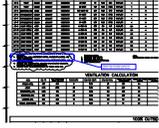


# 24-0092 H2 Greenwood SC UPDATED Mechanical 100% Review.pdf Markup Summary

Exhaust fan schedule remark #1: replace wall cap with wall louver. (1)



Page Label: M-105

Exhaust fan schedule remark #1: replace wall cap with wall louver.

Guest room thermostats must have occupancy sensing capability. (1)

(PTAC) SCHEDULE			
UNIT	DIS	REF	REMARKS
1001	100	10	1001

HEAT PUMP SCHEDULE			
UNIT	DIS	REF	REMARKS
1001	100	10	1001

Page Label: M-105

Guest room thermostats must have occupancy sensing capability.

**Make Corrections Noted**

## **HILTON ARCHITECTURE, DESIGN & CONSTRUCTION**

This review of your plans, drawings, specifications, construction phase product submittals, site conditions or construction progress is limited to conformance with aesthetic and functional layout and design, and certain functional, operational, and quality criteria, as specified in the Brand's prototype requirements and/or Design and Construction Standards. It does not encompass, and Hilton does not make any representation or warranty as to, nor shall it be responsible for, the Architectural, Structural, Mechanical, or Electrical safety, adequacy, integrity, or efficiency of the design, or compliance with applicable government or other legal requirements. All Hilton licensees must comply with National accessibility laws, codes, and requirements (i.e. ADA), as well as State and Local codes for accessible facilities, Hilton's fire life-safety and security equipment standards, and all applicable Local, State, and Federal Building Codes. Omissions from this review do not constitute a waiver and do not release the licensee from any responsibility to conform to the criteria defined in the Property Improvement Plan (PIP), Brand's prototype requirements and/or Design and Construction Standards.

**REVIEWED - 12/02/2025**



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Project Title:  
**HOME 2 SUITES  
GREENWOOD SC**  
475 HOSPITALITY BLVD,  
GREENWOOD, SC 29649

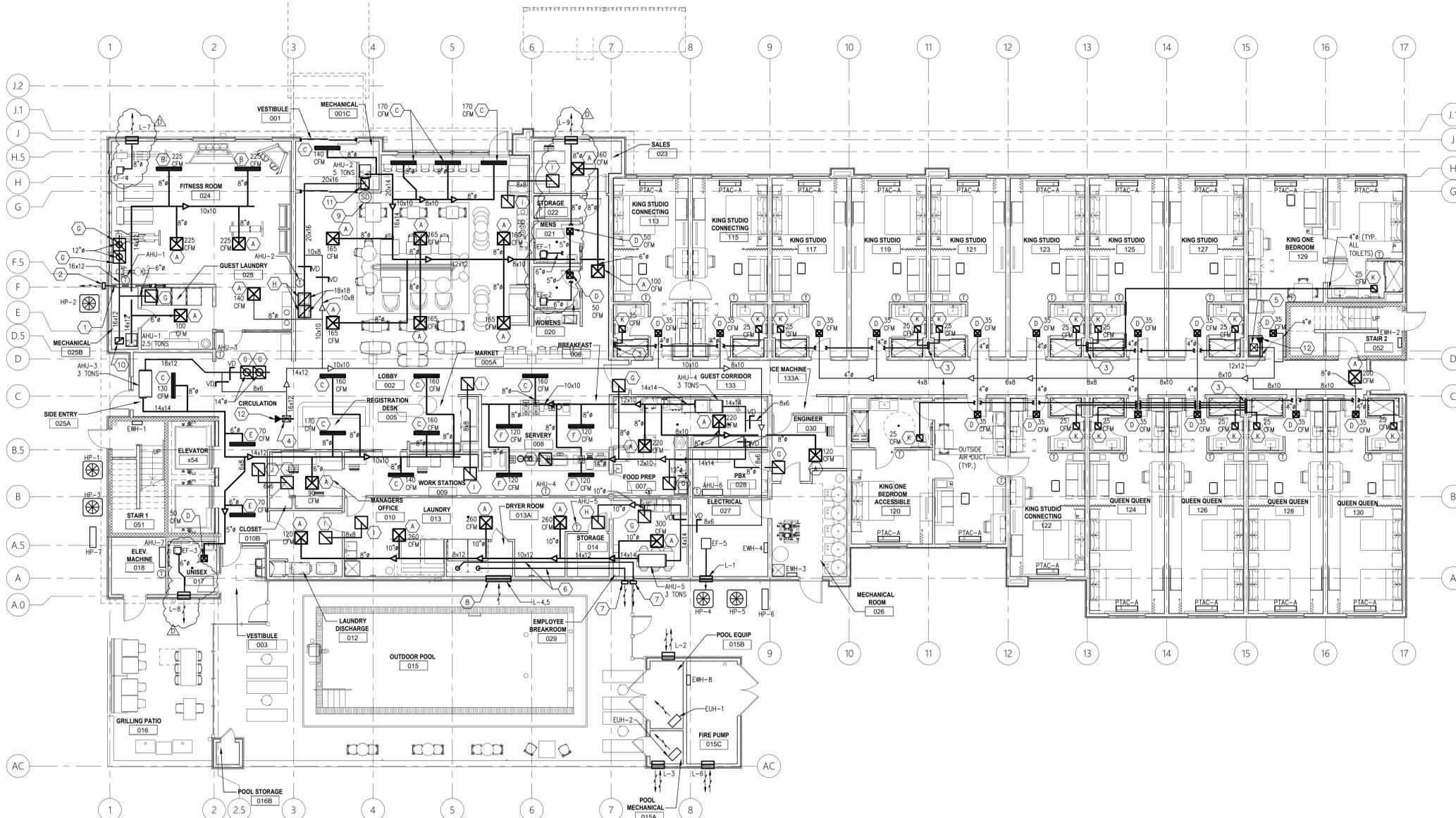
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Project Number:  
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Phase:  
CD  
Date:  
04.22.2024  
Drawn By:  
DCB  
Checked By:  
LWI

Sheet Number:  
**M-101**  
Sheet Title:  
FIRST FLOOR HVAC PLAN



**KEY NOTES (THIS SHEET ONLY)**

- 1 ROUTE DRYER VENT PER CODE REQUIREMENTS AND MANUFACTURER'S RECOMMENDATIONS.
- 2 DRYER WALL DISCHARGE.
- 3 EXHAUST DUCT TURN UP IN EXHAUST SHAFT A MINIMUM OF 22°.
- 4 16x12 FROM SECOND FLOOR. SEE SECOND FLOOR PLAN ON DRAWING M-102 FOR CONTINUATION ABOVE.
- 5 12x12 FROM SECOND FLOOR. SEE SECOND FLOOR PLAN ON DRAWING M-102 FOR CONTINUATION ABOVE.
- 6 ROUTE DRYER VENT TO BUILDING EXTERIOR PER CODE REQUIREMENTS AND MANUFACTURER'S RECOMMENDATIONS. SIZE AND DUCT MATERIAL SHALL BE PER MANUFACTURER'S RECOMMENDATIONS AND CODE REQUIREMENTS COORDINATE WITH DRYER MANUFACTURER ALLOWABLE DISTANCE TO EXTERIOR.
- 7 DRYER MANUFACTURER WALL DISCHARGE FOR DRYER VENT. COORDINATE EXACT LOCATION OF DRYER VENT DISCHARGE WITH OWNER AND ARCHITECT. DRYER VENT SHALL NOT BE A NUISANCE.
- 8 PROVIDE TWO COMBUSTION AIR LOUVERS FOR GAS FIRED DRYERS. PROVIDE ONE LOUVER WITHIN 12" OF BOTTOM OF CEILING AND THE OTHER WITHIN 12" OF THE FLOOR. PROVIDE A MOTORIZED DAMPER AT EACH LOUVER. DAMPERS ARE TO BE INTERLOCKED WITH DRYERS. WHEN DRYERS ARE OPERATING, THE LOUVERS WILL BE OPEN. WHEN THE DRYERS ARE NOT OPERATING, THE LOUVERS WILL BE CLOSED. LOUVER SIZE IS PRELIMINARY AND MUST BE ADJUSTED TO ACTUAL DRYER BTUH'S.
- 9 INSTALL DUCT SMOKE DETECTOR PER CODE REQUIREMENTS.
- 10 16x12 RETURN DUCT DOWN. CONNECT TO PLENUM ON BOTTOM OF AHU-1.
- 11 20x16 RETURN DUCT DOWN. CONNECT TO PLENUM ON BOTTOM OF AHU-2.
- 12 PROVIDE FIRE SMOKE DAMPER. COORDINATE WITH ELECTRICIAN/BUILDING CONTROLS CONTRACTOR TO TIE INTO FIRE ALARM SYSTEM.

**DIFFUSER LOCATION NOTE:**  
COORDINATE EXACT LOCATION OF ALL SUPPLY, RETURN, EXHAUST, AND TRANSFER DIFFUSERS AND GRILLES WITH ARCHITECTURAL RCP. SEE ARCHITECTURAL DRAWINGS.

**CONDENSATE DRAINAGE NOTE (AHU-1,2,3,4,5,6,7):**  
ROUTE CONDENSATE DRAINAGE FROM AHU-1,2,3,4,5,6 & 7 TO NEAREST FLOOR DRAIN, FLOOR SINK, JANITOR'S SINK (SEE PLUMBING DRAWINGS) OR TO DRY DRAINAGE. DROP IN NON LOAD BEARING WALL TO 6" WELL OUTSIDE THE BUILDING PER CODE REQUIREMENTS. SLOPE CONDENSATE DRAIN PIPING A MINIMUM OF 1/8" PER FOOT TOWARD DRAIN.

**CONDENSATE DRAINAGE NOTE (PTAC-A):**  
PROVIDE OVERFLOW DRAIN PAN WITH WATER SENSOR SWITCH PER LOCAL CODE. PROVIDE INSULATED CONDENSATE DRAIN LINE WITH POSITIVE SLOPE TO OUTSIDE WALL OR WHERE SPECIFIED ON THESE DRAWINGS. DROP IN NON LOAD BEARING WALL TO 6" ABOVE FIRST FLOOR - TURN OUTSIDE & CONNECT TO DRYWELL PER DETAIL 6 ON DRAWING M-10B. DRYWELL AND PIPING NOT SHOWN. PROVIDE DRYWELLS AS NECESSARY FOR ALL CONDENSATE COLLECTION. LOCATE DRYWELLS PER G.C. COORDINATE EXACT NUMBER OF DRYWELLS WITH EXISTING SITE CONDITIONS. PROVIDE CLEANOUT IN CEILING PRIOR TO TURN DOWN IN WALL. PROVIDE ACCESS PANEL IF CLEANOUT IS ABOVE HARD CEILING. UP TO TWO PTAC'S ALLOWED TO SHARE ONE COMMON CONDENSATE BRANCH PER FLOOR. ALTERNATE IS TO PIPE EACH CONDENSATE RISER TO STORM DRAINAGE SYSTEM. COORDINATE WITH DWG AND LOCAL CODE OFFICIALS.

**OUTSIDE AIR INTAKE NOTE:**  
LOCATE ALL OUTSIDE AIR INTAKES AT LEAST 10 FT. AWAY FROM EXHAUST AIR DISCHARGE.

**BALANCING DAMPER NOTE:**  
PROVIDE A BALANCING DAMPER (VD) ON THE OUTSIDE AIR CONNECTION AND THE RETURN AIR CONNECTION FOR AHU-2,3,4 AND 5. PROVIDE A BALANCING DAMPER (VD) IN EACH DIFFUSER BRANCH AND AS SHOWN ON THIS PLAN. INSTALL A DAMPER IN EACH EXHAUST BRANCH (TYP FOR EACH GUEST ROOM). SEE DETAILS ON DWG: M-107. LOCATE ALL DAMPERS IN ACCESSIBLE LOCATIONS.

