

GAS PACKAGE ROOFTOP UNIT SCHEDULE		
GENERAL	TAG	GP-1
	MANUFACTURER	AAON
	MODEL NUMBER	RK-25-3-E0-216
	NOMINAL TONS	25
	ALTITUDE (FT.)	2162
BLOWER	BAROMETRIC PRESSURE	27.66
	APPROX. OPER. WT. (LBS.)	2291
	CFM AT SITE ELEVATION	9000
	OUTSIDE AIR CFM	3020
	ESTIMATED E.S.P. (IN. WC.)	.75
COOLING/HEATING	HP	10
	FILTERS - 4" DISPOSABLE	PROVIDE
	OAT WINTER DB (°F)	25
	FUEL	NAT. GAS
	INPUT (MBTUH)	245.5
ELEC.	OUTPUT (MBTUH)	198.9
	O.A.T. SUMMER DB/WB (DEGREES F)	115/63
	E.A.T. SUMMER DB/WB (DEGREES F)	80/69
	TOTAL CAPACITY (MBTUH)	267.5
	SENSIBLE CAPACITY (MBTUH)	219.6
ACCESS.	VOLT/PHASE/HZ	460/3/60
	FULL LOAD AMPS	59
	STARTERS	INTEGRAL
	DISCONNECT	SEE ELEC.
	FULLY MODULATING ECONOMIZER	PROVIDE
ACCESS.	BAROMETRIC RELIEF DAMPER	PROVIDE
	CRANKCASE HEATER	PROVIDE
	LOW PRESSURE SWITCH	PROVIDE
	HIGH PRESSURE SWITCH	PROVIDE
	FILTER RACK	PROVIDE
ACCESS.	THERMOSTAT & SUBBASE	PROVIDE
	PRE-FAB ROOF CURB (14" HIGH)	PROVIDE
	SMOKE DETECTOR	PROVIDE
	HOT GAS BYPASS	PROVIDE
	NOTES:	
	1. MAXIMUM INSTALLED HEIGHT OF UNITS SHALL NOT EXCEED ADJACENT PARAPET WALL HEIGHT UNLESS APPROVED BY ARCHITECT.	
	2. SUBSTITUTION OF TRANE MODEL NUMBER YCD330A (9000 CFM SUPPLY AIR AND 350.0 MBTUH NATURAL GAS INPUT FOR HEATING) IS PERMITTED.	

