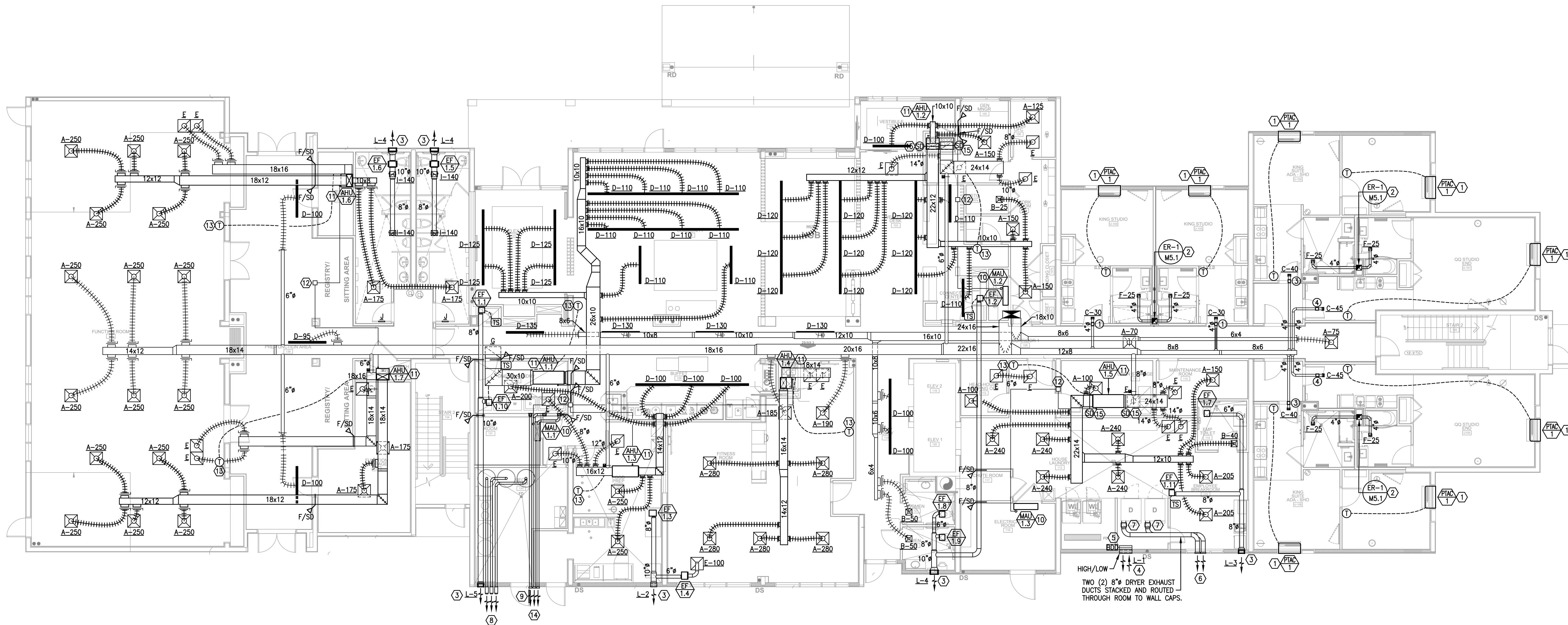


GENERAL NOTES:

- METAL DUCT WITH AN APPROVED INSULATION SYSTEM IS REQUIRED. DUCTBOARD CAN NOT BE USED.
- INTERNAL INSULATION FOR SUPPLY DUCTS AND OUTSIDE AIR DUCTS MUST BE CLOSED-CELL ELASTOMERIC. FIBERGLASS DUCT LINER IS NOT ALLOWED.
- GUESTROOM PTACS TO BE PROVIDED WITH A DIGITAL THERMOSTAT LISTED AND APPROVED BY BRAND STANDARDS. THERMOSTAT CANNOT BE WIRELESS. COORDINATE EXACT THERMOSTAT LOCATION WITH OWNER AND BRAND.
- PROVIDE THRU-WALL UNITS WITH METAL SLEEVE.
- LOUVERS FOR THRU-WALL UNITS SHALL BE ARCHITECTURAL STYLE WITH FINISH TO MATCH THE WINDOW SECTIONS OR THE ADJACENT WALL.
- THRU-WALL SLEEVES SHALL BE PROPERLY SEALED ON THE EXTERIOR AND INTERIOR.
- PROVIDE 10' OF ACOUSTICALLY LINED SUPPLY & RETURN DUCTWORK MAINS FOR ALL AIR HANDLING UNITS.

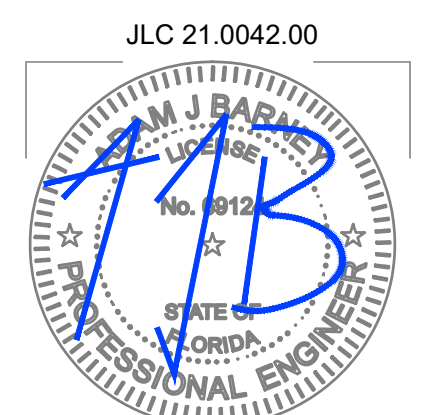
REFERENCE NOTES: (1)

- ROUTE PTAC CONDENSATE TO RISER WITHIN WALL AND DOWN TO EXTERIOR. CONNECT TO STORM. REFER TO PLUMBING PLANS FOR CONNECTION LOCATIONS.
- ROUTE 4" RESTROOM EXHAUST DUCT INTO MAIN EXHAUST SHAFT AND TURN UP INTO EXHAUST SHAFT. SEE SUBDUCT DETAIL SHEET.
- ROUTE GALVANIZED METAL EXHAUST DUCT FROM EXHAUST FANS THROUGH BUILDING SIDEWALL AND TERMINATE WITH LOUVER PER SCHEDULE SHEET. COORDINATE EXACT MOUNTING ELEVATION AND LOCATION OF LOUVER WITH ARCHITECTURAL DRAWINGS.
- INSTALL NEW HIGH/LOW LOUVERS PER SCHEDULE SHEET. ONE LOUVER TO BE INSTALLED 12" BELOW CEILING AND ONE LOUVER TO BE INSTALLED 12" ABOVE FINISHED FLOOR PER DETAIL SHEET.
- PROVIDE FULL SIZE BACKDRAFT DAMPER.
- ROUTE 6" COMMERCIAL DRYER EXHAUST DUCT FROM EACH DRYER THROUGH BUILDING SIDEWALL. TERMINATE WITH WALL CAP PER DETAIL SHEET. DO NOT PROVIDE BIRD SCREEN ON DRYER WALL CAP. EXHAUST TO BE LOCATED A MINIMUM OF 3'-0" ABOVE ANY OPERABLE DOOR, WINDOW OR OUTSIDE AIR INTAKE.
- PROVIDE LINT TRAP EQUAL TO SOLER & PALAU MODEL NO. MFL-200 FOR EACH DRYER.
- ROUTE 4" VENT PIPING TO BUILDING SIDEWALL USING A.O. SMITH CONCENTRIC VENT PIPING AND TERMINATE WITH A.O. SMITH CONCENTRIC VENT TERMINATION KIT PER DETAIL SHEET. (TYP. OF 3)
- INSTALL 24"x12" HART AND COOLEY DOOR GRILLE MODEL TG WITH TGF FRAME OR EQUIVALENT ON BOTH SIDES OF THE DOOR.
- MOUNT MINI-SPLIT PER DETAIL SHEET. FOR CONDENSATE LINE PROVIDE IN-LINE CHECK VALVE AND CLEANOUT PER FLORIDA BUILDING CODES 314.2.4.1 AND 314.2.5 AND SUEREMANN CONDENSATE PUMP 9-30 IF REQUIRED.
- INSTALL NEW SUSPENDED OR VERTICAL AIR HANDLING UNIT PER DETAILS SHEET.
- ROUTE FULLY INSULATED REFRIGERANT LINES FROM AIR HANDLING UNIT WITHIN REFRIGERANT LINE CHASE TO CONDENSING UNITS ON ROOF. ROUTE FULL SIZE CONDENSATE LINES FROM AIR HANDLING UNIT TO EXTERIOR. REFER TO PLUMBING PLANS FOR CONDENSATE ROUTING.
- PROVIDE NEW HONEYWELL THB321WF1001 FULLY DIGITAL 7 DAY PROGRAMMABLE TYPE THERMOSTAT WITH HUMIDISTAT, AUTO CHANGE OVER AND AUTO SET BACK. MOUNT THERMOSTAT 4'-0" ABOVE FINISHED FLOOR. COORDINATE EXACT LOCATIONS WITH OWNER. PROVIDE CLEAR ACRYLIC LOCKING COVER IF LOCATED WITHIN PUBLIC SPACE.
- ROUTE 4" GALVANIZED METAL EXHAUST DUCT FROM GUEST LAUNDRY DRYERS THROUGH BUILDING SIDEWALL AND TERMINATE WITH WALL CAPS PER DETAIL SHEET. DO NOT PROVIDE BIRD SCREEN ON DRYER WALL CAP. EXHAUST TO BE LOCATED A MINIMUM OF 3'-0" ABOVE ANY OPERABLE DOOR, WINDOW OR OUTSIDE AIR INTAKE. (TYP. OF 3)
- PROVIDE TEST STATION FOR DUCT SMOKE DETECTOR WHICH IS REQUIRED TO BE ACCESSIBLE FROM THE FLOOR PER MARriott'S MODULE 14.



1 FIRST FLOOR PLAN - MECHANICAL
SCALE: 1/8" = 1'-0"

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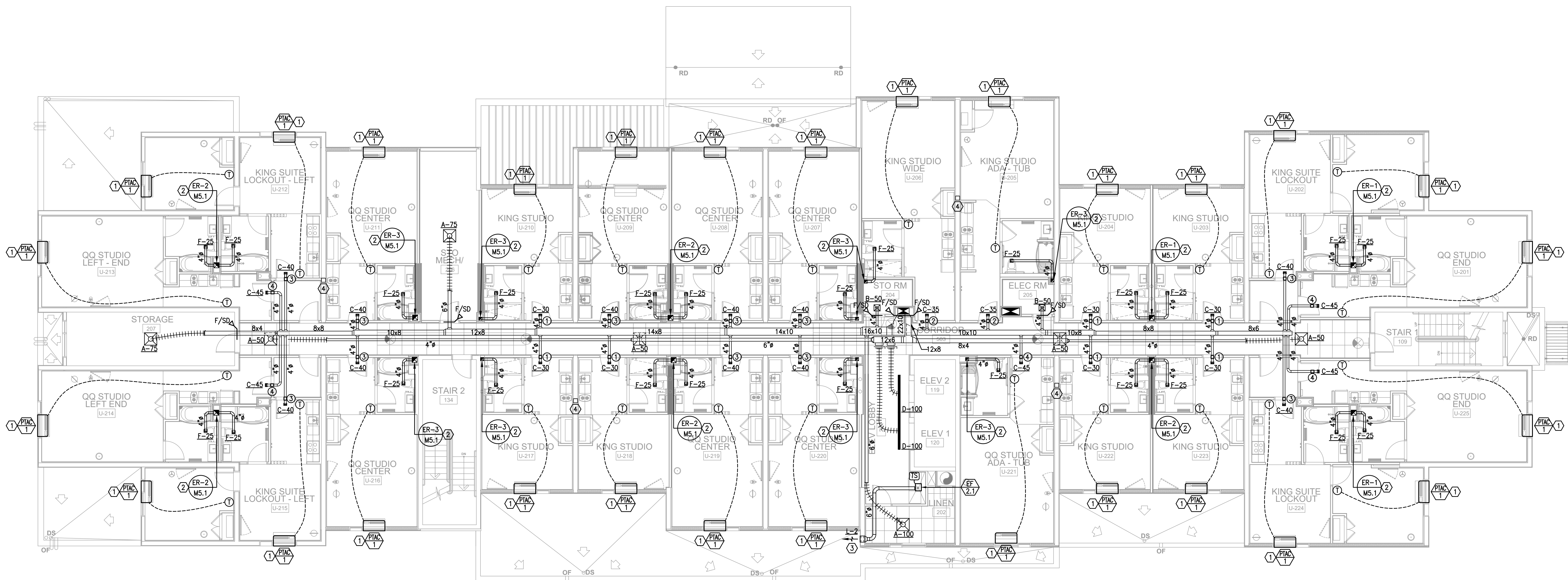


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1 SECOND FLOOR PLAN - MECHANICAL
SCALE: 1/8" = 1'-0"

GENERAL NOTES:

- METAL DUCT WITH AN APPROVED INSULATION SYSTEM IS REQUIRED. DUCTBOARD CAN NOT BE USED.
- INTERNAL INSULATION FOR SUPPLY DUCTS AND OUTSIDE AIR DUCTS MUST BE CLOSED-CELL ELASTOMERIC. FIBERGLASS DUCT LINER IS NOT ALLOWED.
- GUESTROOM PTACs TO BE PROVIDED WITH A DIGITAL THERMOSTAT LISTED AND APPROVED BY BRAND STANDARDS. THERMOSTAT CANNOT BE WIRELESS. COORDINATE EXACT THERMOSTAT LOCATION WITH OWNER AND BRAND.
- PROVIDE THRU-WALL UNITS WITH METAL SLEEVE.
- LOUVERS FOR THRU-WALL UNITS SHALL BE ARCHITECTURAL STYLE WITH FINISH TO MATCH THE WINDOW SECTIONS OR THE ADJACENT WALL.
- THRU-WALL SLEEVES SHALL BE PROPERLY SEALED ON THE EXTERIOR AND INTERIOR.

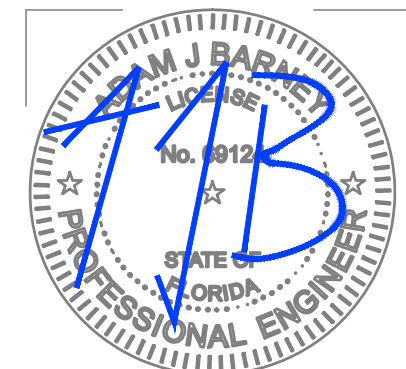
REFERENCE NOTES: (X)

- ROUTE PTAC CONDENSATE TO RISER WITHIN WALL AND DOWN TO EXTERIOR. CONNECT TO STORM. REFER TO PLUMBING PLANS FOR CONNECTION LOCATIONS.
- ROUTE 4" RESTROOM EXHAUST DUCT INTO MAIN EXHAUST SHAFT AND TURN UP INTO EXHAUST SHAFT. SEE SUBDUCT DETAIL.
- ROUTE 6" GALVANIZED METAL EXHAUST DUCT FROM ICE MACHINE EXHAUST FAN THROUGH BUILDING SIDEWALL AND TERMINATE WITH LOUVER PER SCHEDULE. COORDINATE EXACT MOUNTING ELEVATION AND LOCATION OF LOUVER WITH ARCHITECTURAL DRAWINGS.
- REFRIGERANT LINES UP FROM FLOOR BELOW. PROVIDE REFRIGERANT LINE CHASE FOR ROUTING UP TO CONDENSING UNITS ON ROOF.



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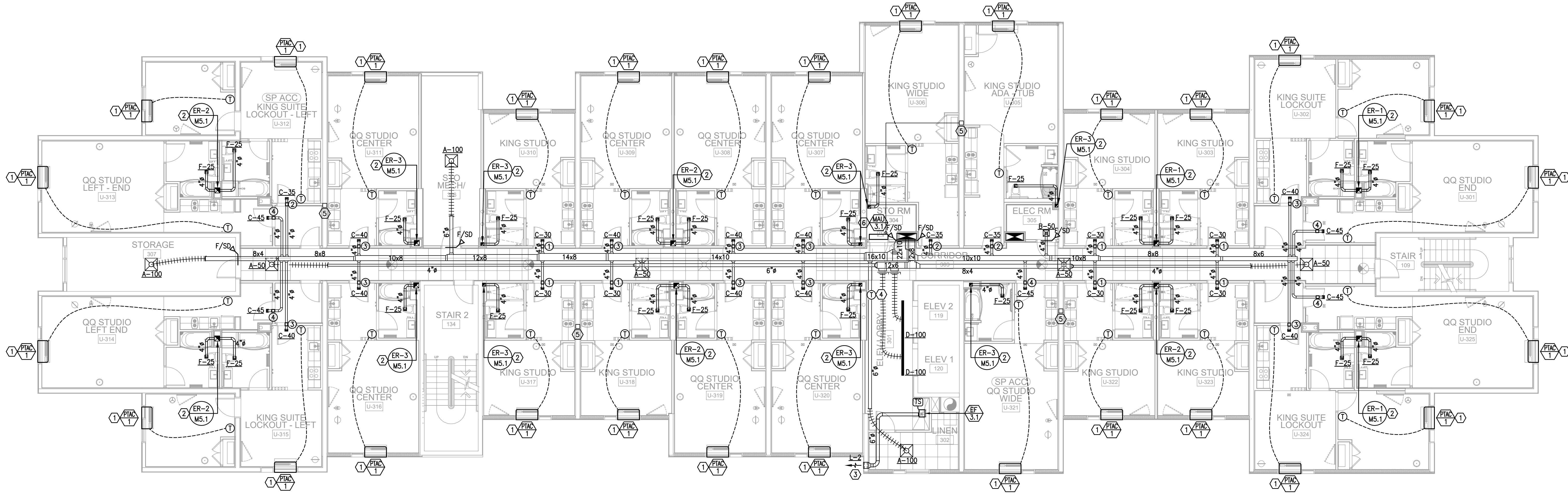
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GENERAL NOTES:

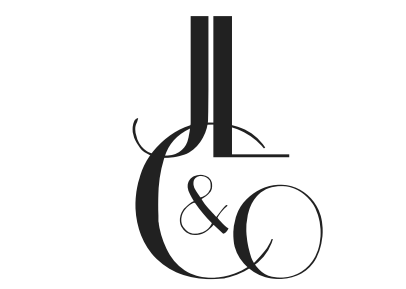
- A. METAL DUCT WITH AN APPROVED INSULATION SYSTEM IS REQUIRED. DUCTBOARD CAN NOT BE USED.
- B. INTERNAL INSULATION FOR SUPPLY DUCTS AND OUTSIDE AIR DUCTS MUST BE CLOSED-CELL ELASTOMERIC. FIBERGLASS DUCT LINER IS NOT ALLOWED.
- C. GUESTROOM PTACS TO BE PROVIDED WITH A DIGITAL THERMOSTAT LISTED AND APPROVED BY BRAND STANDARDS. THERMOSTAT CANNOT BE WIRELESS. COORDINATE EXACT THERMOSTAT LOCATION WITH WITH OWNER AND BRAND.
- D. PROVIDE THRU-WALL UNITS WITH METAL SLEEVE.
- E. LOUVERS FOR THRU-WALL UNITS SHALL BE ARCHITECTURAL STYLE WITH FINISH TO MATCH THE WINDOW SECTIONS OR THE ADJACENT WALL.
- F. THRU-WALL SLEEVES SHALL BE PROPERLY SEALED ON THE EXTERIOR AND INTERIOR.

REFERENCE NOTES: (X)

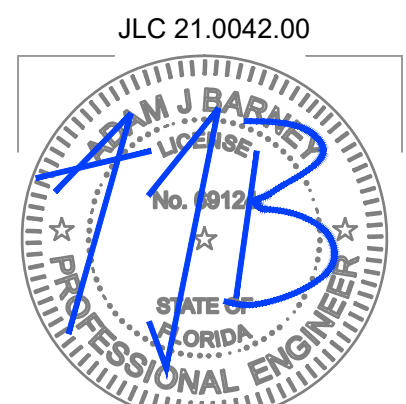
- (1) ROUTE PTAC CONDENSATE TO RISER WITHIN WALL AND DOWN TO EXTERIOR. CONNECT TO STORM. REFER TO PLUMBING PLANS FOR CONNECTION LOCATIONS.
- (2) ROUTE 4" RESTROOM EXHAUST DUCT INTO MAIN EXHAUST SHAFT AND TURN UP INTO EXHAUST SHAFT. SEE SUBDUCT DETAIL SHEET.
- (3) ROUTE 6" GALVANIZED METAL EXHAUST DUCT THROUGH BUILDING SIDEWALL AND TERMINATE WITH LOUVER PER SCHEDULE. COORDINATE EXACT MOUNTING ELEVATION AND LOCATION OF LOUVER WITH ARCHITECTURAL DRAWINGS.
- (4) PROVIDE NEW HONEYWELL TH8321WF1001 FULLY DIGITAL 7 DAY PROGRAMMABLE TYPE THERMOSTAT WITH HUMIDISTAT, AUTO CHANGE OVER AND AUTO SET BACK FOR QAU-2. MOUNT THERMOSTAT 4'-0" ABOVE FINISHED FLOOR. THERMOSTAT TO AVERAGE TOGETHER WITH THERMOSTAT LOCATED ON THE 5TH FLOOR CORRIDOR FOR THESE UNITS TO MAINTAIN A TEMPERATURE OF 78°. COORDINATE EXACT LOCATIONS WITH OWNER. PROVIDE CLEAR ACRYLIC LOCKING COVER IF LOCATED WITHIN PUBLIC SPACE.
- (5) REFRIGERANT LINES UP FROM FLOOR BELOW. PROVIDE REFRIGERANT LINE CHASE FOR ROUTING UP TO CONDENSING UNITS ON ROOF.
- (6) ROUTE FULL SIZE FULLY INSULATED REFRIGERANT LINES UP THROUGH CHASE WITHIN WALL TO ROOF MOUNTED CONDENSING UNIT. REFER TO PLUMBING PLANS FOR CONDENSATE ROUTING.



1 THIRD FLOOR PLAN - MECHANICAL
SCALE: 1/8" = 1'-0"



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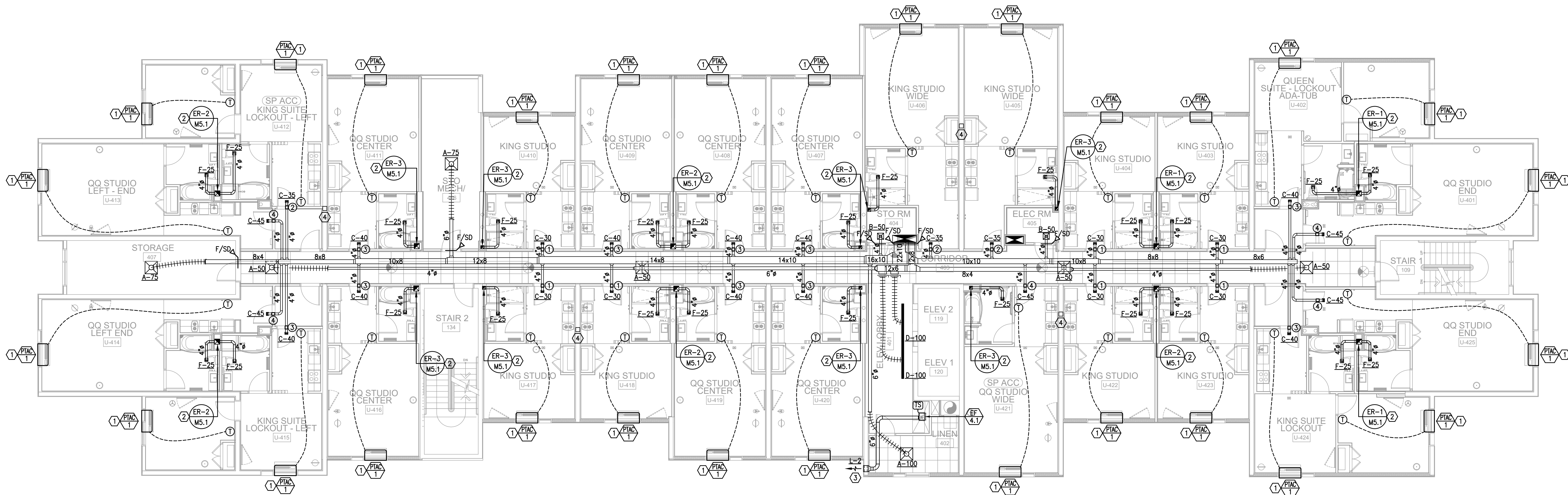
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GENERAL NOTES:

- METAL DUCT WITH AN APPROVED INSULATION SYSTEM IS REQUIRED. DUCTBOARD CAN NOT BE USED.
- INTERNAL INSULATION FOR SUPPLY DUCTS AND OUTSIDE AIR DUCTS MUST BE CLOSED-CELL ELASTOMERIC. FIBERGLASS DUCT LINER IS NOT ALLOWED.
- GUESTROOM PTACs TO BE PROVIDED WITH A DIGITAL THERMOSTAT LISTED AND APPROVED BY BRAND STANDARDS. THERMOSTAT CANNOT BE WIRELESS. COORDINATE EXACT THERMOSTAT LOCATION WITH OWNER AND BRAND.
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- LOUVERS FOR THRU-WALL UNITS SHALL BE ARCHITECTURAL STYLE WITH FINISH TO MATCH THE WINDOW SECTIONS OR THE ADJACENT WALL.
- THRU-WALL SLEEVES SHALL BE PROPERLY SEALED ON THE EXTERIOR AND INTERIOR.

