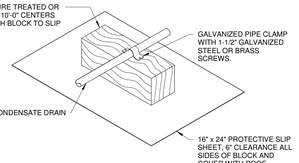
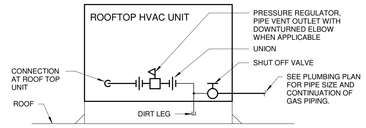


PIPING SUPPORT ON ROOF TOP	DATE: 7/29/14
	DRAWN: ZAW
MASTER SPECIFICATION DETAIL	PSD-35

ORIGINAL ISSUE DATE 9/1/06



NOTE:
Paint all exterior Gas Lines per Kroger Master Building Specifications – Section 01 General Requirements.

GAS PIPING CONNECTIONS AT ROOF TOP UNITS	DATE: 1/30/09
	DRAWN: DCS
MASTER SPECIFICATION DETAIL	PSD-55

ORIGINAL ISSUE DATE 11/30/06

GENERAL NOTES

A. REFER TO HEATING, VENTILATING & AIR CONDITIONING SPECIFICATIONS AND GENERAL CONDITIONS FOR ADDITIONAL REQUIREMENTS.
B. ALL NEW RTUs SPECIFIED ARE INCLUDED IN KROGER'S DIRECT BUY PROGRAM, AND SHALL BE FURNISHED BY KROGER AND INSTALLED BY HVAC CONTRACTOR, UNLESS OTHERWISE NOTED.

DESIGN AMBIENT TEMP'S:

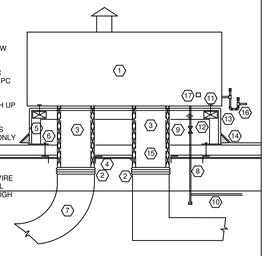
SUMMER: 94 DEG DRY BULB
75 DEG WET BULB
WINTER: 10 DEG DRY BULB

KEYED NOTES:

1. GAS FIRED ROOFTOP UNIT LOCATE A MINIMUM OF 10'-0" FROM EDGE OF ROOF AND ROOF HATCH
2. CANVAS FLEXIBLE CONNECTION
3. 1" ACOUSTICALLY LINED DUCTS
4. 4X4 ANGLE FASTENED TO ROOF DECK AND STRUCURAL SYSTEM. PROVIDE SUPPORTS AS REQUIRED
5. FACTORY FABRICATED, INSULATED ROOF CURB (BY SAME MFGR AS UNIT)
6. FASTEN TO CURB DECK
7. INSULATED RADIUSED ELBOW
8. UNION BY PLUMBING CONTRACTOR (PC)
9. GAS SHUT-OFF VALVE BY PC
10. GAS LINE (BLACK STEEL) BY PC
11. SECURE TO CURB
12. WOOD NAILER
13. ROOFING MEMBRANE, FLASH UP TO BELOW WOOD NAILER
14. CANT STRIP
15. ROOF DECK - CUT OPENINGS FOR DUCT PENETRATIONS ONLY
16. CONDENSATE TRAP - SEE CONDENSATE DRAIN TRAP DETAIL
17. HIGH WATER ALARM IN CONDENSATE DRAIN PAN. WIRE TO BREAK 24 VOLT CONTROL POWER IN THE CASE OF A HIGH WATER EVENT.

GENERAL NOTES:

A. CONTRACTOR SHALL PROVIDE CURB TO MAINTAIN 14" MINIMUM ABOVE FINISHED ROOFING SYSTEM. PROVIDE ADDITIONAL BLOCKING AS REQUIRED TO ACCOMMODATE ROOF INSULATION THICKNESS.
B. FINAL LOCATION AND STRUCTURAL VERIFICATION BY OTHERS.



237433.00-04 - ROOF CURB & MOUNTING C

SCALE: NONE

MECHANICAL LEGEND

SYMBOL	DESCRIPTION
PLAN-VIEW LINE TYPES	
	WORK SHOWN FADED INDICATES EXISTING WORK TO REMAIN OR NEW WORK BY OTHERS AS APPLICABLE
— — — —	WORK SHOWN BOLD-DASHED INDICATES SELECTIVE DEMOLITION WORK
———	WORK SHOWN BOLD-CONTINUOUS INDICATES NEW WORK
MECHANICAL STATS & SENSORS	
TS	TEMPERATURE SENSOR

