	VIATIONS
AFF	ABOVE FINISHED FLOOR
AHU BCU	AIR HANDLER UNIT BUILDING CONTROL UNIT
BD	BALANCING DAMPERS
BTU	BRITISH THERMAL UNIT
CFH	CUBIC FEET PER HOUR
CFM	CUBIC FEET PER MINUTE
CLG	CEILING
СОММ.	COMMUNICATION
CV	CONTROL VALVE
(D)	DEMOLISHED
DB	DRY BULB
DCV DEG. F	DEMAND CONTROLLED VENTILATION  DEGREES FAHRENHEIT
DEG. F	DIAMETER
DX	DIRECT EXPANSION
"E"	ELECTRICAL CONTRACTOR
(E)	EXISTING
EA	EACH
EAT	ENTERING AIR TEMPERATURE
EER	ENERGY EFFICIENCY RATING
ESP	EXTERNAL STATIC PRESSURE
FAI	FRESH AIR INTAKE
FD FLA	FLOOR DRAIN FULL LOAD AMPS
FT. H2O	FEET OF WATER
'G'	GENERAL CONSTRUCTION CONTRACT
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
Н	HEIGHT
'H'	HVAC CONTRACT
HP	HORSEPOWER
IN.	INCHES
IN. W.C.	INCHES WATER COLUMN (WATER GUAGE)
KW L	KILOWATTS  LENGTH
LAT	LEAVING AIR TEMPERATURE
LBS	POUNDS
LCD	LIQUID CRYSTAL DISPLAY
LDB	LEAVING DRY BULB TEMPERATURE
LWB	LEAVING WET BULB TEMPERATURE
LWT	LEAVING WATER TEMPERATURE
M	METER
MAX	MAXIMUM
MBH MCA	1,000 BTU PER HOUR MINIMUM CIRCUIT AMPACITY
MIN	MINIMUM CIRCUIT AMPACITY
MFA	MANUFACTURER
N.C.	NORMALLY CLOSED
N.O	NORMALLY OPEN
NFPA	NATIONAL FIRE PROTECTION AGENCY
NPT	NATIONAL PIPE THREAD
NTS	NOT TO SCALE
OAI	OUTSIDE AIR INTAKE
OD	OUTSIDE DIAMETER
OED	OPEN ENDED DUCT
'P' PD	PLUMBING CONTRACT PRESSURE DROP
PSIG	LBS / PER SQUARE INCH (GUAGE PRESSURE)
RD	ROOF DRAIN
RPM	REVOLUTIONS PER MINUTE
RPZ	REDUCED PRESSURE ZONE
SAT	SUPPLY AIR TEMPERATURE
SEER	SEASONAL ENERGY EFFICIENCY RATING
TEMP	TEMPERATURE
TG	TRANSFER GRILLE
TYP	TYPICAL
VFD	VARIABLE FREQUENCY DRIVE
W	WIDTH
WB	WET BULB
WMS	WIRE MESH SCREEN

SYMBOL	ABBREV	DESCRIPTION
STWIDGE -	ADDIVE	NEW DUCTWORK WITH 45 DEGREE TAKE OFF
	VD	VOLUME DAMPER
	CD	ROUND SUPPLY CEILING DIFFUSER
	SEE AIR DEVICE SCHEDULE	SIDEWALL SUPPLY, RETURN OR EXHAUST
	SEE AIR DEVICE SCHEDULE	SQUARE SUPPLY CEILING DIFFUSER
	SEE AIR DEVICE SCHEDULE	CEILING RETURN OR EXHAUST GRILLE
山州州		FLEX DUCT
	FC	FLEXIBLE CONNECTION
		TURNING VANES
		RECTANGULAR TO ROUND TRANSITION
	AL	ACOUSTICAL LINING
		END CAP
	SEE AIR DEVICE SCHEDULE	SUPPLY DIFFUSER WITH DIRECTIONAL FLOW (SOLID HATCH INDICATES BLANK OFF PANEL)
		SUPPLY DUCT DROP
		RETURN/EXHAUST DUCT DROP
		SUPPLY DUCT RISE
		RETURN/EXHAUST DUCT RISE
RAL WP S	DSD	DUCT SMOKE DETECTOR (SUPPLY)
CM RAL WP R	DSD	DUCT SMOKE DETECTOR (RETURN)
M	MD	MOTORIZED DAMPER WITH ACTUATOR
	FD/AD	FIRE DAMPER WITH ACCESS DOOR
	FSD/AD	FIRE SMOKE DAMPER WITH ACCESS DOOR
		WORK TO BE REMOVED
<del></del>		POINT OF DISCONNECTION FROM EXISTING
•		POINT OF RECONNECTION TO EXISTING

CONTROLS LEGEND		
SYMBOL	ABBREV	DESCRIPTION
C		CARBON MONOXIDE SENSOR
T		THERMOSTAT
S		DIGITAL TEMPERATURE SENSOR
H		HUMIDITY SENSOR
<b>C2</b>		CARBON DIOXIDE SENSOR

PIPING LEGEND	ADDDE'	BESSEINTIST
SYMBOL	ABBREV	DESCRIPTION
		NEW WORK
		PIPING DOWN/ PIPING UP
<b>—</b> —[		BALL VALVE WITH HOSE END CONNECTION
	тн	THERMOMETER
	U	UNION
	FPC	FLEXIBLE PIPE CONNECTION/ FLEX PIPE
		DIRECTION OF FLOW
	PSR	PRESSURE SAFETY AND RELIEF VALVE
	PRV	PRESSURE REDUCING VALVE
<u> </u>	BV	BALL VALVE
	ВА	BALANCING VALVE
	BFV	BUTTERFLY VALVE
		TEMPERATURE SENSOR WITH THERMOWELL
	GA	GATE VALVE
	GB	GLOBE VALVE
	AV	AUTOMATIC AIR VENT
	cv	2-WAY CONTROL VALVE
	cv	3-WAY CONTROL VALVE
		PLUG VALVE
J \	STR	STRAINER
	FD	FLOOR DRAIN
S		AIR SEPARATOR
		STEAM TRAPS (INDICATE TYPE)
	СН	CHECK VALVE
	PG	PRESSURE GAUGE WITH GAUGE COCK
<del></del>	RED	REDUCER
co.	со	CLEANOUT END CAP
		CAPPED PIPE
		PUMP
		WORK TO BE REMOVED
<del></del>		POINT OF DISCONNECTION FROM EXISTING
•		POINT OF RECONNECTION TO EXISTING
lacksquare	TDV	TRIPLE DUTY VALVE

#### **GENERAL NOTES**

- 1. PROVIDE ALL MATERIALS AND EQUIPMENT AND PERFORM ALL LABOR REQUIRED TO INSTALL COMPLETE AND OPERABLE MECHANICAL SYSTEMS AS INDICATED ON THE DRAWINGS, AS SPECIFIED AND AS REQUIRED BY CODE.
- 2. THE CONTRACTOR, BY PRESENTING THEIR BID FOR THE WORK, REPRESENTS THAT HE/SHE HAS INSPECTED THE SITE AND IS COMPLETELY FAMILIAR WITH THE SCOPE OF WORK AND ALL FIELD CONDITIONS RELATED TO, AND AFFECTING THE WORK AND ITS PERFORMANCE. EXCEPTIONS AFFECTING THE WORK AND ITS PERFORMANCE, OR CONFLICTS BETWEEN FIELD CONDITIONS, SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO THE SUBMISSION OF BIDS.
- 3. PERFORM ALL WORK IN ACCORDANCE WITH THE PLUMBING CODE, FIRE CODE, MECHANICAL CODE, ENERGY CONSERVATION CODE, AND FUEL GAS CODE OF NEW JERSEY STATE AND REQUIREMENTS OF THE LOCAL AUTHORITIES HAVING JURISDICTION.
- 4. COMPLY WITH THE NATIONAL ELECTRIC CODE AND THE REQUIREMENTS OF DIVISION 26 FOR ALL ELECTRICAL INSTALLATIONS.
- 5. FIRE STOP ALL OPENINGS IN FIRE RATED CONSTRUCTION FOR PIPING, DUCTWORK, CONDUIT, ETC. PROVIDE FIRE DAMPERS AND ACCESS DOORS IN ALL OPENINGS IN FIRE RATED FLOORS, PARTITIONS, AND WALLS FOR DUCTWORK AS PER THE MECHANICAL CODE OF NEW JERSEY STATE. (SEE ARCHITECTURAL DRAWINGS FOR LOCATIONS OF FIRE RATED CONSTRUCTION.)
- 6. DO NOT SCALE DRAWINGS, DRAWINGS FOR HVAC WORK ARE DIAGRAMMATIC AND ARE INTENDED TO CONVEY SCOPE AND GENERAL ARRANGEMENT ONLY. THE LOCATIONS OF ALL ITEMS SHOWN ON THE DRAWINGS OR CALLED FOR IN THE SPECIFICATIONS THAT ARE NOT DEFINITELY FIXED BY DIMENSIONS ARE APPROXIMATE. COORDINATE CONTRACT DOCUMENTS, PROJECT REQUIREMENTS, WORK OF OTHERS, AND EQUIPMENT AND MATERIALS PURCHASED WITH FIELD DIMENSIONS. INSTALL ALL EQUIPMENT AS PER MANUFACTURER'S REQUIREMENTS TO PROVIDE PROPER CLEARANCE FOR INSTALLATION, OPERATION, AND MAINTENANCE. CONTRACTOR'S INTENDED MEANS AND METHODS OF INSTALLATION AND CONTRACTOR'S FABRICATED ITEMS SHALL ENSURE A PROPER "FIT" AND INSTALLATION. BRING ANY CONFLICTS TO THE ATTENTION OF THE ARCHITECT/ENGINEER DURING THE SUBMITTAL PHASE FOR RESOLUTION PRIOR TO PURCHASING ANY EQUIPMENT.
- 7. MAINTAIN MAXIMUM HEADROOM AND SPACE CONDITIONS AT ALL POINTS. WHERE HEADROOM AND SPACE CONDITIONS APPEAR INADEQUATE, NOTIFY THE ARCHITECT/ENGINEER PRIOR TO PROCEEDING WITH INSTALLATION. MAINTAIN A MINIMUM OF 6'-8" CLEARANCE FROM FINISHED FLOOR TO UNDERSIDE OF PIPES, DUCTS, CONDUITS, SUSPENDED EQUIPMENT ETC., THROUGHOUT ACCESS ROUTES IN MECHANICAL ROOMS OR WALKING AREAS.
- 8. FIELD VERIFY AND COORDINATE ALL DUCT AND PIPING DIMENSIONS BEFORE FABRICATION. MAKE MODIFICATIONS IN THE LAYOUT AS NEEDED TO PREVENT CONFLICT WITH WORK OF
- OTHER TRADES OR FOR PROPER EXECUTION OF THE WORK. OBTAIN THE APPROVAL OF THE ARCHITECT/ENGINEER FOR MODIFICATIONS.

  9. PROVIDE PRODUCTS OF ONE MANUFACTURER WHERE TWO OR MORE ITEMS OF THE SAME TYPE OF MATERIAL OR EQUIPMENT IS REQUIRED.
- 10. INSTALL ALL EQUIPMENT AND APPURTENANCES IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS, CONTRACT DOCUMENTS, AND APPLICABLE CODES AND REGULATIONS. REFER TO DETAILS FOR ADDITIONAL PIPING AND EQUIPMENT INSTALLATION REQUIREMENTS.
- 11. LOCATE ALL TEMPERATURE, PRESSURE, AND FLOW MEASURING DEVICES IN ACCESSIBLE LOCATIONS WITH STRAIGHT SECTION OF PIPE OR DUCT UP- AND DOWNSTREAM AS RECOMMENDED BY THE MANUFACTURER TO ENSURE MANUFACTURER CERTIFIED ACCURACY.
- 12. COORDINATE ALL EQUIPMENT CONNECTIONS WITH MANUFACTURER'S CERTIFIED DRAWINGS. COORDINATE AND PROVIDE ALL PIPING AND DUCT TRANSITIONS REQUIRED FOR FINAL
- 13. COORDINATE LOCATIONS AND SIZES OF ALL FLOOR, WALL, AND ROOF OPENINGS WITH ALL OTHER TRADES. COORDINATE ALL PIPING AND EQUIPMENT SUPPORTED FROM STRUCTURE WITH GENERAL CONSTRUCTION WORK.
- 14. COORDINATE INSTALLATION OF SUPPLY AND RETURN GRILLES WITH INSTALLATION OF FINISHED CEILINGS.
- 15. COMPLETE ALL PRESSURE TESTS BEFORE ANY MECHANICAL EQUIPMENT, DUCTWORK, OR PIPING INSULATION IS APPLIED.
- 16. TESTING, ADJUSTING, AND BALANCING AGENCY SHALL BE A MEMBER OF THE ASSOCIATED AIR BALANCE COUNCIL (AABC) OR THE NATIONAL ENVIRONMENTAL BALANCING BUREAU (NEBB). PERFORM ALL TESTING, ADJUSTING, AND BALANCING IN ACCORDANCE WITH THE SPECIFICATIONS.
- 17. MAKE ALL ATTACHMENTS TO JOISTS, TRUSSES, OR JOIST GIRDERS AT PANEL POINTS. PROVIDE BEAM CLAMPS MEETING MSS STANDARDS. THE USE OF C-CLAMPS IS NOT PERMITTED.
- 18. PROVIDE CONCRETE PADS A MINIMUM OF 6 INCHES HIGH FOR ALL FLOOR MOUNTED EQUIPMENT. EXTEND PAD 4 INCHES BEYOND THE EQUIPMENT ON ALL SIDES.
- 19. INTERNALLY LINE ALL SUPPLY AND RETURN DUCTWORK WITHIN 20 FEET UPSTREAM AND DOWNSTREAM OF FANS WITH 1" THICK INSULATION. INTERNALLY LINED DUCTWORK MEETING THIS REQUIREMENT SHALL ALSO BE PROVIDED WITH EXTERNALLY APPLIED INSULATION AS REQUIRED BY THE SPECIFICATIONS. SEE SPECIFICATION SECTION 230719 FOR ADDITIONAL
- 20. PROVIDE TRAPPED DRAIN PIPING FROM DRAIN PANS OF ALL COOLING COILS, FANS, AND OTHER ACTIVE DRAINS EXPOSED TO SYSTEM AIR STREAM. PROVIDE TRAP AT CONNECTION, WATER SEAL DEPTH 1 INCH GREATER THAN UNIT OPERATING PRESSURE. DIRECT DRAINS TO NEAREST FLOOR DRAIN, MOP SINK, OR OTHER LOCATION APPROVED BY ARCHITECT/ENGINEER.
- 21. INSTALL PIPING, DUCTWORK, AND CONDUIT CONCEALED IN AREAS HAVING HUNG CEILINGS AND/OR FURRED SPACES UNLESS OTHERWISE INDICATED ON THE DRAWINGS.

### **WORK IN EXISTING AREAS**

- 1. EXISTING CONDITIONS, INCLUDING EQUIPMENT, DUCT AND PIPE SIZES AND LOCATIONS, INDICATED ON THE DRAWINGS ARE DIAGRAMMATIC. CONFIRM ALL EXISTING CONDITIONS PRIOR TO PROCEEDING WITH THE WORK.
- 2. CUT AND ROUGH PATCH EXISTING CONSTRUCTION AS REQUIRED FOR THE PERFORMANCE OF THE WORK. FINISH PATCHING AND FLASHING REQUIREMENTS ARE SHOWN ON THE ARCHITECTURAL DRAWINGS. PERFORM ALL CUTTING AND PATCHING WORK IN A MANNER SUCH THAT EXISTING WARRANTEES/GUARANTEES ARE NOT VOIDED, USE QUALIFIED PERSONNEL

### CONTRACT 'H' SCOPE NOTES

IN PERFORMANCE OF WORK.