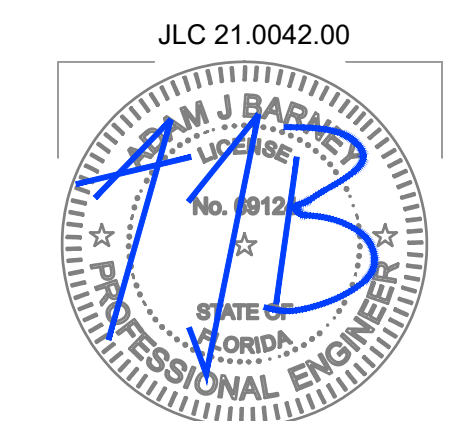
REFERENCE NOTES: (X)

- ROUTE PTAC CONDENSATE TO RISER WITHIN WALL AND DOWN TO EXTERIOR. CONNECT TO STORM. REFER TO PLUMBING PLANS FOR CONNECTION LOCATIONS.
- ROUTE 4" RESTROOM EXHAUST DUCT INTO MAIN EXHAUST SHAFT AND TURN UP INTO EXHAUST SHAFT. SEE SUBDUCT DETAIL.
- ROUTE 6" GALVANIZED METAL EXHAUST DUCT FROM ICE MACHINE EXHAUST FAN THROUGH BUILDING SIDEWALL AND TERMINATE WITH LOUVER PER SCHEDULE. COORDINATE EXACT MOUNTING ELEVATION AND LOCATION OF LOUVER WITH ARCHITECTURAL DRAWINGS.
- REFRIGERANT LINES UP FROM FLOOR BELOW. PROVIDE REFRIGERANT LINE CHASE FOR ROUTING UP TO CONDENSING UNITS ON ROOF.



1 FOURTH FLOOR PLAN - MECHANICAL
SCALE: 1/8" = 1'-0"

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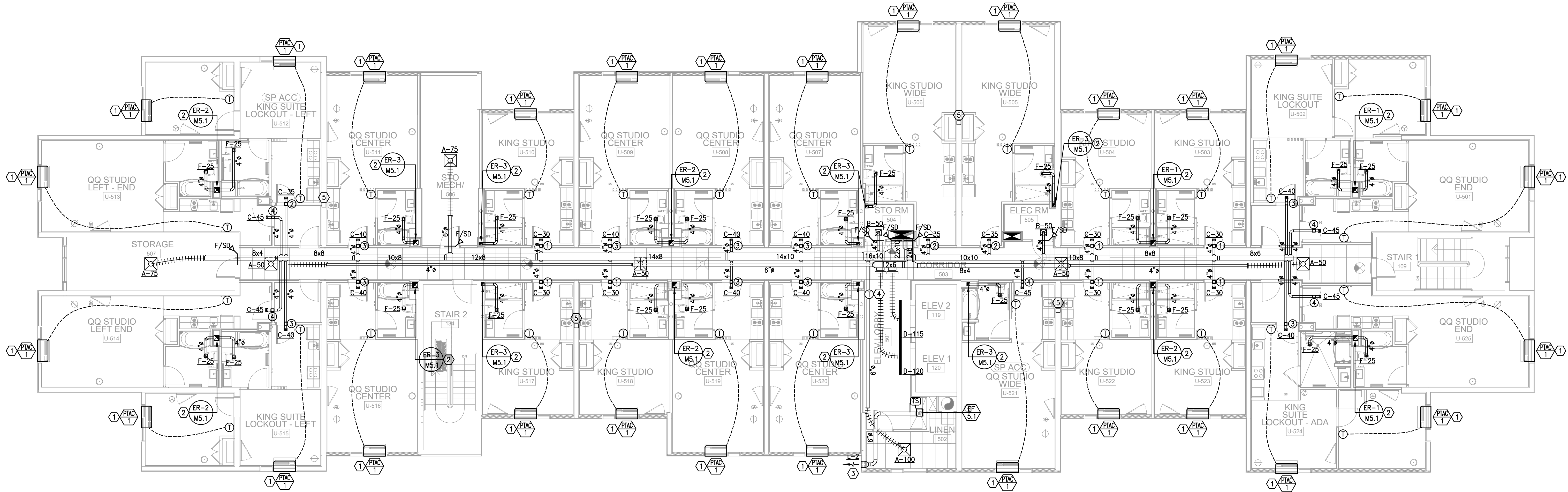


GENERAL NOTES:

- A. METAL DUCT WITH AN APPROVED INSULATION SYSTEM IS REQUIRED. DUCTBOARD CAN NOT BE USED.
- B. INTERNAL INSULATION FOR SUPPLY DUCTS AND OUTSIDE AIR DUCTS MUST BE CLOSED-CELL ELASTOMERIC. FIBERGLASS DUCT LINER IS NOT ALLOWED.
- C. GUESTROOM PTACS TO BE PROVIDED WITH A DIGITAL THERMOSTAT LISTED AND APPROVED BY BRAND STANDARDS. THERMOSTAT CANNOT BE WIRELESS.
- D. PROVIDE THRU-WALL UNITS WITH METAL SLEEVE.
- E. LOUVERS FOR THRU-WALL UNITS SHALL BE ARCHITECTURAL STYLE WITH FINISH TO MATCH THE WINDOW SECTIONS OR THE ADJACENT WALL.
- F. THRU-WALL SLEEVES SHALL BE PROPERLY SEALED ON THE EXTERIOR AND INTERIOR.

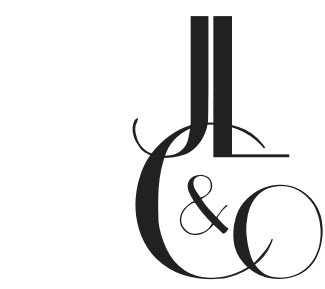
REFERENCE NOTES: (X)

- (1) ROUTE PTAC CONDENSATE TO RISER WITHIN WALL AND DOWN TO EXTERIOR. CONNECT TO STORM. REFER TO PLUMBING PLANS FOR CONNECTION LOCATIONS.
- (2) ROUTE 4" RESTROOM EXHAUST DUCT INTO MAIN EXHAUST SHAFT AND TURN UP INTO EXHAUST SHAFT. SEE SUBDUCT DETAIL.
- (3) ROUTE 6" GALVANIZED METAL EXHAUST DUCT FROM ICE MACHINE EXHAUST FAN THROUGH BUILDING SIDEWALL AND TERMINATE WITH LOUVER PER SCHEDULE. COORDINATE EXACT MOUNTING ELEVATION AND LOCATION OF LOUVER WITH ARCHITECTURAL DRAWINGS.
- (4) PROVIDE NEW HONEYWELL TH8321WF1001 FULLY DIGITAL 7 DAY PROGRAMMABLE TYPE THERMOSTAT WITH HUMIDISTAT, AUTO CHANGE OVER AND AUTO SET BACK FOR QAU-2. MOUNT THERMOSTAT 4'-0" ABOVE FINISHED FLOOR. THERMOSTAT TO AVERAGE TOGETHER WITH THERMOSTAT LOCATED ON THE 3RD FLOOR CORRIDOR FOR THESE UNITS TO MAINTAIN A TEMPERATURE OF 78°. COORDINATE EXACT LOCATIONS WITH OWNER. PROVIDE CLEAR ACRYLIC LOCKING COVER IF LOCATED WITHIN PUBLIC SPACE.
- (5) REFRIGERANT LINES UP FROM FLOOR BELOW. PROVIDE REFRIGERANT LINE CHASE FOR ROUTING UP TO CONDENSING UNITS ON ROOF.



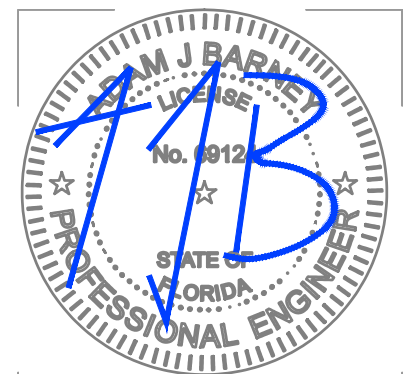
FIFTH FLOOR PLAN - MECHANICAL

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



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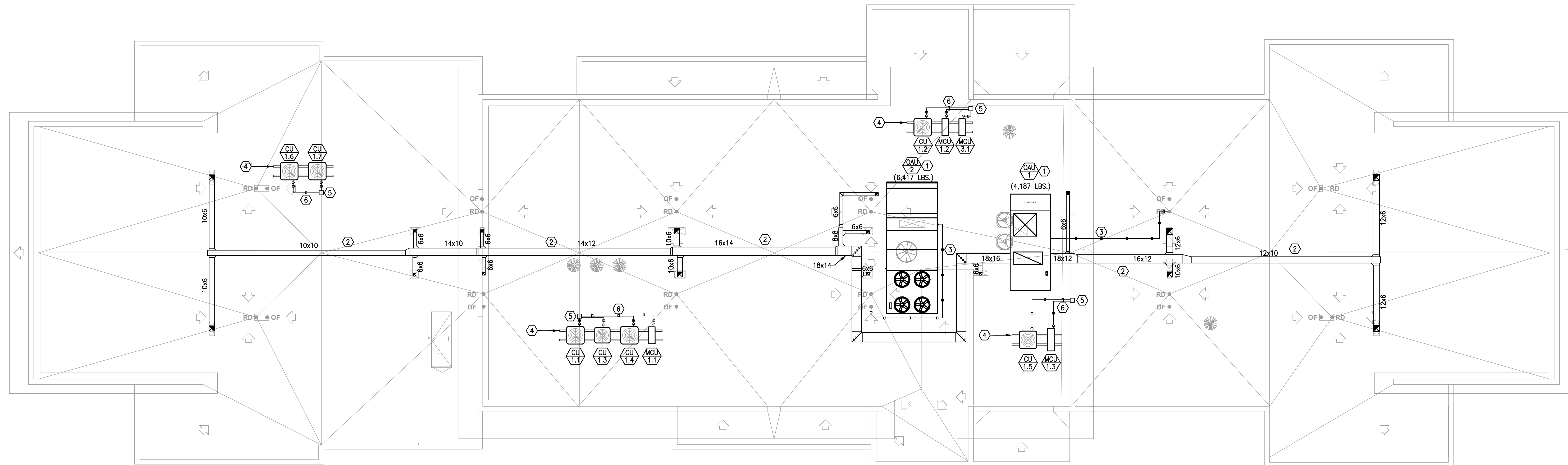


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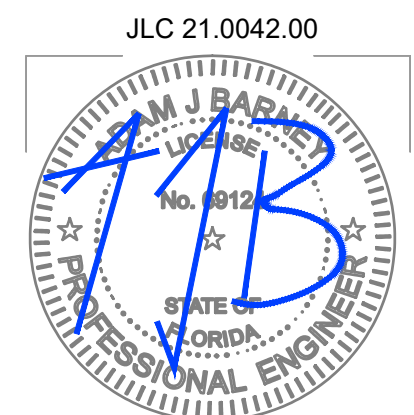
- GENERAL NOTES:
- A. REFER TO ARCHITECTURAL DRAWINGS FOR MECHANICAL EQUIPMENT SCREENING.
- B. MAINTAIN A MINIMUM OF 10'-0" BETWEEN ANY EXHAUST AND OUTSIDE AIR INTAKE.

- REFERENCE NOTES: (X)
1. INSTALL NEW 100% OUTSIDE AIR/ENERGY RECOVERY UNIT AND CURB PER DETAILS. OUTSIDE AIR DUCT WILL DISCHARGE VERTICALLY OUT OF THE BOTTOM OF THE UNIT INTO THE OUTSIDE AIR SHAFT. ROUTE UNIT CONDENSATE PIPING FULL SIZE ALONG ROOF TO NEAREST ROOF DRAIN ROUTED TO STORM.
2. EXHAUST AIR DUCT WILL DISCHARGE HORIZONTALLY OUT OF THE UNIT. DUCTWORK TO BE R-8 DOUBLE WALL INSULATED AND ROUTED ACROSS ROOF. CONNECT ALL EXHAUST SHAFTS AS SHOWN PER PLAN. PROVIDE DUCTWORK SUPPORTS PER CODE AND DETAIL.
3. PROPERLY SUPPORT CONDENSATE OFF ROOF AT A MINIMUM OF 4'-0" ON CENTER PER DETAIL, TYPICAL.
4. INSTALL CONDENSING UNITS ON ROOF RACK PER DETAIL.
5. REFRIGERANT LINES UP FROM FLOOR BELOW. PROVIDE DOGHOUSE PER DETAIL.
6. PROVIDE REFRIGERANT LINE SUPPORTS PER DETAIL.

1 ROOF PLAN - MECHANICAL

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

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GENERAL NOTES:

1. CONTRACTOR TO VERIFY ALL MECHANICAL EQUIPMENT SELECTED FITS WITHIN DESIGNATED SPACE SHOWN ON MECHANICAL PLANS AND PROVIDES THE CORRECT CLEARANCES REQUIRED BY THE MANUFACTURER.

2. CONTRACTOR SHALL COORDINATE VOLTAGE, PHASE AND REQUIRED MOCP FOR EACH PIECE OF EQUIPMENT WITH THE ELECTRICAL CONTRACTOR PRIOR TO ORDERING.

3. IF PRODUCTS/EQUIPMENT ARE VALUE ENGINEERED OR SUBSTITUTED IT IS THE CONTRACTORS RESPONSIBILITY TO FIELD COORDINATE ALL NEW PRODUCTS/EQUIPMENT REQUIREMENTS WITH OTHER DISCIPLINES/TRADES.

PTAC UNIT SCHEDULE																										
MARK	LOCATION SERVED	FAN				COOLING COIL			FILTERS			ELECTRIC HEATING COIL			SINGLE POINT UNIT ELEC. REQUIREMENTS		UNIT INFORMATION									
		TOTAL AIR FLOW (CFM)	OUTSIDE AIR FLOW (CFM)	EXTERNAL STATIC PRESS. (IN.WG.)	DRIVE TYPE	HP	ENTERING AIR TEMP. (F° DB/WB)	LEAVING AIR TEMP. (F° DB/WB)	TOTAL CAPACITY (BTUH)	TYPE	EFFICIENCY	THICKNESS	NO. OF STAGES	VOLTS/ PHASE	TOTAL KW	HEATER STEPS	VOLTAGE/ PHASE	SINGLE CIRCUIT MCA	SINGLE CIRCUIT MOCP	EER	UNIT SIZE (H"xW"xD")	OPERATING WEIGHT (LBS.)	MANUFACTURER	MODEL NUMBER	MOUNTING APPLICATION	NOTES
PTAC-1	GUESTROOMS	409	--	--	DIRECT	--	--	9,600	SLIDEOUT	30%	0.5"	1	208/1#	3.1	1	208/1#	--	20	12.2	16"x42"x20"	110	GE	AZ6SH09DAB	SIDEWALL MOUNTED	1. & 2.	
NOTES: 1. PROVIDE COMPLETE WITH SINGLE POINT WIRING, CORD & PLUG, 1" THICK CABINET FOIL FACED INSULATION, AND GE ZONELINE DIGITAL THERMOSTAT, FACTORY INSTALLED TVX KIT, AND CONDENSATE OVERFLOW SWITCH. 2. PROVIDE GUESTROOM THERMOSTATS PER BRAND STANDARDS.																										

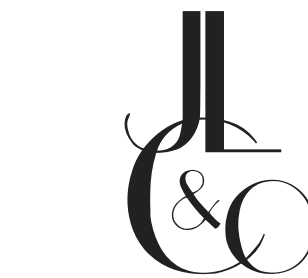
MINI-SPLIT AIR HANDLING UNIT SCHEDULE																										
MARK	LOCATION SERVED	FAN				COOLING COIL						FILTERS		ELECTRIC HEATING COIL			SINGLE POINT UNIT ELEC. REQUIREMENTS			UNIT INFORMATION						
		TOTAL AIR FLOW (CFM)	OUTSIDE AIR FLOW (CFM)	EXTERNAL STATIC PRESS. (IN.WG.)	DRIVE TYPE	FLA	ENTERING AIR TEMP (° DB/WB)	LEAVING AIR TEMP (° DB/WB)	TOTAL CAPACITY (BTUH)	SENSIBLE CAPACITY (BTUH)	COIL AREA (SQ.FT.)	COIL ROW/FINS	TYPE	EFFICIENCY	THICKNESS	TOTAL CAPACITY (BTUH)	VOLTS/ PHASE	HEATER AMPS	VOLTAGE/ PHASE	SINGLE CIRCUIT MCA	SINGLE CIRCUIT MOCP	UNIT SIZE (H"xW"xD")	OPERATING WEIGHT (LBS.)	MANUFACTURER	MODEL NUMBER	NOTES
MAU-1.1	PBX ROOM 1ST FLR	380	—	—	—	0.33	80.0/67.0	56.0/54.0	18,000	—	—	INTERNAL	25%-30%	—	—	—	—	—	208/1#	1	—	12"x36"x10"	29	MITSUBISHI	PKA-A18HA7	1, 2, & 3.
MAU-1.2	SERVER CLOSET	380	—	—	—	0.33	80.0/67.0	56.0/54.0	18,000	—	—	INTERNAL	25%-30%	—	—	—	—	—	208/1#	1	—	12"x36"x10"	29	MITSUBISHI	PKA-A18HA7	1, 2, & 3.
MAU-1.3	ELECTRICAL	380	—	—	—	0.57	80.0/67.0	56.0/54.0	36,000	—	—	INTERNAL	25%-30%	—	—	—	—	—	208/1#	1	—	15"x46"x12"	46	MITSUBISHI	PKA-A38KA7	1, 2, & 3.
MAU-3.1	PBX ROOM 3RD FLR	380	—	—	—	0.33	80.0/67.0	56.0/54.0	18,000	—	—	INTERNAL	25%-30%	—	—	—	—	—	208/1#	1	—	12"x36"x10"	29	MITSUBISHI	PKA-A18HA7	1, 2, & 3.
NOTES: 1. POWER FOR INDOOR UNIT PROVIDED FROM EXTERIOR CONDENSER. COORDINATE WITH ELECTRICAL CONTRACTOR TO PROVIDE POWER WIRING BETWEEN EACH UNIT IN FIELD. 2. ROUTE AND SIZE REFRIGERANT LINES PER MANUFACTURER'S REQUIREMENTS. 3. MOUNT AS HIGH ON WALL AS POSSIBLE AND PROVIDE SAUERMANN SI-38 CONDENSATE PUMP IF REQUIRED.																										

MINI- SPLIT CONDENSING UNIT SCHEDULE (HEAT PUMP)																			
MARK	LOCATION	COMPRESSOR			CONDENSER FANS		ELECTRICAL					UNIT INFORMATION			MANUFACTURER	MODEL NUMBER	NOTES		
		OUTDOOR DESIGN TEMP. °F	QTY.	CAPACITY STEPS	QTY.	NOMINAL HP	VOLTAGE/ PHASE	COMPRESSOR RLA/LRA	CONDENSER FANS QTY.	F.L.A.	MCA	MOCP	SEER	UNIT SIZE (H"xW"xD")				OPERATING WEIGHT (LBS.)	
MCU-1.1	ROOF	95°	1	100	1	--	208/1#	--	1	0.5	11	28	18.5	25"x32"x12"	100	MITSUBISHI	PUZ-A18NK47	1.	
MCU-1.2	ROOF	95°	1	100	1	--	208/1#	--	1	0.5	11	28	18.5	25"x32"x12"	100	MITSUBISHI	PUZ-A18NK47	1.	
MCU-1.3	ROOF	95°	1	100	1	--	208/1#	--	2	0.5+0.5	25	31	18.8	53"x42"x14"	211	MITSUBISHI	PUZ-A36NK47	1.	
MCU-3.1	ROOF	95°	1	100	1	--	208/1#	--	1	0.5	11	28	18.5	25"x32"x12"	100	MITSUBISHI	PUZ-A18NK47	1.	
NOTES: 1. PROVIDE COMPLETE WITH DISCONNECT SWITCH (PROVIDED BY DIVISION 16), TIME DELAY RELAY AND ANTI-SHORT CYCLE TIMER.																			

DX SPLIT AIR HANDLING UNIT SCHEDULE																										
MARK	LOCATION SERVED	FAN				COOLING COIL				FILTERS			ELECTRIC HEATING COIL				SINGLE POINT UNIT ELEC. REQUIREMENTS		UNIT INFORMATION							
		TOTAL AIR FLOW (CFM)	OUTSIDE AIR FLOW (CFM)	EXTERNAL STATIC PRESS. (IN.WG.)	DRIVE TYPE	HP	ENTERING AIR TEMP. (F DB/WB)	LEAVING AIR TEMP. (F DB/WB)	TOTAL CAPACITY (BTUH)	TYPE	MERV	THICKNESS	NO. OF STAGES	VOLTS/ PHASE	TOTAL KW	HEATER STEPS	VOLTAGE/ PHASE	SINGLE CIRCUIT MCA	SINGLE CIRCUIT MOCP	UNIT SIZE (H"xW"xD")	OPERATING WEIGHT (LBS.)	MANUFACTURER	MODEL NUMBER	MOUNTING APPLICATION	NOTES	
AHU-1.1	COMMUNITY/FLEX	1,600	--	0.5	DIRECT	1	77.0/64.0	56.0/55.0	48,000	THROWAWAY	8	1"	1	208/1#	6	1	208/1#	36	40	59x22x25	189	LENNOX	CB427UHE-048	FLOOR STAND	1. & 2.	
AHU-1.2	LOBBY/OFFICES	2,000	75	0.5	DIRECT	1	77.0/64.0	56.0/55.0	60,000	THROWAWAY	8	1"	1	208/1#	8	2	208/1#	45	45	63x22x25	199	LENNOX	CB427UHE-060	FLOOR STAND	1. & 2.	
AHU-1.3	FOOD PREP/GUEST LAUNDRY	1,000	105	0.5	DIRECT	1/2	77.0/64.0	56.0/55.0	30,000	THROWAWAY	8	1"	1	208/1#	5	1	208/1#	28	30	51x22x23	154	LENNOX	CB427UHE-030	FLOOR STAND	1. & 2.	
AHU-1.4	FITNESS	1,400	--	0.5	DIRECT	1	77.0/64.0	56.0/55.0	42,000	THROWAWAY	8	1"	1	208/1#	6	1	208/1#	36	40	59x22x25	189	LENNOX	CB427UHE-042	FLOOR STAND	1. & 2.	
AHU-1.5	LAUNDRY	2,000	155	0.5	DIRECT	1	77.0/64.0	56.0/55.0	60,000	THROWAWAY	8	1"	1	208/1#	8	2	208/1#	45	45	63x22x25	199	LENNOX	CB427UHE-060	FLOOR STAND	1. & 2.	
AHU-1.6	FUNCTION/RR	1,600	--	0.5	DIRECT	1	77.0/64.0	56.0/55.0	48,000	THROWAWAY	8	1"	1	208/1#	6	1	208/1#	36	40	59x22x25	189	LENNOX	CB427UHE-048	FLOOR STAND	1. & 2.	
AHU-1.7	FUNCTION/STORAGE	1,600	45	0.5	DIRECT	1	77.0/64.0	56.0/55.0	48,000	THROWAWAY	8	1"	1	208/1#	6	1	208/1#	36	40	59x22x25	189	LENNOX	CB427UHE-048	FLOOR STAND	1. & 2.	
NOTES: 1. PROVIDE COMPLETE WITH SINGLE POINT WIRING, ELECTRICAL DISCONNECT (PROVIDED BY DIVISION 16), 1" THICK CABINET FOIL FACED INSULATION, HONEYWELL TH8321WF1001 PROGRAMMABLE THERMOSTAT WITH HUMIDISTAT AND NIGHT SET BACK, FACTORY INSTALLED TVX KIT, AND CONDENSATE OVERFLOW SWITCH. 2. PROVIDE UV PROTECTIVE COATING/COVERING ON ALL ELASTOMERIC PIPE INSULATION WHERE EXPOSED TO SUNLIGHT.																										