**EQUIPMENT SERVICE CLEARANCE NOTE:**  
PROVIDE ALL EQUIPMENT WITH THE REQUIRED SERVICE/MAINTENANCE CLEARANCES PER MANUFACTURER'S RECOMMENDATIONS AND CODE REQUIREMENTS.

**AIR HANDLING UNIT NOTE:**  
MOUNT AIR HANDLING UNITS (AHU-1,2) IN THE VERTICAL POSITION ON A STAND WITH THE RETURN CONNECTION LOCATED ON THE BOTTOM OF THE UNIT. PROVIDE A RETURN AIR PLENUM ON BOTTOM OF UNIT. INCLUDE A FILTER RACK. MOUNT AIR HANDLING UNITS (AHU-3,4,5) IN THE HORIZONTAL POSITION ABOVE THE CEILING.

**GENERAL DUCT ROUTING NOTE:**  
ALL DUCTWORK FITTINGS, OFFSETS, ETC. ARE NOT SHOWN THROUGHOUT. PROVIDE ALL FITTINGS, OFFSETS, ETC. AS REQUIRED TO FIT DUCTWORK IN AREAS WHERE IT IS SHOWN.

**1 FIRST FLOOR HVAC PLAN**

M-101 SCALE: 1/8"=1'-0"



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Checked By:  
LWI

Sheet Number:  
**M-102**

Sheet Title:  
2ND & 3RD FLOOR HVAC PLAN

**KEY NOTES (THIS SHEET ONLY)**

- EXHAUST DUCT TURN UP IN EXHAUST SHAFT A MINIMUM OF 22'.
- 14x28 UP TO FOURTH FLOOR AND 14x22 DOWN TO SECOND FLOOR. SEE FOURTH FLOOR PLAN ON DRAWING M-103 FOR CONTINUATION ABOVE AND SECOND FLOOR PLAN ON THIS DRAWING FOR CONTINUATION BELOW.
- 14x22 UP TO THIRD FLOOR AND 12x16 DOWN TO FIRST FLOOR. SEE THIRD FLOOR PLAN ON THIS DRAWING FOR CONTINUATION ABOVE AND FIRST FLOOR PLAN ON DRAWING M-101 FOR CONTINUATION BELOW.
- 14x24 UP TO FOURTH FLOOR AND 14x16 DOWN TO SECOND FLOOR. SEE FOURTH FLOOR PLAN ON DRAWING M-103 FOR CONTINUATION ABOVE AND SECOND FLOOR PLAN ON THIS DRAWING FOR CONTINUATION BELOW.
- 14x16 UP TO THIRD FLOOR AND 12x12 DOWN TO FIRST FLOOR. SEE THIRD FLOOR PLAN ON THIS DRAWING FOR CONTINUATION ABOVE AND FIRST FLOOR PLAN ON DRAWING M-101 FOR CONTINUATION BELOW.
- PROVIDE FIRE SMOKE DAMPER. COORDINATE WITH ELECTRICIAN/BUILDING CONTROLS CONTRACTOR TO TIE INTO FIRE ALARM SYSTEM.

**DEFUSER LOCATION NOTE:**  
COORDINATE EXACT LOCATION OF ALL SUPPLY, RETURN, EXHAUST, AND TRANSFER DIFFUSERS AND GRILLES WITH ARCHITECTURAL RCP. SEE ARCHITECTURAL DRAWINGS.

**CONDENSATE DRAINAGE NOTE (PTAC-A):**  
PROVIDE OVERFLOW DRAIN PAN WITH WATER SENSOR SWITCH PER LOCAL CODE. PROVIDE INSULATED CONDENSATE DRAIN LINE WITH POSITIVE SLOPE TO OUTSIDE WALL OR WHERE SPECIFIED ON THESE DRAWINGS. DROP IN NON LOAD BEARING WALL TO 6" ABOVE FIRST FLOOR - TURN OUTSIDE & CONNECT TO DRYWELL PER DETAIL 6 ON DRAWING M-108. DRYWELL AND PIPING NOT SHOWN. PROVIDE DRYWELLS AS NECESSARY FOR ALL CONDENSATE COLLECTION. LOCATE DRYWELLS PER G.C. COORDINATE EXACT NUMBER OF DRYWELLS WITH EXISTING SITE CONDITIONS. PROVIDE CLEANOUT IN CEILING PRIOR TO TURN DOWN IN WALL. PROVIDE ACCESS PANEL IF CLEANOUT IS ABOVE HARD CEILING. UP TO TWO PTAC'S ALLOWED TO SHARE ONE COMMON CONDENSATE BRANCH PER FLOOR. ALTERNATE IS TO PIPE EACH CONDENSATE RISER TO STORM DRAINAGE SYSTEM. COORDINATE WITH CIVIL AND LOCAL CODE OFFICIALS.

**OUTSIDE AIR INTAKE NOTE:**  
LOCATE ALL OUTSIDE AIR INTAKES AT LEAST 10 FT. AWAY FROM EXHAUST AIR DISCHARGE.

**BALANCING DAMPER NOTE:**  
PROVIDE A BALANCING DAMPER (VD) ON THE OUTSIDE AIR CONNECTION AND THE RETURN AIR CONNECTION FOR AHU-2,3,4 AND 5. PROVIDE A BALANCING DAMPER (VD) IN EACH DIFFUSER BRANCH AND AS SHOWN ON THIS PLAN. INSTALL A DAMPER IN EACH EXHAUST BRANCH (TYP FOR EACH GUEST ROOM). SEE DETAILS ON DWG. M-107. LOCATE ALL DAMPERS IN ACCESSIBLE LOCATIONS.

**EQUIPMENT SERVICE CLEARANCE NOTE:**  
PROVIDE ALL EQUIPMENT WITH THE REQUIRED SERVICE/MAINTENANCE CLEARANCES PER MANUFACTURER'S RECOMMENDATIONS AND CODE REQUIREMENTS.

**GENERAL DUCT ROUTING NOTE:**  
ALL DUCTWORK FITTINGS, OFFSETS, ETC. ARE NOT SHOWN THROUGHOUT. PROVIDE ALL FITTINGS, OFFSETS, ETC. AS REQUIRED TO FIT DUCTWORK IN AREAS WHERE IT IS SHOWN.

**CEILING RADIATION DAMPER NOTE:**  
ALL GUEST ROOM SUPPLY AND EXHAUST GRILLES LOCATED ON THE SECOND, THIRD AND FOURTH FLOORS ARE TO BE PROVIDED WITH CEILING RADIATION DAMPERS PER CODE REQUIREMENTS.

**FIRE WALL PENETRATION NOTE:**  
DUCT SYSTEMS THAT PENETRATE FIRE RATED WALLS OR PARTITIONS SHALL BE RIGID METAL, MINIMUM OF 26 GAUGE PER CODE REQUIREMENTS. THE AREA AROUND ANY DUCT PENETRATIONS THRU FIRE RATED WALLS OR FLOORS SHALL BE SEALED WITH FIRE CAULK PER CODE REQUIREMENTS.

**1 SECOND FLOOR HVAC PLAN**

M-102 SCALE: 1/8"=1'-0"

**2 THIRD FLOOR HVAC PLAN**

M-102 SCALE: 1/8"=1'-0"

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Client Logo:



Seals:



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Date:

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Checked By:

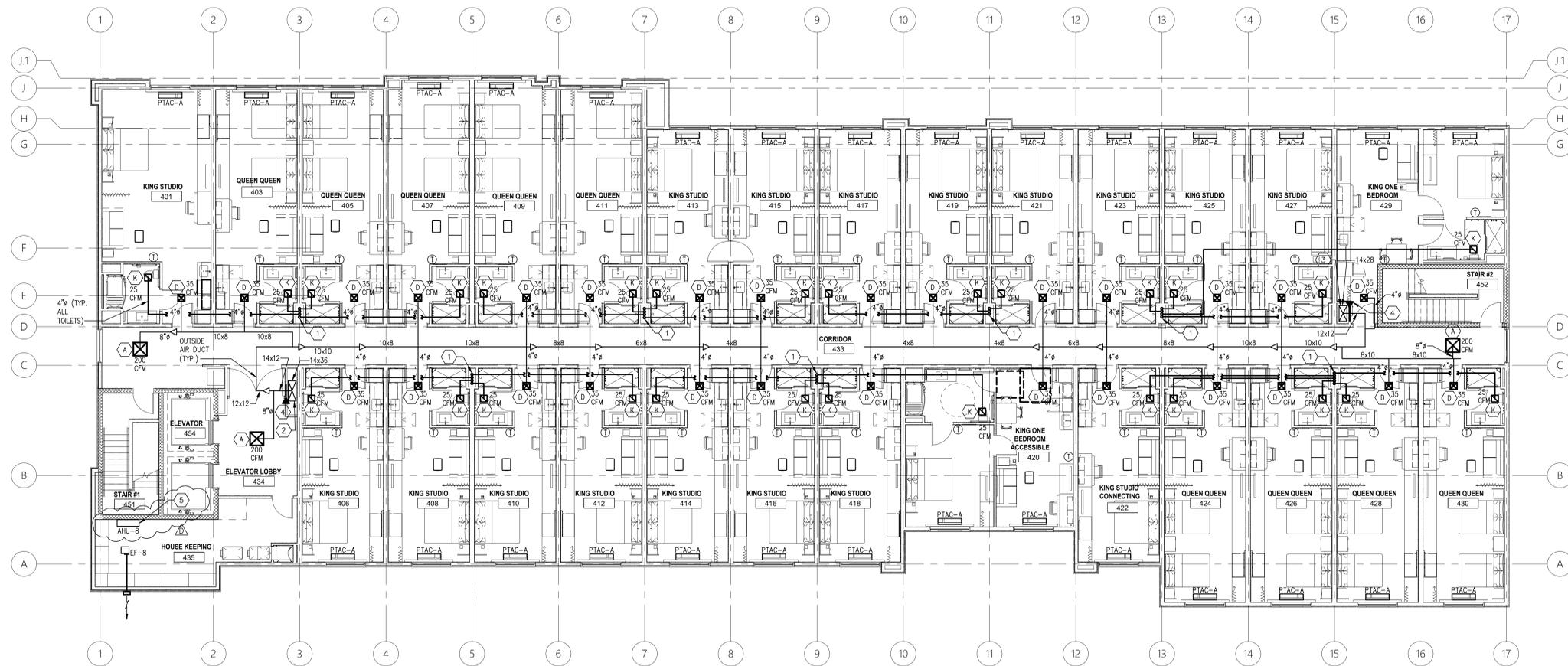
LWI

Sheet Number:

M-103

Sheet Title:

4TH FLOOR HVAC PLAN



**1 FOURTH FLOOR HVAC PLAN**  
M-103 SCALE: 1/8"=1'-0"

**KEY NOTES (THIS SHEET ONLY)**

- EXHAUST DUCT TURN UP IN EXHAUST SHAFT A MINIMUM OF 22°.
- 14x36 UP TO MUA-1 ON ROOF AND 14x28 DOWN TO THIRD FLOOR. SEE THIRD FLOOR PLAN ON DRAWING M-102 FOR CONTINUATION BELOW.
- 14x28 UP TO MUA-2 ON ROOF AND 14x24 DOWN TO THIRD FLOOR. SEE THIRD FLOOR PLAN ON DRAWING M-102 FOR CONTINUATION BELOW.
- PROVIDE FIRE SMOKE DAMPER. COORDINATE WITH ELECTRICIAN/BUILDING CONTROLS CONTRACTOR TO TIE INTO FIRE ALARM SYSTEM.
- ROUTE CONDENSATE DRAIN FROM MINI SPLIT SYSTEM AIR HANDLING UNIT TO FLOOR DRAIN AT ICE MACHINE PER CODE REQUIREMENTS. SEE PLUMBING DRAWINGS.