- 1. FURNISH ALL LOUVERS FOR INSTALLATION BY CONTRACT 'G'. SUBMIT LOUVER COLOR AND CONFIGURATION TO THE ARCHITECT/ENGINEER FOR APPROVAL.
- 2. INSTALL SMOKE DETECTORS IN DUCTWORK FOR AIR HANDLING UNITS RATED AT 2,000 CFM OR GREATER. SMOKE DETECTOR SUPPLY AND WIRING IS PART OF CONTRACT 'E'.
- 3. INSTALL SMOKE DETECTORS IN DUCTWORK WHERE A SMOKE DAMPER OR FIRE SMOKE DAMPER IS INSTALLED. SMOKE DETECTOR SUPPLY AND WIRING IS PAR OF CONTRACT 'E'.
- 4. FURNISH AND INSTALL ALL NECESSARY CONTROL WIRING, CONDUIT, AND ACCESSORIES AS REQUIRED TO PROVIDE FULLY FUNCTIONING SYSTEMS AND SEQUENCES OF OPERATION.
- 5. FURNISH ALL LINTELS FOR DUCT AND PIPE PENETRATIONS IN INTERIOR MASONRY WALLS FOR INSTALLATION BY CONTRACT 'G'.
- 6. FURNISH ALL SLEEVES FOR PIPE AND CONDUIT FLOOR, WALL, PARTITION, AND ROOF PENETRATIONS FOR INSTALLATION BY CONTRACT 'G'.
- 7. FURNISH ALL CURBS FOR ALL ROOF MOUNTED EQUIPMENT AND DUCT PENETRATIONS FOR INSTALLATION BY CONTRACT 'G'.
- 8. REMOVE CHASE ENCLOSURE COVER WHEN PERFORMING WORK IN ANY CHASE, AND REINSTALL THE CHASE ENCLOSURE COVER WHEN WORK IS COMPLETE.

  9. PERFORM ALL CUTTING AND PATCHING AS REQUIRED IN THE EXECUTION OF THE WORK. FINISH PATCHING AND FLASHING IS PART OF CONTRACT 'G'
- 9. PERFORM ALL CUTTING AND PATCHING AS REQUIRED IN THE EXECUTION OF THE WORK. FINISH PATCHING AND FLASHING IS PART OF CONT

OCCUPANCY OR LETTER OF COMPLETION IN ACCORDANCE WITH THE REQUIREMENTS OF THE 2020 NJS ECC SECTION C408.2.5.4.

### LEGENDS/ABBREVIATIONS NOTES

1. ABBREVIATIONS AND SYMBOLS ON THIS SHEET DO NOT DEFINE THE SCOPE OF WORK.

### EXISTING SYSTEM PRE-MODIFICATION/DEMOLITION TESTING

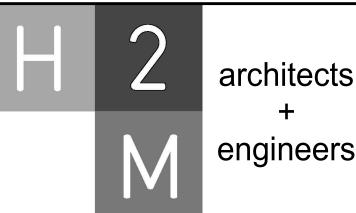
- 1. OBTAIN THE SERVICES OF A TESTING AND BALANCING COMPANY TO PERFORM OPERATIONAL TESTS PRIOR TO THE [MODIFICATION / DEMOLITION] OF THE EXISTING AIR SYSTEM(S). SUBMIT REPORT TO ENGINEER FOR REVIEW/RECORD PURPOSES WITH FINDINGS INCLUDING, BUT NOT LIMITED TO, EXISTING FAN CURVES, PRESSURE READINGS, AIRFLOW MEASUREMENTS, ENTERING AIR TEMPERATURE, LEAVING AIR TEMPERATURE, EQUIPMENT/MOTOR NAMEPLATE DATA, ETC.
- 2. OBTAIN THE SERVICES OF A TESTING AND BALANCING COMPANY TO PERFORM OPERATIONAL TESTS PRIOR TO THE [MODIFICATION / DEMOLITION] OF THE EXISTING HYDRONIC SYSTEM(S). SUBMIT REPORT TO ENGINEER FOR REVIEW/RECORD PURPOSES WITH FINDINGS INCLUDING, BUT NOT LIMITED TO, EXISTING PUMP CURVES, PRESSURE READINGS, HYDRONIC FLOW MEASUREMENTS, ENTERING WATER TEMPERATURE, LEAVING WATER TEMPERATURE, EQUIPMENT/MOTOR NAMEPLATE DATA, ETC.
- 3. VERIFY EXISTING EQUIPMENT CALLED TO BE REPLACED 'IN-KIND' IS OPERATIONAL (HAS POWER AND RESPONDS TO EXISTING CONTROLS) PRIOR TO PERFORMING ANY DISCONNECTIONS OR REMOVALS. REPORT ANY DEFICIENCIES IN EXISTING SERVICES OR CONTROLS EXPECTED TO BE RE-USED FOR THE 'IN-KIND' REPLACEMENT TO ENGINEER IN WRITING PRIOR TO REMOVALS. CONTRACTOR IS RESPONSIBLE TO CORRECT ANY DEFICIENCIES NOT REPORTED PRIOR TO DEMOLITION TO PROVIDE A FULLY OPERATIONAL EQUIPMENT REPLACEMENT.

### SYSTEM COMMISSIONING NOTES (NJS)

- COMMISSION ALL NEW BUILDING MECHANICAL SYSTEMS IN ACCORDANCE WITH THE REQUIREMENTS OF THE 2020 NEW JERSEY STATE (NJS) ENERGY CONSERVATION CODE (ECC) SECTION C408.

  COMMISSIONING SHALL BE PERFORMED BY AN APPROVED THIRD-PARTY COMMISSIONING AGENCY HIRED BY THE [OWNER / ASSIGNED CONSTRUCTION MANAGER / CONTRACTOR]. REFER TO SPECIFICATION SECTIONS 019113 GENERAL COMMISSIONING REQUIREMENTS AND 230800 COMMISSIONING OF MECHANICAL SYSTEMS FOR MORE INFORMATION.
- PROVIDE DRAWINGS, OPERATION & MAINTENANCE (O&M) MANUALS, AND SYSTEM BALANCING REPORTS TO BUILDING OWNER OR OWNER'S AUTHORIZED AGENT WITHIN 90 DAYS OF THE DATE OF RECEIPT OF THE CERTIFICATE OF OCCUPANCY OR LETTER OF COMPLETION IN ACCORDANCE WITH THE 2020 NJS ECC SECTION C408.2.5.
- COMMISSIONING AGENT SHALL PROVIDE FINAL COMMISSIONING REPORT TO THE BUILDING OWNER OR OWNER'S AUTHORIZED AGENT WITHIN 90 DAYS OF THE RECEIPT OF THE CERTIFICATE OF

#	T 000.00	TITLE SHEET
1	M 001.00	GENERAL HVAC NOTES, LEGENDS, AND ABBREVVIATIONS
2	M 101.00	FIRST FLOOR HVAC PIPING PLAN
3	M 102.00	MEZZANINE AND LOW ROOF HVAC PIPING PLAN
4	M 103.00	HIGH ROOF HVAC PLAN
5	M 104.00	OUTBUILDING HVAC PLAN
6	M 105.00	FIRST FLOOR HVAC RADIANT FLOOR PLAN
7	M 131.00	FIRST FLOOR HVAC DUCTWOK PLAN
3	M 132.00	MEZZANINE AND LOW ROOF HVAC DUCTWORK PLAN
9	M 500.00	HVAC DETAILS
0	M 501.00	HVAC DETAILS
1	M 600.00	HVAC SCHEDULES
2	M 601.00	HVAC SCHEDULES
13	M 602.00	HVAC SCHEDULES
14	M 630.00	KITCHEN SCHEDULES 1
15	M 631.00	KITCHEN SCHEDULES 2
6	M 632.00	KITCHEN SCHEDULES 3
7	M 633.00	KITCHEN SCHEDULES 4
18	M 640.00	FLOW DIAGRAMS



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JOHN CHRIS MORRIS III, P.E.

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RAWING

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**GENERAL MECHANICAL NOTES** 

& RESTRAINTS FOR ALL HVAC PIPING.

INSTALL MANUAL.

1. INSTALL ALL REFRIGERANT PIPING AS PER SPECIFICATIONS. 2. SIZE ALL REFRIGERANT PIPING AS PER MANUFACTURERS

3. INSULATE ALL REFRIGERANT PIPING AS PER SPECIFICATIONS.

6. CONTRACTOR SHALL PROVIDE AND INSTALL SEISMIC SUPPORTS

7. CONTRACTOR SHALL INSTALL ALL PIPING AND EQUIPMENT SUCH

THAT IT DOES NOT INFRINGE ON THE 60" CLEARANCE ZONE

ROOM 102. SEE 'A' DRAWINGS FOR MORE INFORMATION.

REQURED BELOW THE PROPOSED MANHOLE COVER IN DECON

4. INSTALL ALL CONDENSATE PIPING AS PER SPECIFICATIONS. 5. PITCH ALL CONDENSATE PIPING AS PER SPECIFICATIONS.

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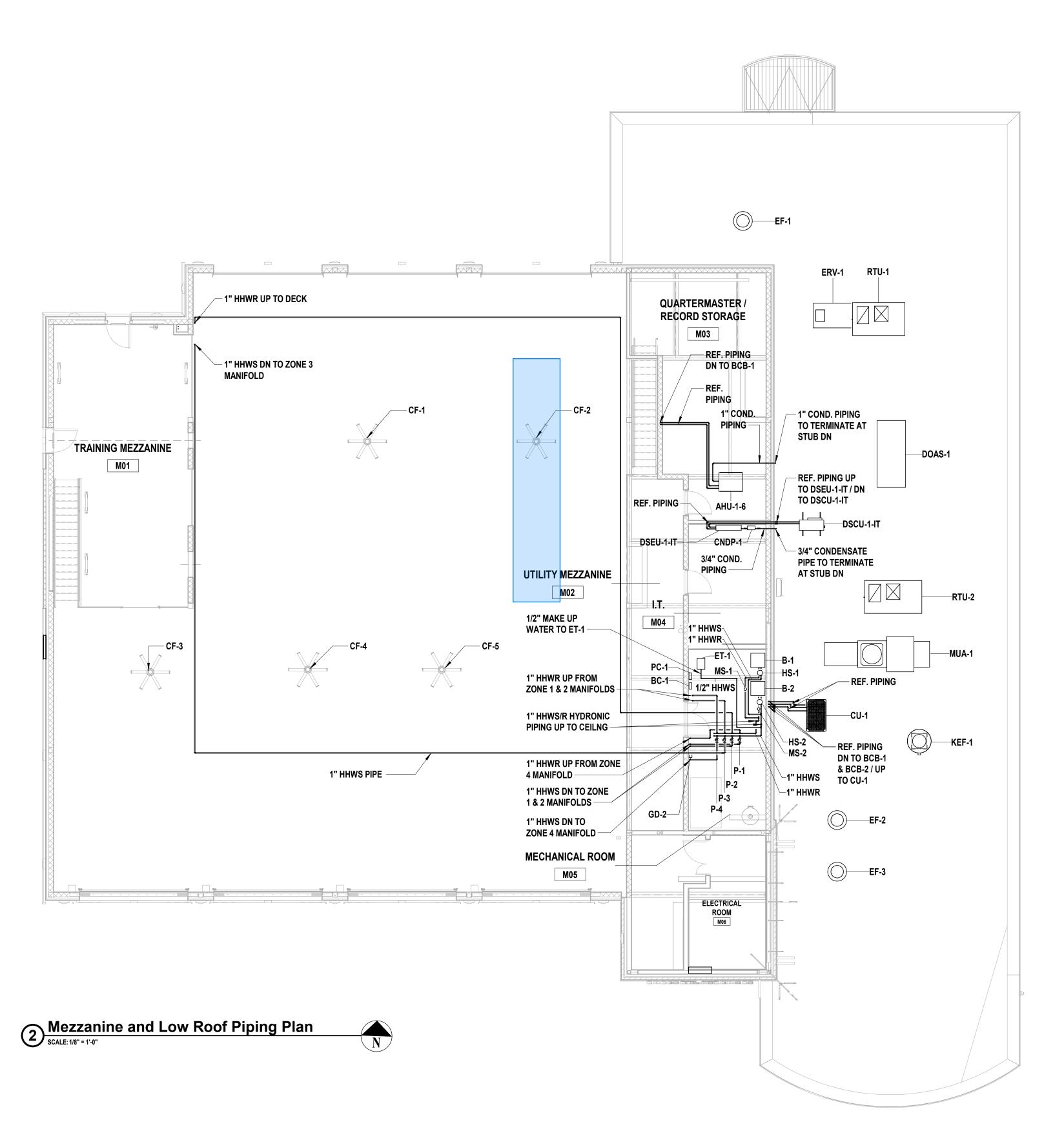
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SHEET TITLE

FIRST FLOOR HVAC PIPING PLAN

D 414//140

M 101.00



#### **GENERAL MECHANICAL NOTES**

1. INSTALL ALL REFRIGERANT PIPING AS PER SPECIFICATIONS. 2. SIZE ALL REFRIGERANT PIPING AS PER MANUFACTURERS INSTALL MANUAL. 3. INSULATE ALL REFRIGERANT PIPING AS PER SPECIFICATIONS. 4. INSTALL ALL CONDENSATE PIPING AS PER SPECIFICATIONS. 5. PITCH ALL CONDENSATE PIPING AS PER SPECIFICATIONS. 6. ALL ROOFTOP HVAC EQUIPMENT SHALL BE INSTALLED A MINIMUM OF 10'-0" AWAY FROM ALL ROOF EDGES. 7. CONTRACTOR SHALL PROVIDE AND INSTALL SEISMIC SUPPORTS & RESTRAINTS FOR ALL HVAC PIPING. 8. MAKE UP WATER LINE FOR THE RADIANT FLOOR BOILER SYSTEM, UP TO AND INCLUDING BACKFLOW PREVENTION DEVICE, SHALL BE THE RESPONSIBILITY OF THE 'P' TRADE. 'M' TRADE SHALL PROVIDE AND INSTALL ALL MAKE UP WATER PIPING/SYSTEM COMPONENTS DOWNSTREAM OF THE BACKFLOW PREVENTION DEVICE. 'M' TRADE SHALL COORDINATE WITH 'P' TRADE FOR CONNECTION TO MAKE UP WATER LINE.

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SHEET

MEZZANINE AND LOW ROOF HVAC PIPING PLAN

RAWING

M 102.00



### GENERAL MECHANICAL NOTES:

INSTALL HVAC EQUIPMENT AS PER MANUFACTURERS INSTALLATION INSTRUCTIONS.
 SIZE REFRIGERANT PIPING AS PER MANUFACTURERS INSTALLATION INSTRUCTIONS.
 INSULATE ALL REFRIGERANT AND CONDENSATE PIPING AS PER SPECIFICATIONS.
 PITCH ALL CONDENSATE PIPING AS PER SPECIFICATIONS.