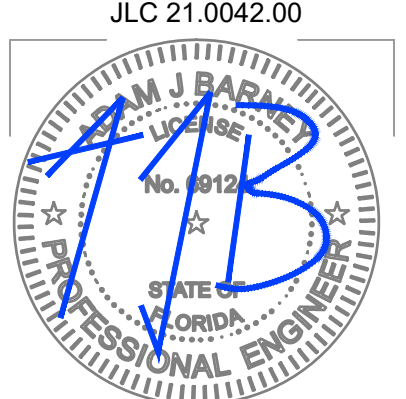
DX SPLIT CONDENSING UNIT SCHEDULE (HEAT PUMP)																			
MARK	LOCATION	COMPRESSOR			CONDENSER FANS			ELECTRICAL					UNIT INFORMATION		MANUFACTURER	MODEL NUMBER	NOTES		
		OUTDOOR DESIGN TEMP. (F)	QTY.	CAPACITY STEPS %	QTY.	NOMINAL HP	VOLTAGE/ PHASE	COMPRESSOR RLA EACH	CONDENSER FANS QTY.	FLA (EA)	MCA	MOCP	SEER	UNIT SIZE (H"xW"xD")				OPERATING WEIGHT (LBS.)	
CU-1.1	ROOF	95°	1	100	1	1/3	208/1#	19.6	1	1.8	26.2	45	14	38x33x33	273	LENNOX	ML14XP1-048 - HEAT PUMP	1.	
CU-1.2	ROOF	95°	1	100	1	1/3	208/1#	22.2	1	1.8	29.6	50	14	44x33x33	295	LENNOX	ML14XP1-060 - HEAT PUMP	1.	
CU-1.3	ROOF	95°	1	100	1	1/6	208/1#	12.8	1	1	17	25	14	44x29x29	213	LENNOX	ML14XP1-030 - HEAT PUMP	1.	
CU-1.4	ROOF	95°	1	100	1	1/3	208/1#	19.2	1	1.8	25.8	45	14	38x33x33	272	LENNOX	ML14XP1-042 - HEAT PUMP	1.	
CU-1.5	ROOF	95°	1	100	1	1/3	208/1#	22.2	1	1.8	29.6	50	14	44x33x33	295	LENNOX	ML14XP1-060 - HEAT PUMP	1.	
CU-1.6	ROOF	95°	1	100	1	1/3	208/1#	19.6	1	1.8	26.2	45	14	38x33x33	273	LENNOX	ML14XP1-048 - HEAT PUMP	1.	
CU-1.7	ROOF	95°	1	100	1	1/3	208/1#	19.6	1	1.8	26.2	45	14	38x33x33	273	LENNOX	ML14XP1-048 - HEAT PUMP	1.	
NOTES: 1. PROVIDE COMPLETE WITH DISCONNECT SWITCH (PROVIDED BY DIVISION 16), TIME DELAY RELAY AND ANTI-SHORT CYCLE TIMER.																			

OUTSIDE AIR/ENERGY RECOVERY UNIT SCHEDULE																															
PLAN MARK	OUTDOOR AIR PERFORMANCE								EXHAUST PERFORMANCE				HOT GAS REHEAT COIL		HEATER – GAS			CONDENSER SECTION				ELECTRICAL REQUIREMENTS (COMPRESSORS & CONDENSERS)			ELECTRICAL REQUIREMENTS (FAN, DDC CONTROLS, GAS VALVE & ENERGY RECOVERY WHEEL)			UNIT WEIGHT (LBS.)	UNIT EFF. (EER)	MANUFACTURER & MODEL NUMBER	NOTES
	SUPPLY AIRFLOW (CFM)	E.A.T. (DB/WB)	L.A.T. (DB/WB)	TOTAL COOLING (BTUH)	SENSIBLE COOLING (BTUH)	E.S.P. (IN. OF WG.)	H.P.	R.P.M.	EXHAUST AIRFLOW (CFM)	E.S.P. (IN. OF WG.)	H.P.	R.P.M.	TOTAL CAPACITY (BTUH)	LEAVING (DB/WB)	TOTAL CAPACITY (BTUH)	ENTERING/ LEAVING (DB/DB)	EFFICIENCY	NO. COMPRESSOR	COMPRESSOR RLA (EACH)	NO. CONDENSER FANS	CONDENSER FAN FLA (EA)	V/Ø	M.C.A.	M.O.C.P.	V/Ø	M.C.A.	M.O.C.P.				
0AU–1	3,750	81.0/72.0	51.2/51.2	249,011	122,076	1.50	5	1,651	2,650	0.75	2.3	2,226	76,523	70.0/58.5	240,000	32.0/91.0	80%	1	61.7	1	8.4	208/3Ø	85.5	125	208/3Ø	25.8	20	4,187	10.4	DAIKIN DPS020A	1. – 14.
0AU–2	6,800	88.0/80.0	54.0/54.0	642,523	253,014	1.50	3.93	1,469	–	–	–	–	118,244	70.0	324,000	32.0/75.9	80%	4	49.9	4	4.2	208/3Ø	282.3	300	–	–	–	6,417	9.6	DAIKIN DPSA052	1. – 14.
NOTES: 1. DOUBLE WALL CONSTRUCTION. 2. 208/3 VOLTAGE DUAL POINT POWER (FOR EMERGENCY CONNECTION) WITH NON-FUSED DISCONNECT (PROVIDED BY DIVISION 16). 3. 2" MERV 8 FILTERS AND 4" MERV 12 FILTERS. MERV 12 FILTERS PROVIDED BY INSTALLING CONTRACTOR. 4. ALUMINUM MICROCHANNEL CONDENSER COIL WITH ELECTROFIN COATING. 5. MODULATING HOT GAS REHEAT COIL. 6. BELT DRIVE PLENUM FAN. 7. PHASE FAILURE MONITOR. 8. FACTORY AUTHORIZED STARTUP. 9. DDC CONTROLS WITH BAGNET INTERFACE. 10. ONE INVERTER DUTY VARIABLE SPEED & ONE FIXED SCROLL COMPRESSOR. 11. COMPRESSOR ISOLATION VALVES. 12. 5 YEAR COMPRESSOR PARTS WARRANTY. 13. 24" HIGH WIND RATED ROOF CURB FOR HORIZONTAL DISCHARGE OF EXHAUST. 14. INTEGRAL ENERGY RECOVERY VENTILATOR.																															



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GUESTROOM OUTSIDE AIR CALCULATIONS

CLASSIFICATION	OCC. FACTOR PERCENT / 1000 SQFT. (PERSONS)	ASHRAE 62.1 VULZ.1		SPACE AREA (SQFT)	SPACE LOAD (PERSONS)	OUTDOOR AIR REQUIRED (CFM)	OUTDOOR AIR SUPPLIED (CFM)
		R _p	R _a				
				R _p	R _a	Sz	Pz
KING STUDIO	10	5	0.06	253*	2**	25	30
KING STUDIO WIDE	10	5	0.06	409*	2**	35	35
KING STUDIO ADA-TUB	10	5	0.06	394*	2**	35	35
KING SUITE SP-ACC	10	5	0.06	419*	2**	35	35
KING SUITE	10	5	0.06	437*	2**	40	40
KING SUITE ADA-SHO	10	5	0.06	436*	2**	40	40
KING SUITE ADA-TUB	10	5	0.06	441*	2**	40	40
QQ CENTER	10	5	0.06	341*	4**	40	40
QQ STUDIO WIDE SP ACC	10	5	0.06	377*	4**	45	45
QQ STUDIO ADA-TUB	10	5	0.06	377*	4**	45	45
QQ STUDIO END	10	5	0.06	387*	4**	45	45
QQ SUITE ADA-TUB	10	5	0.06	437*	2**	40	40

NOTES:

- REQUIRED OUTDOOR VENTILATION AIR VALUES TAKEN FROM ASHRAE 62.1, TABLE 6.2.2.1.
VENTILATION BREATHING ZONE FORMULA: $V_{OZ} = R_p \cdot Sz + R_a \cdot Pz$
 Pz = OCCUPANCY FACTOR * SPACE AREA
- OUTSIDE AIR CALC. REFERENCES CHAPTER 15 OF THE 2020 EDITION OF THE OF THE FLORIDA BUILDING CODE (MECHANICAL).

*AREA DOES NOT INCLUDE RESTROOM.
**PHYSICAL NUMBER OF FIXED SEATING PER PLAN.

OUTSIDE AIR CALCULATIONS							
CLASSIFICATION	OCC. FACTOR OCCUPANCY/ 1000 (SQFT. PERSONS)	ASHRAE 62.1 VALUES PER TABLE 6.2.2.1		SPACE AREA (SQFT) A _Z	SPACE LOAD (PERSONS) P _Z	OUTDOOR AIR REQUIRED (CFM)	OUTDOOR AIR SUPPLIED (CFM)
		R _p	R _o				
FIRST FLOOR							
CORRIDOR	—	—	0.06	1,165	—	70	145
FITNESS	40	20	0.06	817	16*	369	375
BREAKROOM	25	5	0.06	188	4*	31.28	35
LAUNDRY	10	5	0.12	477	4.8	81	85
GUEST LAUNDRY	10	5	0.12	123	1.2	21	25
LINEN STORAGE	2	5	0.06	126	0.6	10.71	15
LOBBY	30	7.5	0.06	398	11.9	113.43	115
HUB	30	7.5	0.06	400	12	114	120
COMMUNITY	70	7.5	0.18	827	30*	373.86	375
FLEX	30	7.5	0.06	289	8*	77.34	80
BUFFET	70	7.5	0.18	175	12.3	123.4	125
FOOD PREP	20	7.5	0.12	278	5.6	75	80
GM OFFICE	5	5	0.06	123	2	17.38	20
SALES OFFICE	5	5	0.06	62	1	8.72	10
WORK ROOM	5	5	0.06	213	2	22.78	25
HSPK. OFFICE	5	5	0.06	63	1	8.78	10
MAINT. OFFICE	5	5	0.06	103	0.5	8.76	10
SUNDRIES	5	5	0.06	93	0.5	7.9	10
CLOSET	2	5	0.12	30	0.1	3.9	5
VESTIBULE	10	5	0.06	101	1	11.11	15
FUNCTION STORAGE	2	5	0.12	316	0.6	41.08	45
PRE-FUNCTION ROOM	30	7.5	0.06	1,025	30.8	292.1	295
FUNCTION ROOM	120	5	0.06	2,265	272	1,495	1,500
GUESTROOMS	10	5	0.06	2,152	16*	209.12	230
SECOND FLOOR							
CORRIDOR	—	—	0.06	1,124	—	67.44	400
LINEN	5	5	0.06	98	1	10.88	100
STORAGE	2	5	0.12	527	1	68.24	200
ELECTRICAL	—	—	—	—	—	—	50
GUESTROOMS	10	5	0.06	8,634	74*	888	945
THIRD FLOOR							
CORRIDOR	—	—	0.06	1,124	—	67.44	400
LINEN	5	5	0.06	98	1	10.88	100
STORAGE	2	5	0.12	527	1	68.24	200
ELECTRICAL	—	—	—	—	—	—	50
GUESTROOMS	10	5	0.06	8,616	74*	886.96	940
FOURTH FLOOR							
CORRIDOR	—	—	0.06	1,124	—	67.44	400
LINEN	5	5	0.06	98	1	10.88	100
STORAGE	2	5	0.12	527	1	68.24	200
ELECTRICAL	—	—	—	—	—	—	50
GUESTROOMS	10	5	0.06	8,631	74*	887.86	940
FIFTH FLOOR							
CORRIDOR	—	—	0.06	1,124	—	67.44	435
LINEN	5	5	0.06	98	1	10.88	100
STORAGE	2	5	0.12	527	1	68.24	200
ELECTRICAL	—	—	—	—	—	—	50
GUESTROOMS	10	5	0.06	8,635	74*	888.1	940
TOTAL	—	—	—	53,321	737.61	7,723.73	10,550

NOTES:

- REQUIRED OUTDOOR VENTILATION AIR VALUES TAKEN FROM ASHRAE 62.1, TABLE 6.2.2.1.
VENTILATION BREATHING ZONE FORMULA: $V_{bz} = R_p \times P_z + R_o \times A_z$
 P_z = OCCUPANCY FACTOR * SPACE AREA
- OUTSIDE AIR CALC. REFERENCES CHAPTER 15 OF THE 2020 EDITION OF THE OF THE FLORIDA BUILDING BUILDING CODE (MECHANICAL).

FLEX DUCT SCHEDULE	
CFM	FLEX SIZE
0 - 50	4"φ
51 - 100	6"φ
101 - 200	8"φ
201 - 400	10"φ
401 - 600	12"φ
601 - 900	14"φ
901 - 1,300	16"φ

MARK	SERVICE	AIR FLOW (CFM)	MANUFACTURER & MODEL NO.	PART #	NOTES
①	GUESTROOM O.A.	30	ALDES #CAR-II	18114	1. & 2.
②	GUESTROOM O.A.	35	ALDES #CAR-II	18115	1. & 2.
③	GUESTROOM O.A.	40	ALDES #CAR-II	18109	1. & 2.
④	GUESTROOM O.A.	45	ALDES #CAR-II	18116	1. & 2.

NOTES:

1. PROVIDE CORROSION RESISTANT BRID SCREEN.
2. PROVIDE GRAVITY BACK DRAFT DAMPER ON INTERIOR SIDE OF LOUVER.

MARK	DESCRIPTION	FACE SIZE	NECK	MATERIAL	MANUFACTURER & MODEL NO.	NOTES
A	SQUARE CONE SUPPLY DIFFUSER	24"x24"	SEE SCHED.	ALUMINUM	PRICE ASCO	1., 2., 3., & 4.
B	SQUARE CONE SUPPLY DIFFUSER	12"x12"	SEE SCHED.	ALUMINUM	PRICE ASCO	1., 2., 3., & 4.
C	LOUVERED FACE SUPPLY SUPPLY GRILLE	6"x4"	SEE SCHED.	ALUMINUM	PRICE #640	1., 2., 3., & 4.
D	LINEAR SLOT DIFFUSER (SUPPLY)	6" LONG	SEE SCHED.	ALUMINUM	PRICE SD575-2-SLOT	1., 4. & 5.
E	EGGCRATE RET./EXH. GRILLE (1/2"x1/2"x1/2")	24"x24"	SEE SCHED.	ALUMINUM	PRICE #80	1. & 2.
F	LOUVERED EXHAUST GRILLE	6"x6"	SEE SCHED.	ALUMINUM	ALDES CER-R-II 18622	1.
G	LOUVERED FACE RETURN GRILLE	30"x22"	SEE SCHED.	ALUMINUM	PRICE #630	1.
H	LOUVERED SIDEWALL RETURN GRILLE	28"x20"	SEE SCHED.	ALUMINUM	PRICE #630	1.
I	LOUVERED EXHAUST GRILLE	12"x10"	SEE SCHED.	ALUMINUM	PRICE #660	1., & 2.
J	LOUVERED FACE EXHAUST DOOR GRILLE	12"x12"	SEE PLAN	ALUMINUM	METALAIR DGDF	1.

NOTES:

1. COORDINATE SURFACE FINISHES WITH ARCHITECTURAL DRAWINGS.
2. PROVIDE RAPID MOUNT FRAME FOR PLASTER AND SHEET ROCK CEILINGS.
3. SUPPLY COMPLETE FACTORY INSTALLED 1/2" THICK FOIL BACKED INSULATION.
4. PROVIDE REMOTE DAMPERS FOR AIR DEVICE IN HARD CEILING.
5. PROVIDE SDA SLOPED SHOULDER PLENUM AND CONCEALED PLASTER FRAME FOR LINEAR SLOT DIFFUSER.

FAN SCHEDULE											
MARK	AREA SERVED	TYPE	CFM	T.S.P.	HP/WATTS	R.P.M.	VOLTS/PH	SONES	WEIGHT	MANUFACTURER & MODEL NO.	NOTES
EF-1.1	ICE MACHINE	CEILING	150	0.50	128 WATTS	1,050	120/1#	3.5	11	GREENHECK SP-B150	6.
EF-1.2	SUNDRIES	CEILING	150	0.50	128 WATTS	1,050	120/1#	3.5	11	GREENHECK SP-B150	6.
EF-1.3	FOOD PREP	CEILING	150	0.50	128 WATTS	1,050	120/1#	3.5	11	GREENHECK SP-B150	6.
EF-1.4	FITNESS	INLINE	100	0.50	68.6 WATTS	819	120/1#	0.7	13	GREENHECK CSP-B150	1. & 7.
EF-1.5	WOMEN'S RESTROOM	INLINE	280	0.25	97 WATTS	1,050	120/1#	2.5	23	GREENHECK CSP-A290	8.
EF-1.6	MEN'S RESTROOM	INLINE	280	0.25	97 WATTS	1,050	120/1#	2.5	23	GREENHECK CSP-A290	8.
EF-1.7	SINGLE RESTROOM	CEILING	70	0.25	21 WATTS	700	120/1#	1.3	10	GREENHECK SP-B90	8.
EF-1.8	SINGLE RESTROOM	CEILING	70	0.25	21 WATTS	700	120/1#	1.3	10	GREENHECK SP-B90	8.
EF-1.9	SINGLE RESTROOM	CEILING	70	0.25	21 WATTS	700	120/1#	1.3	10	GREENHECK SP-B90	8.
EF-1.10	GUEST LAUNDRY	CEILING	150	0.50	128 WATTS	1,050	120/1#	3.5	11	GREENHECK SP-B150	6.
EF-1.11	LAUNDRY	CEILING	150	0.50	128 WATTS	1,050	120/1#	3.5	11	GREENHECK SP-B150	6.
EF-2.1	ICE MACHINE	CEILING	150	0.50	128 WATTS	1,050	120/1#	3.5	11	GREENHECK SP-B150	6.
EF-3.1	ICE MACHINE	CEILING	150	0.50	128 WATTS	1,050	120/1#	3.5	11	GREENHECK SP-B150	6.
EF-4.1	ICE MACHINE	CEILING	150	0.50	128 WATTS	1,050	120/1#	3.5	11	GREENHECK SP-B150	6.
EF-5.1	ICE MACHINE	CEILING	150	0.50	128 WATTS	1,050	120/1#	3.5	11	GREENHECK SP-B150	6.

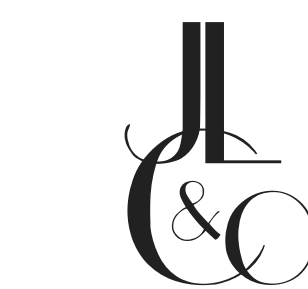
NOTES:

- FAN TO BE CONTROLLED BY TIME CLOCK. COORDINATE WITH DIVISION 16 PLANS AND ELECTRICAL CONTRACTOR.
- PROVIDE FAN WITH FAN SPEED CONTROLLER, SINGLE POINT WIRING AND ELECTRICAL DISCONNECT PROVIDED BY DIVISION 16.
- PROVIDE FAN WITH ROOF CURB AND TIE-DOWNS.
- FAN TO OPERATE CONTINUOUSLY. COORDINATE WITH DIVISION 16 PLANS AND ELECTRICAL CONTRACTOR.
- FAN TO BE CONNECTED TO EMERGENCY POWER.
- FAN TO BE CONTROLLED BY TEMPERATURE SENSOR.
- PROVIDE WITH VIBRATION ISOLATOR KIT AND INTEGRAL BACKDRAFT DAMPER.
- FAN TO BE CONTROLLED BY OCCUPANCY SENSOR.

LOUVER SCHEDULE								
MARK	SERVICE	AIR FLOW (CFM)	FREE AREA (SF)	W X H (IN)	MAX. VELOCITY (IN FPM)	MAX. PRESSURE DROP (IN H2O)	MANUFACTURER & MODEL NO.	NOTES
L-1	OUTSIDE AIR	1,400	1.97	24"x24"	—	—	RUSKIN ELF63750XD	1. & 2.
L-2	EXHAUST/O.A.	—	0.35	12"x12"	VARIES	—	RUSKIN ELF63750XD	1. & 2.
L-3	EXHAUST	250	0.4	14"x14"	750	0.07	GREENHECK ESD-635X-14x14	1. & 2.
L-4	EXHAUST	VARIES	0.4	16"x14"	750	0.07	GREENHECK ESD-635X-16x14	1. & 2.
L-5	EXHAUST	300	0.5	12"x18"	750	0.05	GREENHECK ESD-635X-12x18	1. & 2.

NOTES:
 1. PROVIDE BIRD SCREEN.
 2. PROVIDE GRAVITY BACK DRAFT DAMPER ON INTERIOR SIDE OF LOUVER.

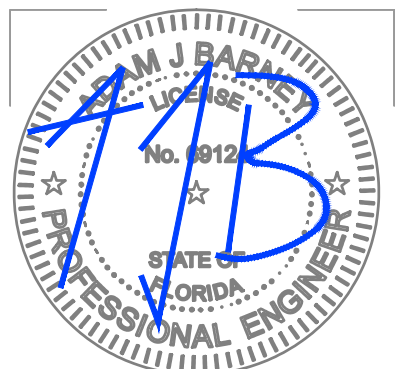
AIR BALANCE									
1ST FLOOR		2ND FLOOR		3RD FLOOR		4TH FLOOR		5TH FLOOR	
EXHAUST:		EXHAUST:		EXHAUST:		EXHAUST:		EXHAUST:	
EF-1.1	150 CFM	EF-2.1	150 CFM	EF-3.1	150 CFM	EF-4.1	150 CFM	EF-5.1	150 CFM
EF-1.2	150 CFM	GUESTROOMS	625 CFM	GUESTROOMS	625 CFM	GUESTROOMS	625 CFM	GUESTROOMS	625 CFM
EF-1.3	150 CFM								
EF-1.4	100 CFM	EXHAUST TOTAL:	775 CFM	EXHAUST TOTAL:	775 CFM	EXHAUST TOTAL:	775 CFM	EXHAUST TOTAL:	775 CFM
EF-1.5	280 CFM								
EF-1.6	280 CFM								
EF-1.7	70 CFM								
EF-1.8	70 CFM								
EF-1.9	70 CFM								
EF-1.10	150 CFM								
EF-1.11	150 CFM								
GUESTROOMS	150 CFM								
EXHAUST TOTAL:	1,770 CFM								
MAKEUP AIR:		MAKEUP AIR:		MAKEUP AIR:		MAKEUP AIR:		MAKEUP AIR:	
OAU-1	3,750 CFM	OAU-2	1,695 CFM	OAU-2	1,690 CFM	OAU-2	1,690 CFM	OAU-2	1,725 CFM
MAKEUP TOTAL:	3,750 CFM	MAKEUP TOTAL:	1,695 CFM	MAKEUP TOTAL:	1,690 CFM	MAKEUP TOTAL:	1,690 CFM	MAKEUP TOTAL:	1,725 CFM
FLOOR PRESSURE = +1,980 (WITH ALL FANS ACTIVATED)		FLOOR PRESSURE = +920 (WITH ALL FANS ACTIVATED)		FLOOR PRESSURE = +915 (WITH ALL FANS ACTIVATED)		FLOOR PRESSURE = +915 (WITH ALL FANS ACTIVATED)		FLOOR PRESSURE = +950 (WITH ALL FANS ACTIVATED)	