HVAC ELECTRICAL COORDINATION SCHEDULE

ABBREVIATIONS		CONTRACTOR TYPE		MOTOR CONTROL TYPE		CONTROL TYPE		SHORT CIRCUIT RATING
DC	LOCAL DISCONNECT	EC	ELECTRICAL CONTRACTOR	CS	COMBINATION STARTER	TC	TIMECLOCK	WHERE SHORT CIRCUIT RATING
MC	MOTOR CONTROL (POWER)	EX	EXISTING	MCC	MOTOR CONTROL STARTER	CPT	CONTROL POWER TRANSFORMER	CODE REQUIRED VALUE INDICATES
SD	DUCT SMOKE DETECTOR	FC	FIRE PROTECTION CONTRACTOR	MG	MAGNETIC STARTER OR CONTACT	BAS	BUILDING AUTOMATION SYSTEM	"YES" APPLICABLE EQUIPMENT'S
CN	CONTROLS	GC	GENERAL CONTRACTOR	MS	MANUAL STARTER	LOW	LOW VOLTAGE CONTROLS	SHORT CIRCUIT RATING SHALL
TS	TOGGLE SWITCH	HC	HVAC CONTRACTOR	VFD	VARIABLE FREQUENCY DRIVE	LINE	LINE VOLTAGE CONTROLS	EXCEED THE AVAILABLE FAULT
CB	H.A.C.R. CIRCUIT BREAKER AT SOURCE PANELBOARD	MFR	MANUFACTURER	MSR	MANUAL STARTER W/ CONTROL RELAY	RLINE	REVERSE ACTING LINE VOLTAGE	CURRENT VALUE INDICATED.
FUSE	FUSE AT LOCAL DISCONNECT (VERIFY FIELD RATING)	PC	PLUMBING CONTRACTOR	OV	OVERCURRENT PROTECTION	MAN	THERMOSTAT	
FLA	OPERATING FULL LOAD AMPS	OR	OWNER OR OTHERS			FA	MANUAL	
MCA	MINIMUM CIRCUIT AMPACITY					CO	FIRE ALARM	
CP	CORD AND PLUG CONNECTION					INT	CARBON MONOXIDE SENSOR	
[BLANK]	HARD WIRED (WHEN INDICATED FOR DC TYPE)					ASD	INTEGRAL TO EQUIPMENT	
						DSD	AREA SMOKE DETECTOR...	

CONNECTION MARK	DESCRIPTION	VOLTAGE	PHASE	EMERGENCY	HP	WATTS	HTG KW	FLA	MCA	OCP	FED FROM	DC TYPE	DC FURN	DC INST	DC WIRE	MC TYPE	MC FURN	MC INST	MC WIRE	CN TYPE	CN FURN	CN INST	CN WIRE	SHORT CIRCUIT RATING CODE REQUIRED?	AVAILABLE FAULT CURRENT
RTU-N	PACKAGED ROOFTOP UNIT, GAS HEAT	208 V	3						26	40			EC	EC	EC	MG	MFR	MFR	MFR	LOW	HC	HC	HC	Yes	1212

HVAC VENTILATION SCHEDULE

NUMBER	NAME	AREA	LEVEL	CEILING HEIGHT	AIR CHGS	OA CHGS	PEOPLE	OA PER PERSON	OA PER SQ FT.	REQ SUP	ACT SUP	REQ OA	ACT OA	ACT RET	ACT EXH	CRIT OA	PRESSURE	PCT OPERABLE	NATURAL VENTILATION
104	FLORAL STORAGE	53 SF	Level 1	12' - 0"	0	0	0	0	0.12	15	15	0	3	15	0	52.7	Neutral	0	False
106	BAKERY PREP...	1026 SF	Level 1	12' - 0"	0	0	0	0	0	1585	1585	34	317	1585	720	0	Negative	0	False
108	BAKERY STORAGE	75 SF	Level 1	12' - 0"	0	0	0	0	0.12	20	20	0	4	20	0	56.2	Neutral	0	False
110	DELI PREP...	866 SF	Level 1	12' - 0"	0	0	0	0	0	380	380	8	76	380	610	0	Negative	0	False
TOTAL		2020 SF																	

HVAC LOAD SCHEDULE

THE HEATING AND COOLING LOAD CALCULATIONS ARE BASED ON THE RTS (RADIANT TIME SERIES) METHOD. ASSUMPTIONS AND EXECUTION OF THESE METHODS ARE PER ASHRAE 183-2007
STANDARD FOR PEAK COOLING AND HEATING LOAD CALCULATIONS IN BUILDINGS EXCEPT LOW-RISE RESIDENTIAL BUILDINGS.