5. COORDINATE/TRANSITION ALL DUCTWORK WITH STRUCTURAL MEMBERS BELOW, AS REQUIRED.

6. FLASH ALL ROOF PENETRATIONS, AS PER SPECIFICATIONS AND DETAILS.
7. INSULATE, WEATHERPROOF, AND SUPPORT ALL ROOFTOP DUCTWORK AS PER

8. PROVIDE AND INSTALL THYBAR SUPPORT RAILS TEMS-1 SYSTEM FOR ALL SPLIT/VRF CONDENSING UNITS AND VEHICLE EXHAUST FANS. SEE DETAILS FOR FURTHER FOLLOWERS SUPPORT INFORMATION

EQUIPMENT SUPPORT INFORMATION.

9. ALL ROOFTOP HVAC EQUIPMENT SHALL BE INSTALLED A MINIMUM OF 10'-0" AWAY FROM ALL ROOF EDGES.

10. CONTRACTOR SHALL PROVIDE AND INSTALL SEISMIC RESTRAINTS FOR ALL HVAC DUCTWORK, PIPING, AND EQUIPMENT. SEE VIBRATION ISOLATION / SEISMIC & WIND RESTRAINTS SCHEDULE FOR FURTHER INFORMATION ON RESTRAINING HVAC EQUIPMENT.

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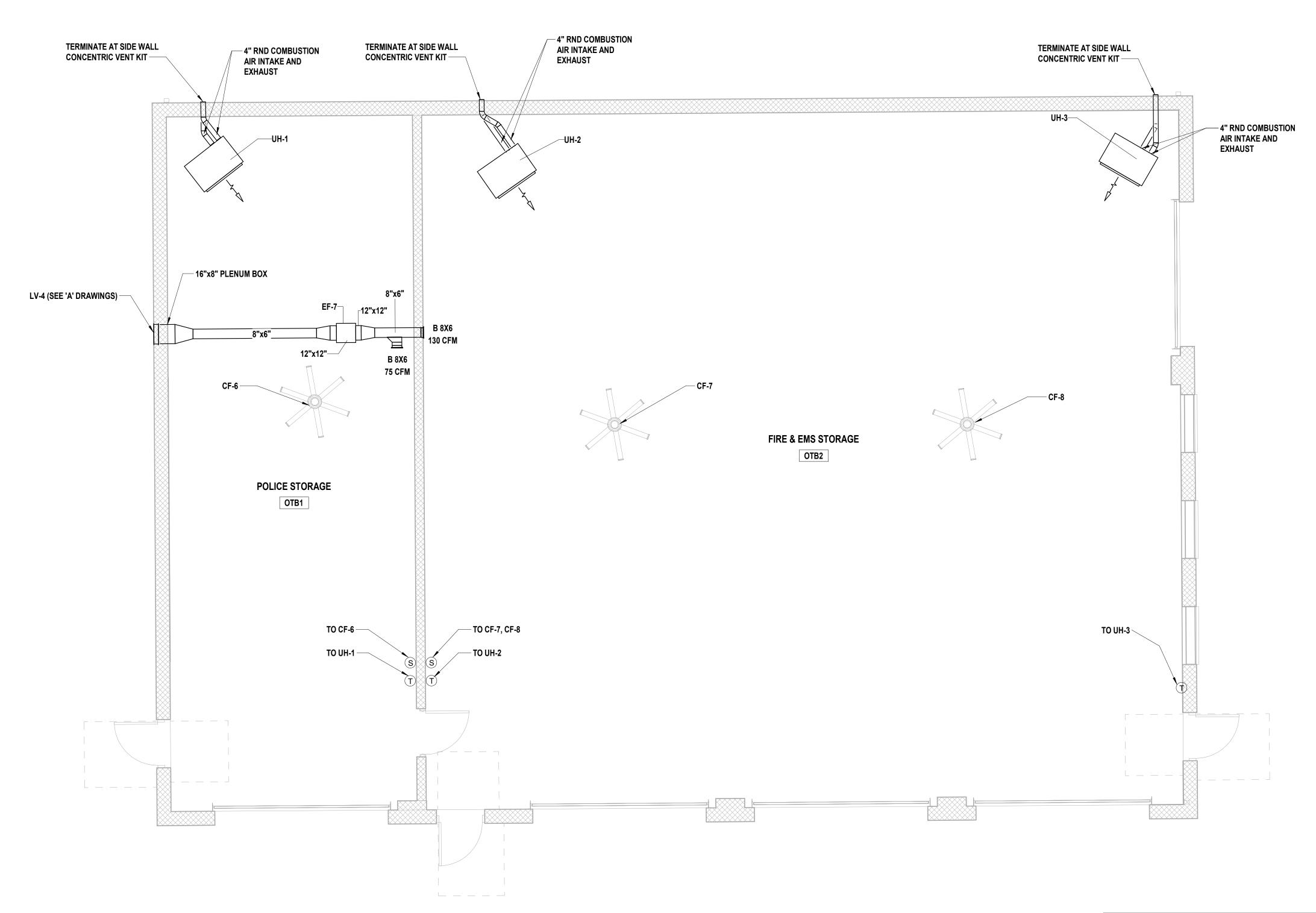
SHEET TITLE

HIGH ROOF HVAC PLAN

DRAWING

M 103.00

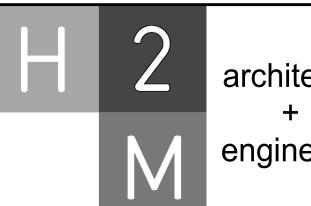
OUTBUILDING HVAC PLAN
SCALE: 1/4" = 1'-0"



# GENERAL MECHANICAL NOTES:

- 1. INSTALL HVAC EQUIPMENT AS PER MANUFACTURERS INSTALLATION INSTRUCTIONS.
  2. ALL HVAC EQUIPMENT TO BE INSTALLED WITH MANUFACTURERS RECOMMENDED
- CLEARANCES.
  3. COORDINATE/TRANSITION ALL DUCTWORK WITH STRUCTURAL MEMBERS, AS
- NECESSARY.
  4. ALL UNIT HEATER'S SUPPLY AND EXHAUST DUCTWORK TO BE INSTALLED WITH FACTORY PROVIDED CONCENTRIC VENT KIT, AND INSTALLED AS PER MANUFACTURERS
- INSTRUCTIONS. CONCENTRIC VENT KIT, AND INSTALLED AS PER MANUFACTURER INSTRUCTIONS. CONCENTRIC VENT KIT SHALL STICK OUT NO MORE THAN 7" PAST BUILDING FACADE.

  5. CONTRACTOR SHALL PROVIDE AND INSTALL SEISMIC RESTRAINTS FOR ALL HVAC
- 5. CONTRACTOR SHALL PROVIDE AND INSTALL SEISMIC RESTRAINTS FOR ALL HVAC DUCTWORK, PIPING, AND EQUIPMENT. SEE VIBRATION ISOLATION / SEISMIC & WIND RESTRAINTS SCHEDULE FOR FURTHER INFORMATION ON RESTRAINING HVAC
- 6. CONTRACTOR SHALL PROVIDE AND INSTALL SEISMIC RESTRAINTS FOR ALL HVAC DUCTWORK, PIPING, AND EQUIPMENT. SEE VIBRATION ISOLATION / SEISMIC & WIND RESTRAINTS SCHEDULE FOR FURTHER INFORMATION ON RESTRAINING HVAC
- EQUIPMENT.
  7. PROVIDE AND INSTALL INSULATED BACKPLATES ON ALL THERMOSTATS LOCATED ON
- EXTERIOR WALLS.
  8. ALL THERMOSTATS TO BE WALL MOUNTED AT A HEIGHT OF 48" AFF.



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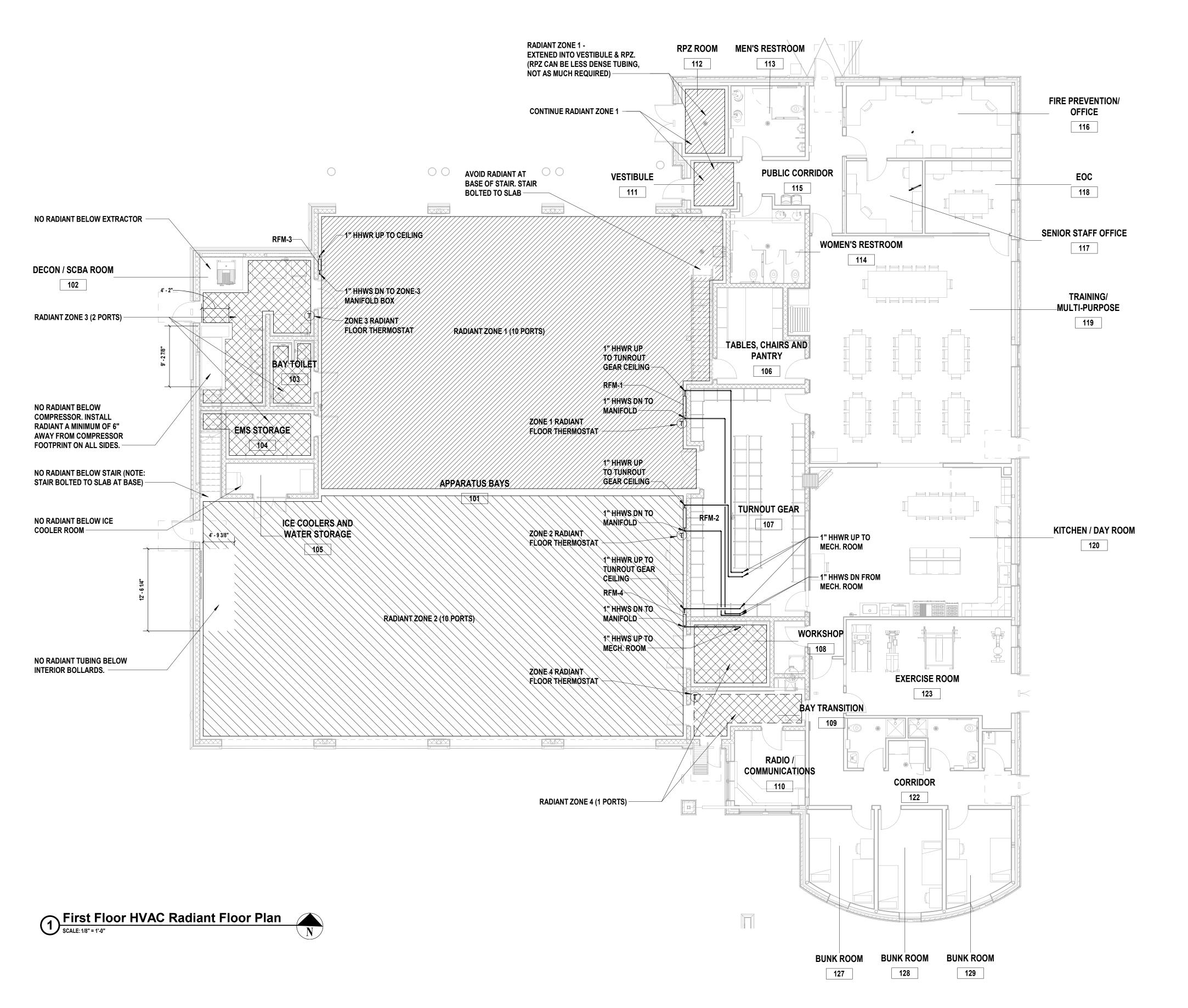
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**OUTBUIDLING HVAC PLAN** 

M 104.00









1. ALL RADIANT FLOOR PIPING TO MAINTAIN A MINIMUM DISTANCE OF 6" FROM ALL WALLS.
2. ALL THERMOSTATS TO BE WALL MOUNTED AT A HEIGHT OF 48"

### RADIANT ZONE KEY PLAN:

ZONE 1: NORTH HALF OF APPARATUS BAY (101), RPZ (112), & VESTIBULE (111).

ZONE 2: SOUTH HALF OF APPARATUS BAY (101).

ZONE 3: DECON/SCBA (102), BAY TOILET (103), & EMS STORAGE (104).

ZONE 4: WORKSHOP (108), & BAY TRANSITION (109).

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FIRST FLOOR HVAC RADIANT FLOOR PLAN

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PLENUM BOX.

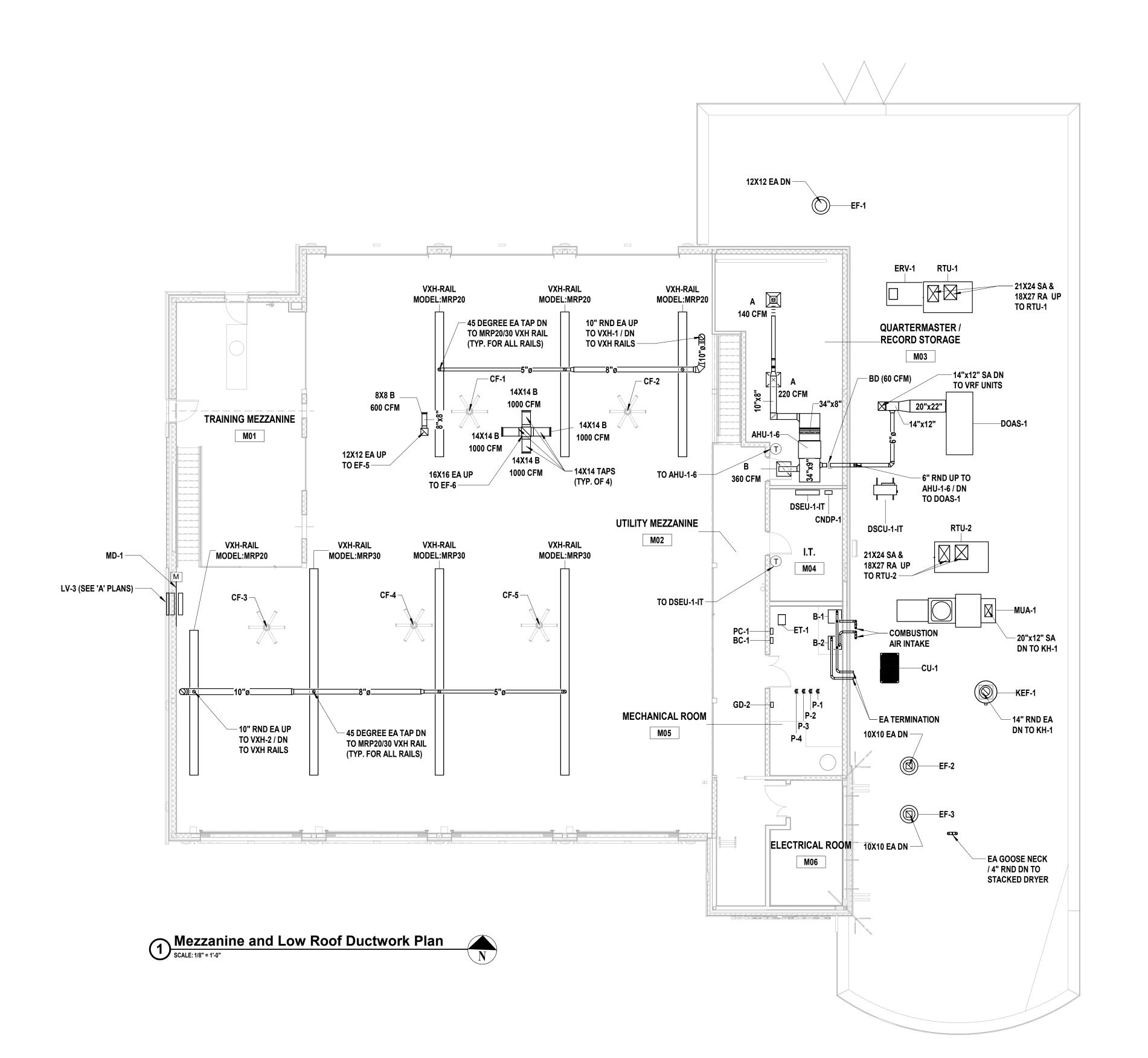
17. ALL THERMOSTATS TO BE WALL MOUNTED AT A HEIGHT OF 48" AFF.