**DIFFUSER LOCATION NOTE:**  
COORDINATE EXACT LOCATION OF ALL SUPPLY, RETURN, EXHAUST, AND TRANSFER DIFFUSERS AND GRILLES WITH ARCHITECTURAL RCP. SEE ARCHITECTURAL DRAWINGS.

**CONDENSATE DRAINAGE NOTE (PTAC-A):**  
PROVIDE OVERFLOW DRAIN PAN WITH WATER SENSOR SWITCH PER LOCAL CODE. PROVIDE INSULATED CONDENSATE DRAIN LINE WITH POSITIVE SLOPE TO OUTSIDE WALL OR WHERE SPECIFIED ON THESE DRAWINGS. DROP IN NON LOAD BEARING WALL TO 6" ABOVE FIRST FLOOR - TURN OUTSIDE & CONNECT TO DRYWELL PER DETAIL 6 ON DRAWING M-108. DRYWELL AND PIPING NOT SHOWN. PROVIDE DRYWELLS AS NECESSARY FOR ALL CONDENSATE COLLECTION. LOCATE DRYWELLS PER G.C. COORDINATE EXACT NUMBER OF DRYWELLS WITH EXISTING SITE CONDITIONS. PROVIDE CLEANOUT IN CEILING PRIOR TO TURN DOWN IN WALL. PROVIDE ACCESS PANEL IF CLEANOUT IS ABOVE HARD CEILING. UP TO TWO PTAC'S ALLOWED TO SHARE ONE COMMON CONDENSATE BRANCH PER FLOOR. ALTERNATE IS TO PIPE EACH CONDENSATE RISER TO STORM DRAINAGE SYSTEM. COORDINATE WITH CIVIL AND LOCAL CODE OFFICIALS.

**CEILING RADIATION DAMPER NOTE:**  
ALL GUEST ROOM SUPPLY AND EXHAUST GRILLES LOCATED ON THE SECOND, THIRD AND FOURTH FLOORS ARE TO BE PROVIDED WITH CEILING RADIATION DAMPERS PER CODE REQUIREMENTS.

**FIRE WALL PENETRATION NOTE:**  
DUCT SYSTEMS THAT PENETRATE FIRE RATED WALLS OR PARTITIONS SHALL BE RIGID METAL, MINIMUM OF #6 GAUGE PER CODE REQUIREMENTS. THE AREA AROUND ANY DUCT PENETRATIONS THRU FIRE RATED WALLS OR FLOORS SHALL BE SEALED WITH FIRE CAULK PER CODE REQUIREMENTS.

**OUTSIDE AIR INTAKE NOTE:**  
LOCATE ALL OUTSIDE AIR INTAKES AT LEAST 10 FT. AWAY FROM EXHAUST AIR DISCHARGE.

**BALANCING DAMPER NOTE:**  
PROVIDE A BALANCING DAMPER (VD) ON THE OUTSIDE AIR CONNECTION AND THE RETURN AIR CONNECTION FOR AHU-2,3,4 AND 5. PROVIDE A BALANCING DAMPER (VD) IN EACH DIFFUSER BRANCH AND AS SHOWN ON THIS PLAN. INSTALL A DAMPER IN EACH EXHAUST BRANCH (TYP FOR EACH GUEST ROOM). SEE DETAILS ON DWG. M-107. LOCATE ALL DAMPERS IN ACCESSIBLE LOCATIONS.

**EQUIPMENT SERVICE CLEARANCE NOTE:**  
PROVIDE ALL EQUIPMENT WITH THE REQUIRED SERVICE/MAINTENANCE CLEARANCES PER MANUFACTURER'S RECOMMENDATIONS AND CODE REQUIREMENTS.

**GENERAL DUCT ROUTING NOTE:**  
ALL DUCTWORK FITTINGS, OFFSETS, ETC. ARE NOT SHOWN THROUGHOUT. PROVIDE ALL FITTINGS, OFFSETS, ETC. AS REQUIRED TO FIT DUCTWORK IN AREAS WHERE IT IS SHOWN.



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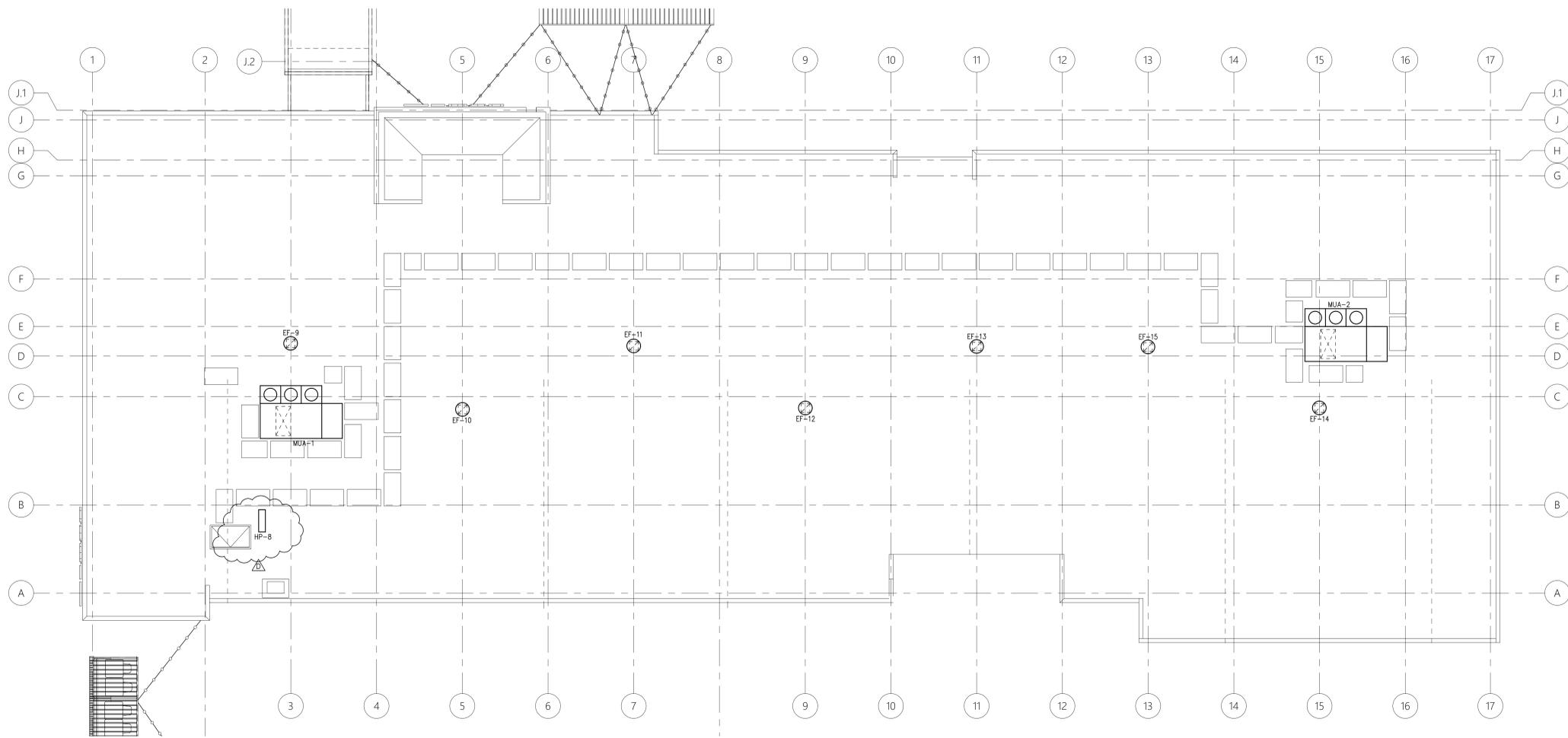
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LWI

Sheet Number:  
**M-104**  
Sheet Title:  
ROOF HVAC PLAN



**1 ROOF HVAC PLAN**  
M-104 SCALE: 1/8"=1'-0"

**OUTSIDE AIR INTAKE NOTE:**  
LOCATE ALL OUTSIDE AIR INTAKES AT LEAST  
10 FT. AWAY FROM EXHAUST AIR DISCHARGE.

**ROOF EQUIPMENT NOTE:**  
SUPPORT ALL EQUIPMENT LOCATED ON ROOF  
AS REQUIRED. PROVIDE ANY REQUIRED  
SUPPORTS. COORDINATE WITH GENERAL  
CONTRACTOR FOR REQUIREMENTS.

**EQUIPMENT SERVICE CLEARANCE NOTE:**  
PROVIDE ALL EQUIPMENT WITH THE REQUIRED  
SERVICE/MAINTENANCE CLEARANCES PER  
MANUFACTURER'S RECOMMENDATIONS AND  
CODE REQUIREMENTS.

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**SPLIT SYSTEM HEAT PUMP SCHEDULE**

UNIT NO.	SUPPLY AIR CFM	OUTSIDE AIR CFM	E.S.P. IN W.G.	INDOOR FAN H.P.	INDOOR UNIT ELECTRICAL	INDOOR UNIT MCA	INDOOR UNIT MOCP	SYSTEM COOLING (NET)				SYSTEM HEATING				AHU MODEL		OUTDOOR UNIT MODEL		NOMINAL TONS	SEER	EER	REMARKS						
								E.D.B. °F	E.W.B. °F	COND. °F	SENSIBLE MBH	TOTAL MBH	E.D.B. °F	OUTDOOR AMBIENT °F	MBH	NOMINAL HEATER KW	MIN. HTR KW OUTPUT @ VOLT.	STAGES	TRANE					NO. CIRCUITS	QUANTITY	OUTDOOR UNIT ELECTRICAL	OUTDOOR UNIT MCA	OUTDOOR UNIT MOCP	
AHU-1/HP-1	1000	140	0.5	0.5	208/1/60	40	40	80	67	95	22.2	29.3	64.3	17° F	18.1	7.68	5.77	1	TEM6A0B30H21	1	4TWR5030N1	1	208/1/60	15	25	2.5	15.2	12.0	1,2,3,4,5
AHU-2/HP-2	2000	300	0.5	0.75	208/3/60	45	45	80	67	95	44.1	58.5	63.8	17° F	34.8	14.4	10.8	1	TEM6BOC60H51	1	4TWA4060A3	1	208/3/60	21	35	5.0	15.0	12.5	1,2,3,4,5
AHU-3/HP-3	1200	200	0.5	0.5	208/3/60	30	30	80	67	95	25.9	35.2	62.8	17° F	20.4	9.6	7.2	1	TEM6A0C36H31	1	4TWA4036A3	1	208/3/60	13	20	3.0	15.0	12.5	1,2,3,4,5
AHU-4/HP-4	1200	200	0.5	0.5	208/3/60	30	30	80	67	95	25.9	35.2	62.8	17° F	20.4	9.6	7.2	1	TEM6A0C36H31	1	4TWA4036A3	1	208/3/60	13	20	3.0	15.0	12.5	1,2,3,4,5
AHU-5/HP-5	1200	150	0.5	0.5	208/3/60	30	30	80	67	95	25.9	35.2	65.1	17° F	20.4	9.6	7.2	1	TEM6A0C36H31	1	4TWA4036A3	1	208/3/60	13	20	3.0	15.0	12.5	1,2,3,4,5

- ACCESSORIES:**
- LOW AMBIENT CONTROL.
  - HAIL GUARDS.
  - PROVIDE SINGLE POINT CONNECTION.
  - FACTORY PROGRAMMABLE THERMOSTAT WITH CLEAR LOCKING COVER.
  - PROVIDE FILTER RACK WITH MERV-13 FILTER.

**NOTE:**  
 SIZE REFRIGERANT PIPING PER MANUFACTURER'S RECOMMENDATIONS. SIZES SHALL BE BASED ON INSTALLED PIPING DISTANCES FROM CONDENSING UNIT TO AIR HANDLING UNIT. PROVIDE ALL NECESSARY ACCESSORIES PER MANUFACTURER'S RECOMMENDATIONS.