AIR DEVICE SCHEDULE												
TAG	MANUFACTURER	MODEL NO.	TYPE	MATERIAL	FRAME STYLE	FACE OR MODULE SIZE	NECK SIZE	ADJUSTABLE AIR PATTERN	O.B.V.D.	MAX. NO. VALUE AT SPECIFIED FLOW RATE	COMMENTS	
D1	TITUS	FL-20-2-33-JT	LINEAR FLOWBAR	ALUMINUM	SURFACE	-	SEE PLAN	PROVIDE	PROVIDE	28	PROVIDE CONCEALED FASTENING AND END CAPS	
D2	TITUS	FL-15-1-11-JT	LINEAR FLOWBAR	ALUMINUM	SURFACE	-	6"(L) x 1 SLOT (W)	PROVIDE	PROVIDE	28	PROVIDE CONCEALED FASTENING AND END CAPS	
D3	TITUS	FL-10-1-11-JT	LINEAR FLOWBAR	ALUMINUM	SURFACE	-	6"(L) X 1 SLOT (W)	PROVIDE	PROVIDE	28	PROVIDE CONCEALED FASTENING AND END CAPS	
D4	TITUS	250-AA	ADJUSTABLE BLADE	ALUMINUM	SURFACE	10"x10"	8"x8"	PROVIDE	PROVIDE	28		
D5	TITUS	250-AA	ADJUSTABLE BLADE	ALUMINUM	SURFACE	14"x14"	12"x12"	PROVIDE	PROVIDE	28		
D6	TITUS	250-AA	ADJUSTABLE BLADE	ALUMINUM	SURFACE	16"x16"	14"x14"	PROVIDE	PROVIDE	28		
D7	TITUS	250-AA	ADJUSTABLE BLADE	ALUMINUM	SURFACE	20"x20"	18"x18"	PROVIDE	PROVIDE	28		
D8	TITUS	MCD	MODULAR CORE	STEEL	SURFACE	11"x11"	6"x6"	PROVIDE	PROVIDE	28		
D9	TITUS	MCD	MODULAR CORE	STEEL	SURFACE	15"x15"	10"x10"	PROVIDE	PROVIDE	28		
D10	TITUS	MCD	MODULAR CORE	STEEL	T-BAR	24"x24"	8"x8"	PROVIDE	PROVIDE	28		
D11	TITUS	MCD	MODULAR CORE	STEEL	T-BAR	24"x24"	10"x10"	PROVIDE	PROVIDE	28		
D12	TITUS	MCD	MODULAR CORE	STEEL	T-BAR	24"x24"	14"x14"	PROVIDE	PROVIDE	28		
D13	TITUS	250-AA	ADJUSTABLE BLADE	ALUMINUM	SURFACE	12"x12"	10"x10"	PROVIDE	PROVIDE	28		
D14	TITUS	250-AA	ADJUSTABLE BLADE	ALUMINUM	SURFACE	8"x8"	6"x6"	PROVIDE	PROVIDE	28		
R1	TITUS	FL-30-2-11-JT	LINEAR FLOWBAR	ALUMINUM	SURFACE	-	14"(L) x 2 SLOTS (W)	-	-	28	PROVIDE CONCEALED FASTENING AND END CAPS	
R2	TITUS	50F	EGGCRATE GRILLE	ALUMINUM	SURFACE	16"x16"	14"x14"	-	-	28	PROVIDE 1/2"x1/2"x1" CORE	
R3	TITUS	50F	EGGCRATE GRILLE	ALUMINUM	SURFACE	14"x14"	12"x12"	-	-	28	PROVIDE 1/2"x1/2"x1" CORE	
R4	TITUS	50F	EGGCRATE GRILLE	ALUMINUM	T-BAR	24"x24"	8"x8"	-	-	28	PROVIDE 1/2"x1/2"x1" CORE	
R5	TITUS	50F	EGGCRATE GRILLE	ALUMINUM	T-BAR	24"x24"	12"x12"	-	-	28	PROVIDE 1/2"x1/2"x1" CORE	
R6	TITUS	50F	EGGCRATE GRILLE	ALUMINUM	T-BAR	24"x24"	14"x14"	-	-	28	PROVIDE 1/2"x1/2"x1" CORE	
R7	TITUS	50F	EGGCRATE GRILLE	ALUMINUM	SURFACE	20"x20"	18"x18"	-	-	28	PROVIDE 1/2"x1/2"x1" CORE	
E1	TITUS	50F	EGGCRATE GRILLE	ALUMINUM	SURFACE	12"x12"	10"x10"	-	-	28	PROVIDE 1/2"x1/2"x1" CORE	
E2	TITUS	50F	EGGCRATE GRILLE	ALUMINUM	SURFACE	14"x14"	12"x12"	-	-	28	PROVIDE 1/2"x1/2"x1" CORE	
E3	TITUS	50F	EGGCRATE GRILLE	ALUMINUM	SURFACE	16"x16"	14"x14"	-	-	28	PROVIDE 1/2"x1/2"x1" CORE	
NOTE: REFER TO HVAC PLAN FOR EXACT CONFIGURATION OF LINEAR FLOWBAR AIR DEVICES.												

HVAC LEGEND		
ABBR.	SYMBOL	DESCRIPTION
SA	⊗	SUPPLY
RA	⊗	RETURN
EXA	⊗	EXHAUST AIR
OA	⊗	OUTSIDE AIR
CA	⊗	COMBUSTION AIR
FD	⊗	FLEXIBLE DUCT
FD	⊗	FUSIBLE LINK FIRE/SMOKE DAMPER (VERTICAL)
SD	⊗	FUSIBLE LINK FIRE/SMOKE DAMPER (HORIZONTAL)
MBD	⊗	DUCT MOUNTED SMOKE DETECTOR
OBVD	⊗	MANUAL BALANCING DAMPER
T-STAT	⊗	OPPOSED BLADE VOLUME DAMPER
RWS	⊗	THERMOSTAT
AD	⊗	ROTARY WALL SWITCH
CFM	⊗	ACCESS DOOR
D	⊗	CUBIC FEET PER MINUTE
E	⊗	SUPPLY AIR DEVICE
P.O.C.	⊗	RETURN AIR DEVICE
	⊗	EXHAUST AIR DEVICE
	⊗	POINT OF CONNECTION