18. GD-1 TO BE WALL MOUNTED AT A HEIGHT OF 48" AFF.

FIRST FLOOR HVAC DUCTWORK
PLAN

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**GENERAL MECHANICAL NOTES:** 

SPECIFICATIONS.

INSTRUCTIONS.

NECESSARY.

FOR METHANE DETECTION..

FROM ALL ROOF EDGES.

2. MAXIMUM FLEX DUCT LENGTH TO BE 5'-0".

**EQUIPMENT SUPPORT INFORMATION.** 

PIPING, AS PER SPECIFICATIONS.

9. MAXIMUM FLEX DUCT LENGTH TO BE 5'-0".

1. INSTALL HVAC EQUIPMENT AS PER MANUFACTURERS INSTALLATION INSTRUCTIONS.

6. PROVIDE AND INSTALL THYBAR SUPPORT RAILS TEMS-1 SYSTEM FOR ALL SPLIT/VRF CONDENSING UNITS AND VEHICLE EXHAUST FANS. SEE DERAILS FOR FURTHER

7. ALL ROOFTOP HVAC EQUIPMENT SHALL BE INSTALLED A MINIMUM OF 10'-0" AWAY

3. COORDINATE/TRANSITION ALL DUCTWORK WITH STRUCTURAL MEMBERS, AS

4. FLASH ALL ROOF PENETRATIONS, AS PER SPECIFICATIONS AND DETAILS.5. INSULATE, WEATHERPROOF, AND SUPPORT ALL ROOFTOP DUCTWORK AS PER

8. PROVIDE AND INSTALL VOLUME DAMPERS ON ALL BRANCH DUCTWORK.

10. SIZE ALL REFRIGERANT PIPING AS PER MANUFACTURERS INSTALLATION

13. LOCATIONS OF MRP-20 AND MRP-30 VEHICLE EXHAUST RAILS ARE

17. MAINTAIN ALL MANUFACTURER RECOMMENDED CLEARANCES.
18. ALL THERMOSTATS TO BE WALL MOUNTED AT A HEIGHT OF 48" AFF.

11. INSULATE AND SUPPORT ALL REFRIGERANT PIPING AND CONDENSATE DRAIN

EXHAUST SYSTEM IN ITS ENTIRETY. THIS IS INCLUDING BUT NOT LIMITED TO VXH-1, VXH-2, ALL MRP-20 & MRP-30 VEHICLE EXHAUST RAILS AND ALL THEIR ASSOCIATED HARDWARE, DUCTWORK, HOSES, AND CONNECTORS. MECHANICAL TRADE SHALL COORDINATE WITH PLYMOVENT, FOR FULL VEHICLE EXHAUST PACKAGE, PRIOR TO

APPROXIMATE/DIAGRAMMATIC. MECHANICAL TRADE SHALL COORDINATE WITH

PLYMOVENT, THE FIRE DISTRICT, AND GENERAL CONTRACTOR FOR EXACT VEHICLE

15. FOR ALL DAMPERS ABOVE GYP. CEILINGS, PROVIDE AND INSTALL 24X24 ACCESS

19. GD-2 TO BE WALL MOUNTED AT HEIGHT OF MANUFACTURERS RECOMMENDATIONS

16. COORDINATE/TRANSITION ALL DUCTWORK WITH STRUCTURAL MEMBERS, AS

EXHAUST RAIL MOUNTING LOCATIONS/PLACEMENT. FINAL RAIL MOUNTING LOCATIONS AND MOUNTING SYSTEMS SHALL BE COORDINATED WITH GENERAL CONTRACTOR.

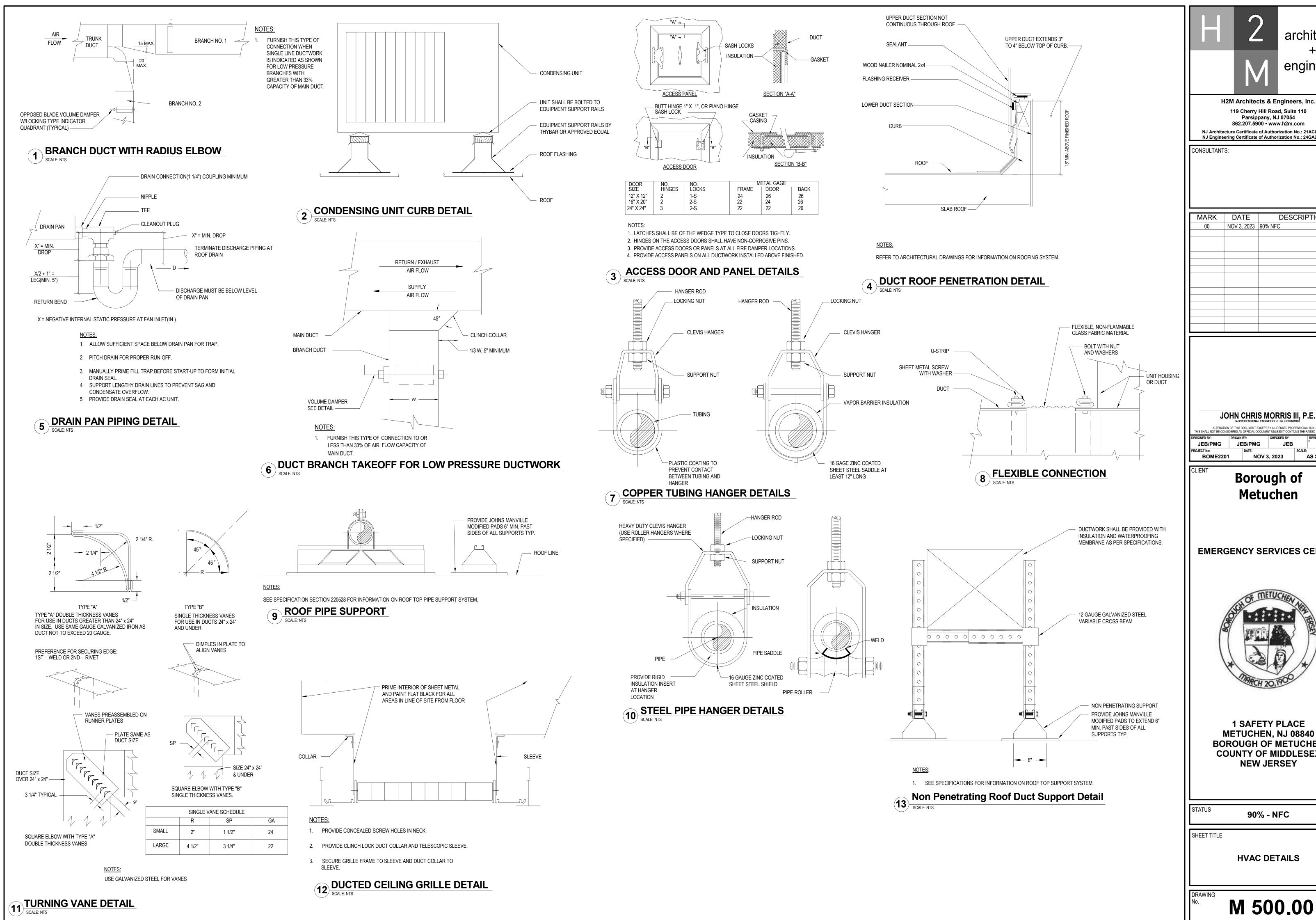
14. FOR ALL VRF AHU'S ABOVE GYP. CEILINGS, PROVIDE AND INSTALL 24X24 ACCESS

12. MECHANICAL TRADE SHALL PURCHASE AND INSTALL THE DIRECT CAPTURE VEHICLE

MEZZANINE AND LOW ROOF HVAC DUCTWORK PLAN

RAWING

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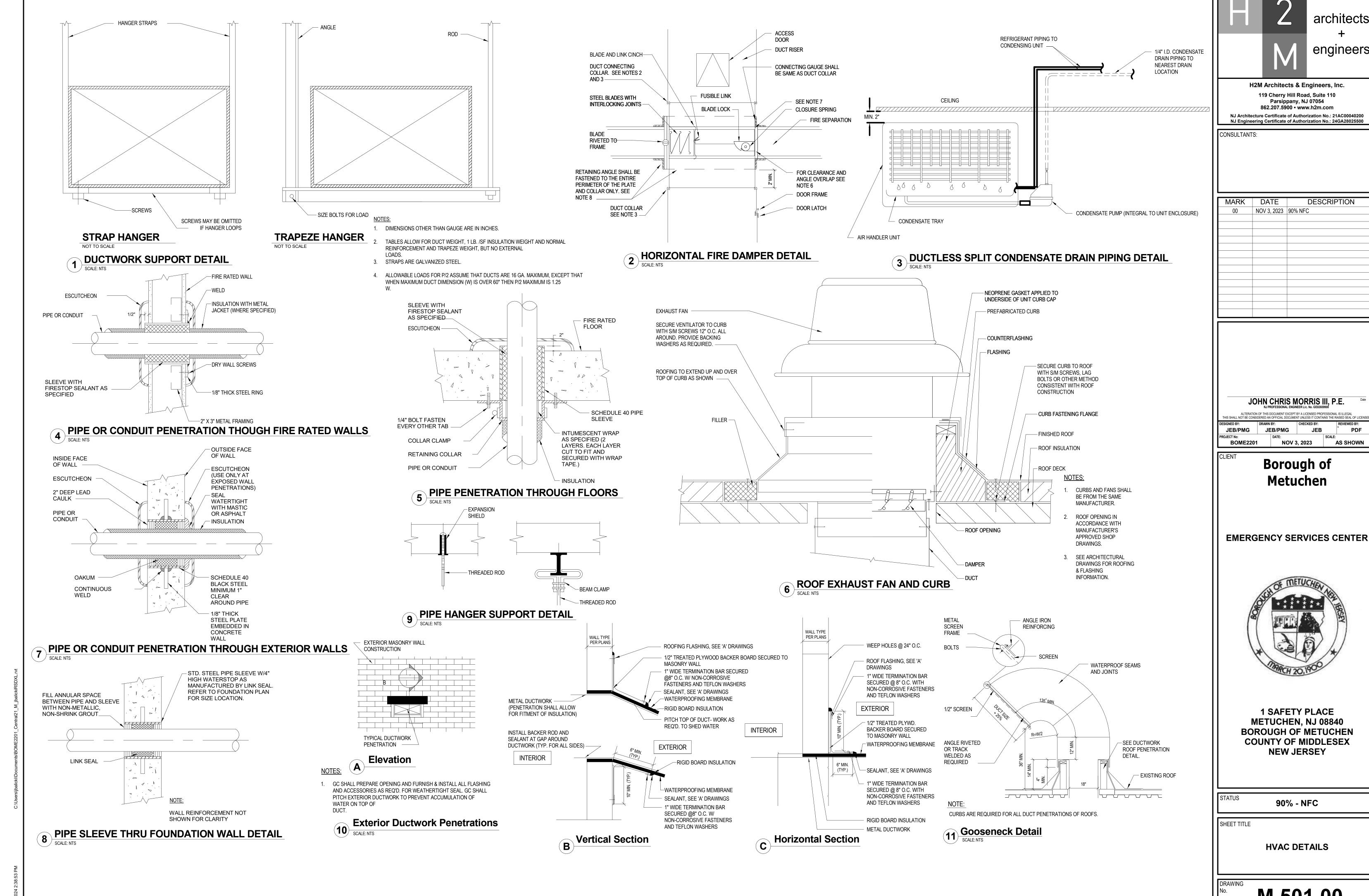


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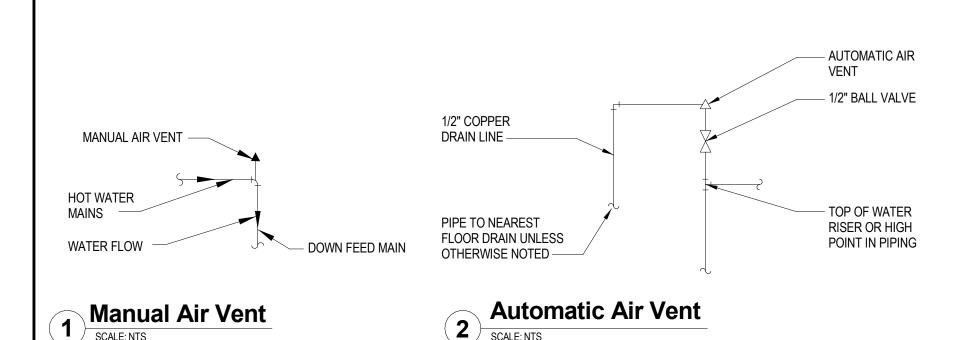
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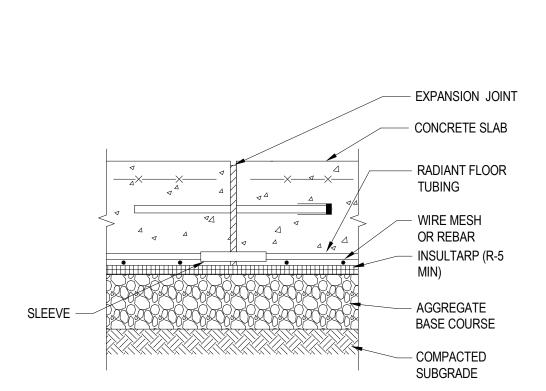
**HVAC DETAILS** 

M 500.00



M 501.00

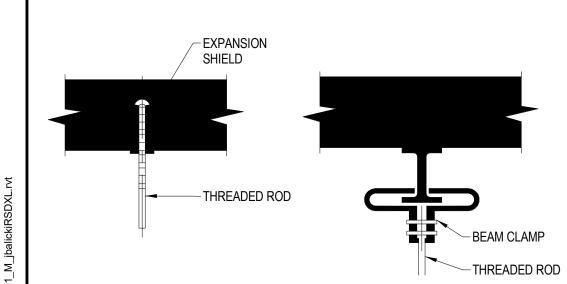




# Radiant Floor Tubing Installation Detail

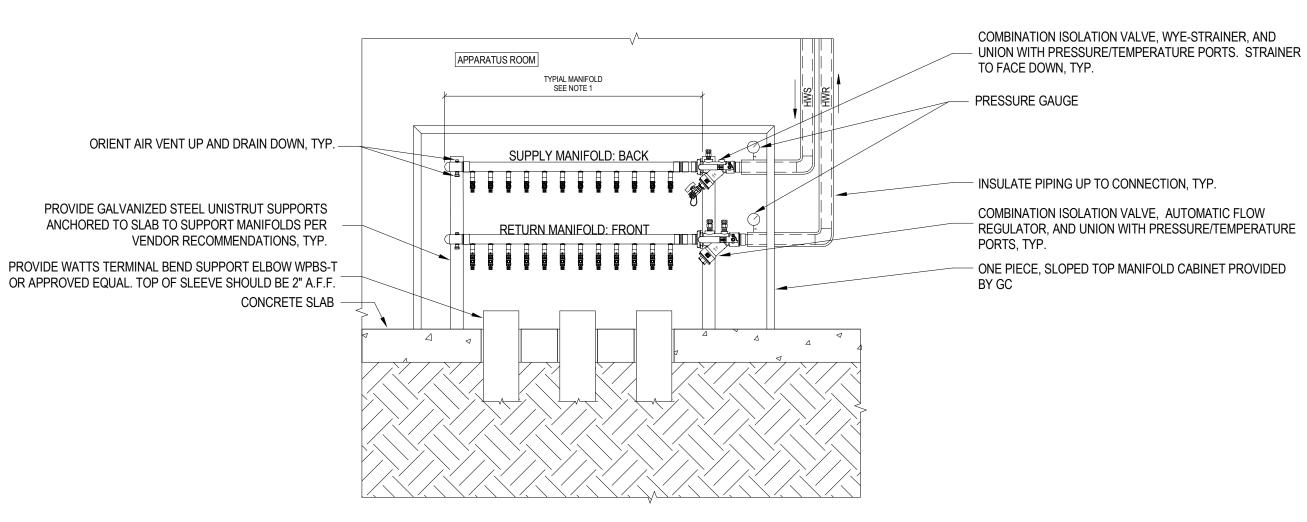
DETAIL FOR CONCRETE PAVEMENT - HEAVY DUTY SUCH AS APP BAYS.

