

REFRIGERANT PIPING DIAGRAM

CONDENSING UNIT SCHEDULE (EXISTING)

SYMBOL	CARRIER MODEL	NOMINAL CAPACITY	ELECTRICAL DATA			NOTES
			MCA	MOP	VOLTAGE	
CU-1	24ABB348A360	4T	24.3	40	208V/1Ø	1,2,3
CU-2	24ABB348A360	4T	24.3	40	208V/1Ø	1,2,3
CU-3	24ABB336A350	3T	18.1	30	208V/1Ø	1,2,3
CU-4	24ABB324A350	2T	14.3	25	208V/1Ø	1,2,3
CU-5	24ABB324A350	2T	14.3	25	208V/1Ø	1,2,3
CU-6	24ABB348A360	4T	24.3	40	208V/1Ø	1,2,3

NOTES:
1. PROVIDE WITH DISCONNECT.
2. PROVIDE REFRIGERANT LINES BASED ON MANUFACTURERS RECOMMENDED SIZES. LINE LENGTH AND UNIT ORIENTATION SHALL BE TAKEN INTO ACCOUNT. FURNISH AND INSTALL ALL REQUIRED CONTROLS FOR REQUIRED SEQUENCE OF OPERATION.
3. PROVIDE NEW HOT GAS BYPASS KIT (RAWAL VALVE AS APPROVED BY CARRIER) FOR EXISTING CONDENSING UNIT.

FURNACE UNIT SCHEDULE (EXISTING)

SYMBOL	CARRIER MODEL	NOM. CFM	O.A. CFM	ESP (IN)	HP	COOLING		HEATING DATA		ELECTRICAL DATA		NOTES
						TOTAL MBH	FUEL	MBH IN	MBH OUT	MFS	VOLTAGE	
GF-1	59SP5A100E211220	1600	275	.80	1.0	48.0	LP	100.0	97.0	20A	120V/1Ø	1,2,3,4
GF-2	59SP5A100E211220	1600	275	.80	1.0	48.0	LP	100.0	97.0	20A	120V/1Ø	1,2,3,4
GF-3	59SP5A080E171216	1200	200	.80	3/4	3T	LP	80.0	78.0	15A	120V/1Ø	1,2,3
GF-4	59SP5A040E141210	800	50	.80	1/2	2T	LP	40.0	39.0	15A	120V/1Ø	1,2,3
GF-5	59SP5A080E171214	800	125	.80	3/4	2T	LP	60.0	58.0	15A	120V/1Ø	1,2,3
GF-6	59SP5A100E211220	1600	200	.80	1.0	48.0	LP	100.0	97.0	20A	120V/1Ø	1,2,3

NOTES:
1. PROVIDE WITH DISCONNECT. REFER TO ELECTRICAL PLANS FOR RATINGS AND COORDINATE WITH E.C.
2. PROVIDE WITH CONCENTRIC VENT TERMINATION KIT.
3. PROVIDE WITH CASED COOLING COIL, FILTER RACK, AND CONDENSATE NEUTRALIZATION KIT.
4. PROVIDE WITH ZONE DAMPERS, BYPASS DAMPER, SPACE SENSORS & ALL ASSOCIATED CONTROLS.

ENERGY RECOVERY VENTILATOR SCHEDULE (BASED ON LOSSNAY)

SYMBOL	LOCATION	MODEL	DESIGN CONDITIONS				OUTDOOR AIR PERFORMANCE			EXHAUST AIR PERFORMANCE			TEMPERATURE RECOVERY EFFICIENCY		ELECTRICAL DATA			APPROX. WEIGHT (LBS)	NOTES
			SUMMER		WINTER		CFM	ESP	HP	CFM	ESP	HP	(FAN SPEED LOW-MED-HIGH-EXTRA-HIGH)	MCA	MCA	VOLTAGE			
			OUTDOOR	INDOOR	OUTDOOR	INDOOR													
ERV-1	ATTIC	LGH-F600RX5-E1	95.0/78.0	75.0/50	0.0/-1.5	70.0/35.0	525	.56	.5	525	.56	.5	80-75-68-67%	3.6	15	208V/1Ø	175	1,2,3	
ERV-2	ATTIC	LGH-F600RX5-E1	95.0/78.0	75.0/50	0.0/-1.5	70.0/35.0	600	.56	.5	600	.56	.5	80-75-68-67%	3.6	15	208V/1Ø	175	1,2,3	