**NOTE:**  
 ROOFTOP A/C UNIT SCHEDULE IS BASED ON UNITS AS MANUFACTURED BY TRANE. ACCEPTABLE ALTERNATE MANUFACTURERS ARE YORK, CARRIER AND LENOX.

- SUPPLY AIR FANS SHALL RUN CONTINUOUSLY DURING NORMALLY OCCUPIED HOURS.

FOR ACCEPTABLE ALTERNATE MANUFACTURERS, CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ELECTRICAL REQUIREMENTS WITH THE ELECTRICAL CONTRACTOR.

**ELECTRIC UNIT HTR. SCHEDULE**

MARK	DESCRIPTION	VOLTS	PH	Hz	HEATING KW	TOTAL AMPS	BASIS OF DESIGN
EUH-1	ELECTRIC UNIT MTD.	208	3	60	3.0	10	INDEECO ULTRA-SAFE EXP.
EUH-2	ELECTRIC UNIT MTD.	208	3	60	3.0	10	INDEECO ULTRA-SAFE EXP.

- FURNISH WITH BUILT-IN THERMOSTAT & DISCONNECT.
- HEATER TO BE EXPLOSION PROOF AND CORROSION RESISTANT.

**PACKAGED TERMINAL AIR CONDITIONING UNIT (PTAC) SCHEDULE**

UNIT NO.	MANUFACTURER/MODEL NO.	FAN CFM	OUTSIDE AIR CFM	ESP (WG)	EER	COOLING CAPACITY MBH	HEATING CAPACITY MBH	AUXILIARY HEAT KW	UNIT ELECTRICAL	MCA	MOCP	COMMENTS
PTAC-A	AMANA/PTH093G	360	-	-	11.5	9.0	8.1	3.5	208/1	19.5	20	1,2,3,4

- COMMENTS:**
- G.C. SHALL PROVIDE SUB-BASE KIT WITH DISCONNECT SWITCH FOR ALL PTAC'S. CONCEAL ALL ELECTRICAL CONNECTIONS WITH-IN KIT.
  - 2 SPEED FAN.
  - PROVIDE HONEYWELL "INCOMM" THERMOSTATS (W/2 FAN SPEED CAPABILITY) FOR ALL GUESTROOM PTAC'S.
  - PROVIDE EXTENDED SLEEVE WHERE REQUIRED. VERIFY PRIOR TO ORDERING.

Guest room thermostats must have occupancy sensing capability.

**ELECTRIC WALL HTR. SCHEDULE**

MARK	DESCRIPTION	VOLTS	PH	Hz	HEATING KW	AMPS	BASIS OF DESIGN
EWH-1	ELECTRIC WALL MTD.	208	3	60	2.0	5.6	MARKEL J3422T
EWH-2	ELECTRIC WALL MTD.	208	3	60	2.0	5.6	MARKEL J3422T
EWH-3	ELECTRIC WALL MTD.	208	3	60	2.0	5.6	MARKEL J3422T
EWH-4	ELECTRIC WALL MTD.	208	3	60	2.0	5.6	MARKEL J3422T
EWH-5	ELECTRIC WALL MTD.	208	3	60	2.0	5.6	MARKEL J3422T
EWH-6	ELECTRIC WALL MTD.	208	3	60	2.0	5.6	MARKEL J3422T
EWH-7	ELECTRIC WALL MTD.	208	3	60	2.0	5.6	MARKEL J3422T
EWH-8	ELECTRIC WALL MTD.	208	3	60	2.0	5.6	MARKEL J3422T

- FURNISH WITH BUILT-IN THERMOSTAT & DISCONNECT, 2" SEMI-RECESSING MOUNTING SLEEVE.

**NOTE:**  
 HEATER SCHEDULE IS BASED ON UNITS AS MANUFACTURED BY MARKEL. ACCEPTABLE ALTERNATE MANUFACTURERS ARE QMARK AND RAYWALL.

**DUCTLESS SPLIT SYSTEM HEAT PUMP SCHEDULE**

INDOOR UNIT NO.	QUANTITY	OUTDOOR UNIT NO.	QUANTITY	MITSUBISHI MODEL NO.	VOLTAGE	MOUNTING	COOLING DATA				HEATING DATA				MITSUBISHI MODEL NO.	VOLTAGE	MCA	MOCP	REMARKS
							TOTAL M.B.H.	DB° F	ENT. AIR WB° F	SEER A.R.I.	TOTAL M.B.H.	DB° F	ENT. AIR WB° F	HSPF					
AHU-6	1	HP-6	1	TPKA0A0181A10A	208/1/60	WALL	18	72	60	20.2	22.0	72	60	9.2	TRUA0181KA70NA	208/1/60	11	28	1,2,3
AHU-7	1	HP-7	1	TPKA0A0181A10A	208/1/60	WALL	18	72	60	20.2	22.0	72	60	9.2	TRUA0181KA70NA	208/1/60	11	28	1,2,3
AHU-8	1	HP-8	1	PKA-AL18NL	208/1/60	WALL	18	72	60	19.5	22.0	72	60	8.9	PUZ-AK18NL	208/1/60	16	27	1,2,3

- REMARKS:**
- PROGRAMMABLE THERMOSTAT.
  - CONDENSATE PUMP.
  - PROVIDE LOW AMBIENT WIND BAFFLE.

**NOTE:**  
 SIZE REFRIGERANT PIPING PER MANUFACTURER'S RECOMMENDATIONS. SIZES SHALL BE BASED ON INSTALLED PIPING DISTANCES FROM CONDENSING UNIT TO AIR HANDLING UNIT. PROVIDE ALL NECESSARY ACCESSORIES PER MANUFACTURER'S RECOMMENDATIONS.

**FAN SCHEDULE**

MARK	AREA SERVED	TYPE	SERVICE	MANUFACTURER	MODEL NO.	CAPACITY		HP (WATTS)	ELECTRICAL	REMARKS	OPERATING NOTES	COMMENTS
						CFM	ESP					
EF-1	TOILET	CEILING	EXHAUST	GREENHECK	SP-B90	70	0.25	(21)	115/1/60	1	1	-
EF-2	TOILET	CEILING	EXHAUST	GREENHECK	SP-B90	70	0.25	(21)	115/1/60	1	1	-
EF-3	TOILET	CEILING	EXHAUST	GREENHECK	SP-B90	70	0.25	(21)	115/1/60	1	1	-
EF-4	TOILET	CEILING	EXHAUST	GREENHECK	SP-B150	140	0.25	(128)	115/1/60	1	2	-
EF-5	ELECTRICAL RM	INLINE	EXHAUST	GREENHECK	CSP-A510-VG	400	0.25	(73)	115/1/60	3	3	-
EF-6	HOUSEKEEPING	CEILING	EXHAUST	GREENHECK	SP-B200	200	0.25	(172)	115/1/60	1	3	-
EF-7	HOUSEKEEPING	CEILING	EXHAUST	GREENHECK	SP-B200	200	0.25	(172)	115/1/60	1	3	-
EF-8	HOUSEKEEPING	CEILING	EXHAUST	GREENHECK	SP-B200	200	0.25	(172)	115/1/60	1	3	-
EF-9	GUEST ROOMS	ROOF	EXHAUST	GREENHECK	G-095-VG	300	0.5	1/6	115/1/60	2,4	4	-
EF-10	GUEST ROOMS	ROOF	EXHAUST	GREENHECK	G-095-VG	300	0.5	1/6	115/1/60	2,4	4	-
EF-11	GUEST ROOMS	ROOF	EXHAUST	GREENHECK	G-095-VG	350	0.5	1/6	115/1/60	2,4	4	-
EF-12	GUEST ROOMS	ROOF	EXHAUST	GREENHECK	G-095-VG	300	0.5	1/6	115/1/60	2,4	4	-
EF-13	GUEST ROOMS	ROOF	EXHAUST	GREENHECK	G-095-VG	300	0.5	1/6	115/1/60	2,4	4	-
EF-14	GUEST ROOMS	ROOF	EXHAUST	GREENHECK	G-095-VG	525	0.5	1/6	115/1/60	2,4	4	-
EF-15	GUEST ROOMS	ROOF	EXHAUST	GREENHECK	G-095-VG	400	0.5	1/6	115/1/60	2,4	4	-

- REMARKS:**
- PROVIDE WALL CAP, DISCONNECT SWITCH, BACKDRAFT DAMPER, AND SPEED CONTROLLER.
  - PROVIDE ROOF CURB, BACKDRAFT DAMPER, DISCONNECT SWITCH, AND VARI-GREEN MOTOR.
  - PROVIDE VARI GREEN MOTOR, ISOLATION KIT, MOUNTING BRACKETS, BACKDRAFT DAMPER, AND DISCONNECT.
  - EXHAUST FANS TO BE PROVIDE BACK UP POWER FROM UPS.

- OPERATING NOTES:**
- INTERLOCK WITH LIGHTS.
  - INTERLOCK WITH AHU-1.
  - THERMOSTATICALLY CONTROLLED.
  - RUNS CONTINUOUSLY.

**NOTE:**  
 ALL INTERLOCK WIRING BY MECHANICAL CONTRACTOR.

Exhaust fan schedule remark #1: replace wall cap with wall louver.

**VENTILATION CALCULATION**

AREA	SQ. FT.	NET OCCUPIABLE AREA (SQ. FT.)	OCCUPANTS	CFM PER SQ.FT.	CFM PER OCC.	REQ'D O.A. (CFM) (OCCUPANCY)	REQ'D O.A. (CFM) (AREA)	REQ'D O.A. TOTAL -VBZ (CFM) (OCCUPANCY + AREA)	ACTUAL DESIGN O.A. (CFM)	UNITS SERVED BY
FITNESS ROOM	933	560	5	0.06	20	100	34	134	140	AHU-1
LOBBY	1715	1030	30	0.06	7.5	225	62	287	300	AHU-2
REGISTRATION, ETC.	1268	761	20	0.06	7.5	150	46	196	200	AHU-3
BREAKFAST, ETC.	936	562	20	0.06	7.5	150	34	184	200	AHU-4
LAUNDRY, ETC.	834	500	10	0.12	7.5	75	60	135	150	AHU-5
TYPICAL GUEST ROOM	546	328	2	0.06	5	10	20	30	35	PTAC-A

**100% OUTSIDE AIR UNIT SCHEDULE**

UNIT NO.	SUPPLY AIR CFM	OUTSIDE AIR CFM	E.S.P. IN W.G.	INDOOR FAN H.P.	ELECTRICAL				SYSTEM COOLING				GAS HEATING SECTION				REHEAT COIL TOTAL CAPACITY MBH	MANUFACTURER/MODEL NO.	EER	WEIGHT LBS.	ACCESSORIES SEE NOTES						
					V/PH/Hz	MCA	MAX FUSE	COMP RLA	EVAP FAN FLA	COND FAN FLA	E.D.B. °F	E.W.B. °F	L.D.B. °F	L.W.B. °F	COND. °F	SENSIBLE MBH						TOTAL MBH	E.D.B. °F	L.D.B. °F	INPUT MBH	OUTPUT MBH	
MAU-1	3730	3730	1.5	3	208/3/60	133.3	175	2 @ 49	8	3 @ 4.2	89.7	78.4	48.1	47.3	95	165.3	368.1	23	93.1	350	283.5	-	-	TRANE/HORIZON D030 - OADG030A1	9.9	3800	1,2
MAU-2	2725	2725	1.5	1.5	208/3/60	111.6	150	2 @ 41	4.8	3 @ 4.2	89.7	78.4	46.4	45.2	95	125.5	282.0	23	91.5	250	202.5	-	-	TRANE/HORIZON D025 - OADG025A1	11.0	3800	1,2

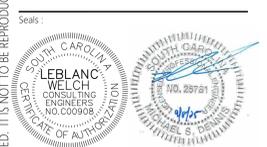
- ACCESSORIES:**
- SEE EQUIPMENT SPECS ON DRAWING M-106.
  - PROVIDE MERV-8 PRE-FILTERS AND MERV-13 SECONDARY FILTERS. PROVIDE FULLY SYNTHETIC MEDIA WITH SPECIAL SUPPORTING STRUCTURE TO PREVENT MOISTURE LADEN FILTER COLLAPSE.