REFER TO STRUCTURAL DRAWINGS FOR SLAB CONSTRUCTION AND DETAILS. THIS DETAIL PROVIDES GENERAL INSTALLATION REQUIREMENTS AND IS PROVIDED FOR REFERENCE ONLY. INSTALL TUBING ACCORDING TO SPECIFIC VENDER INSTRUCTION. IN CASE OF ANY CONFLICTING REQUIREMENTS, THE VENDOR REQUIREMENTS SHALL SUPERSEDE THIS DETAIL.



Pipe Hanger Support Details

SCALE: NTS



# Typical Radiant Manifolds SCALE: NTS

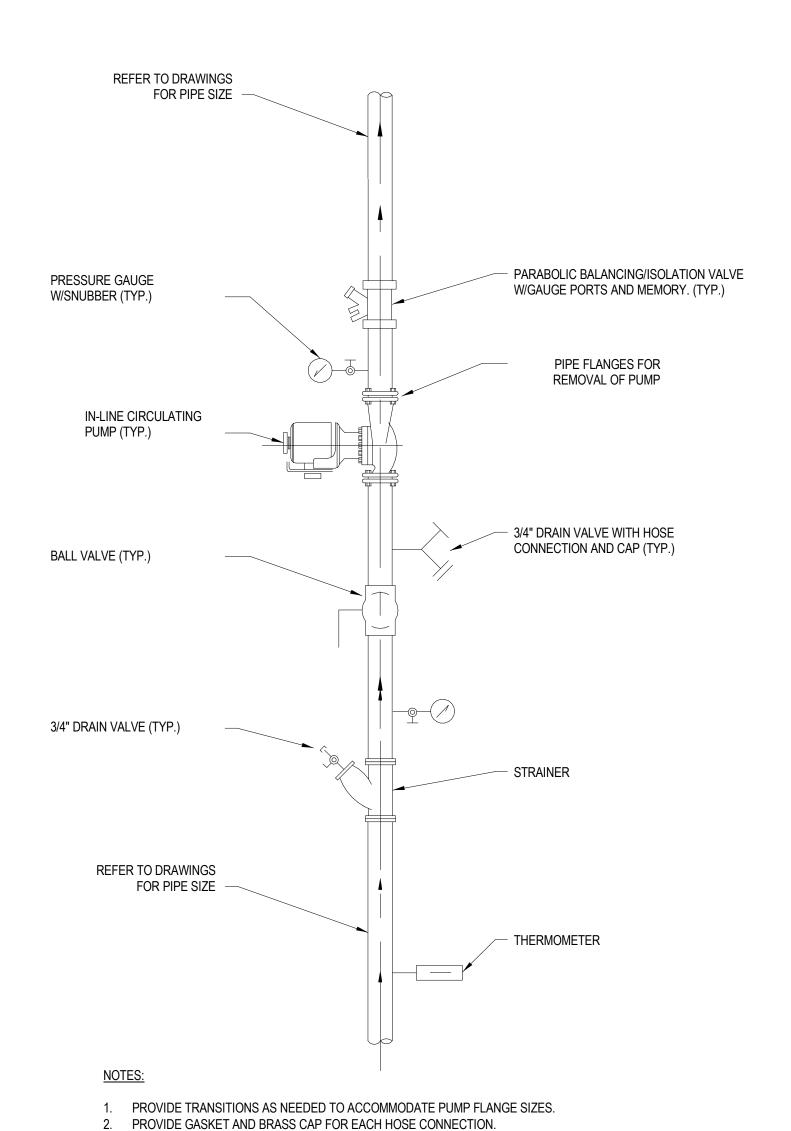
1. ALL DIMENSIONS AND QUANTITIES ARE FOR REFERENCE ONLY. MANIFOLD LENGTH TO BE

PROVIDE MANIFOLD LOOP THERMOMETERS ON SUPPLY AND RETURN FOR EACH MANIFOLD. REFER TO FLOW DIAGRAM ON SHEET M-630 FOR CONTROL VALVE LOCATIONS

BY 'P' TRADE BY 'M' TRADE MAKE-UP WATER ASSEMBLY-—CONTRACT 'P' TO BRING CW PIPING TO A POINT ABOVE THE BOILER BYPASS VALVE (N.C.)-— 3/4" COLD WATER (BY CONTRACT 'G') -BACKFLOW PREVENTION BY CONTRACT 'P' TO EXPANSION TANK 2 PRESSURE REDUCING VALVE (15 PSI) TO PUMP SUCTION 2 TO HYDRAULIC/AIR & DIRT SEPARATORS AND BOILERS

Make-Up Water Piping Detail

SCALE: NTS



PROVIDE TRANSITION TO MATCH EXISTING ZONE PIPE DIAMETER DOWNSTREAM OF FLOW CONTROL VALVE.

5. OFFSET PUMP LOCATIONS AS NECESSARY TO PROVIDE ADEQUATE CLEARANCE FOR ACCESS TO PUMPS, VALVES, AND GAUGES.

MOUNT PUMPS IN ORIENTATIONS RECOMMENDED BY MANUFACTURER.