NOTES:
1. PROVIDE WITH DISCONNECTS. REFER TO ELECTRICAL DRAWINGS FOR RATINGS & COORDINATE WITH E.C.
2. PROVIDE WITH PZ-60DR LOSSNAY STAND ALONE CONTROLLER. ON/OFF, FAN SPEED & VENT MODE (HEAT RECOVERY, BYPASS AUTO), MOTORIZED DAMPERS AND DUCT CONNECTING FLANGES.
3. PROVIDE WITH 2 COMPLETE SETS OF WASHABLE AIR FILTERS

DIFFUSER, REGISTER & GRILLE SCHEDULE (BASED ON PRICE)

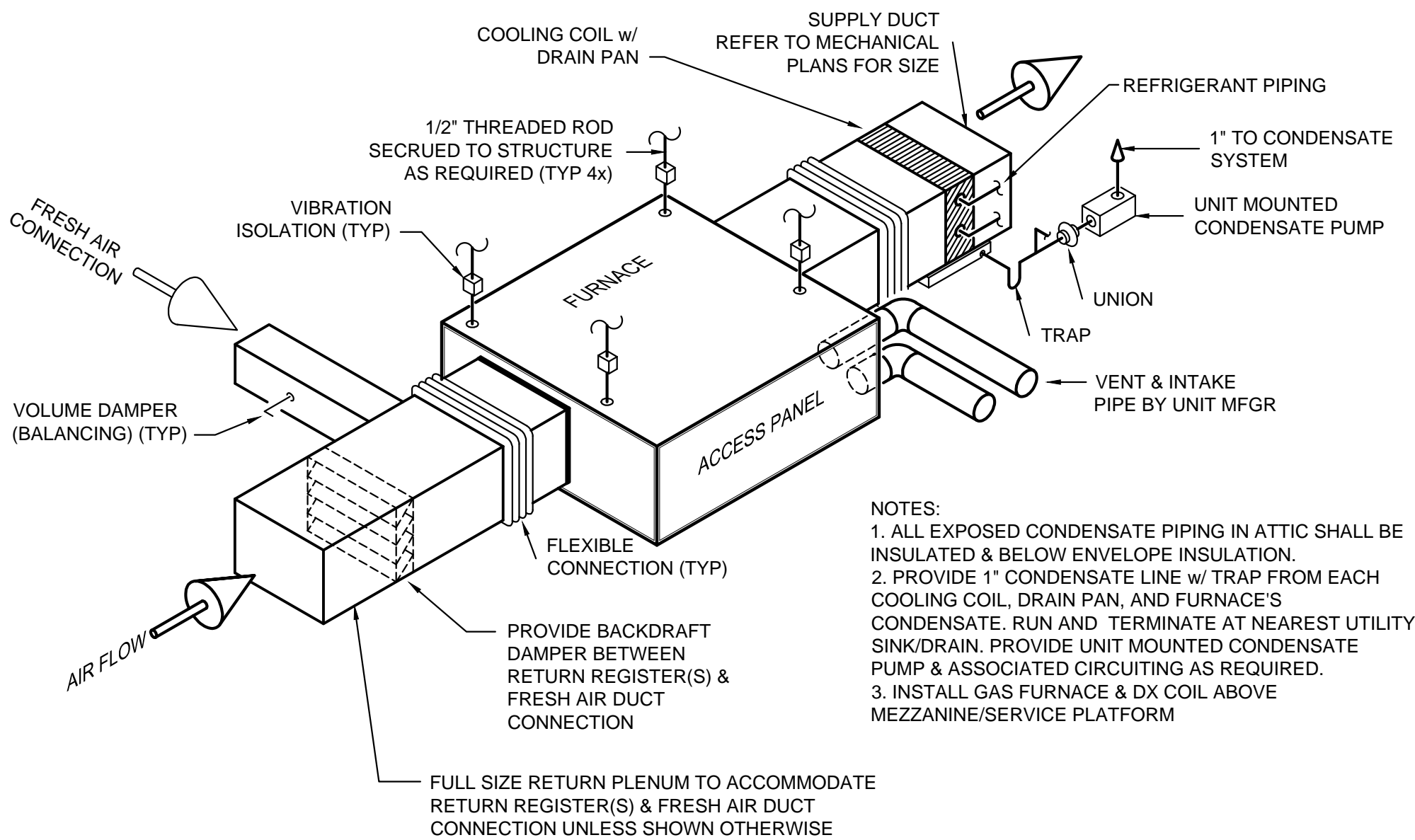
SYMBOL	MODEL	THROW	CFM	SIZE	NOTES
S-1	AMDA	4W	50-100	6x6	1,2
S-2	AMDA	4W	100-250	9x9	1,2
S-3	AMDA	4W	275-450	12x12	1,2
S-4	MSRRP (SECURITY)	-	50	6x6	3,4
S-5	MSRRCD (SECURITY)	4W	100	8x8	3,4
S-5	MSRRCD (SECURITY)	4W	200	9x9	3,4
R-1	635DAL	-	130-150	12x6	1,2
R-2	635DAL	-	175-200	12x8	1,2
R-3	635DAL	-	250-300	14x10	1,2
R-4	635DAL	-	325-400	14x12	1,2
R-5	635DAL	-	500-600	18x14	1,2
R-6	MSRRP (SECURITY)	-	100	6x6	1,3
R-7	MSRRP (SECURITY)	-	600	16x16	1,3,5
E-1	635DAL	-	75-100	8x6	1,2
E-2	635DAL	-	150	12x6	1,2
E-3	635DAL	-	250	12x10	1,2
E-4	635DAL	-	600	24x12	1,2
E-5	MSRRP (SECURITY)	-	75	6x6	1,3
E-6	MSRRP (SECURITY)	-	250	10x10	1,3,5