		DIFFUSER/REGISTER/GRILLE TYPE
		CFM QUANTITY
		THROW
		BLANK = 4-WAY
		3W = 3-WAY
		2W = 2-WAY OPPOSED
		2WC = 2-WAY CORNER
		1W = 1-WAY
AIR DEVICE CALLOUT TAG		
NO SCALE		

THERMOSTAT SCHEDULE (24 VOLT)

TAG	GP-1	AC-1
MANUFACTURER	(1)	(1)
HEAT/OFF/COOL/AUTO	PROVIDE	PROVIDE
FAN-AUTO/MANUAL	PROVIDE	PROVIDE
MANUAL CHANGEOVER	-	-
AUTOMATIC CHANGEOVER	PROVIDE	PROVIDE
TRANSFORMER/RELAYS	PROVIDE	PROVIDE
7-DAY PROGRAMMABLE	-	-
LOCKING COVER	PROVIDE	PROVIDE
MOUNTING HEIGHT	48"	48"
REMARKS	(2)	(2)

EVAPORATIVE COOLER SCHEDULE

TAG	EC-1
TYPE	DOWN DISCHARGE
MANUFACTURER	ARCTIC CIRCLE
MODEL NUMBER	ED430
OPERATING WEIGHT (LBS.)	318
CFM AT SITE ELEVATION	2625
ESTIMATED EXTERNAL E.S.P. (IN. WC.)	.3
BLOWER MOTOR HP	1/3
BLOWER MOTOR SPEED	1
VOLTS/PHASE/HERTZ	120/1/60
STARTER	SEE ELEC.
DISCONNECT	SEE ELEC.

GRAVITY VENTILATOR SCHEDULE		
TAG	GV-1	
MANUFACTURER	GREENHECK	
SERVICE	RELIEF	
MODEL NUMBER	GRS-24	
THROAT SIZE	-	
FREE AREA (SQ. FT.)	3.24	
HOOD SIZE	38. 3/4"	
ROOF CURB	PROVIDE	
BACKDRAFT DAMPER	PROVIDE	
BIRDSCREEN	PROVIDE	
INSECT SCREEN	-	

EXHAUST FAN SCHEDULE

TAG	EF-1	EF-2	EF-3	EF-4	EF-5
MANUFACTURER	GREENHECK	GREENHECK	GREENHECK	GREENHECK	GREENHECK
MODEL NUMBER	CUBE -180-5	GB-70-4	GB-70-4	GB-70-4	SP-218
TYPE	UPBLAST	CENTRIFUGAL	CENTRIFUGAL	CENTRIFUGAL	CEILING
OPERATING WEIGHT (LBS.)	153	80	80	80	15
CFM AT SITE ELEVATION	2870	140	140	140	150
ESTIMATED E.S.P. (IN. WC.)	.5	.25	.25	.25	.25
MOTOR H.P. (WATTS)	1/2	1/4	1/4	1/4	(113 WATTS)
VOLTS/PHASE/HERTZ	120/1/60	120/1/60	120/1/60	120/1/60	120/1/60
STARTER TYPE	SEE ELEC.	SEE ELEC.	SEE ELEC.	SEE ELEC.	SEE ELEC.
DISCONNECT	SEE ELEC.	SEE ELEC.	SEE ELEC.	SEE ELEC.	SEE ELEC.
SOUND ATTENUATION	-	-	-	-	-
PRE-FAB ROOF CURB (8" HIGH)	PROVIDE	-	-	-	-
PRE-FAB ROOF CURB (24" HIGH)	-	PROVIDE	-	PROVIDE	-
ROOF/WALL CAP	-	-	PROVIDE	-	PROVIDE
BIRDSCREEN	PROVIDE	PROVIDE	PROVIDE	PROVIDE	PROVIDE
DISCHARGE ARRANGEMENT	-	-	-	-	-
BACKDRAFT DAMPER	PROVIDE	PROVIDE	PROVIDE	PROVIDE	PROVIDE
ISOLATION BASE/HANGER	-	-	-	-	PROVIDE
DRIVE RANGE	R-4	R-3	R-3	R-3	-
CONTROL	NOTE 2	NOTE 3	NOTE 3	NOTE 3	NOTE 4

