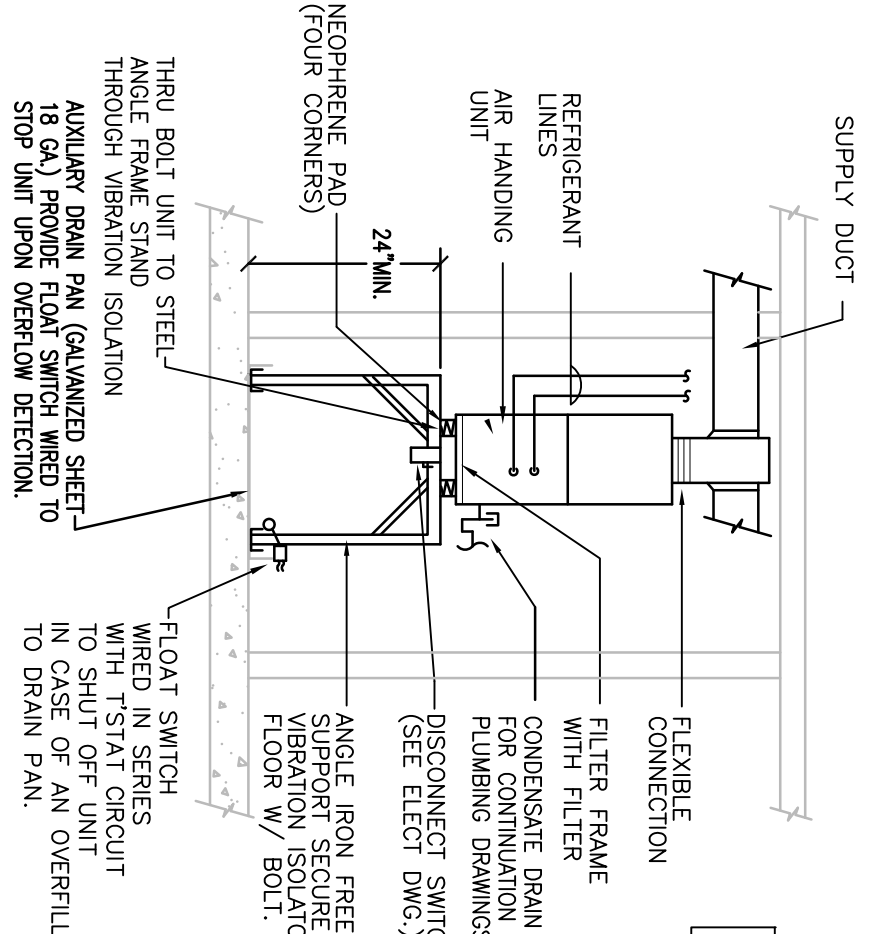


**Mechanical Floor Plan**  
SCALE: 1/4" = 1'-0"

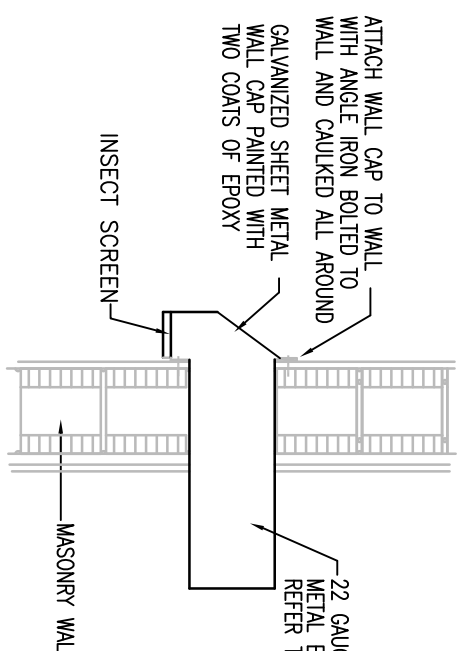
**TYPICAL CONDENSING UNIT MOUNTING DETAIL**  
N.T.S.