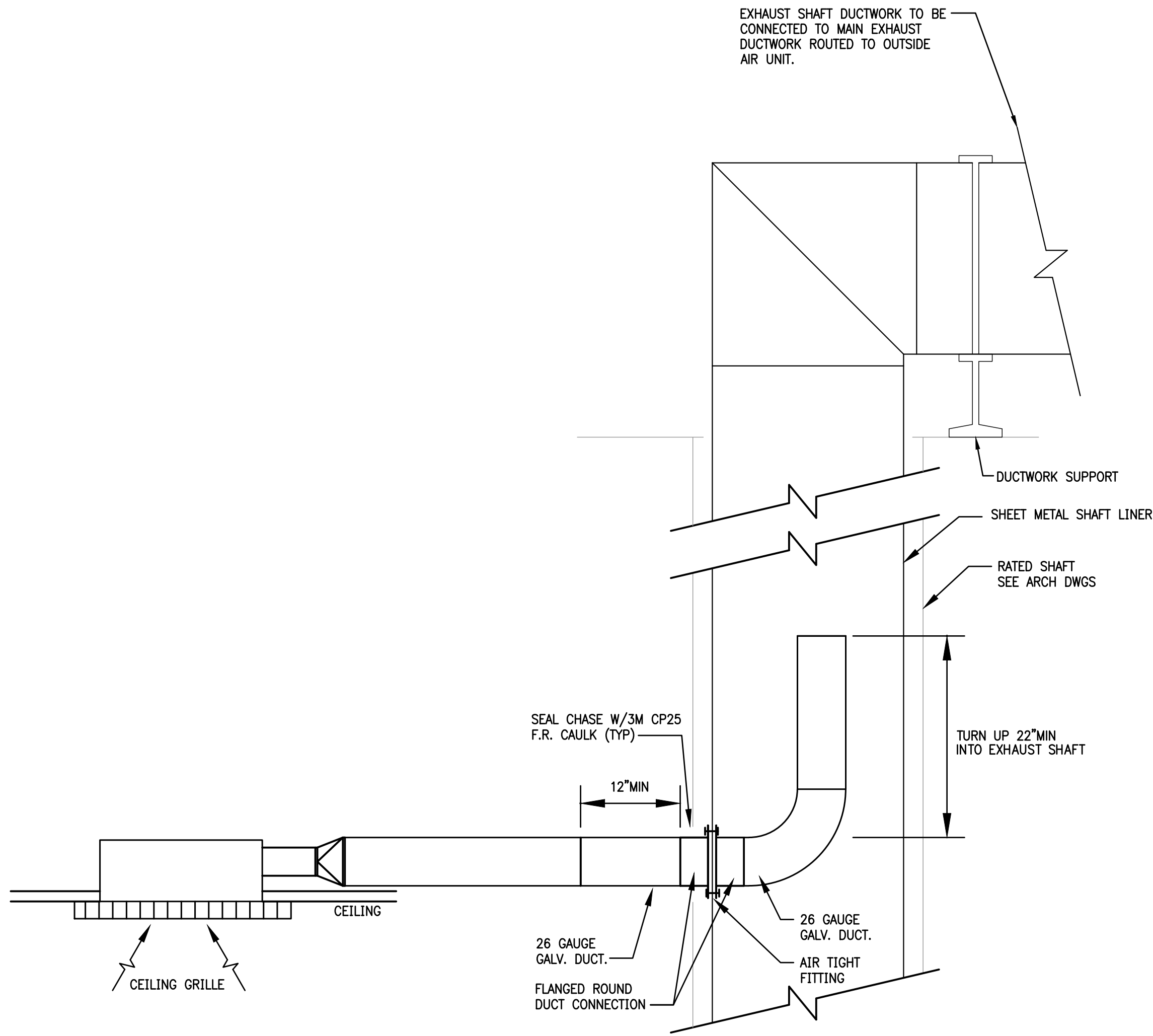
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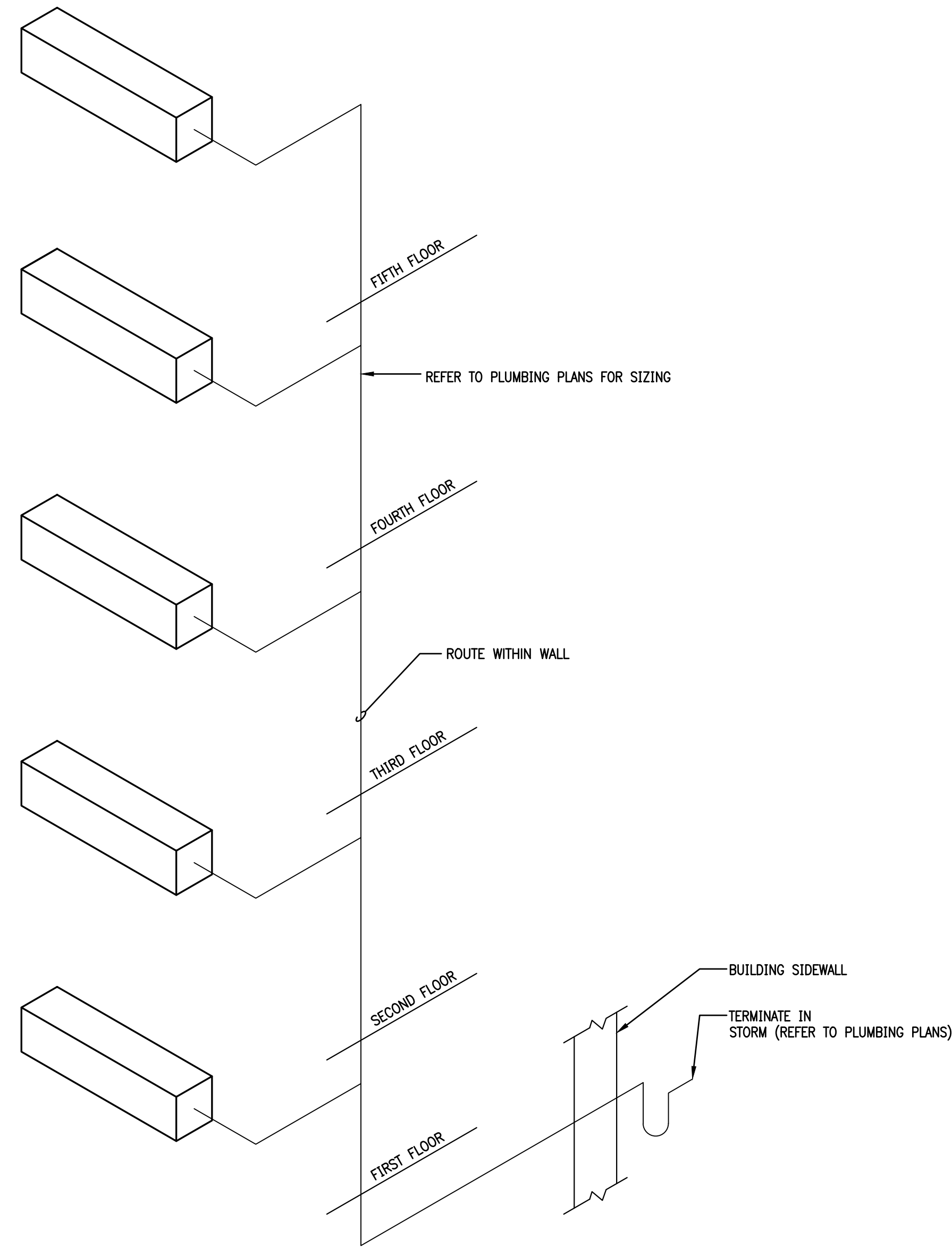
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6 GUEST ROOM TOILET EXHAUST SUB-DUCT DETAIL
NTS

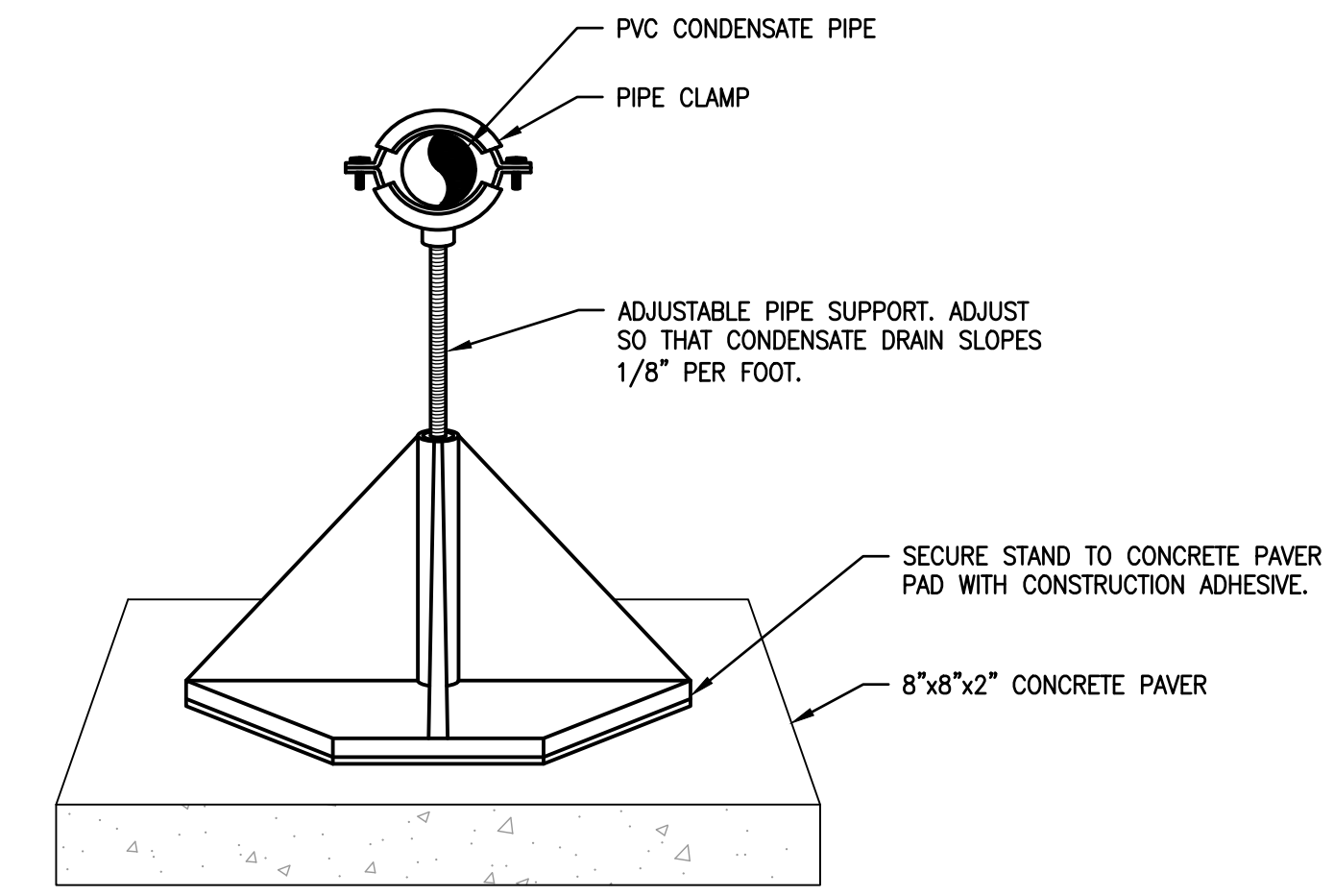


5 GENERAL PTAC CONDENSATE RISER DETAIL
NTS

Condensate Piping Supports MAPA Model MS-1		
Spacing for MS Pipe IPS	1 condensate support Copper	PVC
1-1/2" and smaller	5'	4'
2"	8'	4'
2" and larger	10'	4'

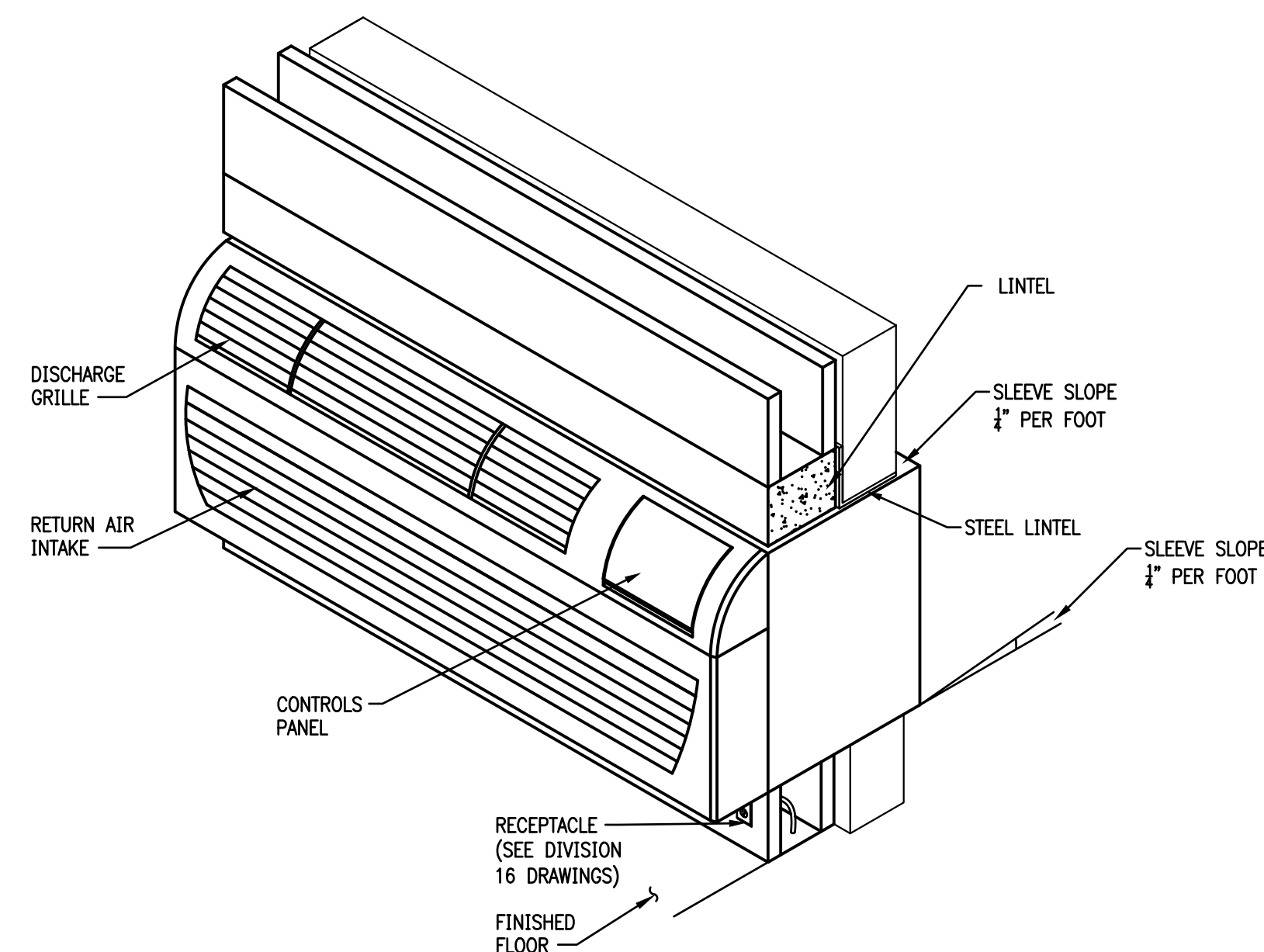
Maximum recommended spacing on all roller supports is 10'
Additional support recommended at each change of direction

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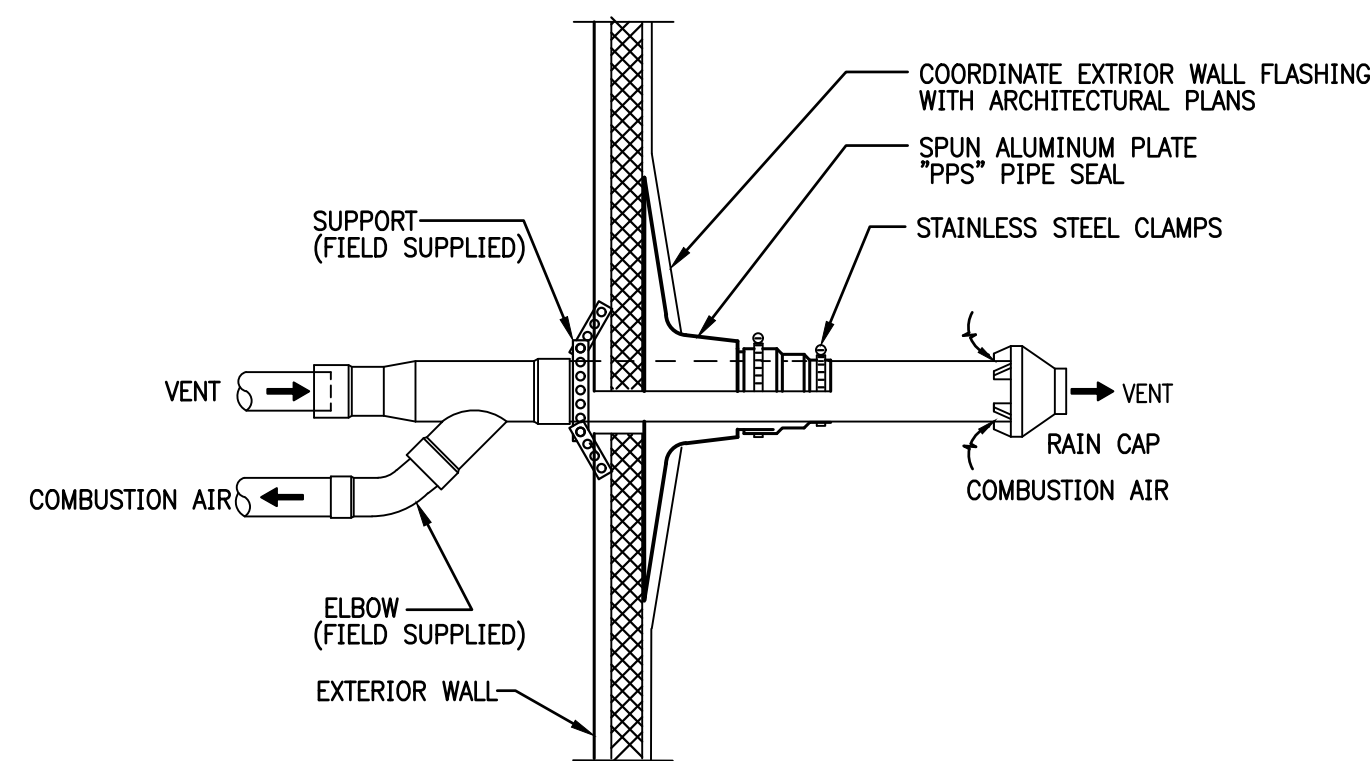


NOTES:
1. SUPPORTS SHALL BE INSTALLED PER SCHEDULE AT LEFT.