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 475 HOSPITALITY BLVD,  
 GREENWOOD, SC 29649



- Revisions:**
- |   |            |                       |
|---|------------|-----------------------|
| A | 10.16.2024 | Issue For Permit      |
| B | 03.20.2025 | 100% Issue For Hilton |
| C | 09.08.2025 | Client Comments       |

Project Number:  
 23112  
 Phase:  
 CD  
 Date:  
 04.22.2024  
 Drawn By:  
 DCB  
 Checked By:  
 LWI  
 Sheet Number:  
**M-105**  
 Sheet Title:  
 HVAC SCHEDULES

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GENERAL PROVISIONS - MECHANICAL

GENERAL: Contractor shall provide all labor, materials, tools, equipment and management necessary or reasonably incidental to complete the work shown on the drawings and/or described in the specifications. All work performed under this contract shall be in strict accordance with requirements of the International Mechanical Code, NFPA codes, and all laws, rules and regulations of public bodies having legal jurisdiction.

DEVIATIONS: The Contractor shall inform the Engineer, clearly and explicitly in writing, of any deviation from the contract documents. Contractor shall not be relieved of any requirements of the contract documents by virtue of the Engineer's review of shop drawings, product data, etc. unless the contractor has clearly and explicitly informed the Engineer in writing of any deviations at the time of submission, and the Engineer has given written approval for the specific deviations from the Contract Documents.

COORDINATION OF WORK: Prior to bidding, Mechanical Contractor shall be responsible for coordinating and resolving any and all questions about Contractor's and Subcontractors' responsibilities in regard to who is to furnish or install supporting components, services, and interconnections for mechanical systems. All parts of the mechanical work and associated services shall be included, and no additional payments will be made for failure to coordinate the Work among the various contractors. Roof and wall openings, where required, shall be defined and located by the mechanical contractor and constructed by the general contractor. Hvac contractor shall furnish roof curbs for mechanical equipment where applicable.

DIMENSIONS: The drawings are not intended to show and cannot show complete or fully accurate measurements and details of the building and installation in every respect. Drawings should be interpreted as general layout and arrangement drawings, and they do not include all details of manufactured equipment, construction, piping, ductwork conduits, etc. No scale measurement taken from a drawing shall be relied upon as a dimension for installation purposes. The figures written upon the drawings indicating dimensions shall be used instead of scaled measurements. Precise locations and measurements are to be defined in the field, and the Contractor shall be responsible for their accuracy and use in construction of the Work.

INTERFERENCES: The Contractor shall coordinate his work with that of all other trades in order to preclude and eliminate interferences and conflicts between trades. He shall examine in advance the location of existing structures, sprinklers, electrical systems, ducts, piping, conduits, as well as all new equipment and systems to be installed, and properly coordinate the installation of his work to avoid interferences. The Engineers have considered existing interferences and the work of other trades in making the drawings, but it is the responsibility of the Contractor to include in his bid proposal adequate allowances to modify, offset, or otherwise accommodate all new equipment to the structure, utilities, and existing equipment. Particular attention is called to clearances for ductwork passing through roof and wall openings, and work in congested spaces, for example above suspended ceilings and within wall cavities. As the mechanical Work requires the greatest amount of space in the construction, the Contractor is advised to schedule and prioritize his installations with the General Contractor and other trades as soon as possible in the construction schedule to avoid conflicts later.

QUARANTEE: All materials and workmanship provided shall be warranted against defects for a period of one year from the date of final acceptance of the work.

CLEAN-UP: All debris, rubbish, scraps, etc. shall be cleaned up at the end of each work day at the completion of the work, upon completion of the job, all new construction work and materials shall be cleaned up of markings, dirt, etc. and left in a clean and slightly condition, ready for use by the owner.

ELECTRICAL PROVISIONS FOR MECHANICAL WORK

COORDINATION OF WORK: Mechanical Contractor shall be responsible for coordinating and resolving any and all questions about Contractor's and Subcontractors' responsibilities in regard to who is to furnish or install electrical components, wiring, and interconnections for mechanical systems. All parts of the mechanical and electrical Work and associated services shall be included, and no additional payments will be made for failure to coordinate the Work among the various contractors.

Areas to be carefully reviewed with the Electrical Contractor and General Contractor to preclude or avoid potential misunderstandings among subcontractors are:

- Power wiring for HVAC controls
Control wiring for HVAC controls
Starters and disconnects for mechanical equipment
Smoke detectors and interlock wiring
Interlock wiring for mechanical equipment such as pumps and fans
Wiring to interconnect safety devices to the building alarm system.
Wiring within HVAC air plenums.

EXECUTION: In general, the following shall apply unless otherwise agreed upon by the Contractor and the Subcontractors:

- Power wiring and code required disconnecting devices, including but not limited to wiring required to power HVAC Units, fan motors, pump motors, heaters, cooling tower fans, HVAC control panels, transformers, etc. shall be furnished and installed by the Electrical Contractor.
HVAC automatic control wiring, except for power wiring, shall be furnished and installed by the Mechanical Subcontractor.
Mechanical equipment and associated electrical equipment (motors, variable frequency drives, SCR power controllers, unit lighting, electric heating coils, etc.) shall be furnished and put in place by the Mechanical Subcontractor and power wiring shall be by the Electrical Contractor.
Starters or contactors integral to the mechanical equipment (factory mounted on units or within equipment control panels, or shipped with the unit for field installation) shall be furnished by the mechanical contractor.
Starters and contactors for larger motors or power equipment not integral to the HVAC equipment (shown or specified in motor control centers or other power distribution arrangement) shall be furnished, installed and wired by the Electrical Subcontractor.
Service disconnects shall be furnished, installed, and wired by the Electrical Subcontractor. If service disconnect is pre-installed on equipment, Electrical Subcontractor shall provide wiring.

DX PIPING

REFRIGERANT PIPING: Piping shall be type ACR hard-drawn copper tubing, ASTM B88, ANSI H23.1. Fittings shall be wrought copper, ASTM B16.22, ANSI B16.22 and unions shall be specifically designed for refrigerant piping.

HVAC DUCTWORK

REFERENCES: Ductwork shall meet applicable requirements of the Codes and Standards listed below. The latest edition of the code or standard shall apply unless an earlier edition is specifically cited.

- Sheet Metal and Air Conditioning Contractors' National Association (SMACNA) Standards shall be considered a minimum requirement only, and ductwork shall also meet any additional requirements of these specifications and drawings which may provide more detail or be more stringent than the listed SMACNA Standards. Take care to use schedules, tables, figures, and construction details listed in referenced to SMACNA Standards.
National Fire Protection Association (NFPA)
American Society for Testing and Materials (ASTM)
Before building ducts or order materials, submit proposed changes or alterations in ductwork, with support detail drawings and calculations showing that he modified design will not increase total pressure or negatively impact system performance. Submittals for proposed changes must be approved by the Engineer prior to commencement of work.

DUCT COORDINATION DRAWINGS: Where other trades' structures, structures, and equipment may interfere with the routing of the ductwork, the Contractor shall submit 3/4" scale drawings of ductwork layout showing potential interferences. Include reflected ceiling layout, doors and panels required to provide access to dampers and other operating devices, and h=calling items including light fixtures, electrical conduits, plumbing pipes, diffusers, grilles, speakers, and sprinklers. Provide elevation and section drawings through congested areas to insure clarity. Where clearance above ceiling or interferences prevent diffuser connections exactly as shown on drawings, relocate ducts or diffusers not more than 2 feet to facilitate installation, show changes on shop drawing submittals for approval.

DUCTWORK PRESSURE CLASSIFICATION:

- Supply Ductwork shall be fabricated to meet minimum 2" w.g. internal pressure.
N/A.
Return and Outside air ductwork shall be fabricated to meet minimum 2" w.g. external pressure.
N/A.
Restroom exhaust and general exhaust ductwork shall be fabricated to meet the greater of either 2" w.g. negative pressure, or the maximum available exhaust fan negative pressure.

RECTANGULAR RADIUS ELBOWS:

Unless otherwise noted on the drawings, all long radius elbows shall be constructed with the radius to the centerline of the elbows not less than 1.5 times the width of the duct. Turning vanes in radius duct elbows shall be heavy-duty single thickness vanes in accordance with referenced standards and the following specified construction. Number of vanes and radius location in the elbow shall be as shown in SMACNA. All turning vanes shall be constructed of the same material and of the same gauge as the ductwork in which installed. Each vane shall be constructed according to SMACNA standards and shall be permanently anchored to the duct wall with formed tabs or welded clips using approved screws, bolts, or welds, tight and rattle-free.

MITERED ELBOWS:

Rectangular 90° miter elbows shall have double thickness metal turning vanes in accordance with referenced standards and the following specified construction. Number of vanes and radius location in the elbow shall be as shown in SMACNA. All turning vanes shall be constructed of the same material and of the same gauge as the ductwork in which installed. Each vane shall be constructed according to SMACNA standards and shall be permanently anchored to the duct wall with formed tabs or welded clips using approved screws, bolts, or welds, tight and rattle-free.

ROUND DUCTWORK:

Round ductwork shall be furnished according to referenced SMACNA Standards. Ducts shall be spiral lockseam or longitudinal welded seam as manufactured by United McGill Sheet Metal Company or Hamlin Sheettmetal, Inc. Minimum galvanized steel or stainless steel gauges, hanger spacing, and reinforcement shall be per SMACNA HVAC Duct Construction Standards.

HANGERS AND SUPPORTS:

General: Refer to Section IV of SMACNA Duct Construction Standards - Metal and Flexible for support requirements. Also refer to Rectangular Industrial Duct Construction Standards, and Round Industrial Duct Construction Standard respectively for products and installation of duct supports and hangers. All supports, including hangers, rods, angles, channels, straps, bars, anchors, clamps, etc., and all associated fasteners and miscellaneous materials shall be stainless steel, hot-dip galvanized steel, structural grade aluminum, brass, or other corrosion resistant material. Painted black steel materials and electroplated materials shall not be acceptable unless approved as alternative prior to bidding.

FLEXIBLE DUCT CONNECTORS:

Install flexible duct connectors at the inlet and outlet connection of each air handling unit or fan, securely fastened to the unit and to the ductwork by a galvanized steel band provided with tightening screws. There shall be no metal-to-metal contact at flexible connections. There shall be no stretching of the flexible material at flexible connections and metal-to-metal spacing as installed shall be approximately 1" to 2". The connection shall be UL listed, to meet NFPA 90 requirements, and the installation shall meet applicable codes and standards.

DAMPERS:

- Fire dampers dampers: Furnish and install fire dampers with curtain style blades according to these specifications and as shown or noted on drawings and schedules. Fire dampers shall meet the requirements set forth in the following standards and codes.
AMCA 500-D - Laboratory Methods for Testing Dampers for Ratings.
AMCA 511 - Certified Ratings Program for Air Control Devices.
IBC - International Building Code
NFPA 80 - Fire doors & Other Opening Protectives
NFPA 90A - Installation of Air Conditioning and Ventilating Systems.
UL 555 - Standard for Safety: Fire Dampers

BALANCING DAMPERS:

Install balancing dampers where shown on drawings and as may be required to balance system. For rectangular duct, dampers shall be opposed blade and shall be provided with locking quadrant manual damper operator. For round duct provide butterfly type damper with locking quadrant. Provide manual balancing dampers for all duct run-outs to diffusers or grilles mounted in 45° take-off as manufactured by Flexmaster. Furnish and install sputter dampers and volume dampers as required for control and balancing of air distribution. Dampers may or may not be shown on the drawings.