- 1. CONCEALED OR NON-REMOVABLE JOINTS SHALL NOT BE PERMITTED FOR UNDERGROUND PIPING.
- 2. MAXIMUM NUMBER OF ELBOWS FOR UNDERGROUND PIPING SHALL BE TWO WITH AN ANGLE OF NO MORE THAN 45 DEGREES. PIPING SHALL BE MIN. TWO INCHES LARGER THAN
- 3. PIPE AND INSULATION ENCASED.
- 4. CONDENSING UNIT SHALL BE MOUNTED ABOVE FLOOD CRITERIA.

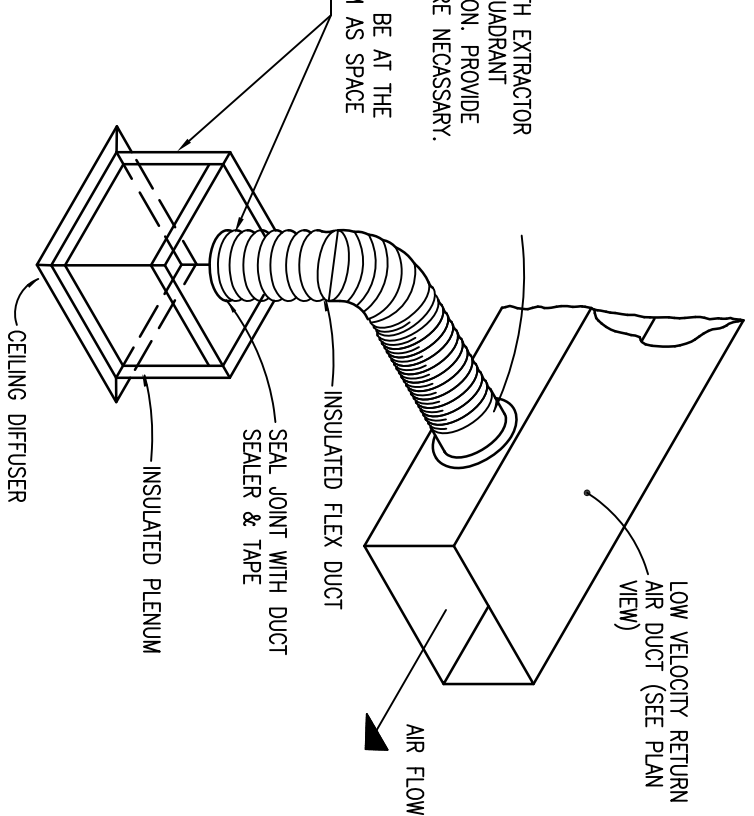
**TYPICAL AHU MOUNTING DETAIL**  
N.T.S.



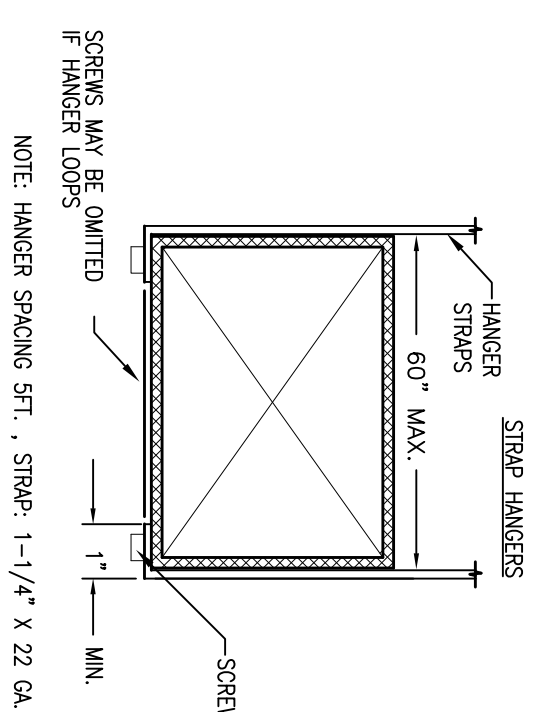
**WALL CAP DETAIL**  
N.T.S.