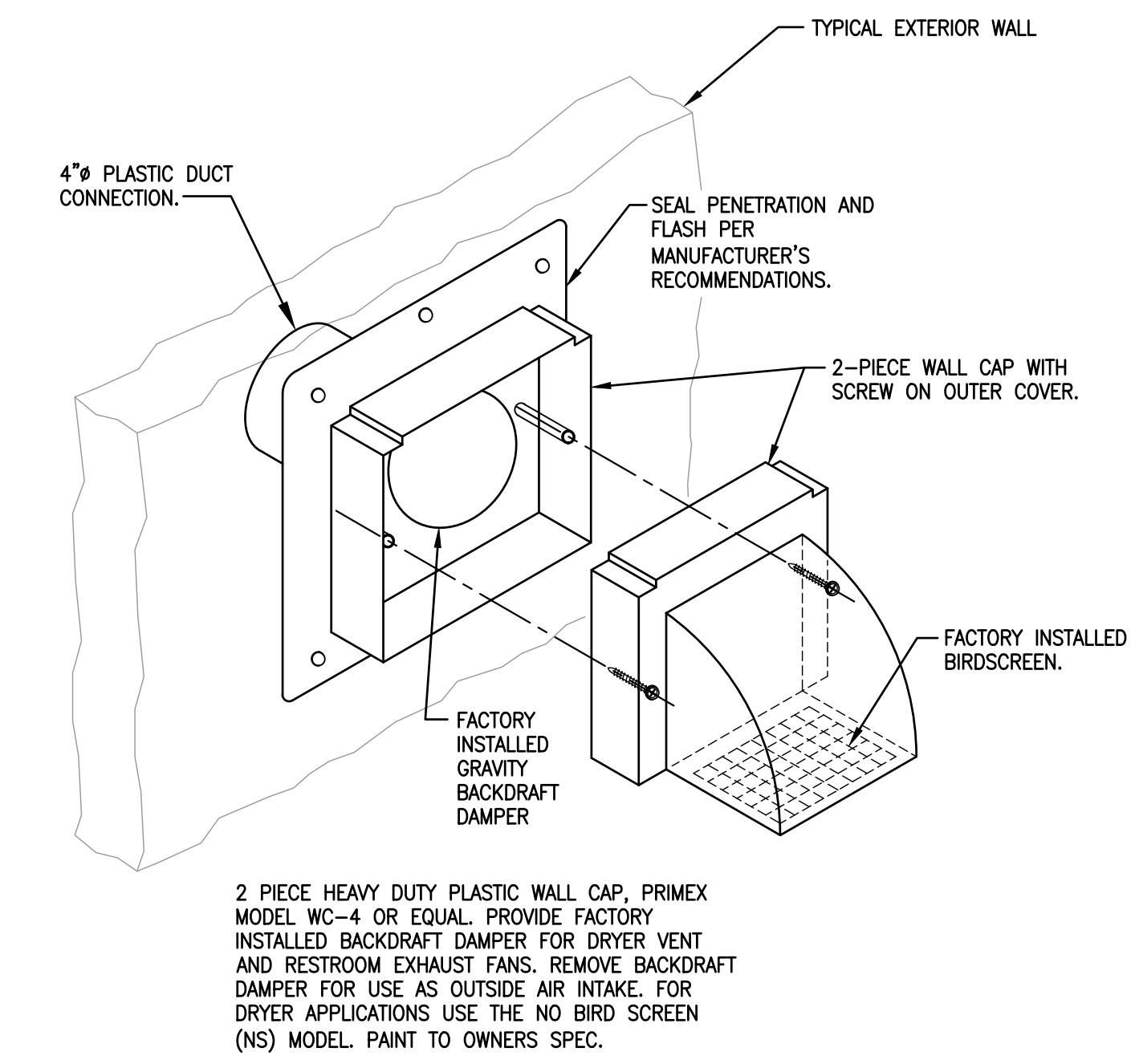
4 CONDENSATE PIPE STAND DETAIL
NTS



3 UNDER WINDOW PTAC DETAIL
NTS



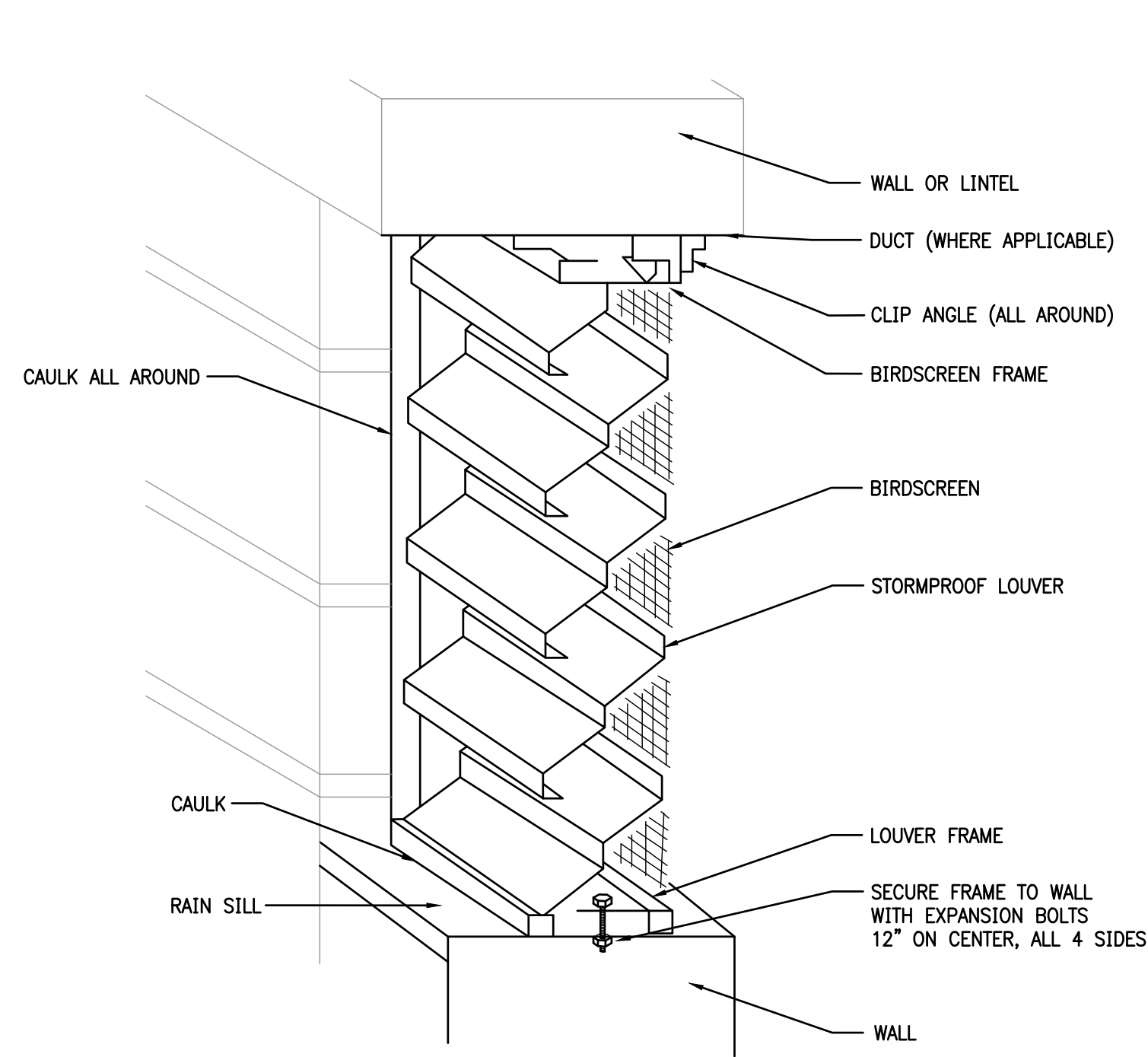
2 CONCENTRIC VENT DETAIL
NTS



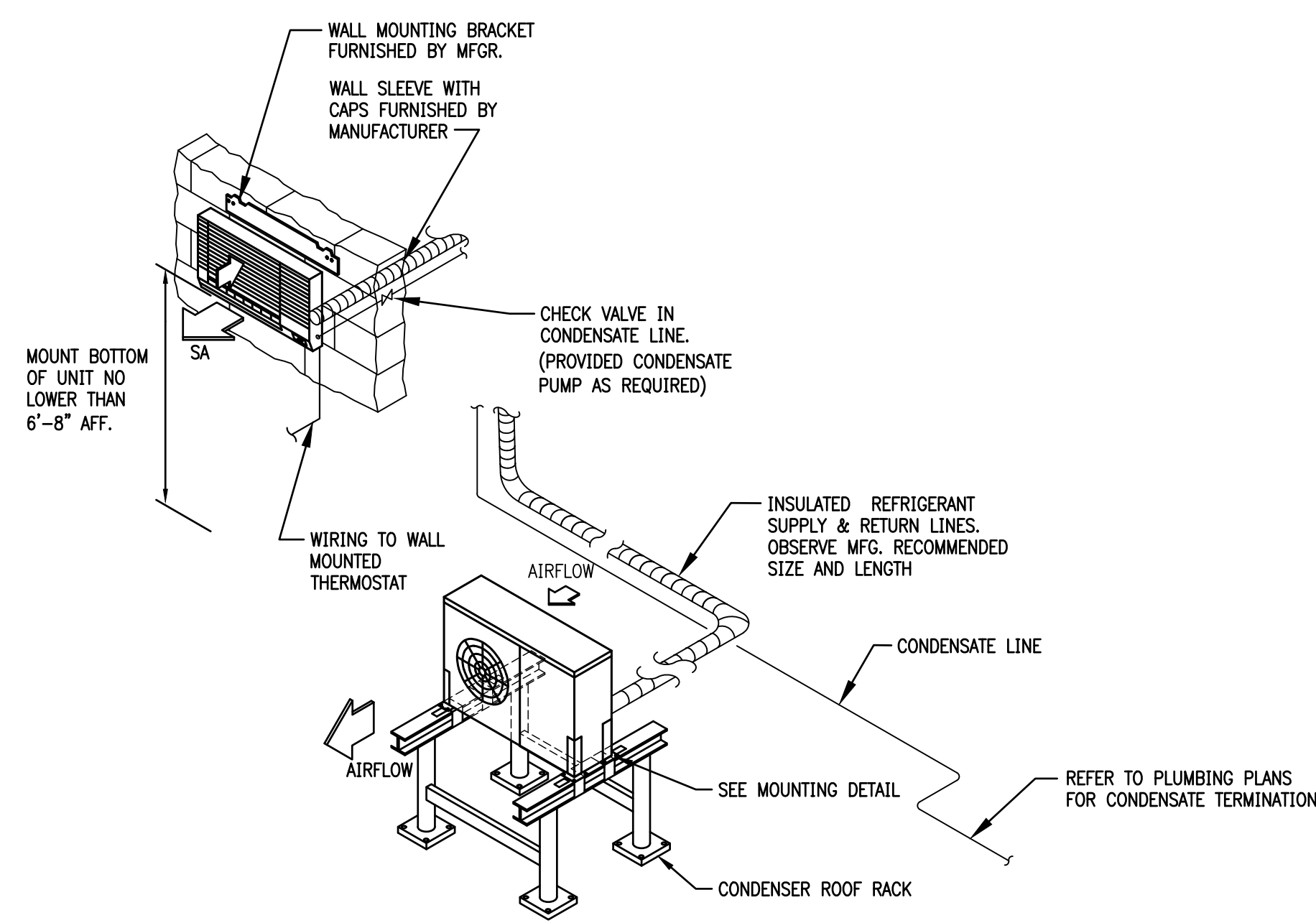
1 TYPICAL WALL JACK DETAIL
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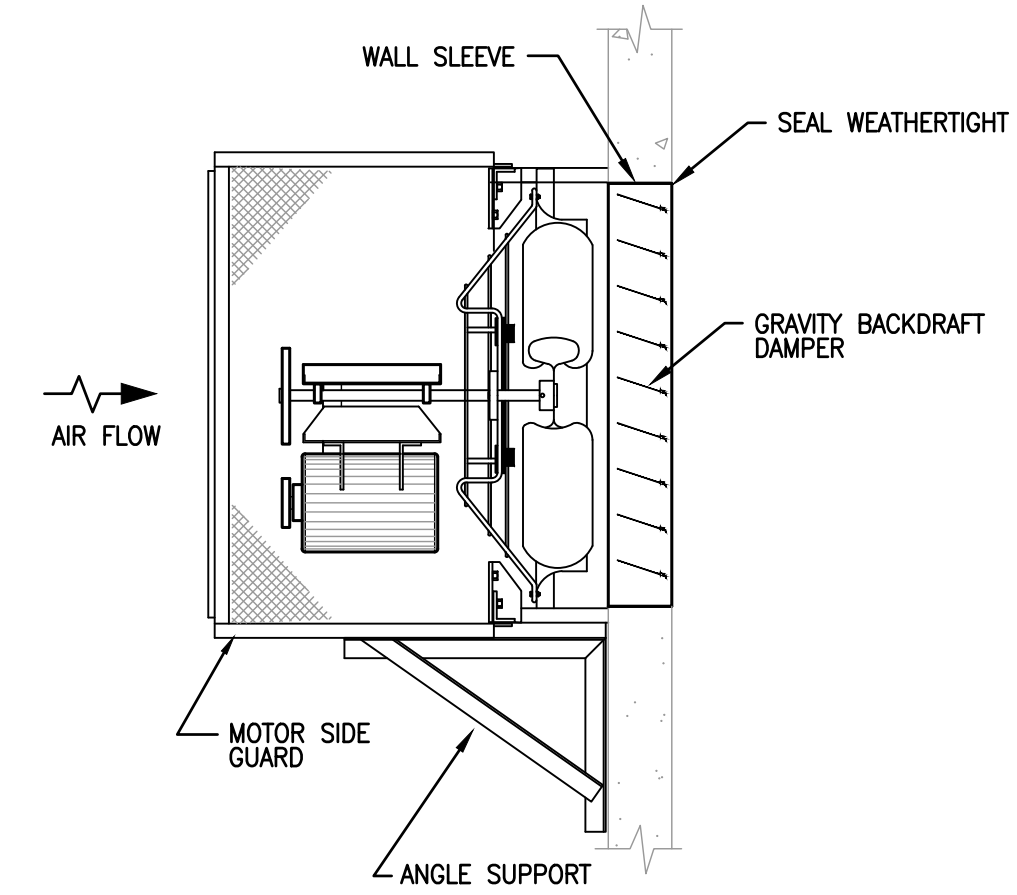
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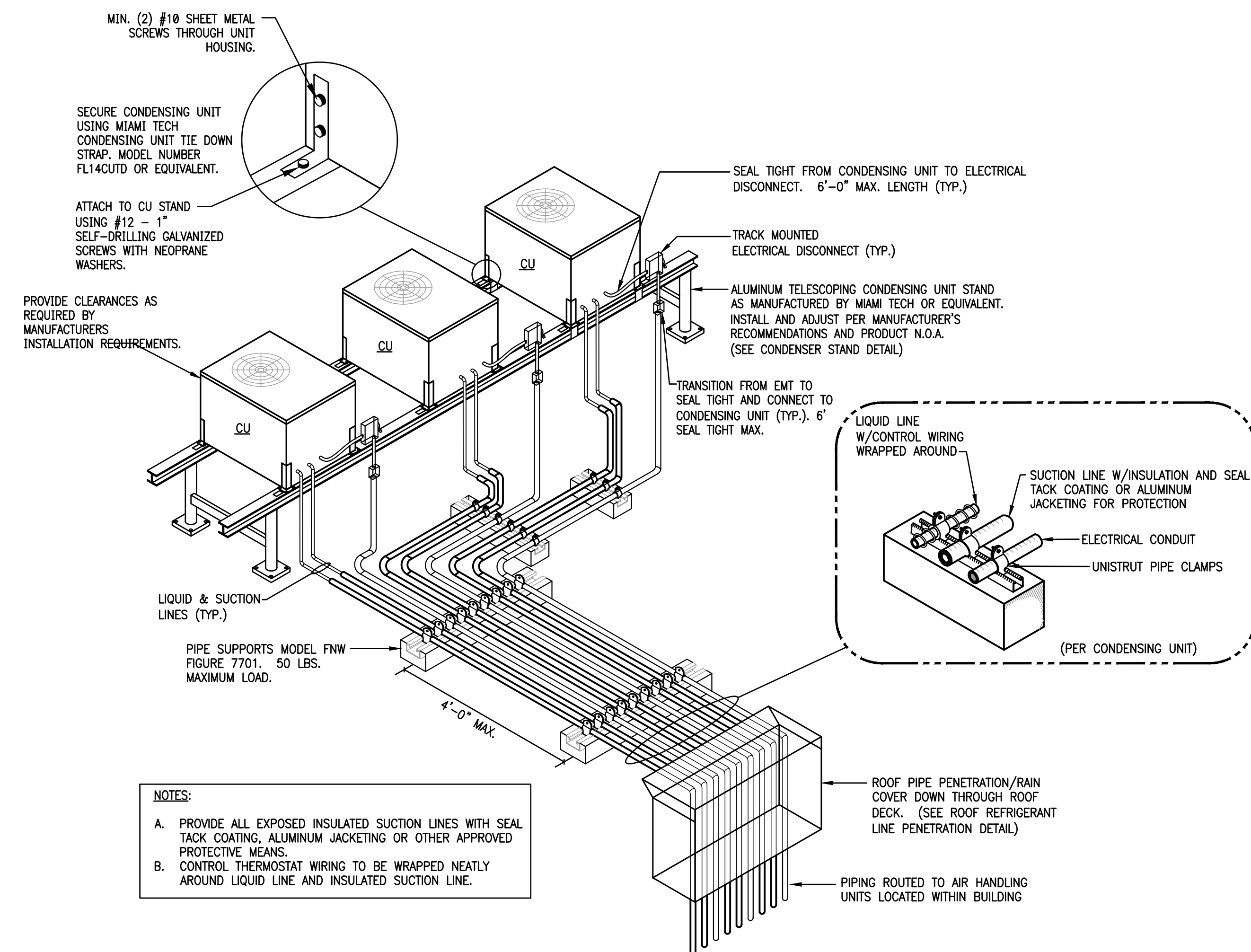
5
NTS
TYPICAL WALL LOUVER DETAIL



4
NTS
WALL MOUNTED SPLIT SYSTEM
SUPPORT DETAIL

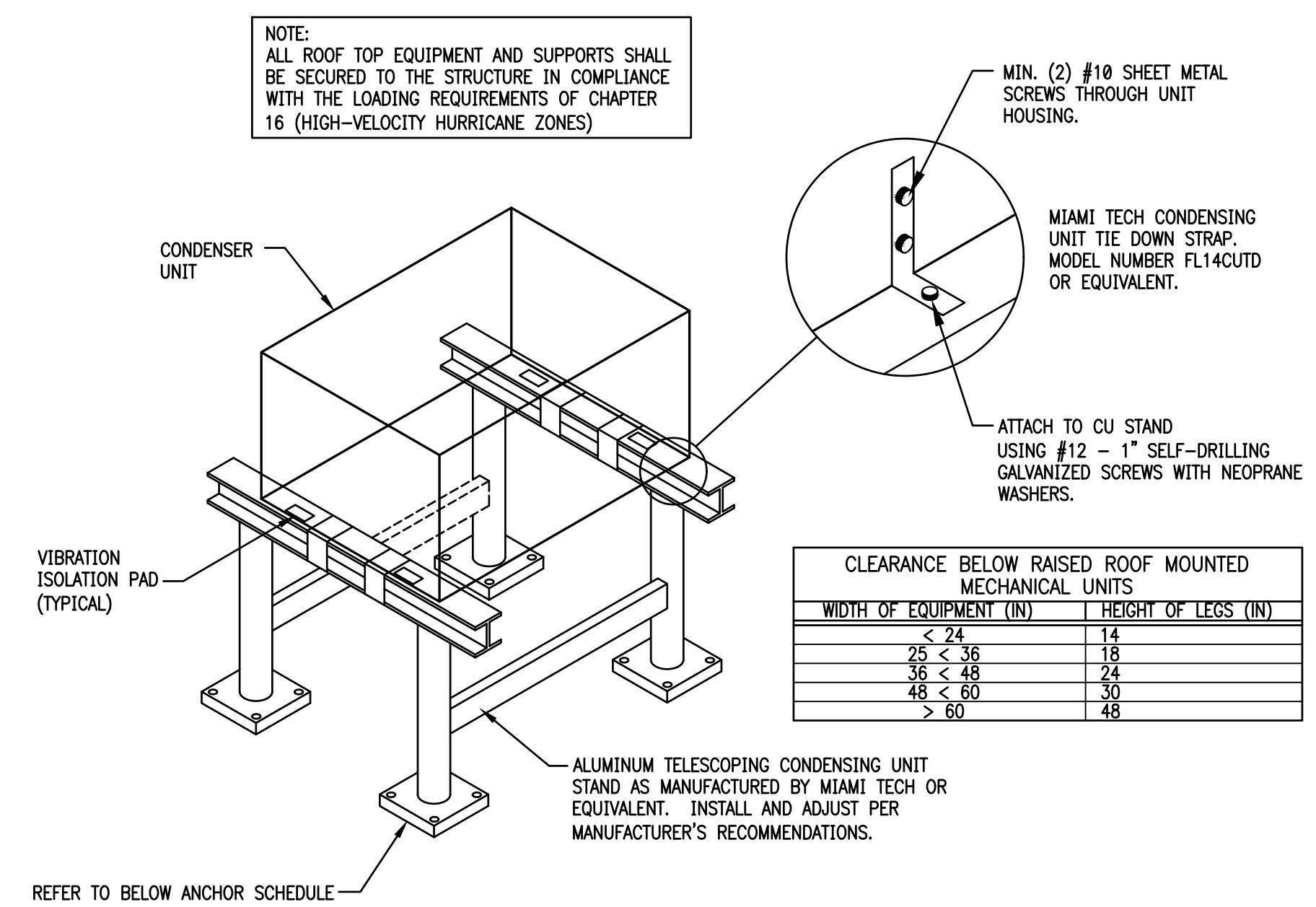


3
NTS
SIDEWALL EXHAUST FAN DETAIL



NOTES:
A. PROVIDE ALL EXPOSED INSULATED SUCTION LINES WITH SEAL TACK COATING, ALUMINUM JACKETING OR OTHER APPROVED PROTECTIVE MEANS.
B. CONTROL THERMOSTAT WIRING TO BE WRAPPED NEATLY AROUND LIQUID LINE AND INSULATED SUCTION LINE.

2
NTS
ROOF MOUNTED CONDENSING UNIT PIPING DETAIL



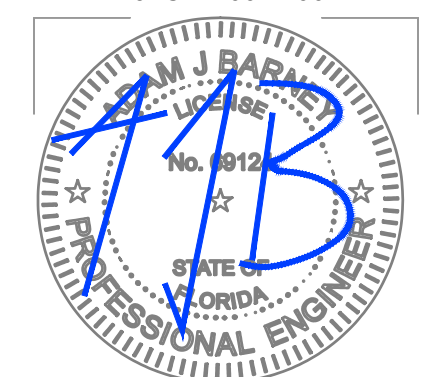
NOTE:
ALL ROOF TOP EQUIPMENT AND SUPPORTS SHALL BE SECURED TO THE STRUCTURE IN COMPLIANCE WITH THE LOADING REQUIREMENTS OF CHAPTER 16 (HIGH-VELOCITY HURRICANE ZONES)

CLEARANCE BELOW RAISED ROOF MOUNTED MECHANICAL UNITS	
WIDTH OF EQUIPMENT (IN)	HEIGHT OF LEGS (IN)
24 < 36	18
36 < 48	24
48 < 60	30
> 60	48

ANCHOR SCHEDULE		
ANCHOR TYPE (HOST STRUCTURE)	ANCHOR DESCRIPTION	
1	STEEL	3/8" SAE GRADE 5 SHEET METAL SCREWS WITH 1 1/8" MIN. WASHER, TO STRUCTURAL A36 STEEL MEMBERS (3/4" MIN HOST THICKNESS)
2	CONCRETE	3/8" CARBON STEEL WEDGE-BOLT CONCRETE ANCHOR WITH 1 1/8" MIN. WASHER, 28" EMBEDMENT & 6" MIN. EDGE DISTANCE, 4 ANCHORS PER BASE PLATE, ONE IN EACH CORNER
3	WOOD	PROVIDE 2" MIN. LAG SCREW TIP TO TUP SPACING & 3" MIN. WOOD EDGE DISTANCE.
4	STEEL	3/8" SAE GRADE 5 THURBOLT WITH 1 1/8" MIN. WASHER & NUT, TO STRUCTURAL A36 STEEL MEMBERS (3/4" MIN HOST THICKNESS)