SUPPLY DUCT:

Unless otherwise noted, ductwork shall be constructed of G-60 galvanized sheet metal in accordance with ASTM A-525 and A-527. ductwork shall be constructed and reinforced according to SMACNA HVAC Duct Construction Standards, latest edition for pressure rating listed above. Maximum joint length shall be 5'-0", all transverse connecting joints shall be standing drive pocket lock or ductmate construction.

DUST CONTROL DUCT:

N/A

DUCT DIMENSIONS:

Unless otherwise noted, duct dimensions shown on drawings shall be clear inside dimensions of insulated duct or acoustically lined duct.

FLEXIBLE DUCTWORK:

Flexible duct not longer than 6 ft. shall be allowed to connect rigid duct to diffusers where concealed above ceilings. Flexible round duct shall be equal to flexmaster acoustic type 5, with trillamate reinforced interior liner bonded to a galvanized helix and fire retardant polyethylene outer liner. Thermal conductance shall meet the latest requirements of the International Energy Code.

CREASE HOOD EXHAUST AIR DUCT: N/A

GRILLES AND DIFFUSERS:

The drawings show, by appropriate symbol and number, the location and air quantities (where applicable) for each register, grille and diffuser. All equipment shall be installed and adjusted according to manufacturer's recommendations and instructions. All equipment shall be tested and certified in accordance with the air diffusion council (ADC). Air devices shall be from the manufacturer as shown in the schedule, or pre-approved equal. Finish shall be coordinated with architect during submittal process.

INTERIOR DUCT INSULATION:

Supply and return ductwork shall be insulated with 2" thick 3/4 lb fiberglass duct insulation with reinforced foil kraft (rik) vapor barrier facing. Duct wrap shall be cut to form 2" overlap which shall be sealed with mastic. Seal small tears, punctures and other penetrations of the duct wrap insulation facing to provide a vapor-tight system.

ACOUSTICAL AND THERMAL DUCT LINER:

All rectangular supply and return duct shall be internally lined with acoustical liner through the first elbow or takeoff, or the first 10 ft. Supply air ducts not externally insulated shall have 1/2" thick liner. Supply air ducts externally insulated shall have 1" thick liner. Return air ducts shall have 1" thick liner. All internal acoustical liner and insulation shall be mechanically and adhesively bonded to ductwork. All exposed rectangular duct shall be insulated with internally lined insulation. All internally lined ducts shall be constructed so that inside clear dimensions of the liner correspond to the duct dimensions shown on the drawings. Duct liner shall be closed-cell elastomeric.

Where acoustically lined round metal ducts are specified or shown on contract documents, ducts shall be lined with pre-formed round acoustic insulation duct liner. Unless otherwise indicated, all duct diameters shown on drawings are clear inner surface dimensions. Outer dimension of the insulation liner shall provide a snug fit in standard sized round metal ducts. Duct liner shall be closed-cell elastomeric.

Acoustic duct liner shall be installed according to the manufacturer's recommendations and referenced SMACNA standards using accessory materials (adhesive, mechanical fasteners, etc.) tested and recommended by both the liner manufacturer and the accessory manufacturer. All duct shall be clean and dry before adhesive or liner is applied.

EXTERIOR DUCTWORK INSULATION (IF APPLICABLE):

Prior to installing insulation the ducts shall be sealed air tight with silicone rubber compound equal to g.e. or dow corning, insulation board shall be 2" thick expanded polystyrene foam board with density of 1.8 lb/cu ft and installed as per manufacture's instructions. Prior to covering insulation with weatherproofing fill all voids, cracks and joints with childers CP-10 VM-CRYL mastic as per manufacturer's recommendations for a smooth and uniform surface. Provide weatherproof covering using tightly stretched woven fiberglass duct insulation wrap embedded in wet childers CP-10 as per manufacturer's recommendations. Apply intermediate and final coats of childers CP-10 as per manufacturer's recommendations. After final coating has dried inspect and touch up all areas where fabric mesh is visible. Alternate weatherproof coverings shall be submitted to the engineer for approval prior to installation.

AIR DISTRIBUTION

GENERAL: Manually adjustable components shall be constructed to move properly and prevent binding or corrosion at the bearing points and adjusting elements. Volume dampers shall be adjustable through the face of the grille, register, diffuser, etc. All terminal air distribution products shall be installed with approved self-adhering closed cell flexible polymeric or rubber foam sealing strips fitted between the air distribution device and the mounting surface. The seal shall preclude HVAC system air leakage around grille face. Sealing products subject to dry-rot or other deterioration will not be accepted.

FINISHES: Products shall be furnished in the type and color of finish as specified. If type and color are not specified, the type and color of standard finishes shall be submitted for selection. Manufacturer's standard white or off-white enamel coating shall be used for steel components unless specified otherwise. Clear anodized finish will be a minimum requirement for all aluminum products, and color anodized or enamel coating shall be provided if specified.

COMPATIBILITY WITH MOUNTING LOCATION:

Where installed on walls, partitions, ceilings or other similar building surfaces, products shall be compatible with the adjacent surface shape and finish, and shall be specifically manufactured to fit ceiling modules and styles or component wall types with accurate fit and adequate support. Products installed on duct or plenum surfaces shall be matched to the adjacent finish, purchase, coating, etc. Refer to mechanical and architectural drawings and schedules for necessary information. All products shall be submitted in full detail for approval prior to purchase or installation.

INSTALLATION:

Install all products according to manufacturer's recommendation. Grille and diffuser frames shall fit snugly to duct, ceiling, wall, casing, or other surface upon which mounted. Exposed fasteners shall match the finish of the grille or diffuser. Coordinate installation with ceiling and light fixtures. Locate outlets as indicated on architectural reflected ceiling plans. Unless otherwise indicated, locate ceiling outlets in the center of acoustical ceiling modules with sides parallel to the grid.

AIR INLET AND OUTLET LOUVERS

GENERAL: Furnish and install all louvers as shown on the drawings and called for in the specifications. Provide other trades with roof, wall and partition opening locations and dimensions as required for proper installation complying with all sections of these specifications.

INSTALLATION:

Install louvers at locations indicated on the drawings and in accordance with manufacturer's installation instructions. Install louvers square and free from racking or binding. Adjustments shall be made to relieve any binding, stiffness or irregular operation. Damaged blade seal material shall be replaced. Do not compress or stretch lower frame into opening. Lift and handle louvers by the frame, not by the blades. Where multiple louvers are required for a given area, the contractor shall provide additional structural support as required to prevent warping or deflection more than 1/240 of the longest dimension of the louver assembly when operable blades are tightly closed against a static pressure of 2" w.g.

TESTING, ADJUSTING, AND BALANCING

QUALITY ASSURANCE: The Contractor shall be responsible for all test, adjust and balance (TAB) work, but TAB work under this section shall be done by an independent certified testing and balancing firm acceptable to the Owner and Engineer. The TAB firm shall not be related in any way to the Mechanical, Plumbing, or HVAC subcontractor. The independent TAB subcontractor shall be certified by the National Environmental Balancing Bureau (NEBB) or the Associated Air Balance Council (AABC). Certification shall be currently valid in the disciplines required for the mechanical systems covered in this project. All field work by the TAB firm shall be performed by or under the direct supervision of an engineer or an experienced certified TAB technician who is a full-time employee of the certified firm. All reports, opinions and recommendations shall be approved and signed by the responsible professional TAB authority in charge.

During all tests, it shall be demonstrated that the systems are free from leaks and that all parts of the system are operating correctly and will continue to operate correctly throughout the warranty period. Temporary repairs, modifications or adjustments shall not be acceptable. The TAB firm shall make final adjustments, or shall instruct Contractor to make recommended fine adjustments to air, water and steam distribution equipment and controls as may be required for proper operation, maintaining correct temperatures, humidity, air quality, and process flows in all parts of the building. Automatic HVAC controls shall be tuned and adjusted by the control subcontractor's technicians in cooperation with the TAB firm.

EXECUTION:

The Contractor shall furnish all services for complete testing, adjusting, and balancing of the mechanical systems. In cases where these specifications differ from the referenced codes and standards (AABC, NEBB or ASHRAE), the more stringent specification or requirement shall supersede. All access openings, pressure taps, wells and closures required to do the TAB work as shown on the drawings or described in the specifications shall be installed by the Mechanical Contractor or the TAB Subcontractor prior to undertaking the TAB tests and adjustments.

HVAC SYSTEM COMMISSIONING:

Provide HVAC System Commissioning if required by code (verify local code requirement). Contractor to verify that economizers (if provided) are in proper working condition. Provide commissioning reports per code requirements.

HVAC AUTOMATED CONTROLS

GENERAL: The HVAC system is designed for human comfort. The control system shall be designed for continuous and fully automatic operation, requiring a minimum of adjustment and maintenance. Furnish and install all digital and electronic devices such as sensors, transmitters, controllers, switches, relays, operators, linkages, recorders, pilot lights, valves, dampers, wiring, etc., required for providing the effective and efficient operation of the HVAC system.

As a minimum, a programmable thermostat shall be furnished by the manufacturer of each packaged single-zone rooftop and DX split system equipment. Typical controls shall be manufactured by Honeywell Controls, commercial products. The decision of the Engineer shall be final in regard to alternate control systems.

Control Wiring:

All low-voltage control wiring (24V or lower) to and from control equipment shall be the responsibility of the controls contractor. Control wiring may be installed by the electrical contractor under arrangements with the mechanical or controls contractor, but contractual responsibility for control wiring including terminal connections, points lists, testing, and warranty shall remain with the HVAC or Controls Contractor.

HVAC LEGEND

- CEILING MTD SUPPLY DIFFUSER
CEILING MTD RETURN OR EXHAUST DIFFUSER
SIDEWALL MTD SUPPLY GRILLE
SIDEWALL MTD RETURN GRILLE
THERMOSTAT/TEMPERATURE CONTROLLER
REMOTE TEMPERATURE SENSOR
FIRE SMOKE DAMPER
SUPPLY, RETURN, EXHAUST, OR OUTSIDE AIR DUCT
VOLUME DAMPER
MOTORIZED DAMPER
DUCT SMOKE DETECTOR
SUPPLY, RETURN OR EXHAUST GRILLE TYPE
CONDENSATE DRAIN LINE
SA SUPPLY AIR
RA RETURN AIR
EA EXHAUST AIR
RTU ROOFTOP UNIT
AHU AIR HANDLING UNIT
HP HEAT PUMP (OUTDOOR UNIT)
PTAC PACKAGED TERMINAL AIR CONDITIONING UNIT
EWH ELECTRIC WALL HEATER
MAU 100% OUTSIDE AIR UNIT
EF EXHAUST FAN
L LOUVER
EUH ELECTRIC UNIT HEATER

SMOKE DETECTOR NOTE:

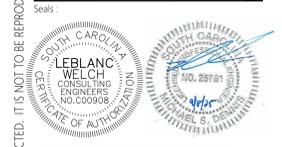
PROVIDE SMOKE DETECTOR ACCORDING TO SOUTH CAROLINA MECHANICAL CODE, NFPA 90A AND NFPA 72E FOR AHU-2. SMOKE DETECTOR SHALL BE INSTALLED IN THE RETURN DUCT PRIOR TO ANY EXHAUST CONNECTIONS OR THE MIXING OF OUTSIDE AIR. THE DETECTOR SHALL BE PROVIDED WITH AN AUDIOVISUAL DEVICE MOUNTED IN THE OCCUPIED SPACE. THE AUDIOVISUAL DEVICE SHALL BE FURNISHED WITH A REMOTE RESET SWITCH AND STROBE ALARM LIGHT. SMOKE DETECTOR SHALL BE PROVIDED BY THE ELECTRICAL CONTRACTOR OR THE ALARM SYSTEM CONTRACTOR, AND SHALL BE INSTALLED BY THE MECHANICAL CONTRACTOR AND WREID BY THE ELECTRICAL CONTRACTOR TO THE FIRE ALARM SYSTEM. THE MECHANICAL CONTRACTOR SHALL INTERLOCK WIRE THE SMOKE DETECTOR TO THE A/C UNIT SHUT DOWN SWITCH. MECHANICAL CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE ABOVE ARRANGEMENTS WITH ELECTRICAL, CONTROLS, AND/OR SECURITY/ALARM SUBCONTRACTORS.