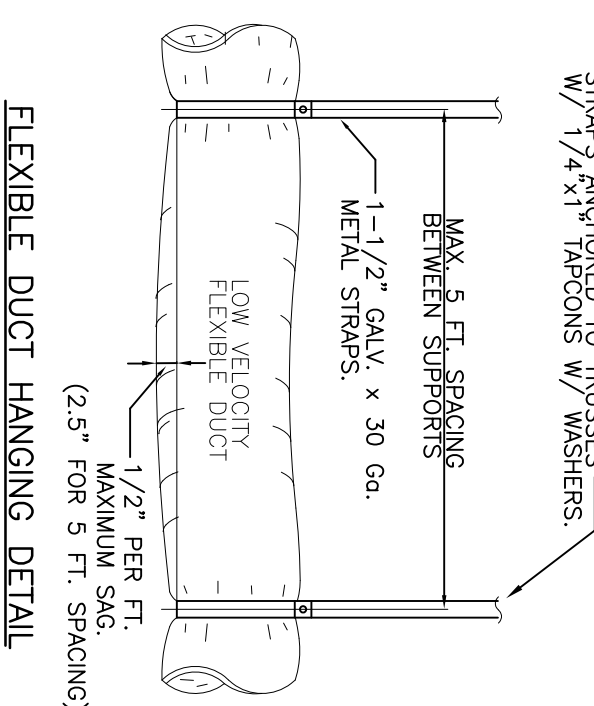
**FLEXIBLE DUCT CONNECTIONS DETAIL**  
N.T.S.



