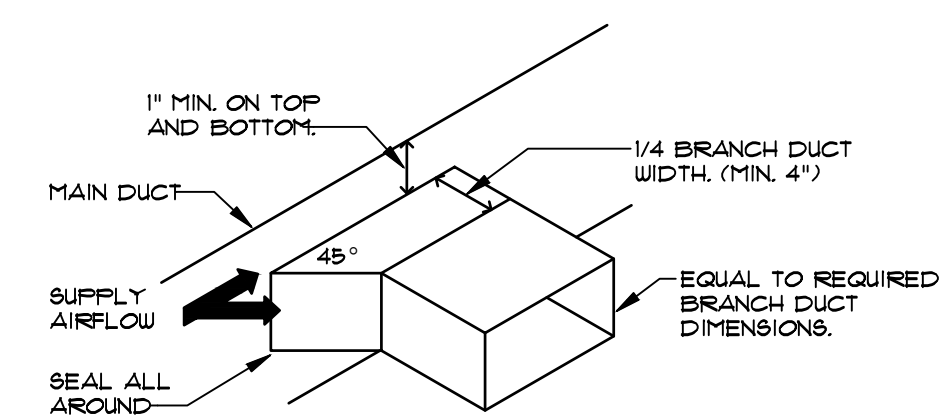
NOTE: SECURE INSTALLATION WITH WELDED STICK PINS ON DUCTWORK 24" AND LARGER



PROVIDE ONLY AT LAST TAKEOFF BEFORE OUTLETS, AND THEN ONLY WHERE RECTANGULAR RUNOUTS ARE INDICATED ON DRAWINGS.



PROVIDE ONLY AT LAST TAKEOFF BEFORE OUTLETS, AND THEN ONLY WHERE ROUND RUNOUTS ARE INDICATED ON DRAWINGS.



KEY NOTES:
 1. AHU CONDENSATE DRAIN PAN.
 2. UNIT SHALL BE SUPPORTED HIGH ENOUGH TO ACCOMMODATE PIPING ARRANGEMENT.
 3. D = MINIMUM 2X EXTERNAL STATIC PRESSURE, IN INCHES WATER COLUMN.
 4. UNION.
 5. THREADED CAP.