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864.271.6535
ELECTRICAL
Matrix Engineering, INC
912 S Pine Street
Greenville, SC 29602
864.583.6274

Project Title:
HOME 2 SUITES
GREENWOOD SC
475 HOSPITALITY BLVD,
GREENWOOD, SC 29649

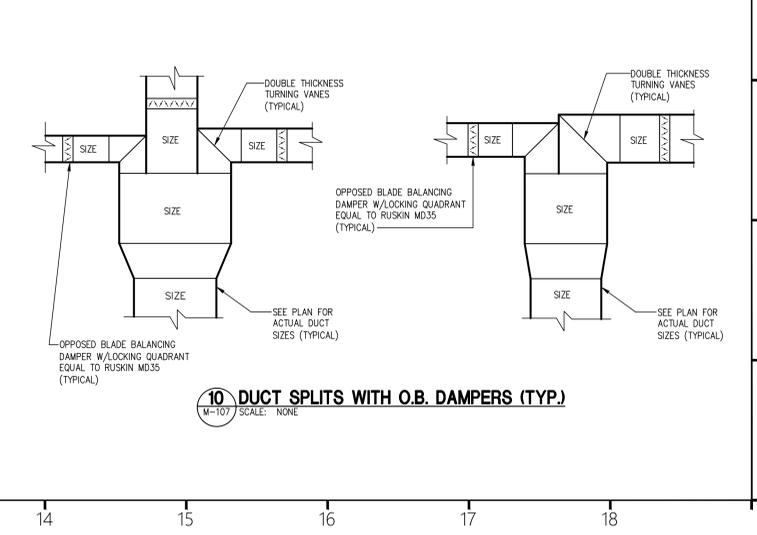
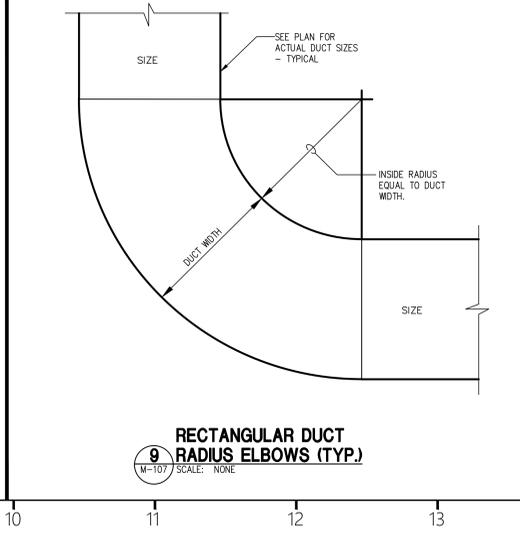
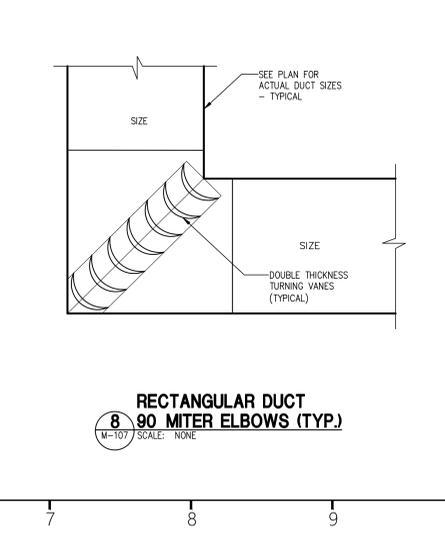
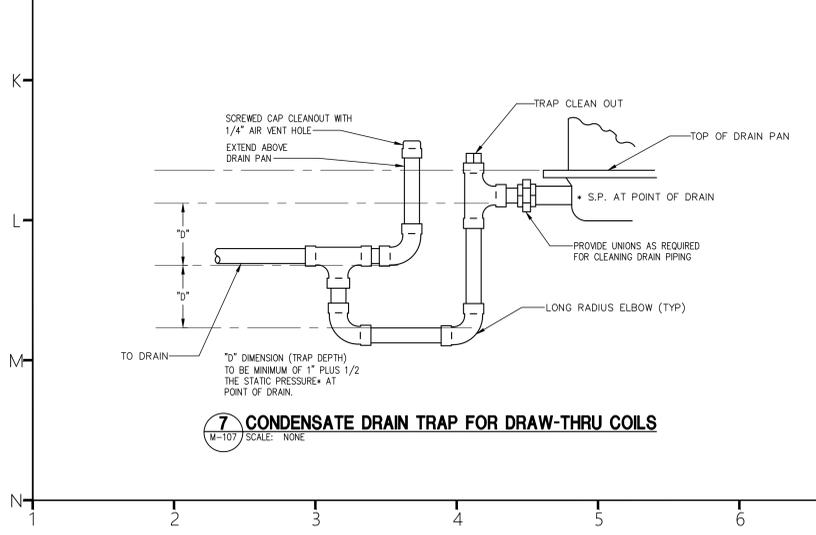
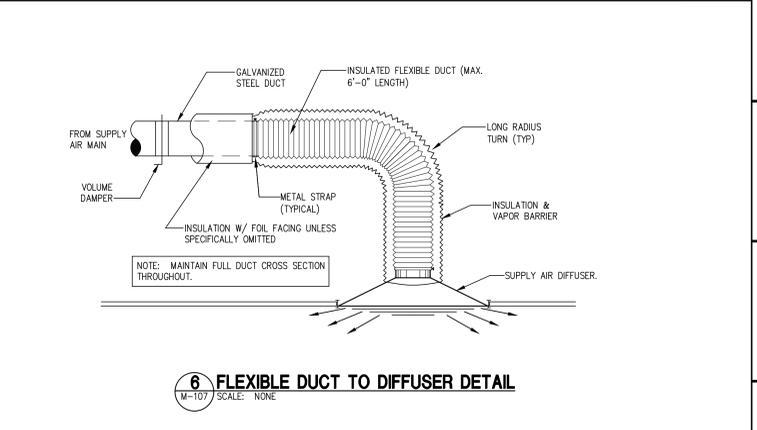
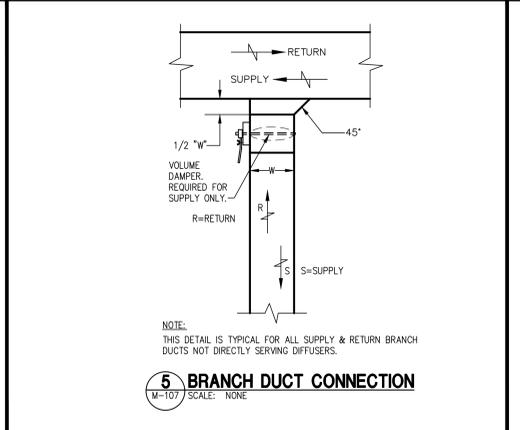
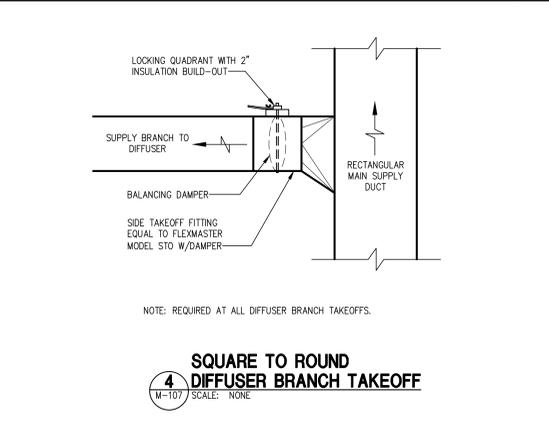
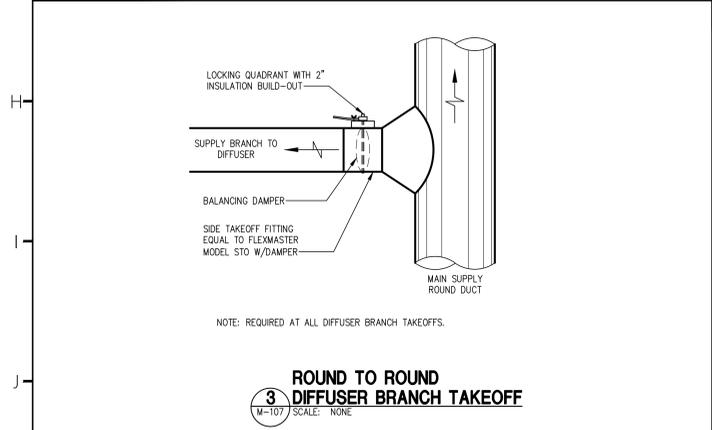
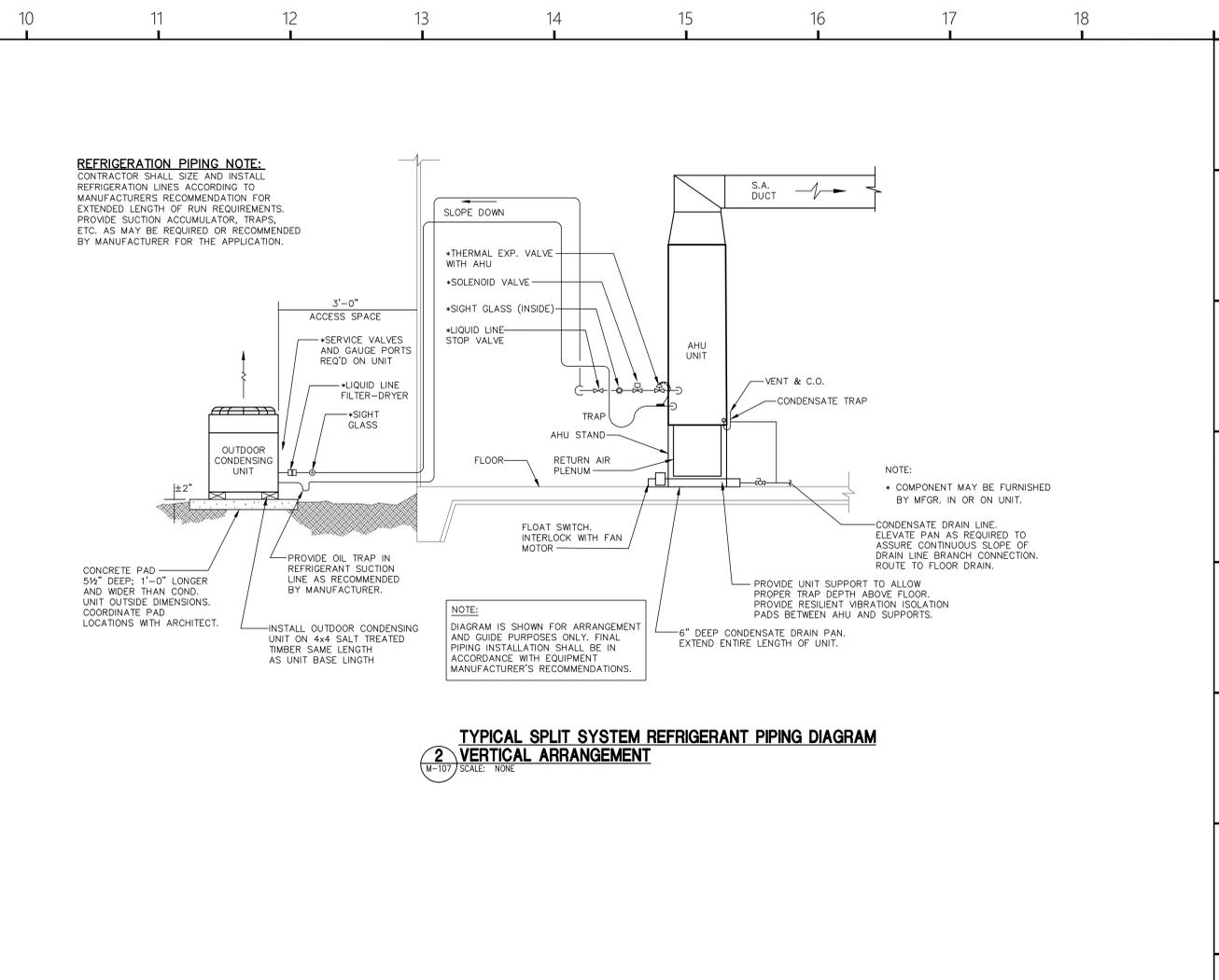
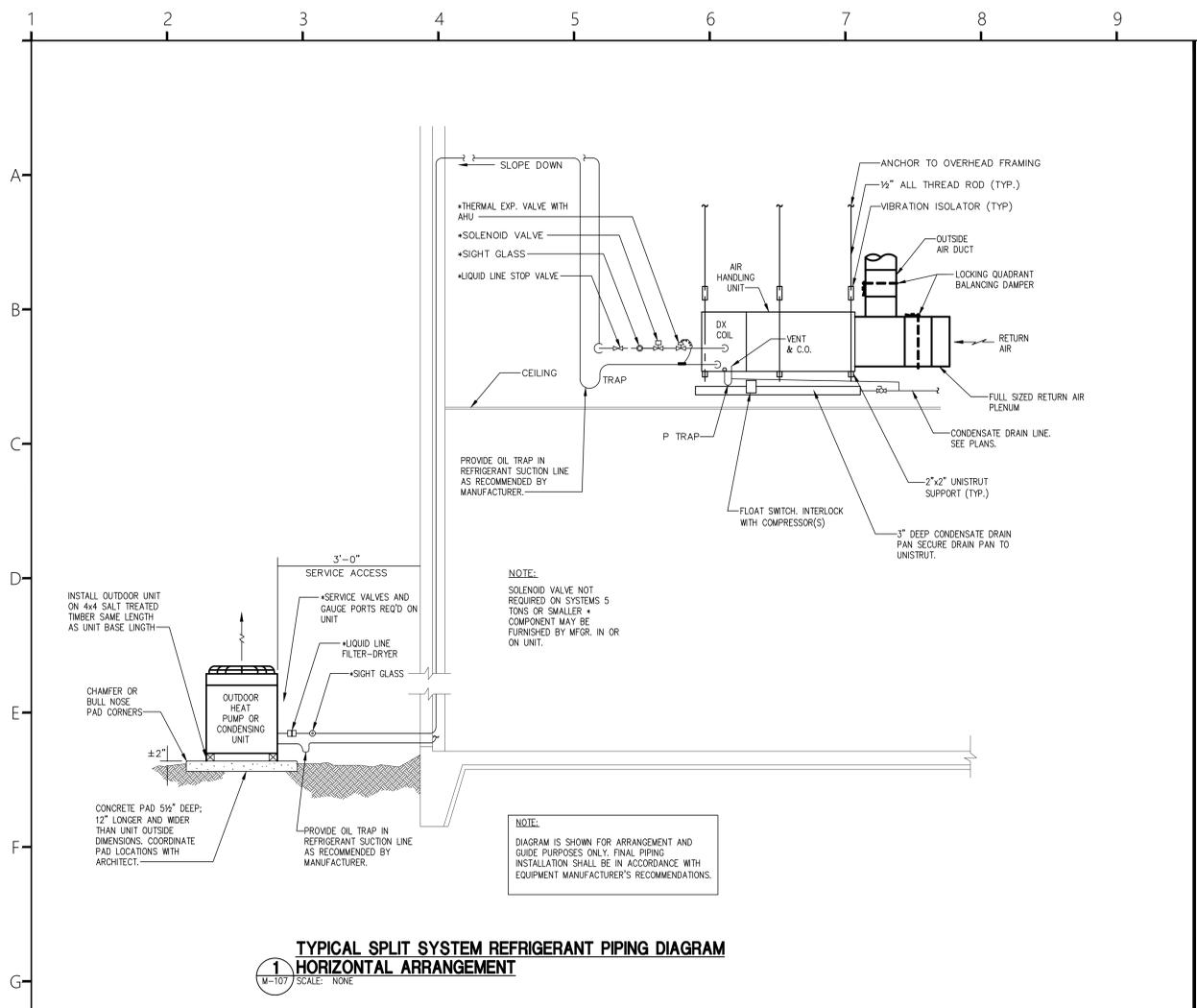