1
NTS
CONDENSER RACK DETAIL

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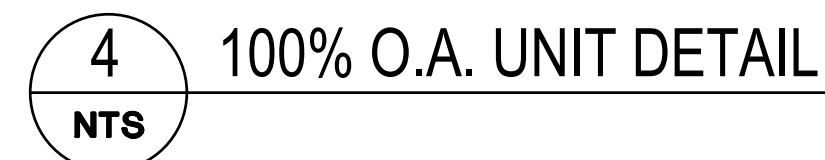
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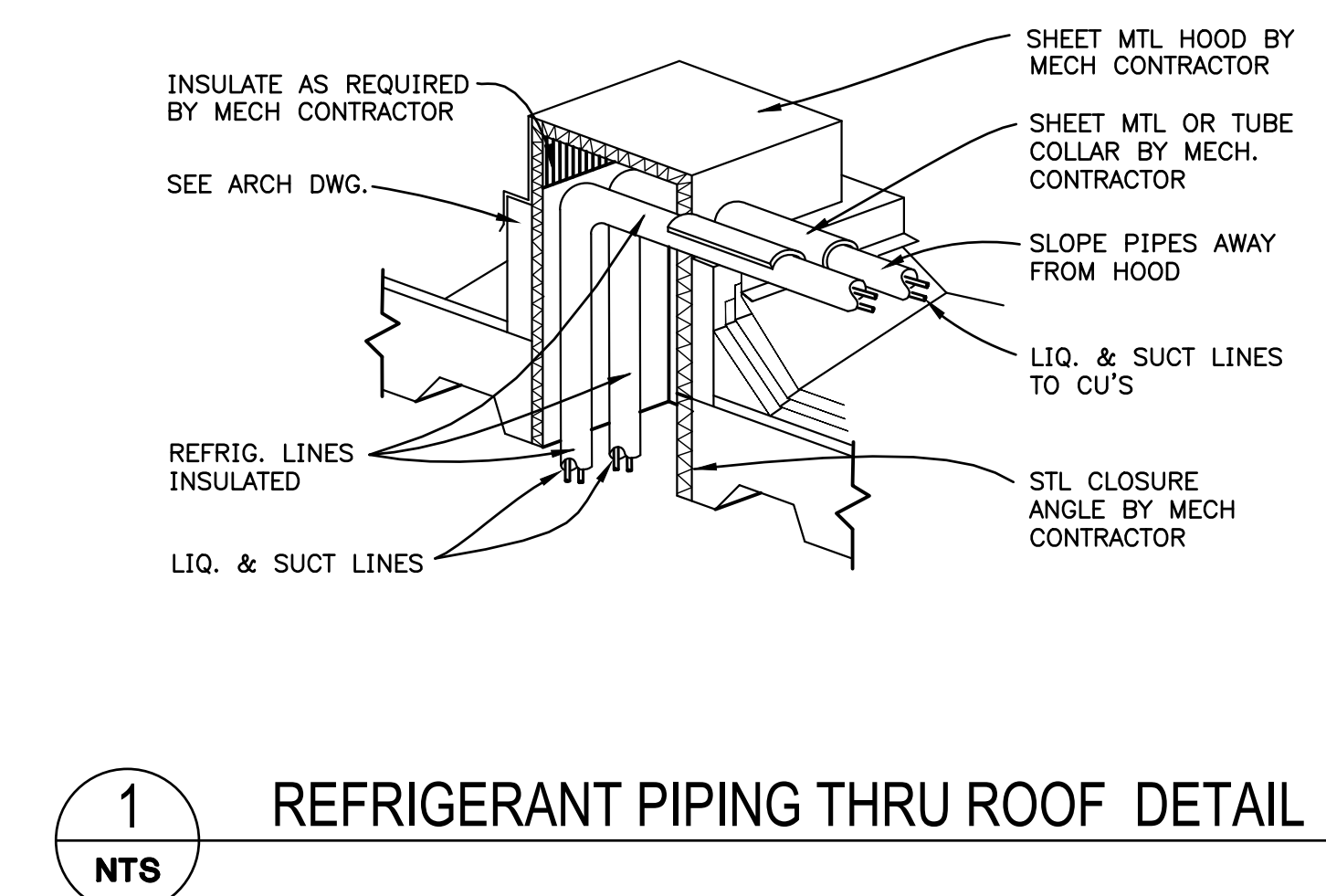
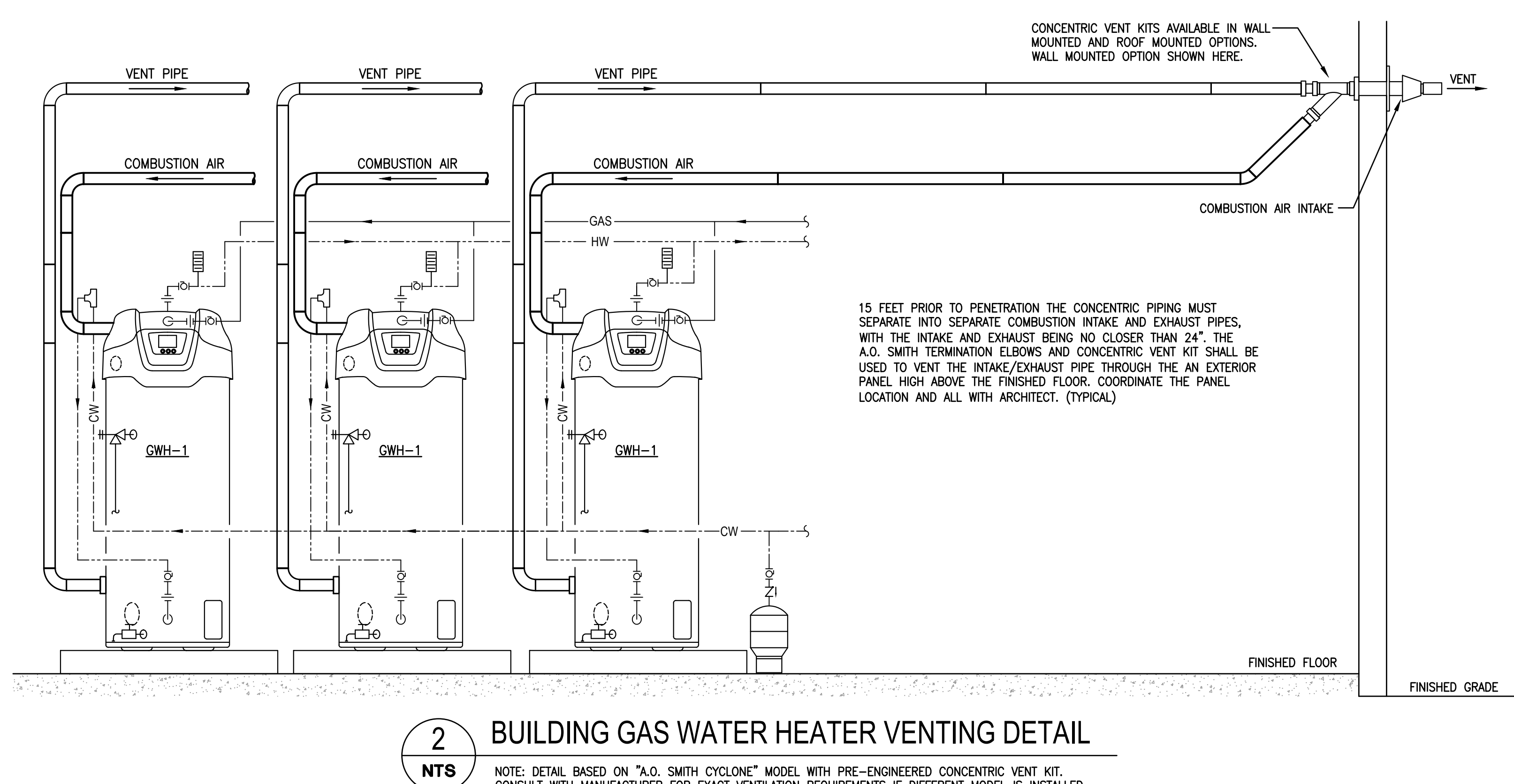
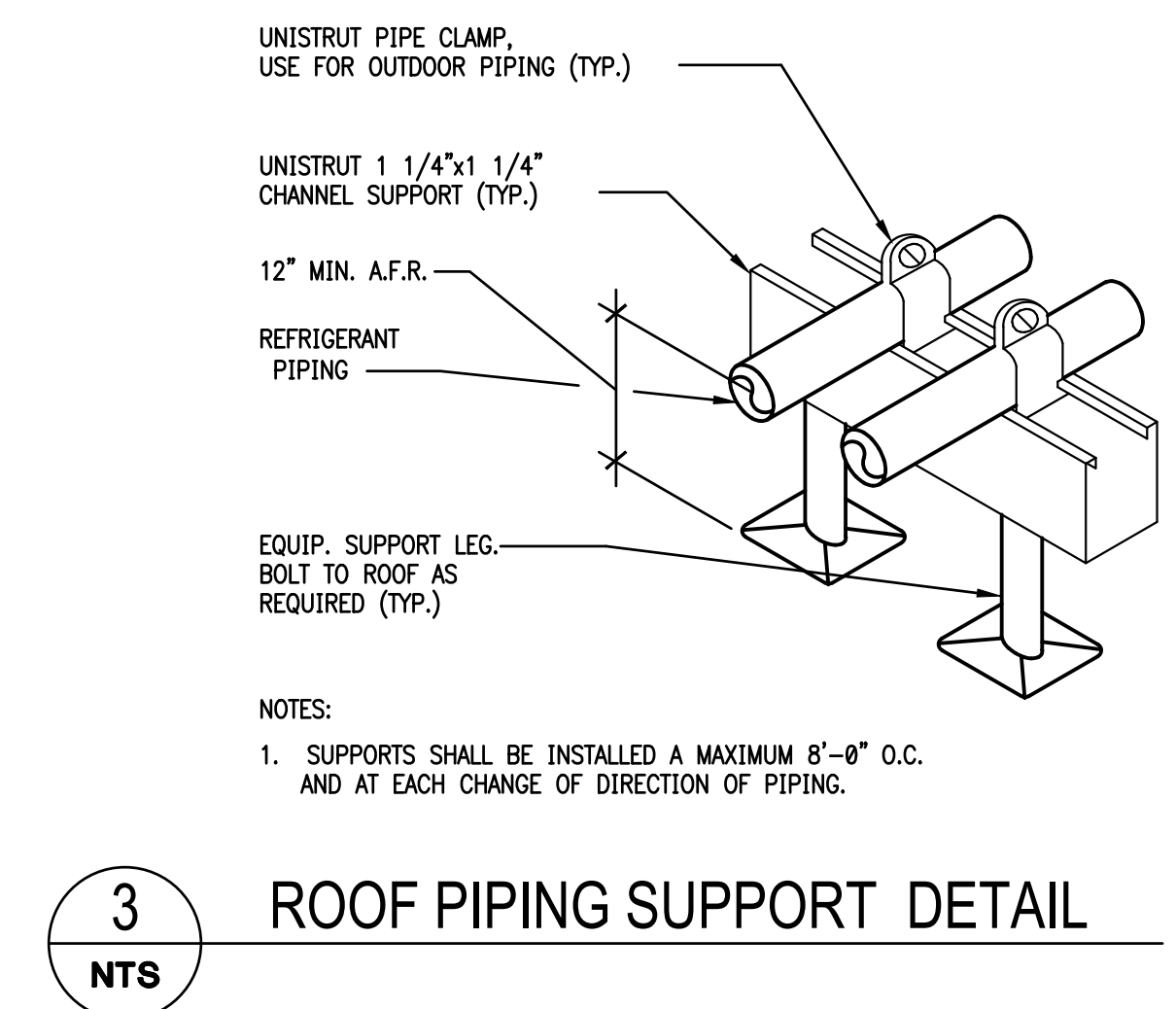
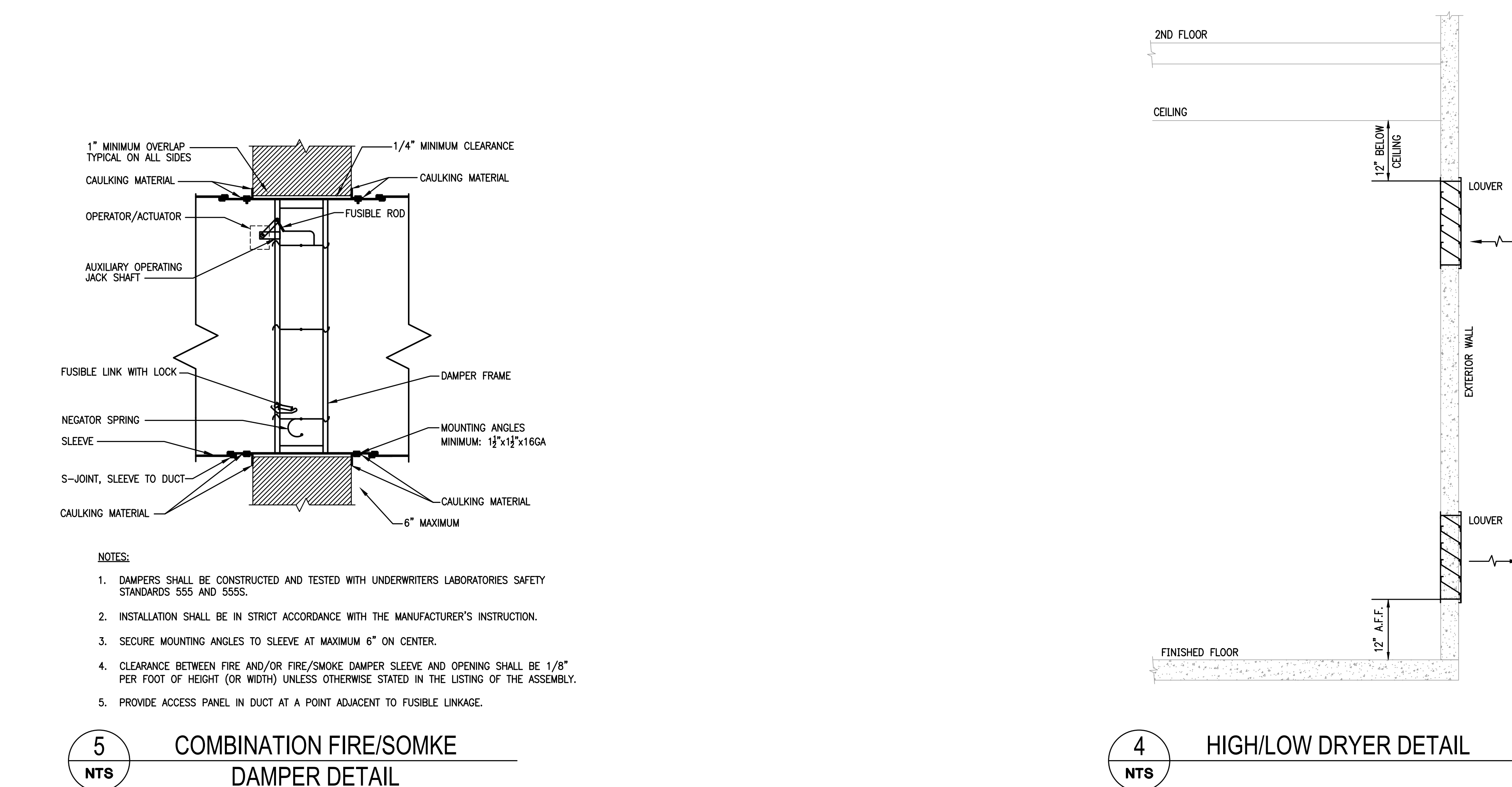
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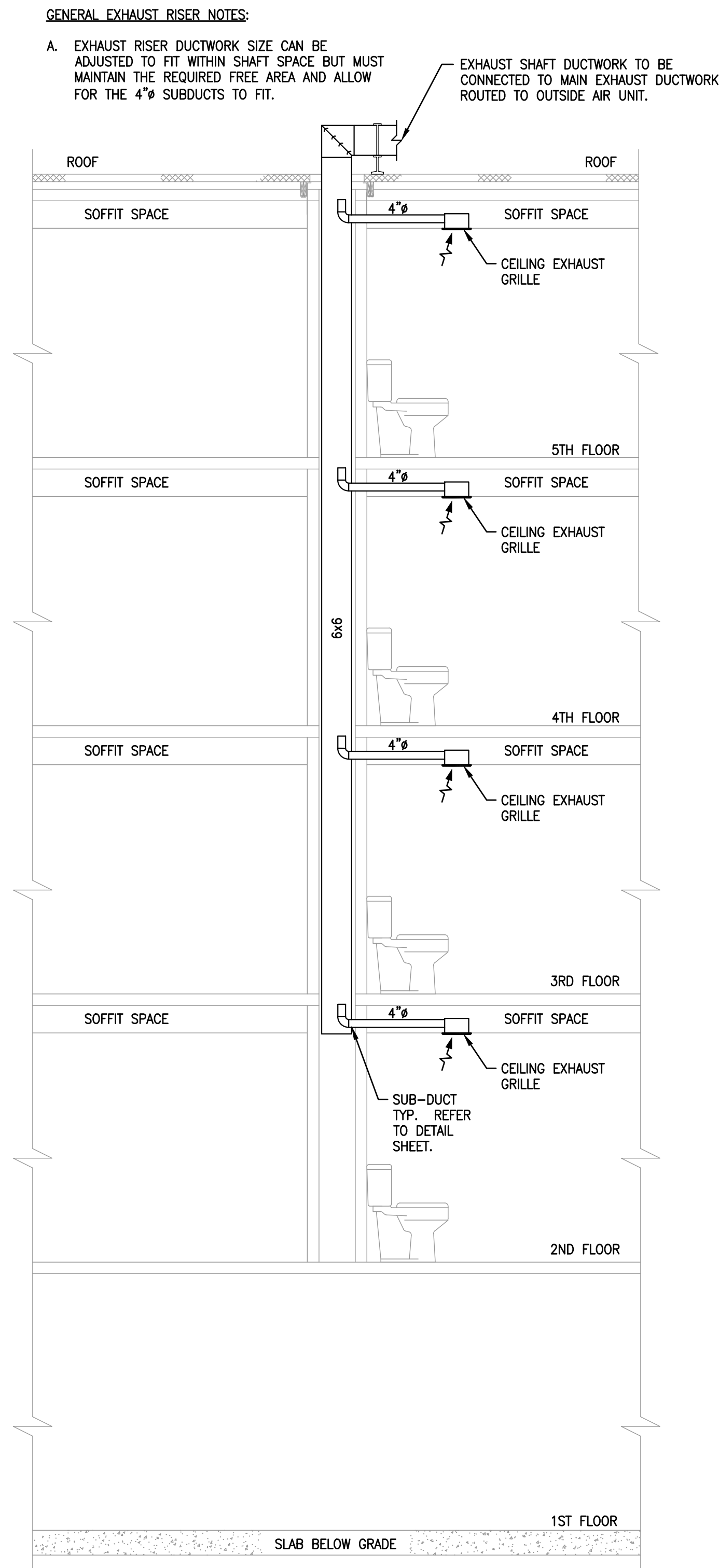
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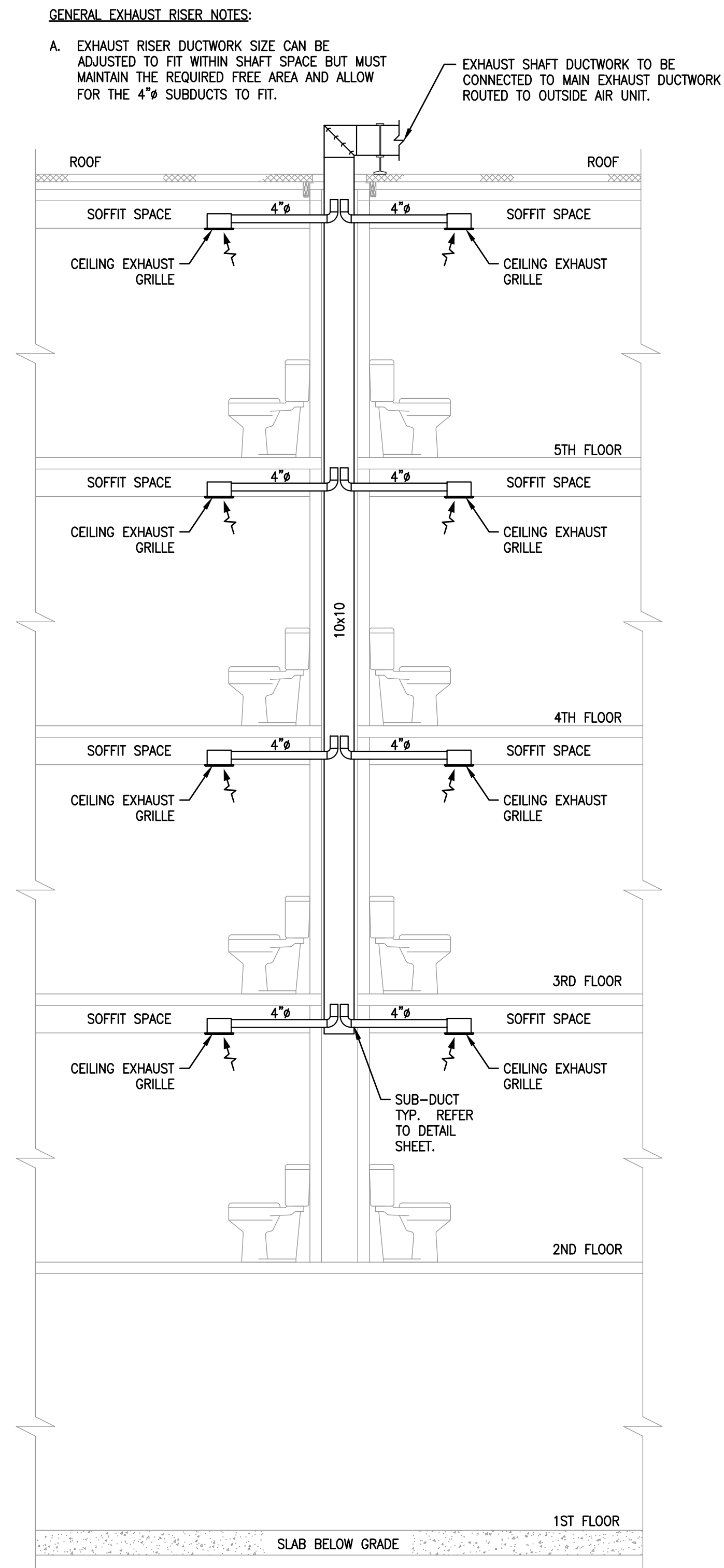


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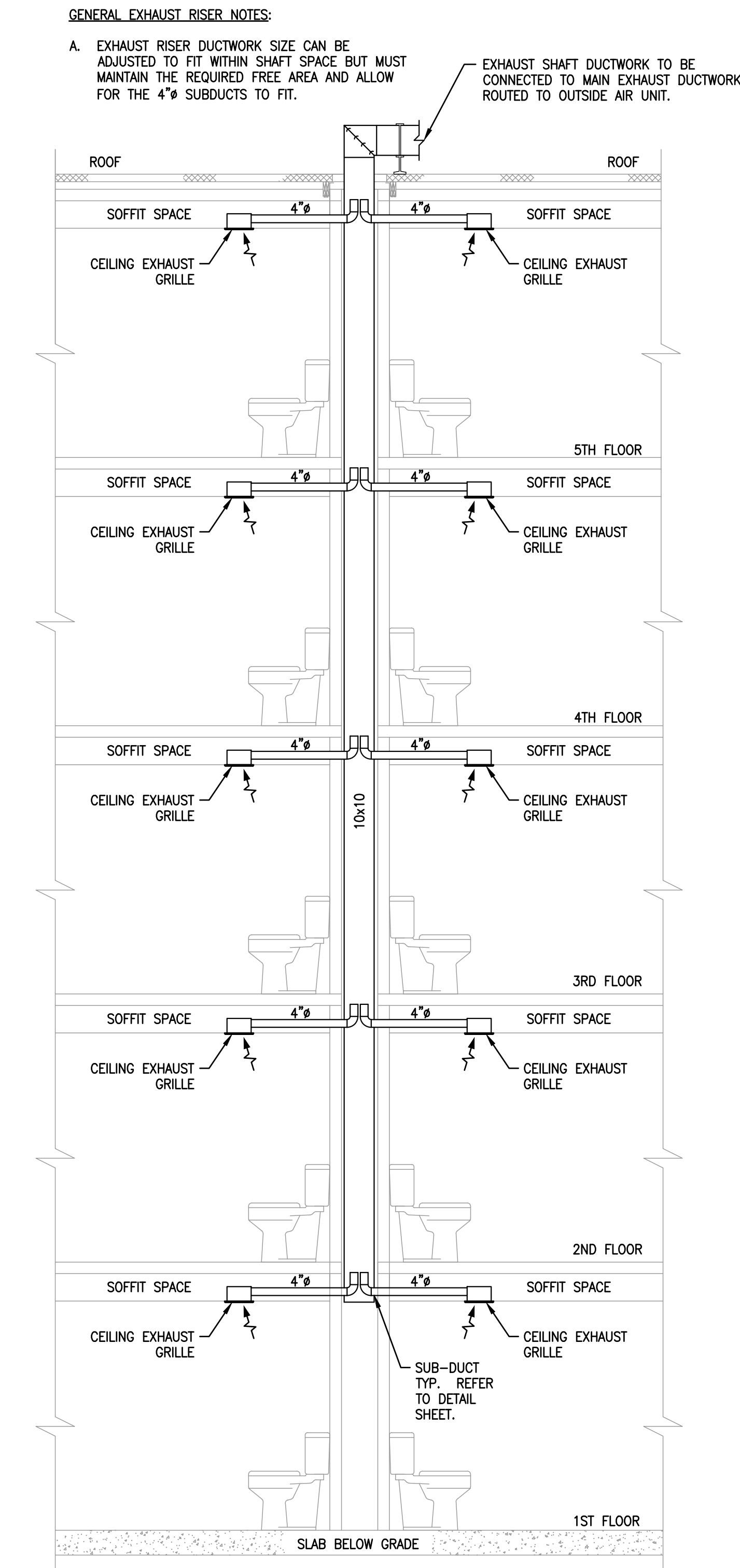
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JAMES J. BARNES
No. 0012
STATE OF FLORIDA



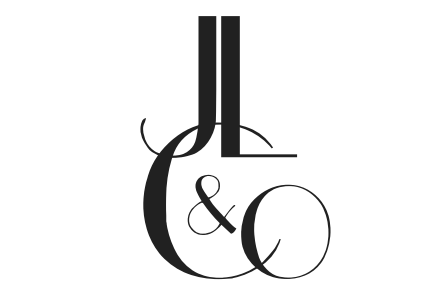
ER-3 BATH EXHAUST VENT DIAGRAM
NTS



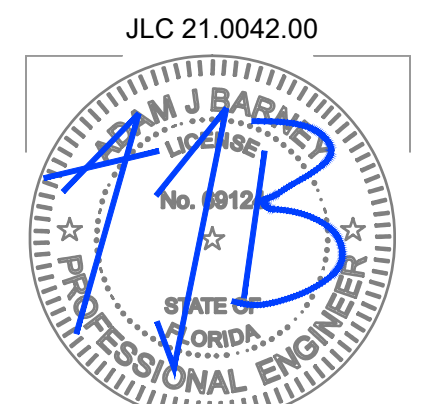
ER-2 BATH EXHAUST VENT DIAGRAM
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ER-1 BATH EXHAUST VENT DIAGRAM
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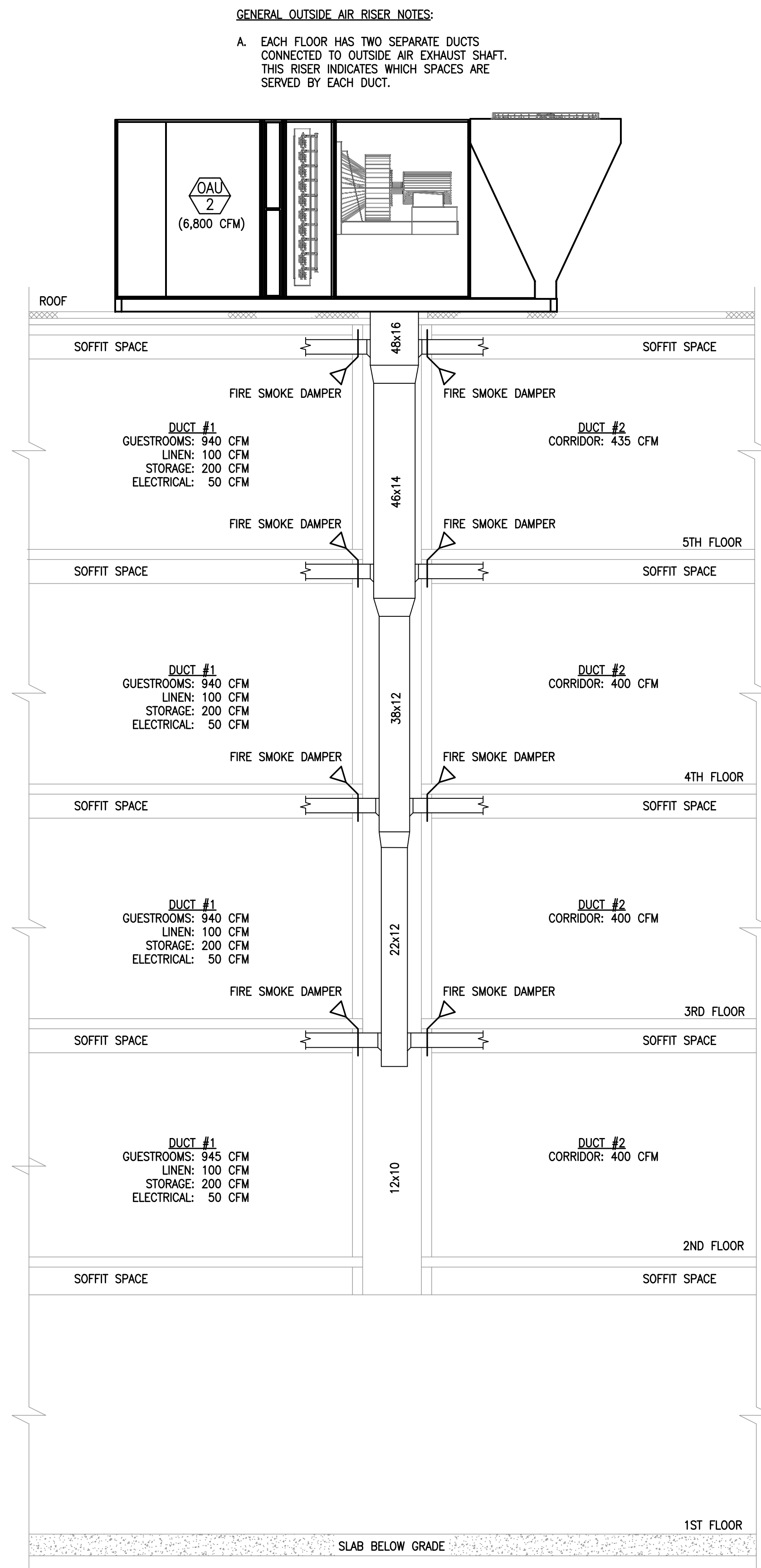


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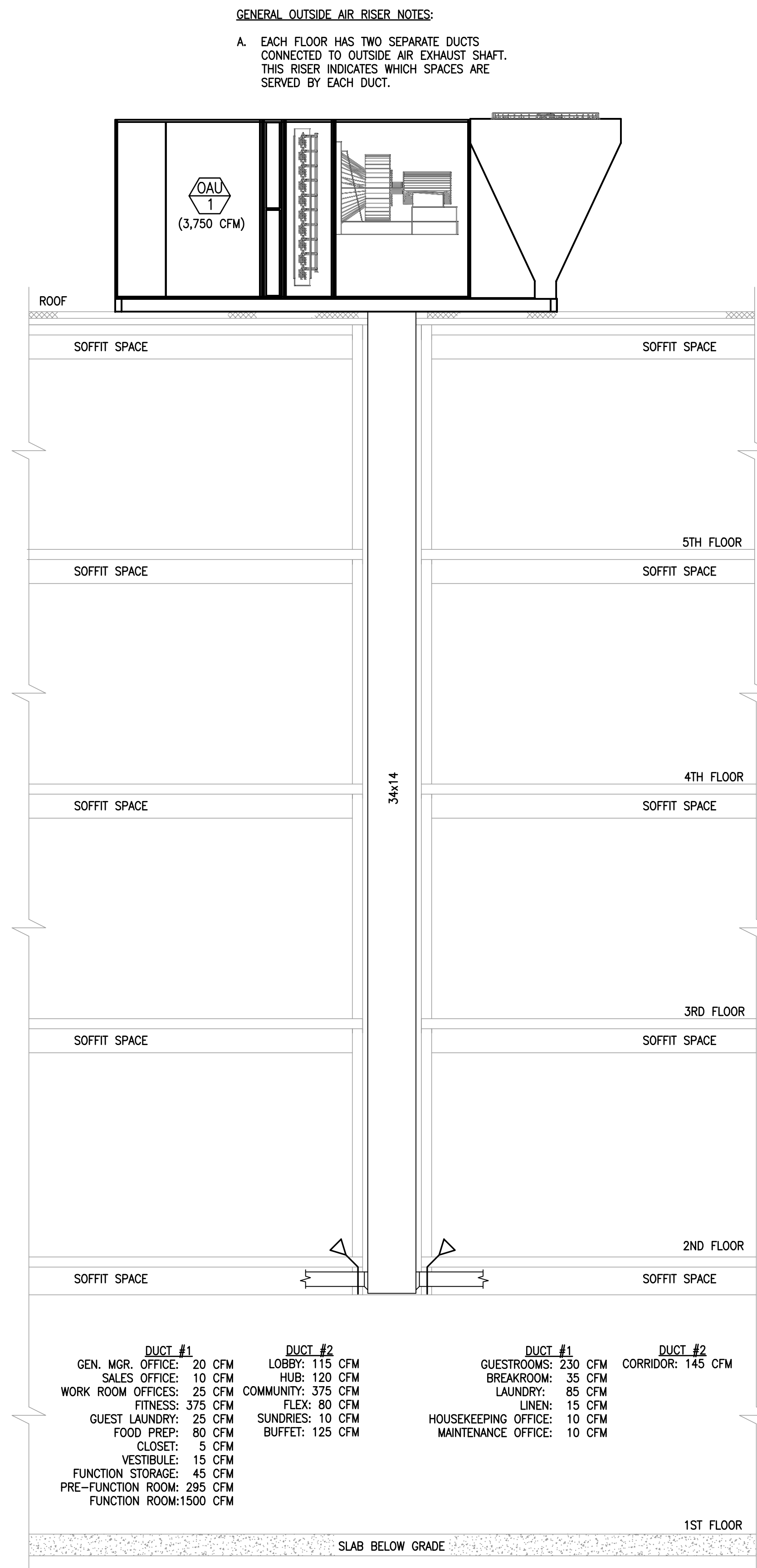
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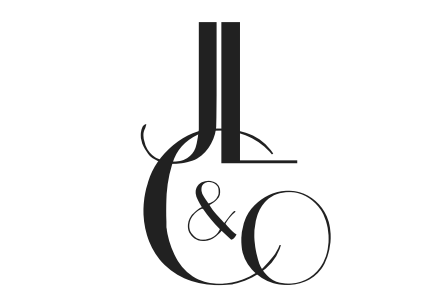
OA-2
NTS

OUTSIDE AIR SHAFT DUCTWORK
DIAGRAM

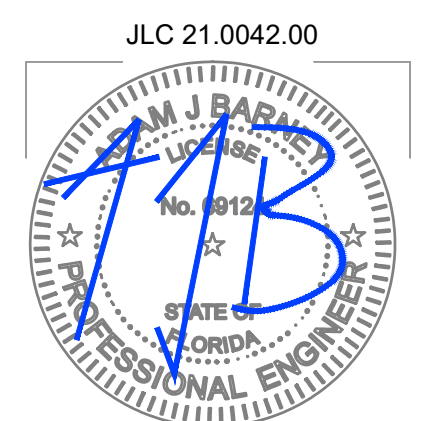


OA-1
NTS

OUTSIDE AIR SHAFT DUCTWORK
DIAGRAM



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MECHANICAL SPECIFICATIONS

GENERAL

THE GENERAL MECHANICAL SPECIFICATIONS APPLY TO THE WORK SPECIFIED IN THIS SECTION.