COOLING LOAD BREAKDOWN				HEATING LOAD BREAKDOWN	
CROOF	SENSIBLE HEAT GAIN FROM ROOF	CSSENS	TOTAL SENSIBLE HEAT GAIN TO SPACE	HROOF	HEAT LOSS FROM ROOF
CWALL	SENSIBLE HEAT GAIN FROM EXTERIOR WALLS	CFAN	SENSIBLE HEAT GAIN FROM AIR HANDLER FAN	HWALL	HEAT LOSS FROM EXTERIOR WALLS
CPART	SENSIBLE HEAT GAIN FROM PARTITIONS	COAS	SENSIBLE HEAT GAIN FROM OUTDOOR VENTILATION AIR	HPART	HEAT LOSS FROM PARTITIONS
CGLASS	SENSIBLE HEAT GAIN FROM GLAZING	CTSENS	TOTAL SENSIBLE HEAT GAIN	HGLASS	HEAT LOSS FROM GLAZING
CSOLAR	SENSIBLE HEAT GAIN FROM SOLAR GAIN THROGH GLAZING	CPLAT	LATENT HEAT GAIN FROM PEOPLE	HSLAB	HEAT LOSS FROM SLAB
CLIGHTS	SENSIBLE HEAT GAIN FROM INTERIOR LIGHTING	COAL	LATENT HEAT GAIN FROM OUTDOOR VENTILATION AIR	HSPACE	TOTAL HEAT LOSS FROM SPACE
CEQUIP	SENSIBLE HEAT GAIN FROM PLUG LOADS, COMPUTERS, ETC.	CTLAT	TOTAL LATENT HEAT GAIN	HOA	HEAT LOSS FROM OUTDOOR VENTILATION AIR
CPSENS	SENSIBLE HEAT GAIN FROM PEOPLE	CTOT	TOTAL HEAT GAIN (SENSIBLE + LATENT)	HTOT	TOTAL HEAT LOSS

EQUIPMENT MARK	CROOF	CWALL	CPART	CGLASS	CSOLAR	CLIGHTS	CEQUIP	CPSENS	CSSENS	CFAN	COAS	CTSENS	CPLAT	COAL	CTLAT	CTOT	HROOF	HWALL	HPART	HGLASS	HSPACE	HSLAB	HOA	HTOT
RTU-N	3.25	0	0	0	0	6.89	30.7	0	40.84	1	7.74	49.58	0	11.34	11.34	60.92	5.83	0	0	0	16.21	1.07	25.82	32.73

HVAC ROOFTOP UNITS SCHEDULE

Equipment shall be braced and labeled by the equipment manufacturer to withstand the minimum scheduled available fault current value for listed equipment.

EQUIPMENT MARK	DESCRIPTION	LOCATION	STATUS	WEIGHT (lbs)	MANUFACTURER	MODEL	MIN SEER	CFM (cfm)	ESP (in WC)	OACFM (cfm)	CO2 CFM (cfm)	NOMINAL TONS	MAT CLG DB (Deg F)	MAT CLG WB (Deg F)	CLG MBH (mbh)	CLG SENS (mbh)	LAT DB (Deg F)	LAT CLG WB (Deg F)	MAT HTG (Deg F)	HTG MBH (mbh)	MIN HTG AFUE	GAS HTG IN (mbh)	GAS HTG OUT (mbh)	MIN GAS PRESSURE (in WC)	MAX GAS PRESSURE (in WC)	EMERGENCY	ELECTRIC CONNECTION SUMMARY	AVAILABLE FAULT CURRENT	ACCESSORIES
RTU-N	PACKAGED ROOFTOP UNIT, GAS HEAT		NEW	1050	TRANE	YHC080	14.2	2000	1	400	0	5	79	66	61	50	55	54	65	53	81	60	49	4.5	14	NO	RTU-N - 208V/3PH, 26 MCA, 40A OCP	1212	2,4,22

HVAC ACCESSORIES

ACCESSORIES:

1. MOTOR DAMPER
2. ECONOMIZER
3. ROOF CURB
4. HAIL GUARDS
5. INTAKE HOOD
6. VIBRATION ISOLATION
7. FLAT FILTER
8. FILTER/MIXING BOX
9. ACCESS DOOR
10. FLEX CONNECTIONS
11. MOUNTING COLLAR
12. HOT GAS BYPASS
13. FACE/BYPASS DAMPER
14. CONDENSATE PUMP
15. MOTOR GUARD
16. GREASE TRAP
17. DUCT FLANGES
18. BASE RAIL
19. HUMIDIFIER
20. CO2 SENSORS
21. ECON POWERED EXHAUST
22. ECON BAROMETRIC RELIEF
23. HOT GAS REHEAT COIL
24. SHAFT GROUNDING BRUSHES

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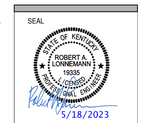

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MECHANICAL ABBREVIATIONS, SYMBOLS, AND GENERAL NOTES

No.	Description	Date

100% Review

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Project number 25376.00
Date 05.17.2023

Drawn By: KSL
Checked By: RAL