Radiant Zone Pump Piping Schematic

SCALE: NTS

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**HVAC DETAILS** 

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AIR OUTLI	ETS	BASIS OF			AIR FLOW	RANGE (CFM)	NEON CIZE	MOTORIZED	DAMPER	RS	PERFORMANCE	E/CONSTRUCTION	BASIS OF DESIG	GN -	ELECTRIC UNIT H	HEATERS	PERFORMANCE/C	ONSTRUCTION REQU	IREMENTS	BASIS OF	DESIGN INFORMATION						
DESIGNATION	SYMBOL	DESIGN: MNF/ MODEL NO.	DESCRIPTION	FACE SIZE (IN)	MIN	MAX	NECK SIZE DIAMETER (IN.)	EQUIPMENT L	OCATION	SYSTEM SERVED	AIR FLOW	REMENTS  V x H (IN.) SERVICE	INFORMATION  MNF MODEL	NOTES	EQUIPMENT AREA SERVE	ED FAN DA	TOTAL	AIR DATA		. DATA MODEL	NOMINAL NOMINAL						
				24x24 UNLESS	201	200 315	8	MD 4	DADATI IC DAV	11/2	RATE (CFM)					FLOW (CFM) HP	OLTS/PHASE (MBH)	ENT. DB LVG. DE TEMP. (DEG. F) (DEG. F)	THROW (FT.)	MNF   NO		NOTES					
A		TITUS/OMNI	SQUARE FACE CEILING DIFFUSER	OTHERWICE MOTER	316 451	450 650	10	MD-1 APF	PARATUS BAY	LV-3	4002	36 x 42 INTAKE	GREENHECK VCD-2		EUH-1 RPZ (ROOM 112  IOTES:	12) 350 1/100	208/1 10.2	55 82	12 3	QMARK MUH03-8	1 14 x 7.5 x 16 27	1-4					
	A (CFM)				651	850	14	<ol> <li>1. 120V MOTORIZED D</li> <li>2. MD-1 TO BE INTERL</li> </ol>		MODEL NUMBER FSNF120- 6. WHEN EF-6 IS OFF, MD-1	FC 1 IS CLOSED. WHEN EF-6 IS (	ON, MD-1 IS OPEN.			MT-1 INTERNAL THERMO     POWER DISCONNECT SV	WITCH (MPDS-25)											
				40.40 HNU FCC				3. FAIL CLOSED							<ol> <li>UNIVERSAL WALL AND C</li> <li>24V CONTROL TRANSFORM</li> </ol>												
В		TITUS/350RL-5	RETURN/EXHAUST GRILLE	12x12 UNLESS OTHERWISE NOTED ON DRAWINGS	SEE DRAWINGS	SEE DRAWINGS	NA																				1
	B (CFM)							DEDICATED	OUTDOO	R AIR UNITS	<b>;</b>											BAS	SIS OF DESIGN INFORMATION	N			
								EQUIPMENT LO	CATION ARE	EA SERVED UNITS SI		PLY FAN	UTSIDE AIR		COOLING	ATA	TOTAL	HEATING AIR DATA	REHEA	AT COIL				ELECTRICAL	DATA	NOTES	
С		NA	NA	NA	NA	NA	NA	NO.			AIR FLOW (CFM)	-	LOW (CFM) REFRIGE	GERANT TOTAL CAPACITY PE (MBH)	ENT. DB/WB (DEG. F)		HEATING CAPACITY ENT. AIR 1		AIR TEMPERATURE (DEG. F)	ACITY (MBH)	IF MODEL NO.	NOMINAL DIMENSIONS LxWxH	NOMINAL OPERATION WEIGHT (LBS)	VOLTS/PHASE MOTOR H	HP MCA/MOCP		
	C (CFM)							DOAS-1 LO	W ROOF INDO	OOR VRF UNITS 13	3 1000	1.46	1000 R-41	10A 67.8	95/75	55.2/55.1	100	10		2.4 LC	G ARDR-12-5I-C-F	1 105 X 59 X 44	1086	208/3 1/2	24.4/35	1-7	
								BACNet CAPABLE FC     FACTORY WIRED NO			<ol><li>OUTDOOR AIR DAM</li></ol>		WIRED 7. PRO	OVIDE AND INSTALL LOW VO	TAGE WALL MOUNTED CONTR	ROLLER											
D	<b>+</b>	TITUS/300RL-5	SIDEWALL SUPPLY REGISTER	SEE DRAWINGS	SEE DRAWINGS	SEE DRAWINGS	NA	3. GKD ROOF CURB (G			6. CONDENSATE OVER	RFLOW SWITCH												DUCT AC	CESS DOORS		
	D (CFM)														201110 2011		NCE/CONSTRUCTION REC							DUCT SIZE PERPENDICULA	AD ACCESS DOOR A	CCESS DOOR	
Е		TITUS/ML-37	LINEAR SLOT DIFFUSER	2 SLOT x 48" L (UNLESS OTHERWISI NOTED ON DRAWINGS)	SEE [	DRAWINGS	1/2" SLOT	EQUIPMENT LOCA	ATION AR			SUPPLY FAN	MIXED AIR	С	DOLING COIL  AIR DATA	FILTERS		HEATING COIL HEATING	MEDIUM		BASIS OF DESIG		ELECTRICAL DATA NOT	TO AIR FLOW (II	N) HEIGHT (IIN)	WIDTH (IN)  8" MINIMUM OR	
NOTES	E (CFM)			2.0						,	ARI SEER AIR FLOW (CFM)	NOMINAL SIZE (TONS) EXT. S.P. (IN W.G)	HP OUTDOOR AIRFLOW (CFM)	REFRIGERANT TOTAL/SE CAPACIT	NSIBLE (MBH) ENT. DB/WB MAX I (DEG. F) DB/WB (I				ERATURE LVG. AIR TEMPERATU		MODEL NO. NOMINAL DI (IN) Lx	MENSIONS OPERATION WEIGH	VOLTS/PHASE	6" - 24" 25" - 48"	DUCT SIZE  2" SMALLER THAN	QUAL TO ACCESS DOOR HEIGHT	
			SHOWER ROOMS, TOIL FICATION SECTION 233'		TS AND OTHER HUMID	AREAS.		RTU-1 LOW	ROOF TRAININ	NG/MULTI-PURPOSE (119)	17.50 1600	4 0.60 0	.70 912	R-410A 35.	5 75/67 54.7/5	/52.7 MERV 8	(CFH) 67.9 120	(DEG. I		TEMPMASTER ZT049	9N12R2B6CCE2A2 89 X 59	9 X 42 1095	208/3 1,3-1		DUCT SIZE 3'-10"	2'-0"	
<ol> <li>PROVIDE OPPO</li> <li>PROVIDE MOUI</li> </ol>	SED BLADE DAMPER FO	OR ALL REGISTERS AND CH CEILING IN WHICH U			ING SCREWS.			RTU-2 LOW	ROOF KITCHE	EN/DAY ROOM (120)	17.00 960	3 0.60 0	.43 320	R-410A 24.	7 80/65.8 54.9/5	/52.8 MERV 8	49 60	60	107.3	TEMPMASTER ZT037	7N06P2B6CCE2A3 89 X 59	9 X 42 1060	208/3 2,4-8,1	10-17 PLENUMS AND WA	NLK 5'-6"	2'-0"	
								NOTES:  1. AVERAGING THERM 2. ONE - 7 DAY PROGF 3. ERV (VP011B12H2A)	RAMMABLE THERM	MOSTAT		7. CO2 SENSORS (2A 8. COMPOSITE DRAIN		13. PO	ONOMIZER WERED CONVENIENCE OUTLET		/O STAGE HEATING R RTU-1, LOCKOUT / DO NOT	WIRE SECOND STAGE	HEATING								
								<ol> <li>VFD (STANDARD)</li> <li>DIRTY FILTER SWIT</li> </ol>	·CH	COMBINED SENSOR (S1-N	NSB8BHN241-0)		LEQUIPMENT SUPPORT (1 RB (1RC0471)	(1ES0402) 14. DE 15. DC	HUMIDIFICATION / (DEMAND CONTROLLED VENT O STAGE COOLING			-									
VRF TERM	INAL UNITS	}								,	,				VRF AIR C	COOLED CO	NDENSING UI	NITS									
					PERI		UCTION REQUIREMENTS				BASIS OF DES	IGN INFORMATION	ELECTRICAL DA							PERFO	ORMANCE/ CONSTRUCTION	REQUIREMENTS			BASIS OF DESIGN I		
EQUIPMENT NO.	TYPE	AREA	SERVED	REFRIGERANT —	AIRFLOW (CFM)	SUPPLY UNIT	APACITY TOTAL RATED HEA		OOR MNF	MODEL NO.	NOMINAL DIMENSIONS W x H x D (IN.)	WEIGHT (LBS.)	ELECTRICAL DA	REWARK						NOM.	NOM.	COMPRESSOR	FANS		NOMINAL NOM		
AHU-1-1	CEILING CASSETTE	EOC/SHAREI	O OFFICE (118)	R-410A	265	(kBTU/HR) 7.5	CAPACITY (kBTU)	ink)	LG	ARNU073TRD4	25 X 25 X 10	29	208/1 0.2	0.2 - 1-4,6-8	EQUIPMENT NO.	LOCATION S	YSTEM SERVED	TYPE EAT C	DB/WB MINIMUM OA F) TEMPERATURE(°		COOLING REFRIGERA CAPACITY TYPE (MBH)	NT COMM NEGOCIA	RI	EQUIRED MNF MODE	LXVVXH   VVE	ATING   GHT   3S.)   VOLTS/PHASE	MCA MOCP NOTES
AHU-1-2	CEILING CASSETTE	CHIEF OF	FICE (117)	R-410A	265	7.5	8.5		LG	ARNU073TRD4	25 X 25 X 10	29	208/1 0.2	0.2 - 1-4,6-8								NUMBER KW N	NUMBER HP/FAN				
AHU-1-3	IEDIUM STATIC DUCTED		ENTION (116)  DMENS REST RM (113),	R-410A	372	7.5	8.5		LG	ARNU073M1A4	41 X 29 X 10	56	208/1 1.6	1.6 - 4,6-9	CU-1	POOF AHU	7-1 AHIL7-7 AHIL7-3	HEAT RECOVERY 81	/61 -22	108	96 R-410A	1 6.7	2 1.13	11.2 LG ARUMOS	96BTE5 49 X 67 X 30 5	07 208/3	28.5 40 1-6
AHU-1-4	EDIUM STATIC DUCTED	CORRIDOR (115), N		R-410A	399	12.3	13.6		LG	ARNU123M1A4	41 X 29 X 10	56		1.6 - 4,6-9			AHU-2-4, AHU-2-5	ONDENSER  HEAT	vo.		24 244						40.0
	IEDIUM STATIC DUCTED	,	7) & WORKSHOP (108) ECORD STORAGE (M03)	R-410A R-410A	399	7.5	13.6	CU-1	LG LG	ARNU123M1A4 ARNU073M1A4	41 X 29 X 10 41 X 29 X 10	56		1.6     -     5,6-9       1.6     -     4,6-9	CU-2	ROOF		RECOVERY 122 ONDENSER	2/61 -4	27	24 R-410A	1 3.2	1 0.14	11.2 LG ARUN02	24GSS4 40 X 16 X 33 1	59 208/1	19.6 30 1,3,7,8
AHU-2-1 N	EDIUM STATIC DUCTED		SINGLE OCC. TOILETS ORRIDOR (121)	R-410A	606	19.1	21.5		1.0	A DNII 1402M4 A 4		50	000/4		NOTES:												
AHU-2-2									LG	ARNU183M1A4	41 X 29 X 10	56	208/1 1.6	1.6 - 5,6-9	-	D INSTALL SUPPORT TE NTERLOCKED WITH BC		CONTROL KIT (PR) BASE PAN HEATER	R (ZPLT1A52A)								
	EDIUM STATIC DUCTED	RADIO/COMMU	SITION (109), NICATIONS (110)	R-410A	385	9.6	10.9		LG	ARNU093M1A4	41 X 29 X 10	56	208/1 1.6	1.6 - 5,6-9	2. CU-1 TO BE IN 3. ELECTRICAL T		8-1 & BCB-2 6. CCT SWITCH 7.	BASE PAN HEATEF BASE PAN HEATEF	R (ZPLT1A52A)								
AHU-2-3	CEILING CASSETTE CEILING CASSETTE	RADIO/COMMU EMS OFFIC		R-410A R-410A R-410A	385 265 265	9.6 7.5 7.5	10.9 8.5 8.5			+		56 56 29 29	208/1 1.6 208/1 0.2 208/1 0.2	1.6 - 5,6-9 0.2 - 1-3,5-9	2. CU-1 TO BE IN 3. ELECTRICAL 1 4. LOW AMBIENT  ERV UNIT	NTERLOCKED WITH BC TO PROVIDE DISCONN	8-1 & BCB-2 6. CCT SWITCH 7.	BASE PAN HEATEF BASE PAN HEATEF	R (ZPLT1A52A) R (PQSH1200)								
AHU-2-3 AHU-2-4 AHU-2-5	CEILING CASSETTE	RADIO/COMMU  EMS OFFIC  BUNK RI  BUNK RI	NICATIÒNS (110) E/BUNK (127)	R-410A	265	7.5	8.5		LG LG	ARNU093M1A4  ARNU073TRD4	41 X 29 X 10 25 X 25 X 10	56 56 29 29 29 29 56	208/1 1.6 208/1 0.2 208/1 0.2	1.6 - 5,6-9  0.2 - 1-3,5-9  0.2 - 1-3,5-9	2. CU-1 TO BE IN 3. ELECTRICAL 1 4. LOW AMBIENT  ERV UNIT	NTERLOCKED WITH BC TO PROVIDE DISCONN	8-1 & BCB-2 6. CCT SWITCH 7.	BASE PAN HEATER BASE PAN HEATER LOW AMBIENT BAR	R (ZPLT1A52A) R (PQSH1200) FFLE KIT (ZLABGP04A)  ERFORMANCE/CC				BASIS O	OF DESIGN INFORMAT	ΓΙΟΝ		
AHU-2-3 AHU-2-4 AHU-2-5 AHU-3-1 AHU-3-2 N	CEILING CASSETTE CEILING CASSETTE CEILING CASSETTE	RADIO/COMMU  EMS OFFIC  BUNK R  BUNK R  DECON/SCB  EMS STORAGE, ICE	NICATIONS (110)  E/BUNK (127)  DOM (128)  DOM (129)	R-410A R-410A R-410A	265 265 265	7.5 7.5 7.5	8.5 8.5 8.5	CU-2	LG LG LG	ARNU093M1A4  ARNU073TRD4  ARNU073TRD4  ARNU073TRD4	41 X 29 X 10 25 X 25 X 10 25 X 25 X 10 25 X 25 X 10	56 29 29 29 29 56 56	208/1 1.6 208/1 0.2 208/1 0.2 208/1 0.2	1.6 - 5,6-9  0.2 - 1-3,5-9  0.2 - 1-3,5-9	2. CU-1 TO BE IN 3. ELECTRICAL 1 4. LOW AMBIENT  ERV UNIT	NTERLOCKED WITH BC TO PROVIDE DISCONN	8-1 & BCB-2 6. CCT SWITCH 7.	BASE PAN HEATER BASE PAN HEATER LOW AMBIENT BAR	R (ZPLT1A52A) R (PQSH1200) :FLE KIT (ZLABGP04A)				BASIS O	OF DESIGN INFORMAT	ΓΙΟΝ		
AHU-2-3 AHU-2-4 AHU-2-5 AHU-3-1 AHU-3-2 NOTES: 1. CASSETTE PAR 2. CEILING CASSI	CEILING CASSETTE CEILING CASSETTE CEILING CASSETTE IEDIUM STATIC DUCTED IEDIUM STATIC DUCTED IEL (PT-QCHW0) ETTE FLANGE (PTVK430)	RADIO/COMMU  EMS OFFIC  BUNK R  BUNK R  DECON/SCB  EMS STORAGE, ICE TOILE  4. AHU TO 5. AHU TO	NICATIONS (110)  E/BUNK (127)  DOM (128)  DOM (129)  A ROOM (102)  COOLERS (105), BAY  ET (103)  BE INTERLOCKED WITH BE INTERLOCKED WITH	R-410A R-410A R-410A R-410A R-410A R-410A R-610A R-610A R-610A R-610A R-610A R-610A R-610A R-610A R-610A	265 265 265 399 372  MULTISITE CRC2 F BUILT IN CONDEN:	7.5 7.5 7.5 12.3 7.5 REMOTE CONTROLLER (SATE LIFT	8.5 8.5 8.5 13.6 8.5 PREMTVC2)		LG LG LG LG	ARNU093M1A4  ARNU073TRD4  ARNU073TRD4  ARNU073TRD4  ARNU123M1A4	41 X 29 X 10 25 X 25 X 10 25 X 25 X 10 25 X 25 X 10 41 X 29 X 10	29 29 29 56	208/1 1.6 208/1 0.2 208/1 0.2 208/1 0.2 208/1 1.6	1.6 - 5,6-9  0.2 - 1-3,5-9  0.2 - 1-3,5-9  1.6 - 6-9	2. CU-1 TO BE IN 3. ELECTRICAL 1 4. LOW AMBIENT  ERV UNIT	NTERLOCKED WITH BC TO PROVIDE DISCONNIT BAFFLE KIT (ZLABKAS	8-1 & BCB-2 6. CCT SWITCH 7.	BASE PAN HEATER BASE PAN HEATER LOW AMBIENT BAR	R (ZPLT1A52A) R (PQSH1200) FFLE KIT (ZLABGP04A)  ERFORMANCE/CC REQUIREN	MENTS				MOMINAL	ΓΙΟΝ	ELECTRICAL DATA	NOTES