**DUCT HANGER DETAIL**  
N.T.S.



**FLEXIBLE DUCT HANGING DETAIL**  
N.T.S.

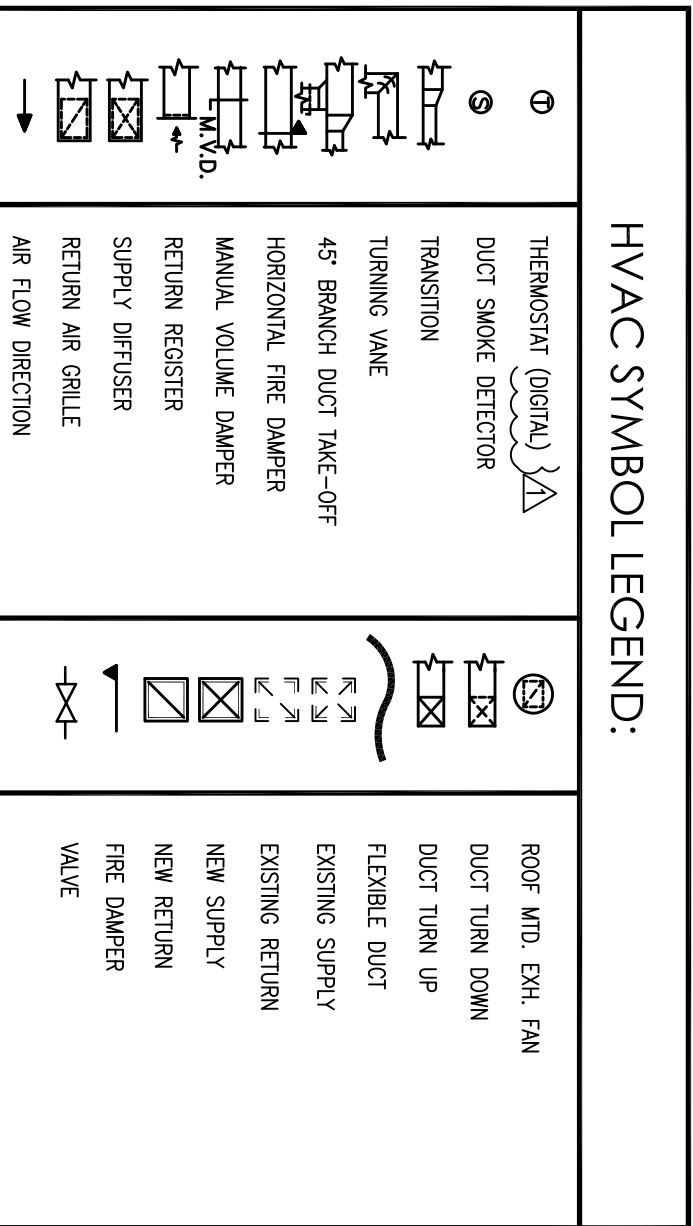


UNIT NUMBER	AREA	SEVENED	LOCATION	DUTY	FAN TYPE	FAN SPEED	FAIR QUANTITY	OPENING REQUIRED	FAIR MOTOR	ELECTRICAL CHAIR	MODEL NUMBER	WEIGHT
EF-1	REAR ROOMS	CEILING	EXH	DIRECT	CEILING FAN	50	50	1/2"	50 WATTS	115/1/60	NINTONE	696
EF-1	REAR ROOMS	CEILING	EXH	DIRECT	CEILING FAN	50	50	1/2"	50 WATTS	115/1/60	NINTONE	696
EF-1	REAR ROOMS	CEILING	EXH	DIRECT	CEILING FAN	50	50	1/2"	50 WATTS	115/1/60	NINTONE	696
EF-1	REAR ROOMS	CEILING	EXH	DIRECT	CEILING FAN	50	50	1/2"	50 WATTS	115/1/60	NINTONE	696
EF-1	REAR ROOMS	CEILING	EXH	DIRECT	CEILING FAN	50	50	1/2"	50 WATTS	115/1/60	NINTONE	696

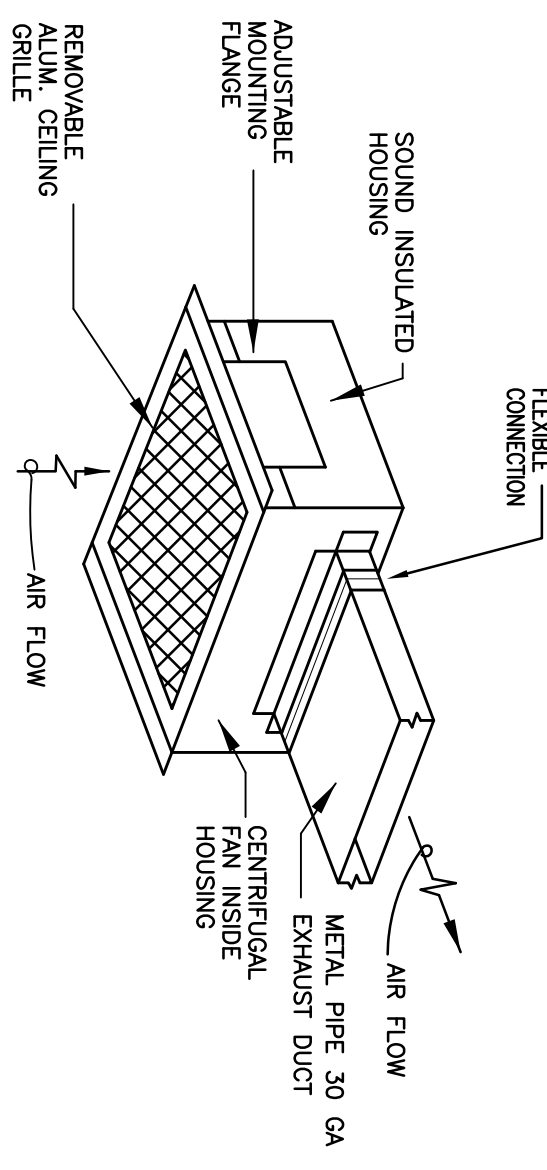
UNIT NUMBER	AREA	SEVENED	LOCATION	DUTY	FAN TYPE	FAN SPEED	FAIR QUANTITY	OPENING REQUIRED	FAIR MOTOR	ELECTRICAL CHAIR	MODEL NUMBER	WEIGHT
AHU-1	REAR ROOMS	CEILING	EXH	DIRECT	CEILING FAN	50	50	1/2"	50 WATTS	115/1/60	NINTONE	696
AHU-1	REAR ROOMS	CEILING	EXH	DIRECT	CEILING FAN	50	50	1/2"	50 WATTS	115/1/60	NINTONE	696
AHU-1	REAR ROOMS	CEILING	EXH	DIRECT	CEILING FAN	50	50	1/2"	50 WATTS	115/1/60	NINTONE	696
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AHU-1	REAR ROOMS	CEILING	EXH	DIRECT	CEILING FAN	50	50	1/2"	50 WATTS	115/1/60	NINTONE	696

