

Drawing Name: P:\313130\31307870\31307870-03.dwg User: JHedberg Date: 03/28/2014 Time: 10:50pm Plotted on: 03/28/2014 by: JHedberg

D

C

B

A

ROOFTOP PACKAGED HEAT PUMP UNIT															
MARK	MANUFACTURER	MODEL	EER	INDOOR BLOWER			GROSS COOLING CAP				HEAT (MBH)	ELECTRICAL 208/3/60		OSA CFM	WEIGHT (LB)
				CFM	ESP	HP	SEN MBH	TOT MBH	ENT. AIR DBF	WBFB		MCA	MOCP		
HP-1	AMERICAN STANDARD	WSC090E3	11.1	3690	0.8"	2	72.9	95.9	80	67	45.0	61.9	80	530	804
HP-2	AMERICAN STANDARD	WSC090E3	11.1	3690	0.8"	2	72.9	95.9	80	67	45.0	61.9	80	620	804

NOTES:

1. SIZE ALL UNITS ON SUMMER AMBIENT TEMPERATURE: 93 °F.
2. VERIFY VOLTAGE/ PHASE WITH ELECTRICAL CONTRACTOR PRIOR TO ORDERING.
3. COOLING CAPACITY, MINIMUM HEAT CAPACITY AND CFM ARE MINIMUM OUTPUT REQUIRED. ALL UNITS SHALL HAVE NO LESS THAN 98% OF THESE CAPACITIES. COOLING CAPACITY IS GROSS COIL CAPACITY REQUIRED (FAN HEAT NOT DEDUCTED).
4. PROVIDE ROOF TAPERED MOUNTING CURB, FILTERS AND FILTER RACK SIZED AT 500 FPM VELOCITY. 5. PROVIDE WITH PROGRAMMABLE THERMOSTAT AMERICAN STANDARD #ACONT800A511AA WITH REMOTE SENSOR #C7189U1005 FOR HP-2 AND HP-1.
5. PROVIDE 9 KW AUXILIARY HEATER.

OUTSIDE AIR CALCULATION					
OUTSIDE AIR REQUIREMENTS PER TABLE 4-1, 2009 UMC.					
HP-1					
	AREA	MULTIPLIER	PEOPLE	MULTIPLIER	REQ'D. CFM
CASHIER'S AREA	410 SQ. FT.	X 0.12 CFM/SQ. FT.	15 PEOPLE/1000 SQ. FT. = 6 PEOPLE	7.5 CFM/PERSON	94
OFFICE	45 SQ. FT.	X 0.06 CFM/SQ. FT.	5 PEOPLE/1000 SQ. FT. = 1 PEOPLE	5 CFM/PERSON	8
STORAGE	430 SQ. FT.	X 0.12 CFM/SQ. FT.	—	—	52
SALES	798 SQ. FT.	X 0.12 CFM/SQ. FT.	15 PEOPLE/1000 SQ. FT. = 12 PEOPLE	7.5 CFM/PERSON	186
UTILITY ROOM	135 SQ. FT.	X 0.12 CFM/SQ. FT.	—	—	16
BACK ROOM	66 SQ. FT.	X 0.12 CFM/SQ. FT.	—	—	8
TOTAL REQUIRED CFM					364
HP-2					
	AREA	MULTIPLIER	PEOPLE	MULTIPLIER	REQ'D. CFM
SALES	1,150 SQ. FT.	X 0.12 CFM/SQ. FT.	15 PEOPLE/1000 SQ. FT. = 17.25 PEOPLE	7.5 CFM/PERSON	268
COOLER	829 SQ. FT.	NOT OCCUPIABLE			0
HALLWAY	74 SQ. FT.	X 0.06 CFM/SQ. FT.	—	—	5
MENS	1—W.C. 2—UR	50 CFM/WATER CLOSET OR URINAL			150*
WOMENS	2—W.C.	50 CFM/WATER CLOSET OR URINAL			100*
TOTAL REQUIRED CFM					273
*SUPPLIED BY TRANSFER AIR WITH LOCAL MECHANICAL EXHAUST.					
TOTAL CFM REQUIRED = 265.25 TOTAL CFM PROVIDED = 1,150  BALANCE OSA AS FOLLOWS: HP-1 = 530 HP-2 = 620					