AHU-2-3  AHU-2-4  AHU-2-5  AHU-3-1  AHU-3-2  NOTES:  1. CASSETTE PAR	CEILING CASSETTE  CEILING CASSETTE  CEILING CASSETTE  IEDIUM STATIC DUCTED  IEDIUM STATIC DUCTED  IEL (PT-QCHW0)  ITTE FLANGE (PTVK430)	RADIO/COMMU  EMS OFFIC  BUNK R  BUNK R  DECON/SCB  EMS STORAGE, ICE TOILE  4. AHU TO 5. AHU TO	NICATIONS (110)  E/BUNK (127)  DOM (128)  DOM (129)  A ROOM (102)  COOLERS (105), BAY  ET (103)  BE INTERLOCKED WITH BE INTERLOCKED WITH	R-410A R-410A R-410A R-410A R-410A R-410A R-610A R-610A R-610A R-610A R-610A R-610A R-610A R-610A R-610A	265 265 265 399 372  MULTISITE CRC2 F BUILT IN CONDEN:	7.5 7.5 7.5 12.3 7.5 REMOTE CONTROLLER (SATE LIFT	8.5 8.5 8.5 13.6 8.5		LG LG LG LG	ARNU093M1A4  ARNU073TRD4  ARNU073TRD4  ARNU073TRD4  ARNU123M1A4	41 X 29 X 10 25 X 25 X 10 25 X 25 X 10 25 X 25 X 10 41 X 29 X 10	29 29 29 56	208/1 1.6 208/1 0.2 208/1 0.2 208/1 0.2 208/1 1.6	1.6 - 5,6-9  0.2 - 1-3,5-9  0.2 - 1-3,5-9  1.6 - 6-9	2. CU-1 TO BE IN 3. ELECTRICAL 1 4. LOW AMBIENT  ERV UNIT	NTERLOCKED WITH BC TO PROVIDE DISCONNIT BAFFLE KIT (ZLABKAS	I-1 & BCB-2 6. CT SWITCH 7. 2A) 8.	BASE PAN HEATER BASE PAN HEATER LOW AMBIENT BAR	R (ZPLT1A52A) R (PQSH1200) FFLE KIT (ZLABGP04A)  ERFORMANCE/CC REQUIREN			MODEL NO.	BASIS O	MOMINAL		ELECTRICAL DATA	NOTES
AHU-2-3 AHU-2-4 AHU-2-5 AHU-3-1 AHU-3-2 NOTES: 1. CASSETTE PAP 2. CEILING CASSI 3. OA CONNECTION	CEILING CASSETTE  CEILING CASSETTE  CEILING CASSETTE  IEDIUM STATIC DUCTED  IEDIUM STATIC DUCTED  IEL (PT-QCHW0)  ITTE FLANGE (PTVK430)	RADIO/COMMU  EMS OFFIC  BUNK R  BUNK R  DECON/SCB  EMS STORAGE, ICE TOILE  4. AHU TO 5. AHU TO	NICATIONS (110)  E/BUNK (127)  DOM (128)  DOM (129)  A ROOM (102)  COOLERS (105), BAY  ET (103)  BE INTERLOCKED WITH BE INTERLOCKED WITH	R-410A R-410A R-410A R-410A R-410A R-410A R-410A  BCB-1 BCB-2 SONNECT SWITCH 9.	265 265 265 399 372  MULTISITE CRC2 F BUILT IN CONDEN: 'M' CONTRACTOR	7.5 7.5 7.5 12.3 7.5 REMOTE CONTROLLER (SATE LIFT	8.5 8.5 13.6 8.5 PREMTVC2)	ATE LINE	LG LG LG LG	ARNU093M1A4  ARNU073TRD4  ARNU073TRD4  ARNU073TRD4  ARNU123M1A4  ARNU073M1A4	41 X 29 X 10 25 X 25 X 10 25 X 25 X 10 25 X 25 X 10 41 X 29 X 10	29 29 29 56	208/1 1.6 208/1 0.2 208/1 0.2 208/1 0.2 208/1 1.6	1.6 - 5,6-9  0.2 - 1-3,5-9  0.2 - 1-3,5-9  1.6 - 6-9	2. CU-1 TO BE IN 3. ELECTRICAL 1 4. LOW AMBIENT  ERV UNIT	NTERLOCKED WITH BC TO PROVIDE DISCONNIT BAFFLE KIT (ZLABKAS	I-1 & BCB-2 6. CT SWITCH 7. 2A) 8.	BASE PAN HEATER BASE PAN HEATER LOW AMBIENT BAF	R (ZPLT1A52A) R (PQSH1200) FFLE KIT (ZLABGP04A)  ERFORMANCE/CC REQUIREN  EXT S. P. (IN.	MAX. OUTLET VELOCI	ITV	MODEL NO.	NOMINAL DIMENSIONS	L x W. x H OPERATING WEIG		ELECTRICAL DATA  MOTOR HP	NOTE:
AHU-2-3 AHU-2-4 AHU-2-5 AHU-3-1 AHU-3-2 NOTES: 1. CASSETTE PAP 2. CEILING CASSI 3. OA CONNECTION	CEILING CASSETTE  CEILING CASSETTE  CEILING CASSETTE  IEDIUM STATIC DUCTED  IEDIUM STATIC DUCTED  IEL (PT-QCHW0)  ITTE FLANGE (PTVK430)	RADIO/COMMU  EMS OFFIC  BUNK R  BUNK R  DECON/SCB  EMS STORAGE, ICE TOILE  4. AHU TO 5. AHU TO	NICATIONS (110)  E/BUNK (127)  DOM (128)  DOM (129)  A ROOM (102)  COOLERS (105), BAY  ET (103)  BE INTERLOCKED WITH BE INTERLOCKED WITH ICAL TO PROVIDE DISCO	R-410A R-410A R-410A R-410A R-410A R-410A  R-410A  BCB-1 7. BCB-2 8. DNNECT SWITCH 9.	265 265 265 399 372  MULTISITE CRC2 F BUILT IN CONDEN: 'M' CONTRACTOR	7.5 7.5 7.5 12.3 7.5 REMOTE CONTROLLER ( BATE LIFT TO PROVIDE AND INSTA	8.5 8.5 13.6 8.5 PREMTVC2) LL CHECK VALVE ON CONDENSA	BASIS OF DES	LG LG LG LG LG LG LG AG	ARNU093M1A4  ARNU073TRD4  ARNU073TRD4  ARNU073TRD4  ARNU123M1A4  ARNU073M1A4	41 X 29 X 10 25 X 25 X 10 25 X 25 X 10 25 X 25 X 10 41 X 29 X 10	29 29 29 56	208/1 1.6 208/1 0.2 208/1 0.2 208/1 0.2 208/1 1.6	1.6 - 5,6-9  0.2 - 1-3,5-9  0.2 - 1-3,5-9  1.6 - 6-9	2. CU-1 TO BE IN 3. ELECTRICAL 1 4. LOW AMBIENT  ERV UNIT	NTERLOCKED WITH BC TO PROVIDE DISCONNIT BAFFLE KIT (ZLABKAS  NO. LOG	EATION SYSTEM S	BASE PAN HEATER BASE PAN HEATER LOW AMBIENT BAF  P  SERVED  CFM	ERFORMANCE/CO REQUIREN  EXT S. P. (IN. W.C.)	MAX. OUTLET VELOCI	ITY MNF		NOMINAL DIMENSIONS (IN.)	L x W. x H  OPERATING WEIG (LBS.)	GHT VOLTS/PHASE		FLA
AHU-2-3 AHU-2-4 AHU-2-5 AHU-3-1 AHU-3-2 NOTES: 1. CASSETTE PAR 2. CEILING CASSI 3. OA CONNECTIO  EXHAUST  EQUIPMENT	CEILING CASSETTE  CEILING CASSETTE  CEILING CASSETTE  IEDIUM STATIC DUCTED  IEDIUM STATIC DUCTED  IEL (PT-QCHW0)  ETTE FLANGE (PTVK430)  FANS	RADIO/COMMU  EMS OFFIC  BUNK R  BUNK R  DECON/SCB  EMS STORAGE, ICE TOILE  4. AHU TO 5. AHU TO 6. ELECTR	NICATIONS (110)  E/BUNK (127)  DOM (128)  DOM (129)  A ROOM (102)  COOLERS (105), BAY  ET (103)  BE INTERLOCKED WITH BE INTERLOCKED WITH ICAL TO PROVIDE DISCO	R-410A R-410A R-410A R-410A R-410A R-410A P-410A R-410A P-ERFOF	265 265 265 399 372  MULTISITE CRC2 F BUILT IN CONDEN: 'M' CONTRACTOR	7.5 7.5 7.5 12.3 7.5 REMOTE CONTROLLER ( SATE LIFT TO PROVIDE AND INSTA	8.5 8.5 13.6 8.5 PREMTVC2) LL CHECK VALVE ON CONDENSA	BASIS OF DES  MODEL NO. OPE	LG L	ARNU093M1A4  ARNU073TRD4  ARNU073TRD4  ARNU073TRD4  ARNU123M1A4  ARNU073M1A4	41 X 29 X 10  25 X 25 X 10  25 X 25 X 10  25 X 25 X 10  41 X 29 X 10  41 X 29 X 10  NOTES	29 29 29 56	208/1 1.6 208/1 0.2 208/1 0.2 208/1 0.2 208/1 1.6	1.6 - 5,6-9  0.2 - 1-3,5-9  0.2 - 1-3,5-9  1.6 - 6-9	2. CU-1 TO BE IN 3. ELECTRICAL 1 4. LOW AMBIENT  ERV UNIT  EQUIPMENT N  ERV-1	NTERLOCKED WITH BC TO PROVIDE DISCONNIT BAFFLE KIT (ZLABKAS  NO. LOG	I-1 & BCB-2 6. CT SWITCH 7. 2A) 8.	BASE PAN HEATER BASE PAN HEATER LOW AMBIENT BAF  P  SERVED  CFM	ERFORMANCE/CO REQUIREN  EXT S. P. (IN. W.C.)	MAX. OUTLET VELOCI	ITV	MODEL NO.  VP011B12H2AM11	NOMINAL DIMENSIONS	L x W. x H OPERATING WEIG	GHT		
AHU-2-3 AHU-2-4 AHU-2-5 AHU-3-1 AHU-3-2 NOTES: 1. CASSETTE PAR 2. CEILING CASSI 3. OA CONNECTIO  EXHAUST  EQUIPMENT	CEILING CASSETTE  CEILING CASSETTE  CEILING CASSETTE  IEDIUM STATIC DUCTED  IEDIUM STATIC DUCTED  IEL (PT-QCHW0)  ETTE FLANGE (PTVK430)  FANS	RADIO/COMMU  EMS OFFIC  BUNK R  BUNK R  DECON/SCB  EMS STORAGE, ICE TOILE  4. AHU TO 5. AHU TO 6. ELECTR	NICATIONS (110)  E/BUNK (127)  DOM (128)  DOM (129)  A ROOM (102)  COOLERS (105), BAY  IT (103)  BE INTERLOCKED WITH BE INTERLOCKED WITH ICAL TO PROVIDE DISCO	R-410A  R-410A  R-410A  R-410A  R-410A  R-410A  R-410A  PERFORM  PERFORM  CFM  EXT S W.	265 265 265 399 372  MULTISITE CRC2 F BUILT IN CONDEN: 'M' CONTRACTOR	7.5 7.5 7.5 12.3 7.5 REMOTE CONTROLLER ( SATE LIFT TO PROVIDE AND INSTA	8.5 8.5 13.6 8.5 PREMTVC2) LL CHECK VALVE ON CONDENSA	BASIS OF DES  MODEL NO. OPE WE (L	LG LG LG LG LG LG LG LG LG VOLTS  12	ARNU093M1A4  ARNU073TRD4  ARNU073TRD4  ARNU073TRD4  ARNU123M1A4  ARNU073M1A4  ION  ELECTRICAL DATA  S/PHASE MOTOR HF	41 X 29 X 10  25 X 25 X 10  25 X 25 X 10  25 X 25 X 10  41 X 29 X 10  41 X 29 X 10  NOTES	29 29 29 56	208/1 1.6 208/1 0.2 208/1 0.2 208/1 0.2 208/1 1.6	1.6 - 5,6-9  0.2 - 1-3,5-9  0.2 - 1-3,5-9  1.6 - 6-9	2. CU-1 TO BE IN 3. ELECTRICAL 1 4. LOW AMBIENT  ERV UNIT  EQUIPMENT N  ERV-1  NOTES:  1. SEE 'E' DRAWINGS	NTERLOCKED WITH BC TO PROVIDE DISCONNI IT BAFFLE KIT (ZLABKAS  NO. LOC  F  S FOR DISCONNECT AN	EATION SYSTEM S	BASE PAN HEATER BASE PAN HEATER LOW AMBIENT BAR  P  EERVED  CFM  7TO 3. FA	ERFORMANCE/COREQUIREN  EXT S. P. (IN. W.C.)  0.5	MAX. OUTLET VELOCI (FPM)	ITY MNF		NOMINAL DIMENSIONS (IN.)	L x W. x H  OPERATING WEIG (LBS.)	GHT VOLTS/PHASE		FLA
AHU-2-3 AHU-2-4 AHU-2-5 AHU-3-1 AHU-3-2 NOTES: 1. CASSETTE PAR 2. CEILING CASSI 3. OA CONNECTIO  EXHAUST  EQUIPMENT NO.	CEILING CASSETTE CEILING CASSETTE CEILING CASSETTE IEDIUM STATIC DUCTED IEDIUM STATIC DUCTED IEL (PT-QCHW0) ETTE FLANGE (PTVK430) IN FANS LOCATION ROOF	RADIO/COMMU  EMS OFFIC  BUNK R:  BUNK R:  DECON/SCB  EMS STORAGE, ICE TOILE  4. AHU TO 5. AHU TO 6. ELECTR  SYSTEM S  MEN AND WOMEN	ERVED  Service Tions (110)  E/BUNK (127)  DOM (128)  DOM (129)  A ROOM (102)  COOLERS (105), BAY  ET (103)  BE INTERLOCKED WITH BE INTERLOCKED WITH BE INTERLOCKED WITH BE INTERLOCKED WITH BOOM (102)  COOLERS (105), BAY  ERVED  SERVED  COOLERS (105), BAY  COOLERS (10	R-410A  R-410A  R-410A  R-410A  R-410A  R-410A  R-410A  PERFORM  PERFORM  CFM  EXT S W.	265 265 265 399 372  MULTISITE CRC2 F BUILT IN CONDEN' 'M' CONTRACTOR  RMANCE/CONSTRUCT  P. (IN. MOTOR F	7.5 7.5 7.5 12.3 7.5 REMOTE CONTROLLER ( SATE LIFT TO PROVIDE AND INSTA	8.5 8.5 13.6 8.5 PREMTVC2) LL CHECK VALVE ON CONDENSA SS OPERATING POWER (HP) 0.04 GREENH	BASIS OF DES  MODEL NO.  NO OPE WE (L  JECK G-099-VG  JECK G-098-VG	LG L	ARNU093M1A4  ARNU073TRD4  ARNU073TRD4  ARNU073TRD4  ARNU123M1A4  ARNU073M1A4  ARNU073M1A4  ELECTRICAL DATA  S/PHASE MOTOR HF 20/1 1/4	41 X 29 X 10  25 X 25 X 10  25 X 25 X 10  25 X 25 X 10  41 X 29 X 10  41 X 29 X 10  NOTES  2,3,5,6,7,8,9,10,12	29 29 29 56 56	208/1 1.6  208/1 0.2  208/1 0.2  208/1 0.2  208/1 1.6  208/1 1.6	1.6 - 5,6-9  0.2 - 1-3,5-9  0.2 - 1-3,5-9  1.6 - 6-9	2. CU-1 TO BE IN 3. ELECTRICAL 1 4. LOW AMBIENT  ERV UNIT  EQUIPMENT N  ERV-1	NTERLOCKED WITH BC TO PROVIDE DISCONN IT BAFFLE KIT (ZLABKAS  NO. LOC  F  S FOR DISCONNECT AN SEPARATE FEED).	EATION SYSTEM S	BASE PAN HEATER BASE PAN HEATER LOW AMBIENT BAR  P  SERVED  CFM  /TO 3. FA 4. FA	ERFORMANCE/COREQUIREN  EXT S. P. (IN. W.C.)	MAX. OUTLET VELOCI (FPM)  807	TEMPMASTER		NOMINAL DIMENSIONS (IN.)	L x W. x H  OPERATING WEIG (LBS.)	GHT VOLTS/PHASE		FLA
AHU-2-3 AHU-2-4 AHU-2-5 AHU-3-1 AHU-3-2 NOTES: 1. CASSETTE PAR 2. CEILING CASSI 3. OA CONNECTION  EXHAUST  EQUIPMENT NO.  EF-1 EF-2	CEILING CASSETTE CEILING CASSETTE CEILING CASSETTE IEDIUM STATIC DUCTED IEDIUM STATIC DUCTED IEL (PT-QCHW0) ETTE FLANGE (PTVK430) N  FANS  LOCATION  ROOF ROOF	RADIO/COMMU  EMS OFFIC  BUNK R  BUNK R  DECON/SCB  EMS STORAGE, ICE TOILE  4. AHU TO 5. AHU TO 6. ELECTR  SYSTEM S  MEN AND WOMEN  EXERCISE RO  SINGLE OCC BATHR	NICATIONS (110)  E/BUNK (127)  DOM (128)  DOM (129)  A ROOM (102)  COOLERS (105), BAY  ET (103)  BE INTERLOCKED WITH BE INTERLOCKED WITH ICAL TO PROVIDE DISCO  ERVED  S BATHROOM  DOM (122)  DOM (124 & 125), 26)	R-410A  R-410A  R-410A  R-410A  R-410A  R-410A  R-410A  PERFORM  PERFORM  CFM  EXT S W.	265 265 265 399 372  MULTISITE CRC2 F BUILT IN CONDEN: 'M' CONTRACTOR  RMANCE/CONSTRUCT  P. (IN. C.)  MOTOR F  3 1725	7.5 7.5 7.5 12.3 7.5 REMOTE CONTROLLER ( SATE LIFT TO PROVIDE AND INSTA  CTION REQUIREMENT  RPM FAN RPM  952 1085	8.5  8.5  13.6  8.5  PREMTVC2)  LL CHECK VALVE ON CONDENSA  S  OPERATING POWER (HP)  0.04  GREENHI  0.05  GREENHI	BASIS OF DES  MODEL NO. OPE WE (L  JECK G-099-VG  JECK G-099-VG	LG   LG   LG   LG   LG   LG   LG   LG	ARNU093M1A4  ARNU073TRD4  ARNU073TRD4  ARNU123M1A4  ARNU073M1A4  ARNU073M1A4  ARNU073M1A4  ARNU073M1A4  ION  ELECTRICAL DATA  S/PHASE MOTOR HF  20/1 1/4  20/1 1/4	41 X 29 X 10  25 X 25 X 10  25 X 25 X 10  25 X 25 X 10  41 X 29 X 10  41 X 29 X 10  NOTES  2,3,5,6,7,8,9,10,12  2,3,5,6,7,8,10,12,13	29 29 29 56 56	208/1 1.6 208/1 0.2 208/1 0.2 208/1 0.2 208/1 1.6	1.6 - 5,6-9  0.2 - 1-3,5-9  0.2 - 1-3,5-9  1.6 - 6-9  1.6 - 6-9	2. CU-1 TO BE IN 3. ELECTRICAL 1 4. LOW AMBIENT  ERV UNIT  EQUIPMENT N  ERV-1  NOTES:  1. SEE 'E' DRAWINGS BE POWERED BY S	NTERLOCKED WITH BC TO PROVIDE DISCONNIT BAFFLE KIT (ZLABKAS  NO. LOC  F  S FOR DISCONNECT AN SEPARATE FEED). Y FACTORY.	EATION SYSTEM S	BASE PAN HEATER BASE PAN HEATER LOW AMBIENT BAF  P  SERVED  CFM  1 900  7 TO 3. FA 4. FA 5. ER	ERFORMANCE/COREQUIREN  EXT S. P. (IN. W.C.)  COTORY LOW AMBIENT KIT. COTORY MOTORIZED INTAKE DAN	MAX. OUTLET VELOCI (FPM)  807	TEMPMASTER		NOMINAL DIMENSIONS (IN.)  45 X 33 X 34	L x W. x H  OPERATING WEIG (LBS.)	GHT VOLTS/PHASE 208/3		FLA