3 TYPICAL DUCT WRAP DETAIL

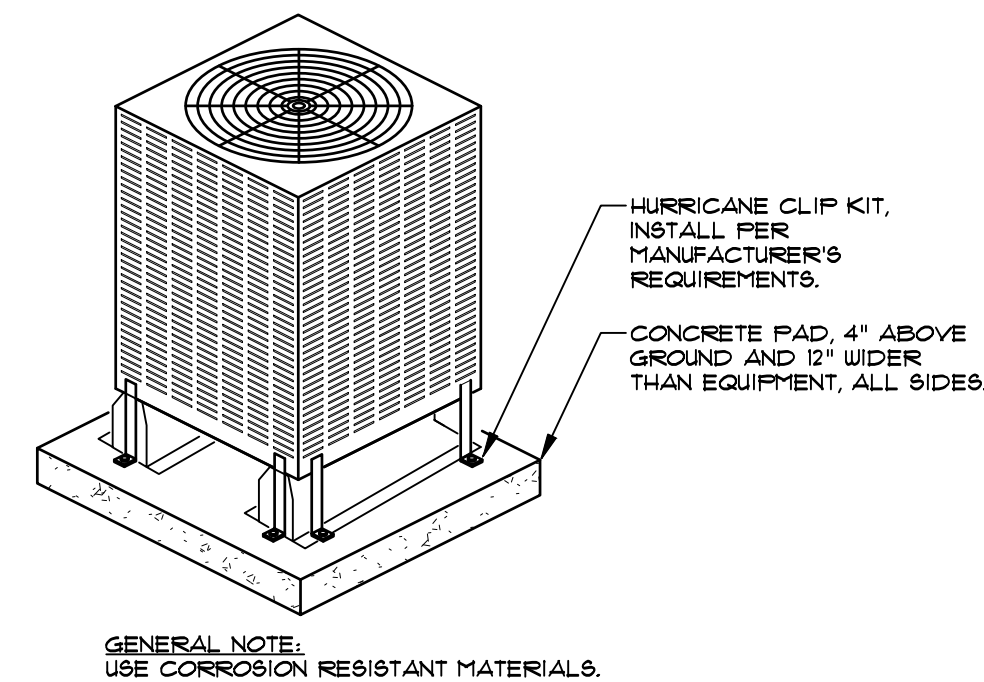
SCALE: NOT TO SCALE

4 DUCT BRANCH TAKE OFF FITTINGS

SCALE: NOT TO SCALE

5 A/C UNIT CONDENSATE TRAP

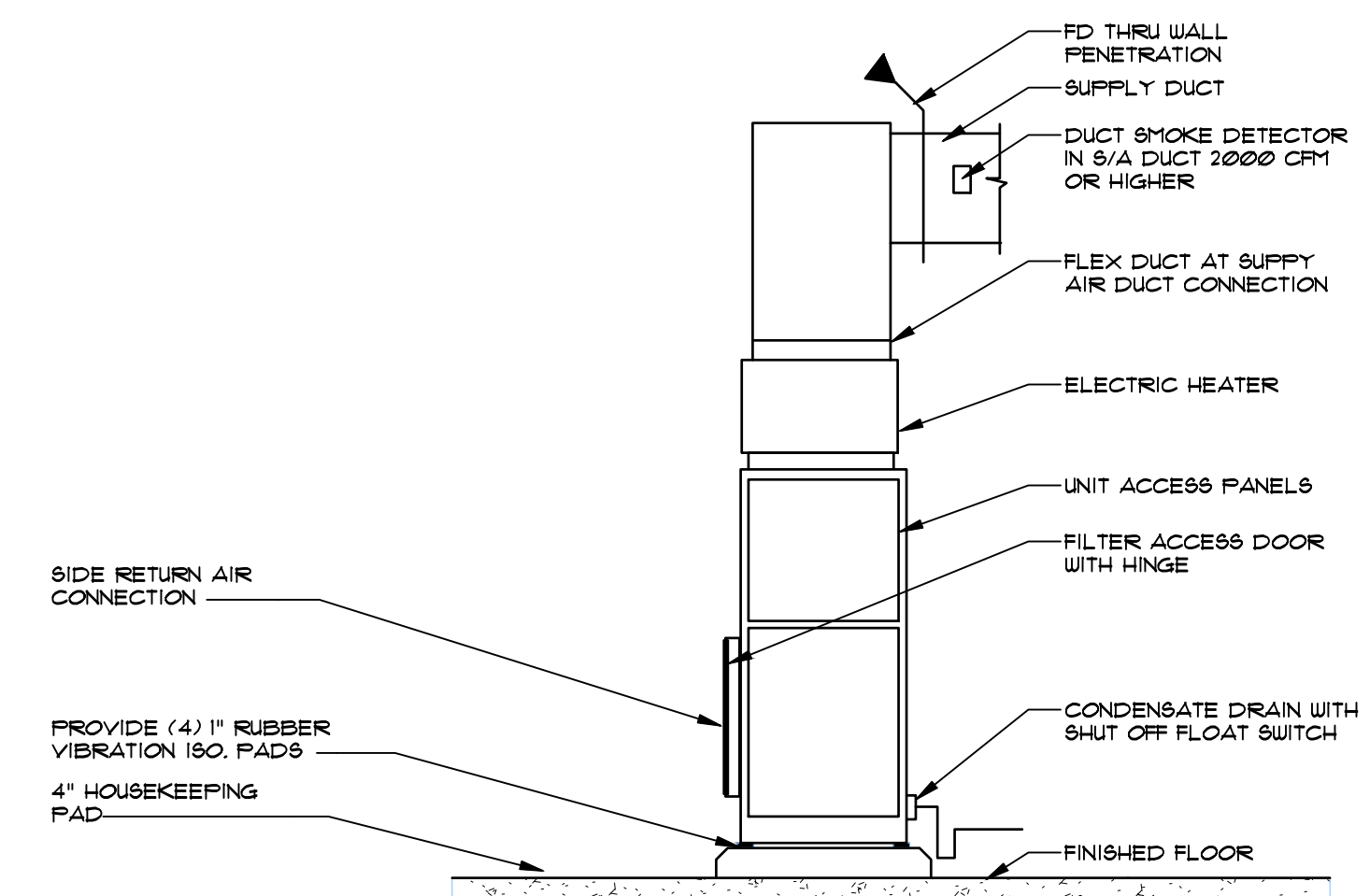
SCALE: NOT TO SCALE



GENERAL NOTE:
 USE CORROSION RESISTANT MATERIALS.

6 CONDENSING UNIT TIE DOWN DETAIL

SCALE: NOT TO SCALE



7 AHU W/PAD (SIDE RETURN)

SCALE: NOT TO SCALE

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| NO. | DATE: | DESCRIPTION |
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PROJECT NO.: 23002.00
 DRAWN BY: TAD
 PROJECT MANAGER: KJB
 CHECKED BY: RFB
 DATE: 12-28-23
 SCALE: NOT TO SCALE

M601
 MECHANICAL
 DETAILS

GENERAL DEMOLITION NOTES

GENERAL CONTRACTOR (GC) SHALL DO ALL REMOVAL/ DEMOLITION AS INDICATED ON THE DRAWINGS AND/OR REQUIRED TO INSTALL THE NEW WORK AS INDICATED ON THE CONSTRUCTION DRAWINGS, INCLUDING BUT NOT LIMITED TO THE FOLLOWING:

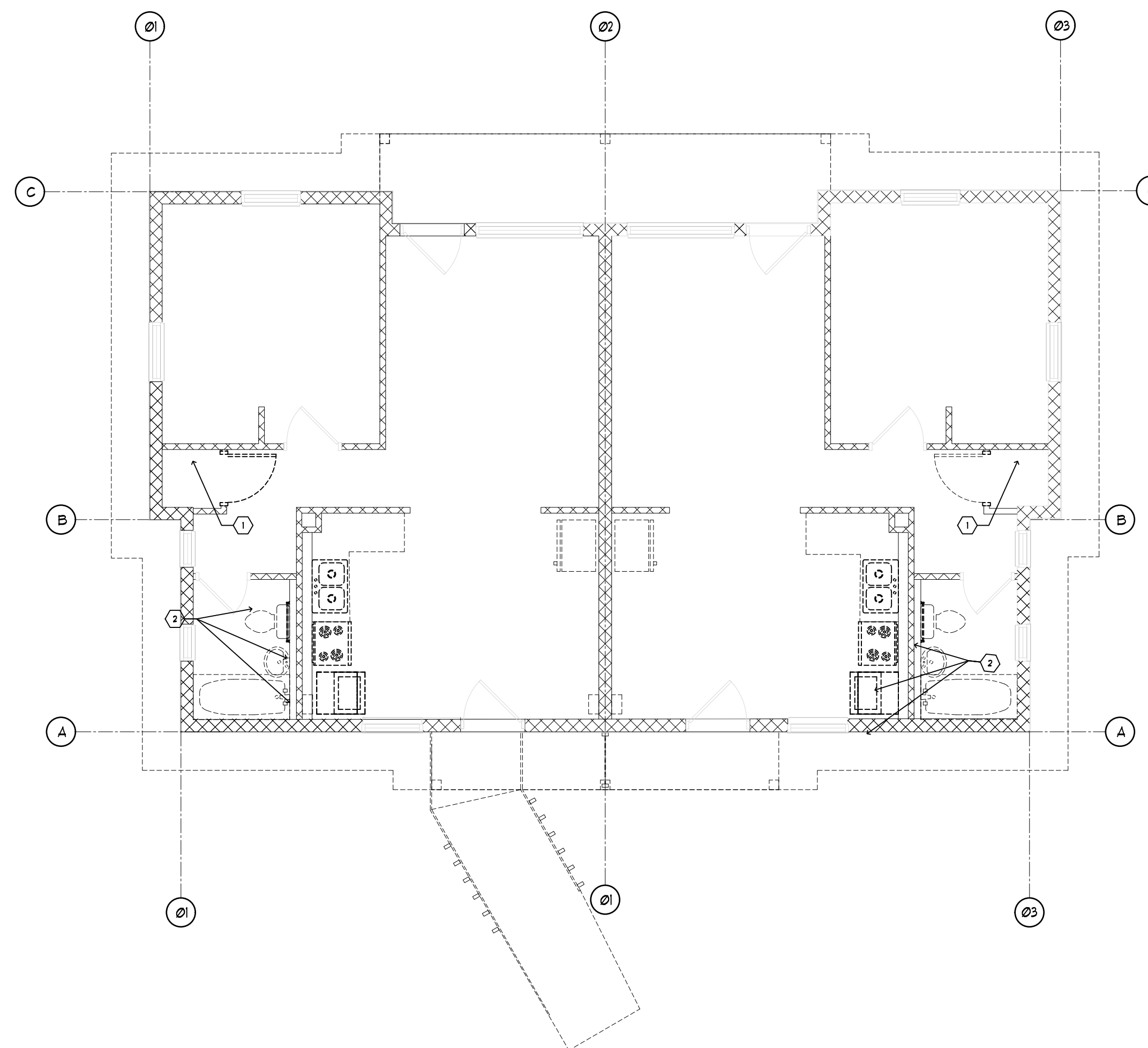
1. GC SHALL VISIT THE SITE PRIOR TO BID AND FAMILIARIZE HIMSELF WITH THE SCOPE OF REMOVAL WORK PRIOR TO BID.
2. DRAWINGS SHOW ONLY MAJOR SCOPE OF REMOVAL AND GENERAL APPROXIMATION OF PARTITIONS AND ANY OTHER EXISTING ITEMS, I.E. PIPES, DUCTS, OUTLETS, ETC. TO BE REMOVED. CONTRACTORS ARE REQUIRED TO REMOVE ALL EXISTING PARTITIONS, PIPES, OUTLETS, DEVICES AND RELATED ITEMS NOT SHOWN, AS REQUIRED TO SUIT ALL NEW WORK.
3. EXISTING PLUMBING, MECHANICAL AND ELECTRICAL EQUIPMENT, FIXTURES AND UTILITIES ETC. SHOWN ON DRAWINGS ARE APPROXIMATELY LOCATED. CONTRACTORS ARE TO DETERMINE EXACT LOCATIONS OF ALL ITEMS IN THE FIELD.
4. ALL SURFACES DISTURBED BY REMOVALS SHALL BE PATCHED TO MATCH EXISTING ADJACENT FINISHES. TYPICAL THROUGHOUT FOR WALLS, CEILINGS AND FLOORS.
5. GC SHALL CHECK AND VERIFY ALL CONDITIONS AFFECTING THE DEMOLITION AND NEW WORK AND NOTIFY THE ARCHITECT OF ANY DISCREPANCIES ON THE PLANS WHICH WOULD AFFECT THE WORK.
6. GC SHALL MAINTAIN A SECURE BUILDING. THE AREAS OF THE BUILDING MUST BE LOCKED AND MADE SECURE DURING NON-CONSTRUCTION HOURS.
7. GC SHALL PROVIDE, ERECT AND MAINTAIN TEMPORARY BARRIERS AT INVOLVED WORK AREAS TO SATISFY THE FACILITY.
8. GC SHALL PROTECT EXISTING MATERIALS AND FINISHES WHICH ARE NOT TO BE DEMOLISHED.