NOTES:
1. PROVIDE OPPOSED BLADE DAMPERS & RADIATION DAMPERS (RADIATION DAMPER TO PROTECT PENETRATION RATING AT CEILING MEMBRANE) ON ALL REGISTERS, GRILLES & DIFFUSERS. RGD COLOR SELECTION TO BE APPROVED BY ARCHITECT.
2. PROVIDE AUXILIARY PANELS FOR ALL REGISTERS & DIFFUSERS IN T-BAR CEILING GRID SYSTEMS & PLASTER FRAME TYPE FOR HARD CEILINGS. PROVIDE SQUARE TO ROUND TRANSITIONS AS NECESSARY.
3. ALL REGISTER, GRILLES & DIFFUSERS IN SECURE AREAS SHALL BE SECURITY GRADE WITH TAMPERPROOF HARDWARE & FASTENERS. TRANSITION DUCTWORK AS NECESSARY. SECURELY SUPPORT RGD'S TO BUILDING STRUCTURE. PROVIDE MOUNTING SUPPORTS FROM BUILDING STRUCTURE TO ACCOMMODATE CEILING MOUNTED INSTALLATIONS. ALL SUPPORTS TO BE REVIEWED AND APPROVED BY ARCHITECT.
4. PROVIDE MOUNTING FRAME ANGLE WITH FIELD BOLTING
5. PROVIDE RGD WITH BARRIER BARS

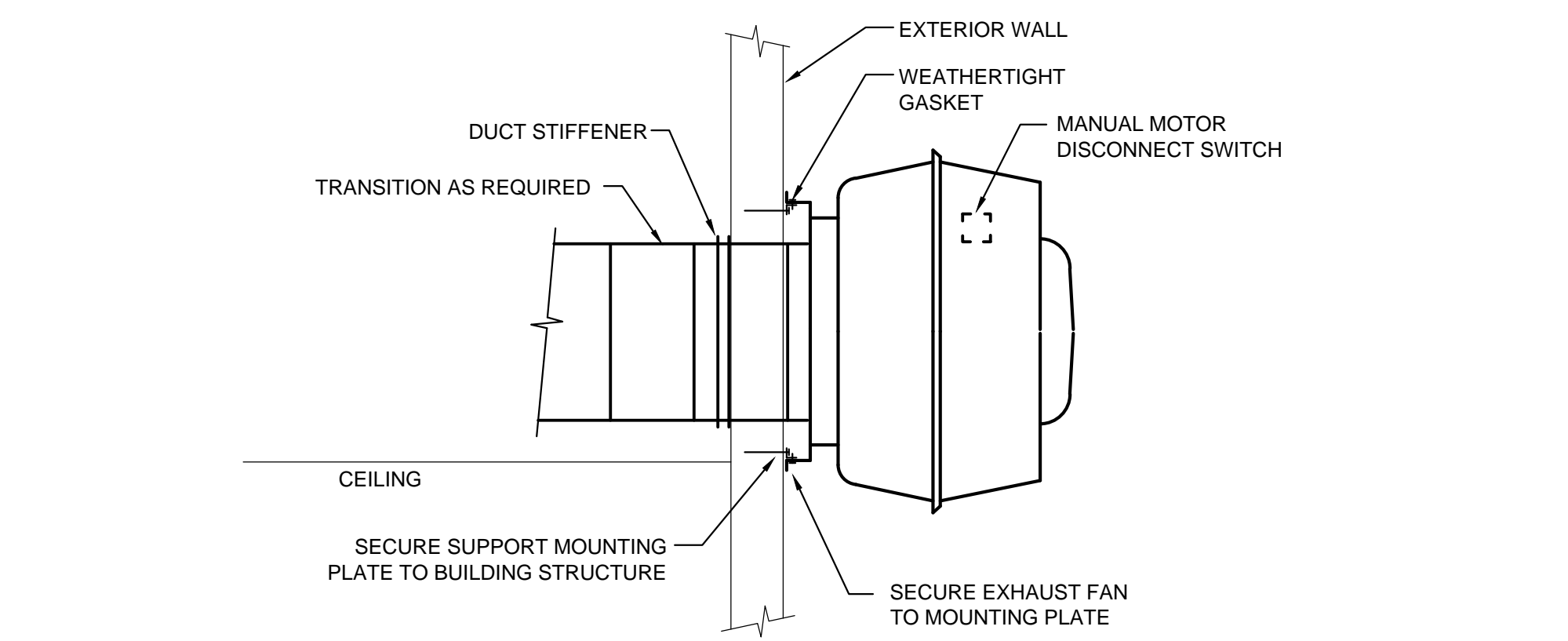
SPLIT SYSTEM SCHEDULE (EXISTING)