HVAC DECISION	REQUIRES	YES	NO
DUCT SMOKE DETECTOR			
DUCT SMOKE DETECTOR			
SMOKE DETECTOR			
FIRE RATED ENCLOSURE			
THE RATED ROOF CEILING ASSEMBLY			
FIRE STOPPING			
SMOKE CONTROL			

**HVAC SYMBOL LEGEND:**



**TYPICAL CEILING TYPE EXHAUST FAN DETAIL**  
N.T.S.



**H.V.A.C. GENERAL NOTES:**

1. THE WORK IS TO BE DONE UNDER THE HEADING INCLUDES THE FURNISHING OF ALL LABOR, MATERIALS, EQUIPMENT, PERMITS, FEES, INSPECTIONS, TESTS, INSURANCE, ETC., REQUIRED FOR THE COMPLETION OF THE AIR CONDITIONING SYSTEM SHOWN ON THE DRAWINGS AND/OR LISTED BELOW.
2. VENTILATION DUCTWORK SHALL BE GALVANIZED STEEL WITH GAUGES, DUCT CONSTRUCTION, BRACING AND SUSPENSION IN ACCORDANCE WITH A.S.H.R.A.E. GUIDE AND S.M.A.C.N.A. STANDARDS. DUCT SIZES SHOWN ARE "INSIDE" DIMENSIONS. VERIFY EXACT LOCATION OF DUCT WITH RESPECT TO STRUCTURE BEFORE FABRICATION.
3. FLEXIBLE DUCT SHALL BE STEEL HELIX WIRE ON 7/8" CENTERS, ENCASED IN A CONTINUOUS SOFT VINYL FILM JOINED BY MOLECULAR WELDING TO FORM AN AIR TIGHT INNER CORE. THE CORE IS TO BE A REINFORCED ALUMINUM METALIZED POLYESTER YACOR BARBER JACKET PROVIDE SPIN COLLAR WITH DAMPER AND EXTRACTOR WHERE FLEXIBLE DUCT IS CONNECTED TO RECONSTRUCT DUCTWORK. DAMPER ACTUATOR SHALL BE EXTENDED OUTSIDE INSULATION.
4. AIR CONDITIONING SUPPLY AND RETURN DUCTWORK EXPOSED IN ANY SPACE SHALL BE FABRICATED IN ACCORDANCE WITH S.M.A.C.N.A. STANDARDS. DUCTWORK SHALL BE FACED ON ONE SIDE WITH A FIRE-RESISTANT POLY-ETHYLENE (FEP) NON-WOVEN MAT. A FIRE-RESISTANT SURFACE MAT FACING SHALL BE BONDING WITH AN EP-RESIN ANTIMICROBIAL AGENT TO AID IN THE PREVENTION OF MOULD AND BACTERIAL GROWTH.
5. ALL WORK SHALL BE COORDINATED WITH OTHER TRADES TO AVOID INTERFERENCE WITH THE PROGRESS OF CONSTRUCTION AND IN STRICT COMPLIANCE WITH ALL APPLICABLE CODES AND STANDARDS.
6. SUBMIT SHOP DRAWING OF ALL MATERIALS AND EQUIPMENT FOR APPROVAL PRIOR TO FABRICATION.
7. OBTAIN FULL INFORMATION REGARDING PECULIARITIES AND LIMITATIONS OF SPACE AVAILABLE FOR INSULATION PRODUCTS INCLUDING ANY PART OF SYSTEM REQUIRED TO BE REACHED FOR MAINTENANCE AND OPERATIONS.