Revisions:
10.16.2024 Issue For Permit
A 03.20.2025 100% Issue For Hilton
D 09.08.2025 Client Comments

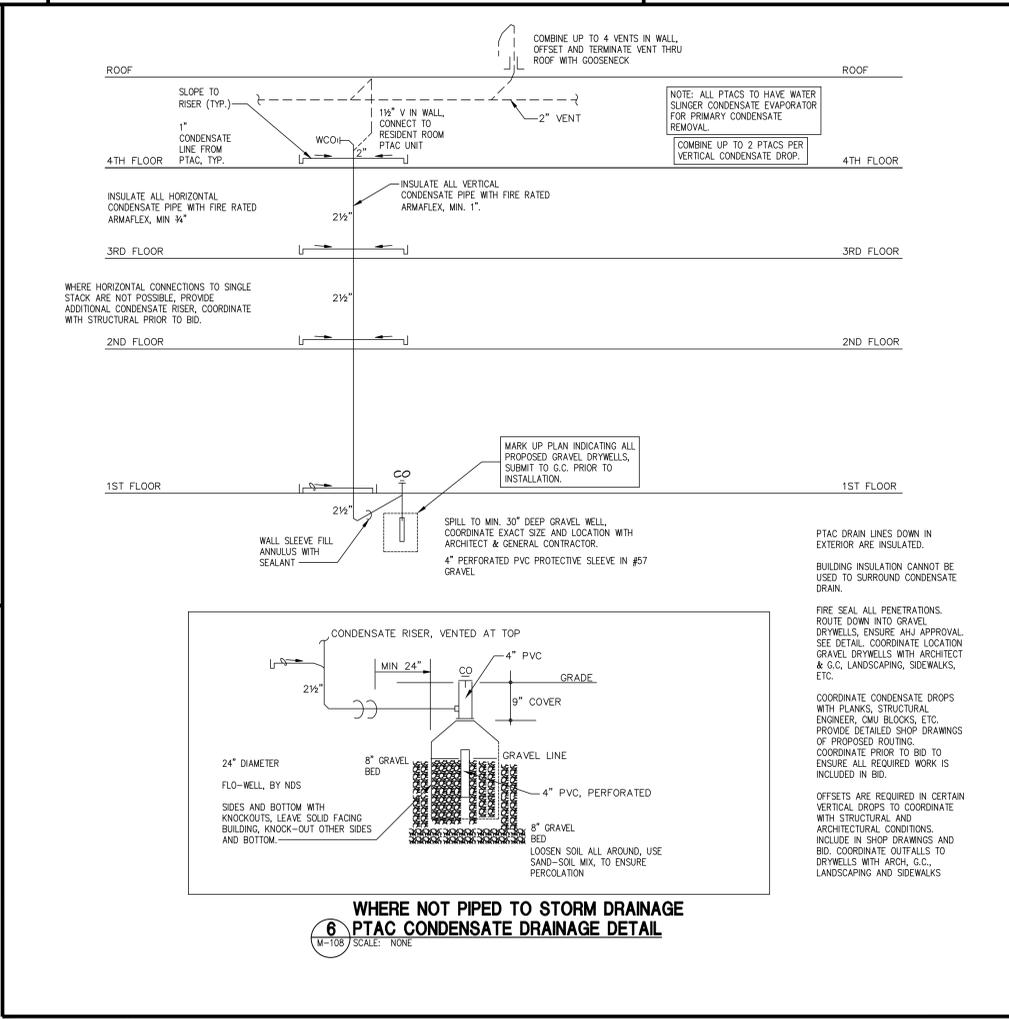
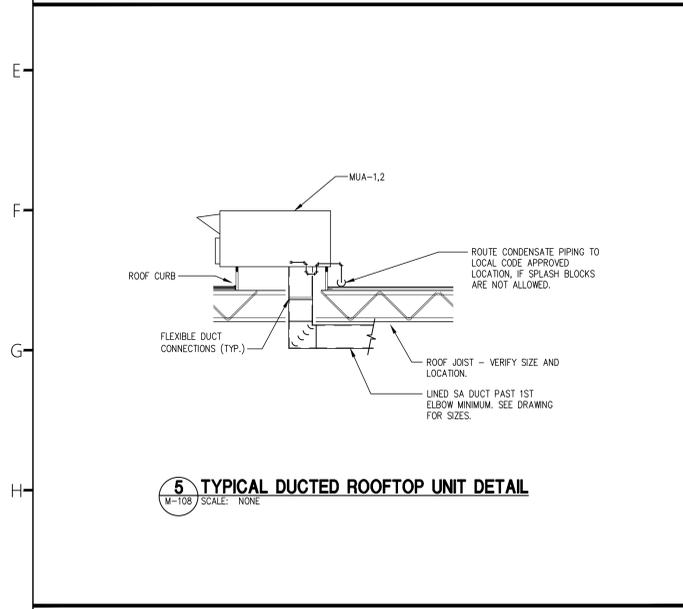
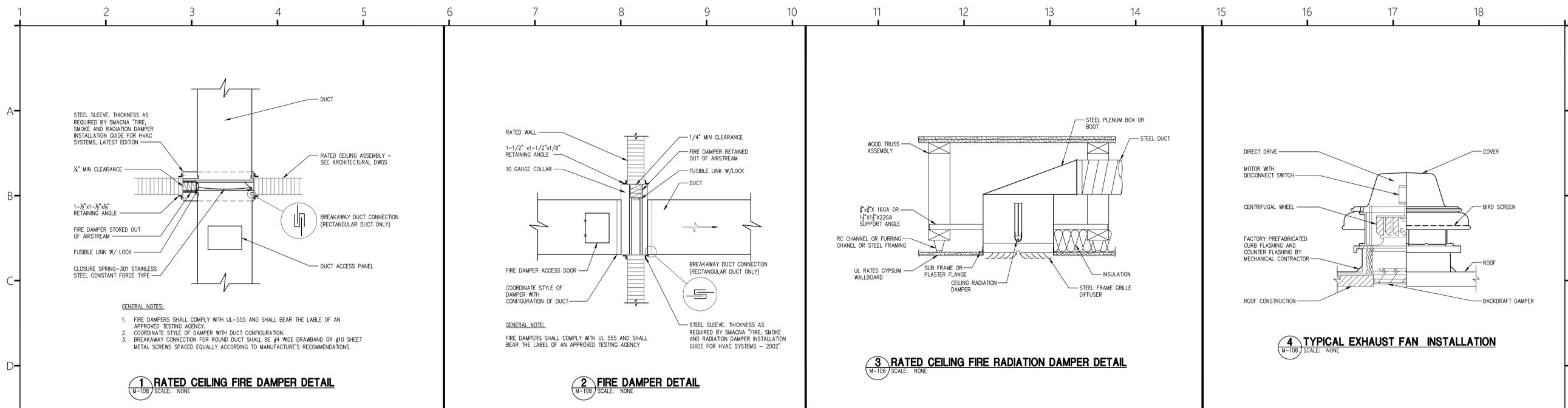
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Checked By: LWI

Sheet Number: M-106
Sheet Title: HVAC SPECIFICATIONS

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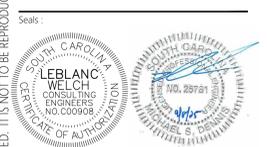
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DCB  
Checked By:  
LWI  
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**M-108**  
Sheet Title:  
HVAC DETAILS

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