SYMBOL	CARRIER MODEL	CFM	TOTAL COOLING CAPACITY MBH	ELECTRICAL DATA			NOTES
				MCA	VOLTAGE	MFS	
AC-1.2	40MAQB24B	870	5.5 - 24.0	.4	208V/1Ø	30	1,2,3,4,5,6
SYMBOL	CARRIER MODEL	FAN MOTOR FLA	COMP RLA	ELECTRICAL DATA		NOTES	
ACCU-1.2	38MAQB24R	.5	14.0	20	208V/1Ø		1,4,5,6,7,8

NOTES:
1. PROVIDE DISCONNECTS. REFER TO ELECTRICAL PLANS FOR RATINGS & COORDINATE WITH E.C.
2. PROVIDE LOW AMBIENT CONTROLS & CONDENSATE PUMP. CONTRACTOR TO RUN & TERMINATE 1" CONDENSATE AT OPEN END DRAIN / FLOOR DRAIN.
3. PROVIDE WATER LIMIT FLOAT SWITCH IN DRAIN PAN IN LIEU OF SECONDARY DRAIN PAN.
4. PROVIDE PROGRAMMABLE THERMOSTAT
5. PROVIDE REFRIGERANT LINES BASED ON MANUFACTURERS RECOMMENDED SIZES. LINE LENGTH AND UNIT ORIENTATION SHALL BE TAKEN INTO ACCOUNT.
6. INDOOR UNITS RECEIVE POWER FROM OUTDOOR UNIT THROUGH FIELD-SUPPLIED INTERCONNECTED WIRING.
7. PROVIDE 1 PIECE WIND BAFFLE WB-PA1 AND INVERTER-DRIVEN COMPRESSOR.
8. PROVIDE WALL MOUNTING SUPPORTS PER EQUIPMENT MFG'S REQUIREMENTS.



TYPICAL GAS FURNACE UNIT DETAIL



TYPICAL WALL EXHAUST FAN DETAIL

ELECTRIC HEATER SCHEDULE (BASED ON QMARK)

SYMBOL	LOCATION	MODEL	TYPE	KW	BTUH	ELECTRICAL DATA		NOTES
						AMPS	VOLTAGE	
EH-1	TLT 108	CWH1101DSAF	WALL	.50	1706	4.2	120V/1Ø	1,2,3

NOTES:
1. PROVIDE WITH DISCONNECT.
2. PROVIDE UNIT MOUNTED THERMOSTAT.
3. PROVIDE WITH 2" SEMI-RECESS MOUNTING FRAME.

DEHUMIDIFIER UNIT SCHEDULE

SYMBOL	MFG	MODEL	TOTAL CFM	MAX ESP	WATER REMOVAL	ELECTRICAL DATA		NOTES
						CURRENT DRAW	VOLTAGE	
DH-1	ULTRA-AIRE	70H	130	.4"	70 PINTS/DAY	5.3 AMPS	120V/1Ø	1
DH-2	ULTRA-AIRE	70H	130	.4"	70 PINTS/DAY	5.3 AMPS	120V/1Ø	1
DH-3	ULTRA-AIRE	MD33	155	0.0"	33 PINTS/DAY	2.8 AMPS	120V/1Ø	2
DH-4	ULTRA-AIRE	MD33	155	0.0"	33 PINTS/DAY	2.8 AMPS	120V/1Ø	2