2009 IECC LOAD SUMMARY				
AREA DESCRIPTION	COOLING LOAD CALCULATION [ MBH ]		PROVIDED EQUIPMENT COOLING CAPACITY [ MBH ]	
	SENSIBLE	TOTAL	SENSIBLE	TOTAL
HP-1,2	135.3	135.3	145.8	191.8

1. CALCULATIONS WERE PERFORMED BY THE CARRIER HAP SOFTWARE PROGRAM IN COMPLIANCE WITH ASHRAE FUNDAMENTALS.
2. EQUIPMENT SIZING MEETS THE IECC 503.2.2 REQUIREMENTS

GRILLE, REGISTER, AND DIFFUSER SCHEDULE									
MARK	DESCRIPTION	MANUFACTURER	MODEL	MATERIAL	MODULE	FRAME	FRONT BLADES	DAMPER	FINISH
A	CEILING DIFFUSER	KRUEGER	1100	STEEL	24"x24"	LAY-IN	4-WAY	OPPOSED BLADE	*
B	CEILING DIFFUSER	KRUEGER	5180	STEEL	12"x12"	FLANGE	4-WAY	OPPOSED BLADE	*
C	RETURN REGISTER	KRUEGER	1190	STEEL	24"x24"	LAY-IN	—	NONE	*
D	RETURN REGISTER	KRUEGER	1190	STEEL	24"x12"	LAY-IN	—	NONE	*
E	EXHAUST GRILLE	KRUEGER	EGC-5	STEEL	18x18"	FLANGE	EGGCRATE	NONE	*

- \* NOTE:  
ALL DIFFUSERS AND GRILLES SHALL BE FACTORY COLOR 44.

EXHAUST FAN SCHEDULE									
MARK	AREA SERVED	MANUFACTURER	MODEL	CFM	E.S.P. ("W.C.)	MOTOR		BAROMETRIC DAMPER	DRIVE
						HP	V/PH		
EF-1	WOMENS TOILET ROOM	GREENHECK	SP-B110	100	0.125"	FRAC.	120/1	YES	DIRECT
EF-2	MENS TOILET ROOM	GREENHECK	SP-B110	150	0.125"	FRAC.	120/1	YES	DIRECT
EF-3	FROSTER COVE	GREENHECK	G-121	700	0.25"	1/8	120/1	YES	DIRECT

NOTES:

1. EF-1&2 SHALL BE PROVIDED WITH VIBRATION ISOLATORS, BACKDRAFT DAMPER, FACTORY ROOF CURB, AND FACTORY ROOF CAP.
2. EF-3 SHALL PROVIDED WITH BACKDRAFT DAMPER, FACTORY ROOF CURB, SPEED CONTROLLER. FAN SHALL BE UL LISTED. INSTALL FAN LEVEL FAN CONTROLLED FROM LINE VOLTAGE THERMOSTAT PROVIDED BY ELECTRICAL. COORDIANTE TEMPERATURE SETTING WITH OWNERS REPRESENTATIVE

AIR BALANCE SCHEDULE					
UNIT	O.A.	R.A.	S.A.	E.A.	PRESSURE
HP-1	530	3165	3690	—	+530
HP-2	610	3090	3690	—	+620
EF-1		—	—	100	100
EF-2		—	—	150	—150
EF-3		—	—	700	—700
TOTALS	1,150	6,255	7380	1000	200

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ISSUE/REVISION RECORD

DATE	DESCRIPTION
03/28/14	PLAN CHECK SUBMITAL

PROFESSIONAL SEAL



PROFESSIONAL IN CHARGE

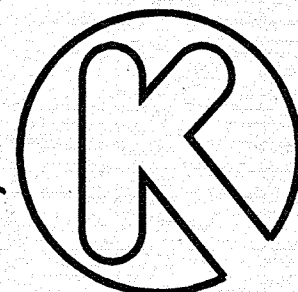
JAMES LEDYARD  
PROJECT MANAGER  
DARCY HASBERRY  
QUALITY CONTROL  
JAMES LEDYARD  
DRAWN BY  
DARCY HASBERRY

PROJECT NAME

CIRCLE K  
STORES, INC.

SAN JUAN COUNTY  
NEW MEXICO

819 NM 516  
FLORA VISTA  
SAN JUAN COUNTY, NM



CIRCLE K STORES INC.

PROJECT NUMBER

20130787.0

SHEET TITLE

MECHANICAL  
SCHEDULES

SHEET NUMBER

M3.0