CONTROL NOTES:

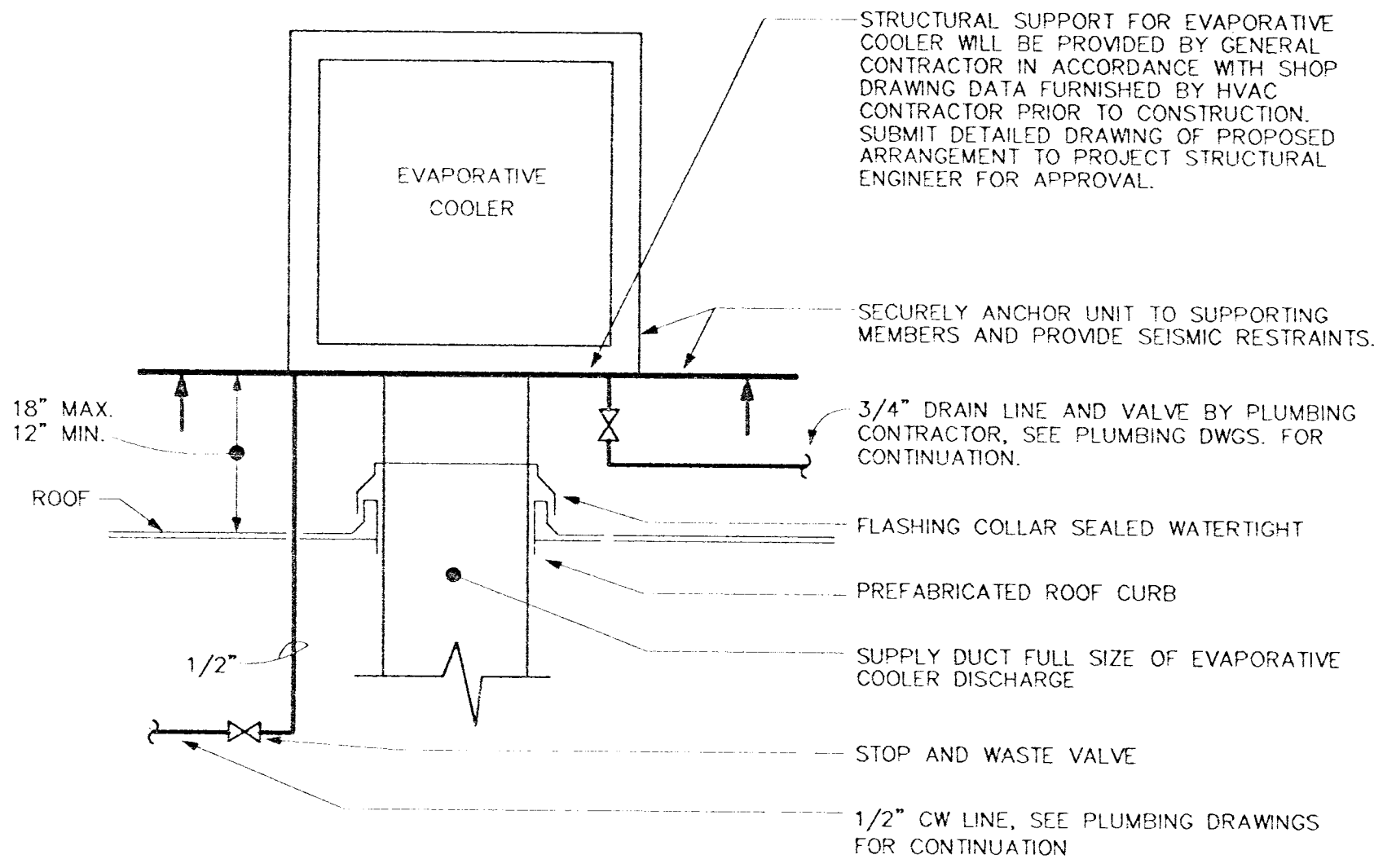
1. WALL SWITCH SHALL CONTROL FAN.
2. TIME CLOCK PROVIDED BY DIVISION 16 SHALL CONTROL FAN.
3. FAN SHALL RUN CONTINUOUSLY.
4. LIGHT SWITCH SHALL CONTROL FAN.