SCOPE OF WORK

FURNISH AND INSTALL COMPLETE AIR CONDITIONING SYSTEMS AS INDICATED ON THE DESIGN DRAWINGS AND AS OUTLINED WITHIN THESE SPECIFICATIONS. WORK SHALL INCLUDE BUT NOT BE LIMITED TO THE FABRICATION AND/OR INSTALLATION OF THE SCHEDULED AIR CONDITIONING UNITS, EXHAUST FANS, AIR DISTRIBUTION AND DUCTWORK.

CLEANING, TESTING AND ADJUSTING: THE MECHANICAL CONTRACTOR, AT HIS EXPENSE, SHALL CLEAN, REPAIR, ADJUST, CHECK, BALANCE, AND PLACE IN SERVICE THE VARIOUS SYSTEMS HEREIN SPECIFIED WITH THEIR RESPECTIVE EQUIPMENT, ACCESSORIES AND PIPING. HE SHALL FURNISH ALL LABOR, MATERIALS, EQUIPMENT, AND TOOLS REQUIRED TO PERFORM TESTS REQUIRED BY THESE SPECIFICATIONS AND BY THE GOVERNING AUTHORITIES.

NO WORK SHALL BE COVERED OR CONCEALED UNTIL PROPERLY INSPECTED AND TESTED.

TESTING: ADJUST THE AIR CONDITIONING SYSTEMS, VENTILATING SYSTEMS, FANS, ETC., TO DELIVER NOT LESS THAN THE REQUIRED AIR QUANTITY WITH QUANTITIES IN EXCESS TO BE SUBJECT TO THE APPROVAL OF THE ENGINEER IF FOUND TO NOT HAVE OBJECTIONABLE EFFECTS SUCH AS NOISE, DRAFTS, OR MOTOR OVERLOAD.

THIS CONTRACTOR SHALL PROVIDE THREE (3) COPIES OF A TEST AND BALANCE REPORT TO THE OWNER AT TIME OF SUBSTANTIAL COMPLETION INSPECTION.

THE TEST AND BALANCE REPORT SHALL BE TYPEWRITTEN AND CONTAIN THE FOLLOWING DATA:

1. DATE, TIME, WEATHER, WHEN TEST TAKEN.
2. AIR CAPACITIES AT EACH UNIT INCLUDING OUTSIDE AIR. (ENTERING AND LEAVING DB/WB)
3. STATIC PRESSURE THROUGH UNITS AND UNIT COMPONENTS.
4. MOTOR OPERATING VOLTAGE AND AMPERAGE.
5. DRIVE TYPES, SIZES AND SPEED RANGE.
6. IDENTIFICATION OF ALL AIR TERMINAL DEVICES WITH DESIGN CFM AND ACTUAL CFM.

ADDITIONALLY, SYSTEMS DRAWING CLEARLY MARKED TO IDENTIFY LOCATION OF EQUIPMENT AND AIR DEVICES TESTED SHALL BE PROVIDED ALONG WITH THE WRITTEN TEST AND BALANCE REPORT.

MAINTENANCE MANUALS

PROVIDE COMPLETE MAINTENANCE MANUALS (3 REQUIRED) ON ALL NEW EQUIPMENT. ORGANIZE OPERATING AND MAINTENANCE DATA INTO SUITABLE SETS OF MANAGEABLE SIZE. BIND PROPERLY INDEXED DATA INTO INDIVIDUAL, HEAVY-DUTY, 2-INCH, 3-RING VINYL COVERED BINDERS WITH POCKET FOLDERS FOR FOLDED SHEET INFORMATION. MARK APPROPRIATE IDENTIFICATION ON FRONT AND SPINE OF EACH BINDER. INCLUDE THE FOLLOWING TYPES OF INFORMATION. THE INFORMATION WILL BE TURNED OVER TO THE OWNER AT TIME OF SUBSTANTIAL COMPLETION:

- OPERATING AND MAINTENANCE INSTRUCTIONS
- SPARE PARTS LIST
- COPIES OF WARRANTIES
- WIRING DIAGRAMS
- INSPECTION REPORTS AND APPROVALS
- SHOP DRAWINGS AND PRODUCT DATA

TRAINING SERVICES

THOROUGHLY INSTRUCT THE OWNER'S REPRESENTATIVE IN THE OPERATION OF ALL EQUIPMENT FURNISHED AND LOCATION OF ALL VALVES AND CONTROL DEVICES.

TRAIN BUILDING OWNER'S PERSONNEL DURING NORMAL WORKING HOURS ON STARTUP AND SHUTDOWN PROCEDURES, TROUBLESHOOTING PROCEDURES, SERVICING AND PREVENTATIVE MAINTENANCE SCHEDULE AND PROCEDURES. REVIEW WITH THE OWNER'S PERSONNEL THE DATA CONTAINED IN THE OPERATING AND MAINTENANCE MANUALS. SCHEDULE TRAINING WITH OWNER, PROVIDE AT LEAST 7-DAYS PRIOR NOTICE TO ARCHITECT/ENGINEER.

HANGERS AND SUPPORTS

PROVIDE ALL NECESSARY HANGER RODS, CLAMPS AND ATTACHMENTS TO PROPERLY INSTALL AND SUPPORT DUCTWORK, PIPING AND EQUIPMENT FROM THE BUILDING STRUCTURE.

PROVIDE ANY ANGLE IRON OR UNISTRUT AND SUSPENSION RODS REQUIRED TO INSTALL EQUIPMENT, PIPING AND DUCTWORK.

ALL SUPPORTS EXPOSED TO OUTDOORS SHALL BE CLEANED, PRIMED AND PAINTED TO PREVENT RUSTING. FINISH COLOR AS SELECTED BY OWNER.

THE USE OF BALING WIRE OR PERFORATED METAL STRAPPING IS NOT ACCEPTABLE FOR SUPPORTS.

WARRANTY/GUARANTEE:

THE CONTRACTOR SHALL WARRANTY/GUARANTEE AND MAINTAIN THE STABILITY OF WORK AND MATERIALS AND KEEP SAME IN COMPLETE REPAIR AND CONDITION OF THE PERIOD OF ONE (1) YEAR.

DEFECTS OF ANY KIND DUE TO FAULTY WORK OR MATERIALS APPEARING DURING THE ABOVE MENTIONED PERIOD MUST BE IMMEDIATELY MADE GOOD BY THE CONTRACTOR AT HIS OWN EXPENSE TO THE ENTIRE SATISFACTION OF THE OWNER AND ARCHITECT AND ENGINEER. SUCH RECONSTRUCTION AND REPAIRS SHALL INCLUDE ALL DAMAGE TO THE FINISH OR FURNISHING OF THE BUILDING RESULTING FROM THE ORIGINAL DEFECT OR REPAIRS THERE TO.

EQUIPMENT:

1.1 QUALITY ASSURANCE

- A. ELECTRICAL COMPONENTS, DEVICES, AND ACCESSORIES: LISTED AND LABELED AS DEFINED IN NFPA 70, ARTICLE 100, BY A TESTING AGENCY ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION, AND MARKED FOR INTENDED USE.
- B. UNITS SHALL BE DESIGNED TO OPERATE WITH HCFC-FREE REFRIGERANTS.

1.2 WARRANTY

- A. ALL UNITS ARE TO BE SET UP BY A CERTIFIED TECHNICIAN.
- B. SPECIAL WARRANTY: MANUFACTURER'S STANDARD FORM IN WHICH MANUFACTURER AGREES TO REPLACE COMPONENTS LISTED BELOW THAT FAIL IN MATERIALS OR WORKMANSHIP WITHIN SPECIFIED WARRANTY PERIOD.

1. WARRANTY PERIOD FOR COMPRESSORS: MANUFACTURER'S STANDARD, BUT NOT LESS THAN FIVE (5) YEARS FROM DATE OF SUBSTANTIAL COMPLETION.
2. WARRANTY PERIOD FOR HEAT EXCHANGERS: MANUFACTURER'S STANDARD, BUT NOT LESS THAN FIVE (5) YEARS FROM DATE OF SUBSTANTIAL COMPLETION.

1.3 MANUFACTURERS

- A. MANUFACTURERS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE PRODUCTS BY ONE OF THE FOLLOWING:
 1. AON
 2. TRANE
 3. CARRIER
 4. YORK
 5. GOODMAN

NOTE:
ALL OF THE SPECIFICATIONS LISTED ON THIS SHEET MAY NOT BE USED FOR THIS PROJECT.

2.1 CABINET

- A. CONSTRUCTION: SINGLE WALL.
- B. EXTERIOR CASING: GALVANIZED STEEL WITH BAKED-ENAMEL PAINT FINISH WITH LIFTING LUGS AND KNOCKOUTS FOR ELECTRICAL AND PIPING CONNECTIONS.

2.2 INTERIOR CASING - GALVANIZED STEEL

- A. BASE RAILS: GALVANIZED-STEEL RAILS FOR MOUNTING ON ROOF CURB.
- B. SERVICE DOORS: HINGED ACCESS DOORS WITH NEOPRENE GASKETS.
- C. INTERNAL INSULATION: FIBROUS-GLASS DUCT LINING COMPLYING WITH ASTM C 1071, TYPE II.

1. THICKNESS: 1 INCH (25 MM).
2. INSULATION ADHESIVE: COMPLY WITH ASTM C 916, TYPE I.
3. MECHANICAL FASTENERS: GALVANIZED STEEL, SUITABLE FOR ADHESIVE ATTACHMENT, MECHANICAL ATTACHMENT, OR WELDING ATTACHMENT TO CASING WITHOUT DAMAGING LINER AND WITHOUT CAUSING AIR LEAKAGE WHEN APPLIED AS RECOMMENDED BY MANUFACTURER.
- D. CONDENSATE DRAIN PANS: FORMED SECTIONS OF STAINLESS-STEEL SHEET DESIGNED FOR SELF-DRAINAGE. FABRICATE PANS WITH SLOPES TO PRECLUDE BUILDUP OF MICROBIAL SLIME. PROVIDE FLOAT SWITCH.
- E. ROOF CURB: FULL-PERIMETER CURB OF SHEET METAL, MINIMUM 14 INCHES HIGH, WITH WOOD NAILER, NEOPRENE SEALING STRIP, AND WELDED Z-BAR FLASHING.

2.3 SUPPLY-AIR FAN

- A. FAN: FORWARD-CURVED CENTRIFUGAL; STATICALLY AND DYNAMICALLY BALANCED, GALVANIZED STEEL, MOUNTED ON SOLID-STEEL SHAFT WITH SELF-ALIGNING, PERMANENTLY LUBRICATED BALL BEARINGS.
- B. MOTOR: TOTALLY ENCLOSED-SPEED MOTOR.
- C. DRIVE: V-BELT DRIVE WITH MATCHING FAN PULLEY AND ADJUSTABLE MOTOR SHEAVES AND BELT ASSEMBLY WITH MINIMUM 1:4 SERVICE FACTOR.
- D. MOUNTINGS: FAN WHEEL, MOTOR, AND DRIVES SHALL BE MOUNTED IN FAN CASING WITH SPRING ISOLATORS.

2.4 REFRIGERATION SYSTEM

- A. FABRICATE AND LABEL REFRIGERATION SYSTEM TO COMPLY WITH ASHRAE 15, "SAFETY CODE FOR MECHANICAL REFRIGERATION".
- B. COMPRESSORS: RECOMPRESSING OR SCROLL COMPRESSORS WITH INTEGRAL VIBRATION ISOLATORS, INTERNAL OVERCURRENT AND OVERTEMPERATURE PROTECTION, INTERNAL PRESSURE RELIEF.
- C. EER AND COP: 13 EER AND 11.8 COP VALUES AS DEFINED BY ASHRAE/IESNA 90.1, "ENERGY EFFICIENT DESIGN OF NEW BUILDINGS EXCEPT LOW-RISE RESIDENTIAL BUILDINGS".
- D. REFRIGERANT: R-410A ON ALL NEW SYSTEMS.
- E. REFRIGERATION SYSTEM SPECIALTIES: EXPANSION VALVE WITH REPLACEABLE THERMOSTATIC ELEMENT

1. REFRIGERANT DRIVER.
2. HIGH-PRESSURE SWITCH.
3. LOW-PRESSURE SWITCH.
4. THERMOSTAT FOR COIL FREEZE-UP PROTECTION DURING LOW AMBIENT TEMPERATURE OPERATION OR LOSS OF AIR.
5. BRASS SERVICE VALVES INSTALLED IN DISCHARGE AND LIQUID LINES.
6. OPERATING CHARGE OF REFRIGERANT.

2.5 CAPACITY CONTROL

- A. HOT-GAS BYPASS REFRIGERANT CONTROL FOR CAPACITY CONTROL WITH CONTINUOUS DEHUMIDIFICATION TO BE PROVIDED.

2.6 REFRIGERANT COILS

- A. EVAPORATOR AND CONDENSER COILS SHALL BE DESIGNED, TESTED, FABRICATED, AND RATED ACCORDING TO ARI 410 AND ASHRAE 33. COILS SHALL BE LEAK TESTED UNDER WATER WITH AIR AT 315 PSIG (2170 KPA).

1. CAPACITY REDUCTION: CIRCUIT COILS FOR FACE CONTROL.
2. TUBES: COPPER.
3. PINS: ALUMINUM
4. FIN AND TUBE JOINT: MECHANICAL BOND.
5. SUCTION AND DISTRIBUTOR: SEAMLESS COPPER TUBE WITH BRAZED JOINTS.
6. COATING: PHENOLIC EPOXY CORROSION-PROTECTION COATING ON BOTH COILS.
7. SOURCE QUALITY CONTROL: TEST TO 450 PSIG (3105 KPA), AND TO 300 PSIG (2070 KPA) UNDERWATER.

- B. CONDENSER FAN: PROPELLER TYPE, DIRECTLY DRIVEN BY MOTOR.
- C. SAFETY CONTROLS:

1. COMPRESSOR MOTOR AND OUTSIDE-COIL FAN MOTOR LOW AMBIENT LOCKOUT.
2. OVERCURRENT PROTECTION FOR COMPRESSOR MOTOR AND OUTSIDE-COIL FAN MOTORS.

2.7 FILTERS

- A. COMPLY WITH NFPA 90A.
- B. DISPOSABLE PLEATED FILTERS: 2-INCH- (50-MM-) THICK, FACTORY-FABRICATED, FLAT-PANEL-TYPE, DISPOSABLE AIR FILTERS WITH HOLDING FRAMES.
- C. FILTER MEDIA TO BE INTERLACED GLASS FIBERS SPRAYED WITH NONFLAMMABLE ADHESIVE.
- D. FILTER FRAMES TO BE GALVANIZED STEEL.

2.8 CONTROLS

- A. ALL CONTROLS ARE TO BE SET UP BY A CERTIFIED TECHNICIAN.
- B. FACTORY-WIRE CONNECTION FOR CONTROLS' POWER SUPPLY.
- C. CONTROL DEVICES, INCLUDING SENSORS, TRANSMITTERS, RELAYS, SWITCHES, THERMOSTATS, HUMIDISTATS, DETECTORS, OPERATORS, ACTUATORS, AND VALVES, SHALL BE MANUFACTURER'S STANDARD ITEMS TO ACCOMPLISH INDICATED CONTROL FUNCTIONS.
- D. UNIT CONTROLS: SOLID-STATE CONTROL BOARD AND COMPONENTS WITH FIELD-ADJUSTABLE CONTROL PARAMETERS.
- E. SUPPLY-FAN CONTROL: UNITS SHALL BE ELECTRICALLY INTERLOCKED WITH CORRESPONDING EXHAUST FANS, TO OPERATE CONTINUOUSLY WHEN EXHAUST FANS ARE RUNNING. TIME CLOCK SHALL SWITCH OPERATION FROM OCCUPIED TO UNOCCUPIED. NIGHT SETBACK THERMOSTAT SHALL CYCLE FAN DURING UNOCCUPIED PERIODS TO MAINTAIN SPACE TEMPERATURE.

1. TIMER: SEVEN-DAY ELECTRONIC CLOCK.

- E. ELECTRICALLY INTERLOCK KITCHEN HOOD FIRE-EXTINGUISHING SYSTEM TO DE-ENERGIZE REPLACEMENT-AIR UNIT WHEN FIRE-EXTINGUISHING SYSTEM DISCHARGES.
- F. MINIMUM REFRIGERATION SYSTEM CONTROLS SHALL CONSIST OF A WALL-MOUNTING, RELATIVE-HUMIDITY AND TEMPERATURE SENSOR THAT ENERGIZES DEHUMIDIFIER OPERATION WHEN RELATIVE HUMIDITY IS MORE THAN 60 PERCENT.

PIPING:

CONDENSATE DRAINS:

CONDENSATE PIPE TO BE TYPE L OR PVC. ROUTE TO DRYWELL OR AS INDICATED ON PLANS. COORDINATE WITH PLUMBER TO PROVIDE HUB DRAIN(S) IN MECHANICAL ROOM AND DRYWELL(S). HVAC CONTRACTOR TO PROVIDE P-TRAP AT UNIT SIZED FOR 2" GREATER THAN UNIT STATIC PRESSURE. PROVIDE CLEAROUT AT UNIT FOR SUSPENDED HORIZONTAL AIR HANDLERS. INSULATE CONDENSATE PIPE WITH 1/2" ARMAFLEX (OR EQUAL) INSULATION RATED FOR PLENUM APPLICATION. CONDENSATE DRAIN LINE SHALL BE NOT LESS THAN THE EQUIPMENT DRAIN LINE SIZE AND IN NO CASE LESS THAN 3/4" PIPE SIZE.

REFRIGERANT PIPING:

COVER ALL EXPOSED LIQUID LINES AND ALL SUCTION PIPING (INDOORS AND OUTDOORS), FITTINGS, VALVES, ETC., CONTINUOUS THROUGH SLEEVES, HANGERS, ETC., WITH 1/2" FR/ARMAFLEX. INSTALLATION SHALL BE CONDENSATION FREE AND INSTALLED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.

REFRIGERANT PIPING BELOW GRADE SHALL BE ROUTED THROUGH MINIMUM 4" DIAMETER PVC PIPE. SLEEVES TO EACH CONDENSING UNIT. ALL UNDERGROUND REFRIGERANT PIPING SHALL BE CONTINUOUS WITH NO UNDERGROUND JOINTS ALLOWED. REFRIGERANT PIPE SIZES SHALL BE SIZED PER A/C EQUIPMENT MANUFACTURER'S RECOMMENDATION BASED ON LENGTH OF RUN BETWEEN CONDENSING UNITS AND AIRU UNITS.

PIPING ROUTED ALONG BUILDING EXTERIOR WALL SHALL BE PROTECTED BY SHEET METAL HOUSING SECURELY ATTACHED TO WALL AT 8'-0" INTERVALS AND PAINTED TO MATCH BUILDING EXTERIOR.

TRAP OIL IN SUCTION LINE AT EVAPORATOR COIL. NO OTHER COIL TRAPS PERMITTED. PROVIDE SUCTION RISERS, CHECK VALVES, SOLENOID VALVES, OR OTHER DEVICES REQUIRED IN PIPING SYSTEM BY MANUFACTURER'S INSTALLATION INSTRUCTIONS.

PIPE HANGERS AND SUPPORTS: PIPE HANGERS, WHERE NEEDED, SHALL BE GRINNEL #280 CLEVIS TYPE, 5'-0" ON CENTER, SECURELY ATTACHED TO BUILDING CONSTRUCTION. SPACE AT MIN. 5'-0" INTERVALS.

PIPE SUPPORT: ATTACH LINES SECURELY ALONG PAD/FLOOR/EQUIPMENT/STRUCTURE TO PREVENT MOVEMENT. SUPPORT IN A MANNER THAT LINES DO NOT HANG FROM EVAPORATOR CONNECTIONS OR BLOCK ACCESS TO FILTERS, CONTROLS, ETC.

SUPPORT AT MIN. 8'-0" INTERVALS FOR VERTICAL PIPES, 5'-0" FOR SUSPENDED HORIZONTAL PIPING.

EXHAUST FANS:

FURNISH EXHAUST FANS WITH PERFORMANCE AND CAPACITIES AS LISTED ON THE DESIGN DRAWINGS.

SUSPENDED FANS SHALL BE SUPPORTED FROM A TRAPEZE TYPE HANGER WITH SPRING MOUNTED VIBRATION ISOLATORS.

ALL EXHAUST FANS SHALL COME WITH INTEGRAL BACKDRAFT DAMPER.

COORDINATE WITH ARCHITECT TO LOCATE EXHAUST FANS, EXHAUST GRILLES, WALL OR ROOF CAPS A MINIMUM DISTANCE OF 10'-0" FROM ANY OPERABLE WINDOW, DOOR OR FRESH AIR INTAKE.

AIR DISTRIBUTION EQUIPMENT:

FURNISH SUPPLY AIR GRILLES AND RETURN AIR REGISTERS WITH OPPOSED BLADE BALANCING DAMPERS AS SCHEDULED ON THE DESIGN DRAWINGS.

GRILLES, REGISTERS, AND CEILING DIFFUSERS SHALL BE FURNISHED AS SCHEDULED ON THE DESIGN DRAWINGS AND SHALL BE ALL ALUMINUM CONSTRUCTION UNLESS NOTED OTHERWISE. AIR DISTRIBUTION SHALL NOT EXCEED NC-30 NOISE CRITERIA AS DEFINED IN THE LATEST ASHRAE GUIDE.

DUCTWORK:

1. ALL DUCTWORK DIMENSIONS ARE INSIDE NET FREE AREA.
2. SEAL ALL JOINTS WITH GLASS-FAB AND MASTIC.
3. ALL DUCTWORK SHOWN PER PLAN IS TO BE SHEET METAL. FIBERGLASS DUCT BOARD IS NOT TO BE INSTALLED UNLESS SPECIFICALLY AUTHORIZED BY THE BUILDING LANDLORD, PROJECT OWNER/AGENT AND MECHANICAL ENGINEER OF RECORD.
4. ALL EXHAUST AND OUTSIDE AIR DUCTWORK IS TO BE SHEET METAL - NO EXCEPTIONS. ADJUSTABLE SPLITTERS AND DAMPERS SHALL BE SUPPLIED AND INSTALLED IN EVERY SPLIT AND BRANCH DUCT AND SHALL BE PROVIDED WITH LOCKING QUADRANTS ON EXPOSED OR IN ACCESSIBLE AREAS OF THE DUCT FOR EASE OF OPERATION. ACCESS PANELS OR YOUNG REGULATORS SHALL BE PROVIDED WHERE DAMPERS ARE INSTALLED ABOVE HARD CEILINGS OR IN SOFFITS EVEN IF NOT STATED ON PLANS/ELBOWS OR CHANGES IN DUCT DIRECTION GREATER THAN 45 DEGREES SHALL BE FITTED WITH AIR TURNS CONSISTING OF CURVED AIRFOIL BLADES OR VANES WHICH WILL PERMIT THE AIR TO MAKE ABRUPT TURNS WITHOUT APPRECIABLE TURBULENCE.
5. ELBOWS OR CHANGES IN DUCT DIRECTION GREATER THAN 45 DEGREES SHALL BE FITTED WITH AIR TURNS CONSISTING OF CURVED AIRFOIL BLADES OR VANES WHICH WILL PERMIT THE AIR TO MAKE ABRUPT TURNS WITHOUT APPRECIABLE TURBULENCE. LONG RADIUS TURNS ARE AN ACCEPTABLE SUBSTITUTE IF SPACE PERMITS.
6. WHEN DUCT BOARD IS USED: 26 GAUGE Y-FITTINGS WILL NOT BE AN APPROVED SUBSTITUTE FOR TRIANGULAR BOXES.