9. GC SHALL REMOVE/DEMOLISH THE FOLLOWING ITEMS (AS INDICATED WITH DASHED LINES) INCLUDING THE REMOVAL OF ALL LIGHTING WIRES AND EXPOSED CEILING FINISHES AND TIES ATTACHED OR SUSPENDED FROM STRUCTURE ABOVE WHERE IMPACTED BY NEW WORK.
10. REMOVE EXISTING FLOOR FINISHES, IN AREA OF DEMOLITION (AND IN AREAS INDICATED TO RECEIVE NEW FINISHES AS PER FINISH SCHEDULE). PATCH ANY OPEN OR CRACKED FLOOR AREAS WITH FLASH PATCHING. CREATE A SMOOTH FLUSH CONDITION TO RECEIVE NEW FLOOR FINISHES.
11. WHERE PARTITIONS ARE INDICATED TO BE REMOVED, REMOVE ALL TRIM, DOORS, FRAMES, WALL, OUTLETS, SWITCHES, SURFACE MOUNTED FIXTURES, AND WIRING BACK TO DISTRIBUTION PANEL.
12. GC 4 HIS/HER SUBCONTRACTORS SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS AND PAYING ALL FEES AS PART OF THE WORK REQUIRED FOR THIS PROJECT.
13. ALL DEMOLITION DEBRIS SHALL BE REMOVED AT LEAST ONCE PER DAY TO MAINTAIN SAFE WORKING CONDITIONS. VERIFY METHOD AND LOCATION OF DUMPSTERS WITH ARCHITECT PRIOR TO BEGINNING WORK.
14. PROVIDE TEMPORARY LIGHTING AND ELECTRICAL SERVICE IN THE WORK AREA AS REQUIRED TO COMPLETE THE WORK.
15. CONTRACTOR SHALL CAREFULLY COORDINATE THE EXTENTS OF ALL DEMOLITION WORK WITH THE PROPOSED NEW WORK AND NOTIFY THE ARCHITECT OF DISCREPANCIES PRIOR TO BEGINNING WORK.
16. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS OF AND TO EXISTING ELEMENTS ON PROJECT SITE AND NOTIFY THE ARCHITECT WHERE DIMENSIONS OF SUCH EXISTING ELEMENTS MAY BE OF IMPACT TO THE NEW WORK.