DUCTLESS SPLIT SYSTEM HEAT PUMP SCHEDULE

TAG	FC-1
MANUFACTURER	CARRIER
MODEL NUMBER	400KE024
OPERATING WEIGHT (LBS.)	66.1
CFM AT SITE ELEVATION	400
OUTSIDE AIR CFM	20
FAN MOTOR FULL LOAD AMPS	7.94
VOLT/PHASE/HZ	208/1/60
STARTER	INTEGRAL
DISCONNECT	SEE ELEC.
TAG	HP-1
MANUFACTURER	CARRIER
MODEL NUMBER	38QR-C018
OPERATING WEIGHT (LBS.)	154
O.A.T. WINTER (°F)	25
HEATING CAPACITY (MBTUH)	10.7
O.A.T. SUMMER (°F)	115/69
E.A.T. SUMMER DB/WB (°F)	80/63
TOTAL COOLING (MBTUH)	11.8
SENSIBLE COOLING (MBTUH)	10.8
VOLT/PHASE/HZ	208/1/60
FULL LOAD AMPS	10.5
STARTER	INTEGRAL
DISCONNECT	SEE ELEC.
LINE SET KIT	PROVIDE
CONTROL TRANSFORMER	PROVIDE
LIQUID LINE SOLENOID VALVE	PROVIDE
TIME DELAY RELAY	-
LOW PRESSURE CUTOFF	PROVIDE
HIGH PRESSURE CUTOFF	PROVIDE
THERMOSTAT	PROVIDE
CONDENSATE PUMP	PROVIDE

DUCTWORK SCHEDULE

FROM	TO	PRESSURE CLASS	SEAL CLASS	SHAPE	DUCT MATERIAL	INSULATION	MATERIAL	TYPE	THICKNESS	DENSITY	K
GP UNIT/AC UNIT	FIRST 10' OF SUPPLY DUCT	1"	C	RECT-ANGULAR OR ROUND	GALV. STEEL OR RIGID FIBERGLASS	GLASS FIBER	GLASS FIBER	FLEXIBLE DUCT LINER	2.0"	1.5	0.28 @ 75°F
FIRST 10' OF SUPPLY DUCT	AIR DEVICES	1"	C	RECT-ANGULAR OR ROUND	GALV. STEEL OR RIGID FIBERGLASS	GLASS FIBER	GLASS FIBER	FLEXIBLE DUCT WRAP	2.0"	1.5	0.28 @ 75°F
AIR INLETS	LAST 10' OF RETURN DUCT	1"	C	RECT-ANGULAR OR ROUND	GALV. STEEL OR RIGID FIBERGLASS	GLASS FIBER	GLASS FIBER	FLEXIBLE DUCT WRAP	2.0"	1.5	0.28 @ 75°F
LAST 10' OF RETURN DUCT	GP UNIT/AC UNIT	1"	C	RECT-ANGULAR OR ROUND	GALV. STEEL OR RIGID FIBERGLASS	GLASS FIBER	GLASS FIBER	FLEXIBLE DUCT LINER	2.0"	1.5	0.28 @ 75°F
EXHAUST DUCTS	WITHIN 10'-0" OF EXTERIOR OPENING	1"	C	RECT-ANGULAR OR ROUND	GALV. STEEL	GLASS FIBER	-	-	-	-	-



EVAPORATIVE COOLER MOUNTING DIAGRAM

NO SCALE

1
M0.02

HARRIS
CONSULTING ENGINEER
No. 9000
State of Nevada
PROJECT NO. 38235-00
DESIGNED BY: J. BURGER
CHECKED BY: J. BURGER
DRAWN BY: J. BURGER

HVAC LEGEND AND SCHEDULES

SUMMERLIN ARBORS PARK
POOL AND POOL BUILDING

500 PILOT ROAD • SUITE A • LAS VEGAS, NEVADA 89119 • PHONE (702) 283-7111 FAX (702) 283-9111

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PLANS APPROVED
PLUMBING/MECHANICAL
Buckley & Gentry Corp.
City of Las Vegas, Nevada

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