- SHEET METAL DUCTWORK: SHALL BE CONSTRUCTED PER THE APPROPRIATE SMACNA DESIGN STANDARDS, MEETING THE MINIMUM GAUGE SHEET METAL THICKNESS SPECIFIED. INSULATE INTERNALLY OR EXTERNALLY WITH FIBERGLASS INSULATION TO ACHIEVE A MINIMUM R-VALUE OF 7.0 UNLESS INSTALLED IN A MECHANICALLY COOLED SPACE OR BETWEEN COOLED FLOORS IN A CAVITY WHOSE EXTERIOR WALLS ARE INSULATED, IN WHICH CASE THE R-VALUE MAY BE 4.2.

- FIBERGLASS DUCTWORK: SHALL BE CONSTRUCTED OF FIBERGLASS FIBERBOARD DUCTWORK TO BE A MINIMUM OF 1" THICK. FIBERGLASS DUCTWORK SHALL BE LINED WITH ANTI MICROBIAL INSULATION EQUAL TO JOHNS-MANVILLE SUPERDUCT. INSULATE FIBERGLASS SUPPLY AND RETURN DUCTS TO A MINIMUM R-VALUE OF 6.0 UNLESS INSTALLED IN A MECHANICALLY COOLED SPACE OR BETWEEN COOLED FLOORS IN A CAVITY WHOSE EXTERIOR WALLS ARE INSULATED, IN WHICH CASE THE R-VALUE MAY BE 4.2.

- FLEXIBLE DUCTWORK: SHALL BE SPIRAL FORMED OUT OF 3003 BRIGHT REFLECTIVE FINISHED ALUMINUM ALLOY AND MECHANICALLY LOCKED. FLEXIBLE DUCTS TO A MINIMUM R-VALUE OF 6.0 UNLESS INSTALLED IN A MECHANICALLY COOLED SPACE OR BETWEEN COOLED FLOORS IN A CAVITY WHOSE EXTERIOR WALLS ARE INSULATED, IN WHICH CASE THE R-VALUE MAY BE 4.2. IT SHALL BE UL LISTED UNDER CLASS 1 AIR DUCTS AND CLASS 1 FORM-A ISSUE NO.566,577 FLEXIBLE "AIR DUCT" AND MEET ALL REQUIREMENTS OF UL 181 AND COMPLY WITH NFPA 90A AND NFPA 90B.

- ROUND SPIRAL DUCTWORK: SHALL BE CONSTRUCTED PER THE APPROPRIATE SMACNA DESIGN STANDARDS, MEETING THE MINIMUM GAUGE SHEET METAL THICKNESS SPECIFIED AND SHALL BE A MINIMUM 1" DOUBLE WALL INTERNALLY INSULATED. NON INSULATED SPIRAL DUCTWORK WILL NOT BE ACCEPTED AS A SUBSTITUTION.

VIBRATION ISOLATION:

ALL BLOWER UNITS AND VIBRATING TYPE EQUIPMENT SHALL BE PROPERLY FITTED WITH MASON INDUSTRIES VIBRATION ISOLATION EQUIPMENT SIZED IN ACCORDANCE WITH EQUIPMENT WEIGHT AND DUTY.

PROVIDE FLEXIBLE CONNECTORS AT ALL SUPPLY AND RETURN CONNECTIONS TO AIR HANDLING EQUIPMENT CONSISTING OF HEAVY CANVAS OR NEOPRENE FABRIC WITH AIRTIGHT SEAMS AND CONNECTIONS TO THE EQUIPMENT.

AIR FILTERS:

FILTERS SHALL BE 1" FIBERGLASS MEDIA THROW AWAY TYPE IN A RIGID FRAME WITH A SUPPORTING MAZE ACROSS BOTH ENTERING AND LEAVING SURFACES. SUPPLY ONE COMPLETE SET OF FILTERS AFTER OWNER'S FINAL ACCEPTANCE. FARR 30/30 OR EQUAL.

CONDENSING UNIT INSTALLATION:

PROVIDE CONCRETE PADS FOR GRADE MOUNTED CONDENSING UNITS. PADS SHALL BE A MINIMUM OF 4" THICK, 3,000 PSI CONCRETE, AND SHALL BE 4" LARGER ON EACH SIDE THAN THE FOOTPRINT OF THE CONDENSING UNIT. VERIFY UNIT DIMENSIONS WITH APPROVED SHOP DRAWINGS PRIOR TO FABRICATION OF PADS.

SUSPENDED UNITS SHALL BE SUPPORTED IN APPROVED MANNER AND IN ACCORDANCE WITH AIR HANDLING UNIT SUPPORT DETAIL. PROVIDE AUXILIARY OVERFLOW DRAIN PAN WITH FLOAT SWITCH WHERE REQUIRED.

ALL AIR HANDLING UNITS AND CONDENSING UNITS SHALL BE INSTALLED WITH MANUFACTURER REQUIRED MINIMUM MAINTENANCE CLEARANCES. PROVIDE MAN SIZED ACCESS PANEL WHERE REQUIRED.

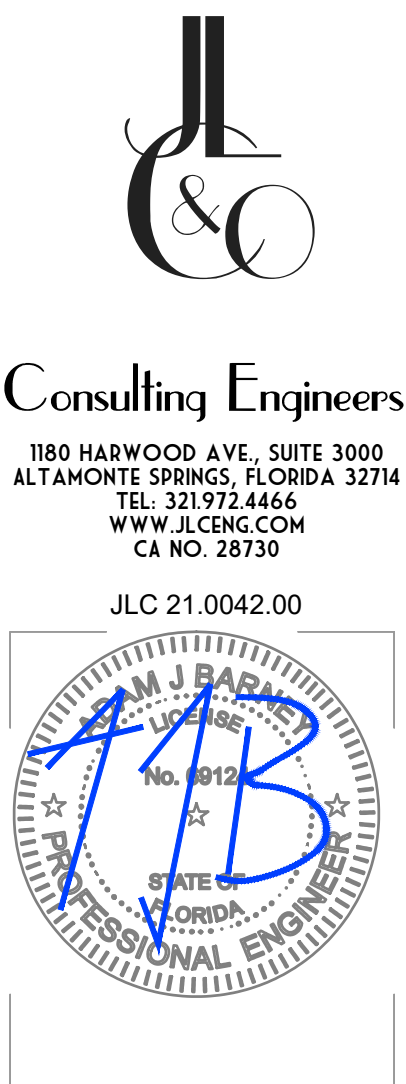
FIRE / SMOKE / RADIATION DAMPERS:

FIRE DAMPERS SHALL BE TYPE "B" CURTAIN TYPE, SUITABLE FOR EITHER VERTICAL OR HORIZONTAL INSTALLATION WITH 20 GAUGE STEEL CHANNEL FRAMES, 24 GAUGE STEEL BLADES, AND 18 GAUGE STEEL ENCLOSURE WITH DUCT COLLARS. ALL PARTS GALVANIZED MILL FINISH.

FIRE DAMPERS SHALL BE EQUAL TO RUSKIN TYPE 1802 FOR WALLS UP TO 2 HOUR.

INSTALL IN ACCORDANCE WITH NFPA-90A, TESTED IN ACCORDANCE WITH UL SAFETY STANDARD 555, 1-1/2 HOUR AND 4 HOUR PROTECTION, AND 165F FUSIBLE LINK.

MEMBRANE PENETRATIONS = RADIATION OR FIRE DAMPERS SHALL BE INSTALLED ON ANY DUCTWORK 6" IN DIAMETER OR LARGER PENETRATING A RATED CEILING MEMBRANE.



Quantity	System Type & Description
1	AHU-1.5 (Single Zone): Heating: 1 each - Unit Heater, Electric, Capacity = 25598 kWh No minimum efficiency requirement applies Cooling: 1 each - Split System, Capacity = 56750 kWh, Air-Cooled Condenser, Air Economizer Proposed Efficiency = 11.20 EER, Required Efficiency: 9.70 EER + 11.2 IEE Fan System: None
1	OAU-1 (Single Zone): Heating: 1 each - Other, Gas, Capacity = 240000 kWh No minimum efficiency requirement applies Cooling: 1 each - Other, Capacity = 334047 kWh, Air-Cooled Condenser, Air Economizer No minimum efficiency requirement applies Fan System: None
1	OAU-2 (Single Zone): Heating: 1 each - Other, Gas, Capacity = 240000 kWh No minimum efficiency requirement applies Cooling: 1 each - Other, Capacity = 175365 kWh, Air-Cooled Condenser, Air Economizer No minimum efficiency requirement applies Fan System: None
1	MAU-1.1 (Single Zone): Cooling: 1 each - Room AC With Louvered Sides, Capacity = 18000 kWh, Air-Cooled Condenser, Air Economizer Proposed Efficiency = 15.30 CEER, Required Efficiency: 9.00 CEER Fan System: None
1	MAU-1.2 (Single Zone): Cooling: 1 each - Room AC With Louvered Sides, Capacity = 18000 kWh, Air-Cooled Condenser, Air Economizer Proposed Efficiency = 15.30 CEER, Required Efficiency: 9.00 CEER Fan System: None
1	MAU-1.3 (Single Zone): Cooling: 1 each - Room AC With Louvered Sides, Capacity = 34200 kWh, Air-Cooled Condenser, Air Economizer Proposed Efficiency = 15.30 CEER, Required Efficiency: 9.00 CEER Fan System: None
1	MAU-3.1 (Single Zone): Cooling: 1 each - Room AC With Louvered Sides, Capacity = 18000 kWh, Air-Cooled Condenser, Air Economizer Proposed Efficiency = 15.30 CEER, Required Efficiency: 9.00 CEER Fan System: None
1	Gas Water Heaters: Gas Storage Water Heater, Capacity: 100 gallons, Input Rating: 75 kWh w/ Circulation Pump Proposed Efficiency: 0.92 UEF, Required Efficiency: 0.78 UEF

Mechanical Compliance Statement

Compliance Statement: The proposed mechanical design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed mechanical systems have been designed to meet the 2020 Florida Building Code, Energy Conservation requirements in COMcheck Version COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Adam Barney, P.E. 02/24/2022
Name - Title Signature Date

Project Title: Towneplace Suites Hotel - Lake City Report date: 02/24/22
Data filename: Page 7 of 23

COMcheck Software Version COMcheckWeb	
Mechanical Compliance Certificate	
Project Information	
Energy Code:	2020 Florida Building Code, Energy Conservation
Project Title:	Towneplace Suites Hotel - Lake City
Location:	Lake City, Florida
Climate Zone:	2a
Project Type:	New Construction
Additional Efficiency Package(s)	
Credits: 1.0 Required 1.0 Proposed Dedicated Outdoor Air System, 1.0 credit	
Mechanical Systems List	
Quantity	System Type & Description
102	PTACs (Single Zone): Heating: 102 each - Unit Heater, Electric, Capacity = 10580 kWh No minimum efficiency requirement applies Cooling: 102 each - Room AC Heat Pump With Louvered Sides, Capacity = 9600 kWh, Air-Cooled Condenser, No Economizer, Economizer exception: None Proposed Efficiency = 14.00 CEER, Required Efficiency: 9.30 CEER Fan System: None
1	AHU-1.1 (Single Zone): Heating: 1 each - Unit Heater, Electric, Capacity = 20478 kWh No minimum efficiency requirement applies Cooling: 1 each - Split System, Capacity = 47500 kWh, Air-Cooled Condenser, Air Economizer Proposed Efficiency = 11.20 EER, Required Efficiency: 9.70 EER + 11.2 IEE Fan System: None
1	AHU-1.2 (Single Zone): Heating: 1 each - Unit Heater, Electric, Capacity = 25598 kWh No minimum efficiency requirement applies Cooling: 1 each - Split System, Capacity = 28800 kWh, Air-Cooled Condenser, Air Economizer Proposed Efficiency = 11.20 EER, Required Efficiency: 9.70 EER + 11.2 IEE Fan System: None
1	AHU-1.3 (Single Zone): Heating: 1 each - Unit Heater, Electric, Capacity = 12969 kWh No minimum efficiency requirement applies Cooling: 1 each - Split System, Capacity = 42000 kWh, Air-Cooled Condenser, Air Economizer Proposed Efficiency = 11.20 EER, Required Efficiency: 9.70 EER + 11.2 IEE Fan System: None
1	AHU-1.4 (Single Zone): Heating: 1 each - Unit Heater, Electric, Capacity = 20478 kWh No minimum efficiency requirement applies Cooling: 1 each - Split System, Capacity = 42000 kWh, Air-Cooled Condenser, Air Economizer Proposed Efficiency = 11.20 EER, Required Efficiency: 9.70 EER + 11.2 IEE Fan System: None

Project Title: Towneplace Suites Hotel - Lake City Report date: 02/24/22
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COMcheck Software Version COMcheckWeb	
Exterior Lighting Compliance Certificate	
Project Information	
Energy Code:	2020 Florida Building Code, Energy Conservation
Project Title:	Towneplace Suites Hotel - Lake City
Project Type:	New Construction
Exterior Lighting Zone	1 (Developed rural area (L21))
Allowed Exterior Lighting Power	
Area/Surface Category	B Quantity C Allowed Watts / D Tradable Wattage E Allowed Watts (B X C)
Pedestrian and vehicular entrances and exits	1 ft of door 14 Yes 14
Total Tradable Watts (a) = 14	
Total Allowed Watts = 14	
Total Allowed Supplemental Watts (b) = 350	
(a) Wattage tradeoffs are only allowed between tradable areas/surfaces.	
(b) A supplemental allowance equal to 350 watts may be applied toward compliance of both non-tradable and tradable areas/surfaces.	
Proposed Exterior Lighting Power	
Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture C # of Fixture D Fixture Watt. E (C X D)
Pedestrian and vehicular entrances and exits (1 ft of door width): Tradable Wattage	
Fixture W1: Other: 1 11 30 330	
Total Tradable Proposed Watts = 330	
Exterior Lighting PASSES: Design 9% better than code	
Exterior Lighting Compliance Statement	
Compliance Statement: The proposed exterior lighting design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed exterior lighting systems have been designed to meet the 2020 Florida Building Code, Energy Conservation requirements in COMcheck Version COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.	
Blake Suddeth, P.E. 02/24/2022 Name - Title Signature Date	

Project Title: Towneplace Suites Hotel - Lake City Report date: 02/24/22
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Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixture	D Fixture Watt.	E (C X D)
Fixture D1: LED Other Fixture Unit 25W:	1	7	20	140
Fixture D2: LED Other Fixture Unit 25W:	1	16	30	480
Fixture J: LED Other Fixture Unit 25W:	1	8	20	160
Guestroom Fixtures: LED Other Fixture Unit 25W:	1	92	30	2760
3-3rd Floor (Common Space Types:Guest Room)	1	2	40	80
Fixture C: LED Other Fixture Unit 25W:	1	7	20	140
Fixture D1: LED Other Fixture Unit 25W:	1	16	30	480
Fixture D2: LED Other Fixture Unit 25W:	1	8	20	160
Guestroom Fixtures: LED Other Fixture Unit 25W:	1	92	30	2760
4-4th Floor (Common Space Types:Guest Room)	1	2	40	80
Fixture C: LED Other Fixture Unit 25W:	1	7	20	140
Fixture D1: LED Other Fixture Unit 25W:	1	16	30	480
Fixture D2: LED Other Fixture Unit 25W:	1	8	20	160
Guestroom Fixtures: LED Other Fixture Unit 25W:	1	92	30	2760
5-5th Floor (Common Space Types:Guest Room)	1	2	40	80
Fixture C: LED Other Fixture Unit 25W:	1	7	20	140
Fixture D1: LED Other Fixture Unit 25W:	1	16	30	480
Fixture D2: LED Other Fixture Unit 25W:	1	8	20	160
Guestroom Fixtures: LED Other Fixture Unit 25W:	1	92	30	2760
Total Proposed Watts =				21002

Interior Lighting PASSES: Design 60% better than code

Interior Lighting Compliance Statement

Compliance Statement: The proposed interior lighting design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed interior lighting systems have been designed to meet the 2020 Florida Building Code, Energy Conservation requirements in COMcheck Version COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Blake Suddeth, P.E. 02/24/2022
Name - Title Signature Date

Project Title: Towneplace Suites Hotel - Lake City Report date: 02/24/22
Data filename: Page 4 of 23



COMcheck Software Version COMcheckWeb

Interior Lighting Compliance Certificate

Project Information

Energy Code: 2020 Florida Building Code, Energy Conservation
Project Title: Towneplace Suites Hotel - Lake City
Project Type: New Construction

Construction Site: NW Commerce Drive, Lake City FL
 Lake City, Florida

Owner/Agent: Nick Patel
 Lake City Hotels Inc.

Designer/Contractor: Adam J. Barney
 JLC Engineering
 1180 Harwood Avenue
 Suite 3000
 Altamonte Springs 32714
 321.972.4466
 adam.barney@iceng.com

Additional Efficiency Package(s)

Credits: 1.0 Required 1.0 Proposed
 Dedicated Outdoor Air System, 1.0 credit

Allowed Interior Lighting Power

Area Category	B Floor Area (ft ²)	C Allowed Watts / ft ²	D Allowed Watts
1-1st Floor (Hotel:Hotel Lobby)	13369	1.08	14171
2-2nd Floor (Common Space Types:Guest Room)	12463	0.77	9597
3-3rd Floor (Common Space Types:Guest Room)	12463	0.77	9597
4-4th Floor (Common Space Types:Guest Room)	12463	0.77	9597
5-5th Floor (Common Space Types:Guest Room)	12463	0.77	9597
Total Allowed Watts =			52557

Proposed Interior Lighting Power

Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixture	D Fixture Watt.	E (C X D)
1-1st Floor (Hotel:Hotel Lobby)				
Fixture A: LED Other Fixture Unit 25W:	1	21	52	1092
Fixture B: LED Other Fixture Unit 25W:	1	2	30	60
Fixture C: LED Other Fixture Unit 25W:	1	42	40	1680
Fixture D1: LED Other Fixture Unit 25W:	1	81	20	1620
Fixture D2: LED Other Fixture Unit 25W:	1	10	30	300
Fixture G: LED Other Fixture Unit 25W:	1	6	15	90
Fixture H: LED Other Fixture Unit 25W:	1	2	35	70
Fixture I: LED Other Fixture Unit 25W:	1	8	20	160
Fixture P1: LED Other Fixture Unit 25W:	1	1	100	100
Fixture P2: LED Other Fixture Unit 25W:	1	2	50	100
Fixture P3: LED Other Fixture Unit 25W:	1	1	50	50
Guestroom Fixtures: LED Other Fixture Unit 25W:	1	40	30	1200
2-2nd Floor (Common Space Types:Guest Room)				
Fixture C: LED Other Fixture Unit 25W:	1	2	40	80

Project Title: Towneplace Suites Hotel - Lake City Report date: 02/24/22
Data filename: Page 3 of 23

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Proposed U-Factor	Budget U-Factor _w
SOUTH					
South Wall: Concrete Block 8", Partially Grouted, Cells Empty, Medium Density, Furring Metal, [Bldg. Use 1 - Hotel]	3826	0.0	11.0	0.070	0.151
Windows: Vinyl/Fiberglass Frame/Fixed, Perf. Specs.: Product ID Product Label, SHGC 0.40, PF 0.50, [Bldg. Use 1 - Hotel] (c)	708	—	—	0.400	0.500
Doors: Glass (> 50% glazing)/Metal Frame, Entrance Door, Perf. Specs.: Product ID Product Label, SHGC 0.25, PF 0.40, [Bldg. Use 1 - Hotel] (c)	21	—	—	0.300	0.830
WEST					
West Wall: Concrete Block 8", Partially Grouted, Cells Empty, Medium Density, Furring Metal, [Bldg. Use 1 - Hotel]	11375	0.0	11.0	0.070	0.151
Windows: Vinyl/Fiberglass Frame/Fixed, Perf. Specs.: Product ID Product Label, SHGC 0.40, PF 0.50, [Bldg. Use 1 - Hotel] (c)	1460	—	—	0.400	0.500
Doors: Glass (> 50% glazing)/Metal Frame, Entrance Door, Perf. Specs.: Product ID Product Label, SHGC 0.25, PF 0.40, [Bldg. Use 1 - Hotel] (c)	84	—	—	0.300	0.830
(a) Budget U-factors are used for software baseline calculations ONLY, and are not code requirements.					
(b) Other components require supporting documentation for proposed U-factors.					
(c) Fenestration product performance must be certified in accordance with NFRC and requires supporting documentation.					
(d) Slab-On-Grade proposed and budget U-factors shown in table are F-factors.					
Envelope PASSES: Design 10% better than code					
Envelope Compliance Statement					
Compliance Statement: The proposed envelope design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed envelope systems have been designed to meet the 2020 Florida Building Code, Energy Conservation requirements in COMcheck Version COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.					
Adam Barney, P.E. 02/24/2022 Name - Title Signature Date					

Project Title: Towneplace Suites Hotel - Lake City Report date: 02/24/22
Data filename: Page 2 of 23



COMcheck Software Version

COMcheckWeb

Envelope Compliance Certificate

Project Information

Energy Code:

2020 Florida Building Code, Energy Conservation

Project Title:

Towneplace Suites Hotel - Lake City

Location:

Lake City, Florida

Climate Zone:

2a

Project Type:

New Construction

Vertical Glazing / Wall Area:

16%

Construction Site:

NW Commerce Drive, Lake City FL
Lake City, Florida

Owner/Agent:

Nick Paley
Lake City Hotels Inc.

Designer/Contractor:

AJG, J. Barney
JLC Engineering
1180 Harwood Avenue
Suite 3000
Altamonte Springs 32714
321.972.4466
adam.barney@jlceng.com

Additional Efficiency Package(s)

Credits: 1.0 Required 1.0 Proposed
Dedicated Outdoor Air System, 1.0 credit

Building Area

1-Hotel : Nonresidential

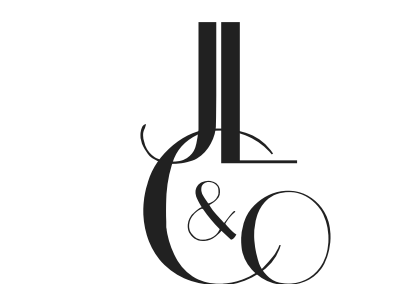
Floor Area

63221

Envelope Assemblies

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Proposed U-Factor	Budget U-Factor _w
Roof: Other Roof, [Bldg. Use 1 - Hotel] (b)	12463	—	—	0.080	0.027
Ground Floor: Slab-On-Grade/Unheated, [Bldg. Use 1 - Hotel] (d)	590	—	—	0.730	0.730
2nd Floor: Steel joist, [Bldg. Use 1 - Hotel]	12463	0.0	13.0	0.083	0.033
3rd Floor: Steel joist, [Bldg. Use 1 - Hotel]	12463	0.0	13.0	0.083	0.033
4th Floor: Steel joist, [Bldg. Use 1 - Hotel]	12463	0.0	13.0	0.083	0.033
NORTH					
North Wall: Concrete Block 8", Partially Grouted, Cells Empty, Medium Density, Furring Metal, [Bldg. Use 1 - Hotel]	3826	0.0	11.0	0.070	0.151
Windows: Vinyl/Fiberglass Frame/Fixed, Perf. Specs.: Product ID Product Label, SHGC 0.40, PF 0.50, [Bldg. Use 1 - Hotel] (c)	708	—	—	0.400	0.500
Doors: Glass (> 50% glazing)/Metal Frame, Entrance Door, Perf. Specs.: Product ID Product Label, SHGC 0.25, PF 0.40, [Bldg. Use 1 - Hotel] (c)	21	—	—	0.300	0.830
EAST					
East Wall: Concrete Block 8", Partially Grouted, Cells Empty, Medium Density, Furring Metal, [Bldg. Use 1 - Hotel]	11375	0.0	11.0	0.070	0.151
Windows: Vinyl/Fiberglass Frame/Fixed, Perf. Specs.: Product ID Product Label, SHGC 0.40, PF 0.50, [Bldg. Use 1 - Hotel] (c)	1699	—	—	0.400	0.500
Doors: Glass (> 50% glazing)/Metal Frame, Entrance Door, Perf. Specs.: Product ID Product Label, SHGC 0.25, PF 0.40, [Bldg. Use 1 - Hotel] (c)	63	—	—	0.300	0.830

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