8. CUT ALL OPENINGS AND CHASES REQUIRED TO ACCOMMODATE THE WORK UNDER THIS DIVISION, AND REPAIR ALL FLOORS, WALLS, ETC., HEADINGS AND CHASES TO ORIGINAL CONDITION. VERIFY EXACT LOCATION OF MATERIALS AND WORKMANSHIP SPECIFIED UNDER APPROPRIATE SECTIONS FOR THE BUILDING.
9. TEMPERATURE CONTROL SHALL BE A ROOM THERMOSTAT FOR HEATING/COOLING WITH STAGES AS REQUIRED.
10. VIBRATION ISOLATION: ALL EQUIPMENT AS PER MANUFACTURER RECOMMENDATIONS TO ELIMINATE ANY EQUIPMENT NOISE FROM BEING HEARD.
11. GUARANTEES:
  - A. COMPRESSOR MOTORS ON NEW EQUIPMENT FINISHED UNDER THIS CONTRACT SHALL HAVE A MIN. 5 YEARS PRODUCT GUARANTEE FROM DATE OF START-UP.
  - B. FREE FROM DEFECTS FOR A PERIOD OF NOT LESS THAN A 1 YEAR FROM DATE OF ACCEPTANCE.
12. TESTING:
  - A. ALL REFRIGERANT HIGH SIDE PIPING TO 300 PSIG, LOW SIDE PIPING TO 100 PSIG SHALL BE TESTED WITH NITROGEN GAS. HOLD FOR 25 HOURS WITH PUMP OFF. BREAK VACUUM WITH REFRIGERANT.
  - B. ALL CONDENSATE PIPING SHALL BE P.V.C SCHEDULE 40. INSULATE COND. PIPES ABOVE GROUND WITH 1/2" INCH ARMAFLEX INSULATION.
  - C. ALL CONDENSING UNITS AND AIR HANDLING UNITS SHALL BE MOUNTED ABOVE FLOOD CRITERIA.
  - D. REFRIGERANT PIPING, SEAMLESS COPPER TYPE "L" AND HARD OR COPPER BRASS ON A/COR COPPER TUBING WITH BRAZING CONTAINING NOT LESS THAN 49% SILVER.
  - E. INSULATE ALL REFRIGERANT SUCTION PIPING WITH 1/2" INSULATION. ALL REFRIGERANT PIPING SHALL BE INSULATED WITH APPROVED JACKET. PAINT ALL EXPOSED PIPING WITH TWO COATS OF WHITE LATEX PAINT.
  - F. COMPLIANCE REQUIRES AN AIR DISTRIBUTION SYSTEM TEST REPORT, BY A FLORIDA CLASS 1 RATER, CONFIRMING DISTRIBUTION SYSTEM AIR LEAKAGE TO OUTDOORS NO GREATER THAN 3 CFM PER 100 SQ FT OF CONDITIONED FLOOR AREA AT PRESSURE DIFFERENCE OF 25 PASCAL IN ACCORDANCE WITH NIT110A.2

**JMM Consulting Engineers LLC**  
Certificate of Authorization #982  
Jose M. Martinez, P.E. #56018  
8535 SW 124 St, Suite 108  
Miami, Florida 33156  
TEL: (305) 255-1621  
FAX: (305) 255-1732

**EXISTING RESIDENCE RENOVATION**  
1120 CORDOVA ST CORAL GABLES,  
FLORIDA 33134

**JMM CONSULTING ENGINEERS, LLC.**  
**JOSE M MARTINEZ ( PE 56018 )**  
8535 SW 124 STREET, SUITE 108  
MIAMI, FL. 33156  
TEL. 305- 255 1621

DATE	DESCRIPTION
07/25/09	