WALL LEGEND

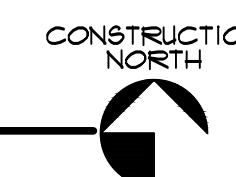
- DEMOLISHED WALL
- ===== EXISTING WALL
- ===== EXISTING CMU WALL
- EXISTING DOOR TO REMAIN
- EXISTING DOOR TO BE REMOVED
- HATCH INDICATED TO BE DEMOLISHED

DEMOLITION KEYNOTES

- 1 REMOVE EXISTING GAS WATER HEATER (SEE PLUMBING DRAWINGS FOR CLARIFICATION & AIR HANDLING UNIT. REMOVE ALL EXISTING MECHANICAL DUCTWORK AND EQUIPMENT IN FIELD. VERIFY IN FIELD
- 2 GC TO COORDINATE ELECTRICAL, PLUMBING & MECHANICAL DRAWINGS FOR CUTTING EXISTING FLOOR SLAB FOR UNDERGROUND PIPING, TRENCHING ETC.



1 FIRST FLOOR DEMOLITION PLAN
SCALE: 1/4" = 1'-0"



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| PROJECT NO.: | 230027.00 |
| DRAWN BY: | TSS |
| PROJECT MANAGER: | KJB |
| CHECKED BY: | KJB |
| DATE: | 12-28-23 |
| SCALE: | 1/4" = 1'-0" |

MD101
FIRST
DEMOLITION PLAN &
ELEVATION