NOTES:
1. PROVIDE WITH SPACE HUMIDISTAT, HANGING KIT, CONDENSATE PUMP KIT WITH UNIT INTERLOCK & CONTROL, DEH 3000R DIGITAL CONTROL W/ HUMIDITY SENSOR, TRANSFORMERS, DEFROST KIT & MERV 13 FILTER (4-PACK) AIR FILTER.
2. PROVIDE WITH SURFACE MOUNTING KIT, CONDENSATE PUMP KIT WITH UNIT INTERLOCK & CONTROL, UNIT CONTROLLER W/ HUMIDITY SENSOR, TAMPERPROOF SCREWS, DEFROST KIT, TRANSFORMERS & WASHABLE FILTER.

EXHAUST FAN SCHEDULE

SYMBOL	MFG	SERVES	MODEL	TYPE	DRIVE	CFM	ESP (IN)	MOTOR DATA		NOTES
								POWER	VOLTAGE	
EF-1	GREENHECK	GARAGE	CUE-090VG	WALL	DIRECT	600	.30	1/10	120V/1Ø	1,2
EF-2	GREENHECK	PURGE	CUE-095VG	WALL	DIRECT	500	.75	1/6	120V/1Ø	1,2
EF-3	PANASONIC	TLT	FV-051VKS2	CEILING	DIRECT	75	.25	20.0 W	120V/1Ø	1,3,4,5
EF-4	PANASONIC	TLT	FV-051VKS2	CEILING	DIRECT	75	.25	20.0 W	120V/1Ø	1,3,4,5
EF-5	PANASONIC	TLT	FV-051VKS2	CEILING	DIRECT	75	.25	20.0 W	120V/1Ø	1,3,4

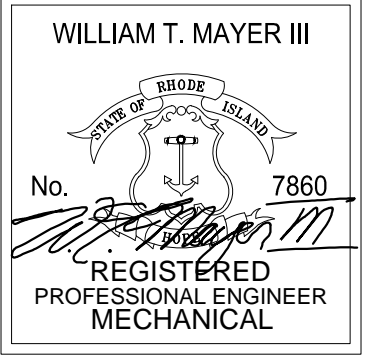
NOTES:
1. PROVIDE VARI-GREEN EC MOTOR & DISCONNECT. REFER TO ELECTRICAL PLANS FOR RATINGS & COORDINATE WITH E.C.
2. PROVIDE WITH MOTORIZED BACKDRAFT DAMPER, DIAL FOR BALANCING CONTROL, SIDEWALL MOUNTING BRACKET & SINGLE POINT WIRING
3. PROVIDE WITH BACKDRAFT DAMPER, BUILT-IN MULTI-SPEED WITH TIME DELAY, UNIT MTD SPEED CONTROL & ROOF CAP (RUN 6"Ø DUCT TO ROOF CAP). FAN TO BE CONTROLLED BY A WALL MOUNTED SWITCH.
4. PROVIDE WITH CEILING RADIATION DAMPER
5. REMOVE EXISTING EXHAUST FAN & REPLACE WITH NEW.

GAS FIRED UNIT HEATER SCHEDULE (BASED ON REZNOR)

SYMBOL	MODEL	CFM	HEATING DATA		FLA	MOC	VOLTAGE	NOTES
			FUEL	INPUT MBH				
GUH-1	UDAS	960	LP	75.0	62.5	3.3	15	115V/1Ø

NOTES:
1. PROVIDE WITH PROGRAMMABLE THERMOSTAT, ADJUSTABLE DISCHARGE LOUVERS, TRANSFORMER FOR 24 VOLT CONTROL, DISCONNECT SWITCH & HORIZONTAL VENT/INTAKE TERMINATION & CONCENTRIC ADAPTOR.

CERTIFICATION :



THIS DRAWING IS A PART OF AN INTEGRATED SET OF CONSTRUCTION CONTRACT DOCUMENTS. REFER TO ALL DRAWINGS AND SPECIFICATIONS INCLUDING BUT NOT LIMITED TO "GENERAL CONDITIONS" SUMMARY OF WORK", AND ANY APPLICABLE MANUFACTURERS TECHNICAL SPECIFICATIONS.

REFER TO ALL DRAWINGS FOR COMPLETE SCOPE OF WORK.

THIS DRAWING IS NOT TO BE SCALED OR USED AS AN AS-BUILT.

REV. NO.	DATE	DESCRIPTION

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SCITUATE POLICE STATION

SHEET TITLE:
MECHANICAL SCHEDULES & DETAILS

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