AHU-2-3 AHU-2-4 AHU-2-5 AHU-3-1 AHU-3-2 NOTES: 1. CASSETTE PAR 2. CEILING CASSI 3. OA CONNECTION  EXHAUST  EQUIPMENT NO.  EF-1 EF-2 EF-3	CEILING CASSETTE CEILING CASSETTE CEILING CASSETTE EDIUM STATIC DUCTED EL (PT-QCHW0) ETTE FLANGE (PTVK430) N  FANS  LOCATION  ROOF ROOF	RADIO/COMMU  EMS OFFIC  BUNK RI  BUNK RI  DECON/SCB  EMS STORAGE, ICE TOILE  4. AHU TO 5. AHU TO 6. ELECTR  SYSTEM S  MEN AND WOMEN  EXERCISE RC  SINGLE OCC BATHR J.C. (1:	NICATIONS (110)  E/BUNK (127)  DOM (128)  DOM (129)  A ROOM (102)  COOLERS (105), BAY  ET (103)  BE INTERLOCKED WITH BE INTERLOCKED WITH ICAL TO PROVIDE DISCO  S BATHROOM  DOM (122)  DOM (124 & 125), 26)	R-410A R-410A R-410A R-410A R-410A R-410A  R-410A  R-410A  BCB-1 BCB-2 8. DNNECT SWITCH 9.  PERFORM  EXT S W.  450 0 370 0	265 265 265 399 372  MULTISITE CRC2 F BUILT IN CONDEN: 'M' CONTRACTOR  RMANCE/CONSTRUC  P. (IN. MOTOR F  3 1725 3 1725	7.5 7.5 7.5 7.5 12.3 7.5 REMOTE CONTROLLER ( SATE LIFT TO PROVIDE AND INSTA  CTION REQUIREMENT  PAN RPM  952 1085 895 1300	8.5  8.5  13.6  8.5  PREMTVC2)  LL CHECK VALVE ON CONDENSA  S  OPERATING POWER (HP)  0.04  GREENH  0.05  GREENH  0.04  GREENH	BASIS OF DES  MODEL NO.  MODEL NO.  MECK  G-099-VG  MECK  G-099-VG  MECK  G-099-VG  MECK  G-099-VG	LG   LG   LG   LG   LG   LG   LG   LG	ARNU093M1A4  ARNU073TRD4  ARNU073TRD4  ARNU073TRD4  ARNU123M1A4  ARNU073M1A4   ION  ELECTRICAL DATA  S/PHASE MOTOR HF  20/1 1/4  20/1 1/4	41 X 29 X 10  25 X 25 X 10  25 X 25 X 10  25 X 25 X 10  41 X 29 X 10  41 X 29 X 10  NOTES  2,3,5,6,7,8,9,10,12  2,3,5,6,7,8,10,12,13  2,3,5,6,7,8,10,12,14	29 29 29 56 56	208/1 1.6  208/1 0.2  208/1 0.2  208/1 0.2  208/1 1.6  208/1 1.6  208/1 1.6	1.6 - 5,6-9  0.2 - 1-3,5-9  0.2 - 1-3,5-9  1.6 - 6-9  1.6 - 6-9  PERFORMA  AIR FLOW	2. CU-1 TO BE IN 3. ELECTRICAL 1 4. LOW AMBIENT  ERV UNIT  EQUIPMENT N  ERV-1  NOTES:  1. SEE 'E' DRAWINGS BE POWERED BY S 2. 0.5 HP MOTOR BY  NCE/CONSTRUCTION REQ	NTERLOCKED WITH BC TO PROVIDE DISCONN IT BAFFLE KIT (ZLABKAS  NO. LOC  F  S FOR DISCONNECT AN SEPARATE FEED). Y FACTORY.  QUIREMENTS	EATION SYSTEM S  OOF RTU- D POWER INFORMATION (ERV  BASIS OF DESIGN INFORMATION	BASE PAN HEATER BASE PAN HEATER LOW AMBIENT BAF  P  SERVED  CFM  /TO 3. FA 4. FA 5. ER  ELECTRI	ERFORMANCE/COREQUIREN  EXT S. P. (IN. W.C.)  COTORY LOW AMBIENT KIT CTORY MOTORIZED INTAKE DAIR RV-1 SHALL BE INTERLOCKED WITCH CAL DATA  NOTES	MAX. OUTLET VELOCI (FPM)  807  MPER KIT TH RTU-1  AIR SCF	TEMPMASTER  RUBBER	VP011B12H2AM11  PERFORMANCE/COMEQUIREME	NOMINAL DIMENSIONS (IN.)  45 X 33 X 34  NSTRUCTION ENTS	BASIS OF DESIGN INI  NOMINAL OPERATING WER (LBS.)  463  BASIS OF DESIGN INI  NOMINAL NOMINAL NOMINAL DIMENSIONS OF	FORMATION  NOMINAL PERATING  ELECTRICAL		FLA
AHU-2-3 AHU-2-4 AHU-2-5 AHU-3-1 AHU-3-2 NOTES: 1. CASSETTE PAR 2. CEILING CASSI 3. OA CONNECTIO  EXHAUST  EQUIPMENT NO.  EF-1 EF-2 EF-3 EF-4 EF-5 EF-6	CEILING CASSETTE CEILING CASSETTE CEILING CASSETTE IEDIUM STATIC DUCTED IEL (PT-QCHW0) ETTE FLANGE (PTVK430) N  FANS  LOCATION  ROOF ROOF CEILING ROOF ROOF ROOF	RADIO/COMMU  EMS OFFIC  BUNK R:  BUNK R:  DECON/SCB  EMS STORAGE, ICE TOILE  4. AHU TO 5. AHU TO 6. ELECTR  SYSTEM S  MEN AND WOMEN  EXERCISE RC  SINGLE OCC BATHR J.C. (1:  DECON/SCBA F  APPARATUS BAY (G	ERVED  S BATHROOM  COM (122)  COOM (124 & 125), 26)  COOM (122)  COOM (129)  AROOM (102)  COOLERS (105), BAY  ET (103)  ERVED  COOLERS (105), BAY  ERVED  COOLERS (105), BAY  ERVED  COOM (122)  COOM (124 & 125), 26)  CONTINUOUS)  AS DETECTION)	R-410A R-410A R-410A R-410A R-410A R-410A  R-410A  R-410A  BCB-1 BCB-2 8. DNNECT SWITCH 9.  PERFORM  450 400 00 370 00 429 00	265 265 265 399 372  MULTISITE CRC2 F BUILT IN CONDEN: 'M' CONTRACTOR  RMANCE/CONSTRUCT  P. (IN. MOTOR F  3 1725 3 1725 3 1300 3 1725 3 1725	7.5 7.5 7.5 7.5 12.3 7.5 REMOTE CONTROLLER ( SATE LIFT TO PROVIDE AND INSTA  CTION REQUIREMENT  PAN RPM  952 1085 895 1300 1479 1450	8.5  8.5  8.5  13.6  8.5  13.6  8.5  PREMTVC2)  LL CHECK VALVE ON CONDENSA  S  OPERATING POWER (HP)  0.04 GREENH  0.05 GREENH  0.06 GREENH  0.08 GREENH  1.16 GREENH	BASIS OF DES  MODEL NO.  NO OPE WE (L  BECK G-099-VG BECK G-099-VG BECK SQ-95 BECK G-097-VG BECK G-160-VG	LG   LG   LG   LG   LG   LG   LG   LG	ARNU093M1A4  ARNU073TRD4  ARNU073TRD4  ARNU073TRD4  ARNU123M1A4  ARNU073M1A4  ARNU073M1A4  ARNU073M1A4  ARNU073M1A4  ION  ELECTRICAL DATA  S/PHASE MOTOR HF  20/1 1/4  20/1 1/4  20/1 1/4  20/1 1/4  20/1 1/4  30/3 2	NOTES  2,3,5,6,7,8,10,12,14  2,3,5,15,22  2,3,6,7,8,10,11,12  1-4,6,7,8,11,12	29 29 56 56 56 CEILIN	208/1 1.6  208/1 0.2  208/1 0.2  208/1 0.2  208/1 1.6  208/1 1.6  208/1 1.6	1.6 - 5,6-9  0.2 - 1-3,5-9  0.2 - 1-3,5-9  1.6 - 6-9  1.6 - 6-9  PERFORMA	2. CU-1 TO BE IN 3. ELECTRICAL 1 4. LOW AMBIENT  ERV UNIT  EQUIPMENT N  ERV-1  NOTES:  1. SEE 'E' DRAWINGS BE POWERED BY 3 2. 0.5 HP MOTOR BY  NCE/CONSTRUCTION REQ	NTERLOCKED WITH BC TO PROVIDE DISCONNIT BAFFLE KIT (ZLABKAS  NO. LOC  F  S FOR DISCONNECT AN SEPARATE FEED). Y FACTORY.	EATION SYSTEM S  OOF RTU- D POWER INFORMATION (ERV	BASE PAN HEATER BASE PAN HEATER LOW AMBIENT BAF  P  SERVED  CFM  1 900  7 TO 3. FA 4. FA 5. ER	ERFORMANCE/COREQUIREN  EXT S. P. (IN. W.C.)  COTORY LOW AMBIENT KIT COTORY MOTORIZED INTAKE DANGE AND	MAX. OUTLET VELOCI (FPM)  807  MPER KIT TH RTU-1  AIR SCF	TEMPMASTER  RUBBER	VP011B12H2AM11  PERFORMANCE/COP REQUIREME	NOMINAL DIMENSIONS (IN.)  45 X 33 X 34  NSTRUCTION ENTS	BASIS OF DESIGN INI  MODEL NO.  NOMINAL OPERATING WERE (LBS.)  A63  NOMINAL DIMENSIONS L X W X H	FORMATION  NOMINAL PERATING WEIGHT  VOLTS/PHASE  208/3  ELECTRICAL	MOTOR HP	FLA
AHU-2-3 AHU-2-4 AHU-2-5 AHU-3-1 AHU-3-2 NOTES: 1. CASSETTE PAR 2. CEILING CASSI 3. OA CONNECTIO  EXHAUST  EQUIPMENT NO.  EF-1 EF-2 EF-3 EF-4 EF-5	CEILING CASSETTE CEILING CASSETTE CEILING CASSETTE IEDIUM STATIC DUCTED IEDIUM STATIC DUCTED IEL (PT-QCHW0) ETTE FLANGE (PTVK430) IN FANS  LOCATION  ROOF ROOF CEILING ROOF	RADIO/COMMU  EMS OFFIC  BUNK RI  BUNK RI  DECON/SCB  EMS STORAGE, ICE TOILE  4. AHU TO 5. AHU TO 6. ELECTR  SYSTEM S  MEN AND WOMEN  EXERCISE RO  SINGLE OCC BATHR J.C. (1)  DECON/SCBA FI  APPARATUS BAY (1)	ERVED  S BATHROOM  COM (122)  COM (129)  A ROOM (102)  COOLERS (105), BAY  T (103)  ERVED  S BATHROOM  COM (122)  COM (122)  COOLERS (105), BAY  T (103)  COOLERS (105), BAY  T (103)  ERVED  S BATHROOM  COM (122)  COM (124 & 125), 26)  ROOM (102)  CONTINUOUS)  AS DETECTION)  RAGE GARAGE	R-410A R-	265 265 265 399 372  MULTISITE CRC2 F BUILT IN CONDEN' 'M' CONTRACTOR  RMANCE/CONSTRUCT  P. (IN. MOTOR F C.)  MOTOR F 3 1725 3 1725 3 1725 3 1300 3 1725	7.5 7.5 7.5 7.5 12.3 7.5 12.3 7.5 REMOTE CONTROLLER ( SATE LIFT TO PROVIDE AND INSTA  CTION REQUIREMENT PAN RPM  952 1085 895 1300 1479 1450 1550	8.5  8.5  8.5  13.6  8.5  PREMTVC2)  LL CHECK VALVE ON CONDENSA  S  OPERATING POWER (HP)  0.04 GREENH  0.05 GREENH  0.04 GREENH  0.06 GREENH  0.08 GREENH	BASIS OF DES  MODEL NO.  PECK G-099-VG BECK G-099-VG BECK G-099-VG BECK G-099-VG BECK G-099-VG BECK G-097-VG BECK G-160-VG BECK G-160-VG BECK SQ-70	LG   LG   LG   LG   LG   LG   LG   LG	ARNU093M1A4  ARNU073TRD4  ARNU073TRD4  ARNU073TRD4  ARNU123M1A4  ARNU073M1A4  ARNU073M1A4  ARNU073M1A4  ARNU073M1A4  ION  ELECTRICAL DATA  S/PHASE MOTOR HF  20/1 1/4  20/1 1/4  20/1 1/4  20/1 1/4	NOTES  2,3,5,6,7,8,10,12,14 2,3,5,15,22 2,3,6,7,8,10,11,12	29 29 56 56 56 CEILIN	208/1 1.6  208/1 0.2  208/1 0.2  208/1 0.2  208/1 1.6  208/1 1.6  208/1 1.6	1.6 - 5,6-9  0.2 - 1-3,5-9  0.2 - 1-3,5-9  1.6 - 6-9  1.6 - 6-9  PERFORMA  AIR FLOW  RATE (CFM)	2. CU-1 TO BE IN 3. ELECTRICAL 1 4. LOW AMBIENT  ERV UNIT  EQUIPMENT N  ERV-1  NOTES:  1. SEE 'E' DRAWINGS BE POWERED BY S 2. 0.5 HP MOTOR BY  NCE/CONSTRUCTION REQ  FAN SIZE WIDTH (INCHES)	NTERLOCKED WITH BC TO PROVIDE DISCONN IT BAFFLE KIT (ZLABKAS  NO. LOC  F  S FOR DISCONNECT AN SEPARATE FEED). Y FACTORY.  QUIREMENTS	EATION SYSTEM S  OOF RTU- D POWER INFORMATION (ERV  BASIS OF DESIGN INFORMATION	BASE PAN HEATER BASE PAN HEATER LOW AMBIENT BAF  P  SERVED  CFM  /TO 3. FA 4. FA 5. ER  ELECTRI	ERFORMANCE/COREQUIREN  EXT S. P. (IN. W.C.)  COTORY LOW AMBIENT KIT CTORY MOTORIZED INTAKE DAIR RV-1 SHALL BE INTERLOCKED WITCH CAL DATA  NOTES	MAX. OUTLET VELOCI (FPM)  807  MPER KIT TH RTU-1  AIR SCF	TEMPMASTER  RUBBER	PERFORMANCE/CON REQUIREME CFM EXT S. P. (IN. W.C.)	NOMINAL DIMENSIONS (IN.)  45 X 33 X 34  NSTRUCTION INTS  MOTOR RPM MNF	BASIS OF DESIGN INI  MODEL NO.  NOMINAL OPERATING WEIG (LBS.)  A63	FORMATION  NOMINAL PERATING WEIGHT (LBS.)  VOLTS/PHASE  208/3  ELECTRICAL  VOLTS/ PHASE MO	MOTOR HP  1/2  DATA NOTES	FLA
AHU-2-3  AHU-2-4  AHU-2-5  AHU-3-1  AHU-3-2  NOTES:  1. CASSETTE PAR 2. CEILING CASSI 3. OA CONNECTION  EXHAUST  EQUIPMENT NO.  EF-1  EF-2  EF-3  EF-4  EF-5  EF-6  EF-7	CEILING CASSETTE CEILING CASSETTE CEILING CASSETTE EDIUM STATIC DUCTED EL (PT-QCHW0) ETTE FLANGE (PTVK430) N  FANS  LOCATION  ROOF ROOF CEILING ROOF ROOF CEILING ROOF CEILING	RADIO/COMMU  EMS OFFIC  BUNK RI  BUNK RI  DECON/SCB  EMS STORAGE, ICE TOILE  4. AHU TO 5. AHU TO 6. ELECTR  SYSTEM S  MEN AND WOMEN  EXERCISE RO  SINGLE OCC BATHR J.C. (1:  DECON/SCBA FI  APPARATUS BAY (GEMS/POLICE STOR	ERVED  ES BATHROOM  DOM (122)  COOM (124 & 125),  COOM (122)  COOM (129)  BE INTERLOCKED WITH BE INTERLOCKED WITH BE INTERLOCKED WITH BE INTERLOCKED WITH ICAL TO PROVIDE DISCOUNT (122)  COOM (122)  COOM (124 & 125),  CONTINUOUS)  AS DETECTION)  RAGE GARAGE  HOOD	R-410A R-	265 265 265 399 372  MULTISITE CRC2 F BUILT IN CONDEN: 'M' CONTRACTOR  RMANCE/CONSTRUCT  P. (IN. MOTOR F  3 1725 3 1725 3 1300 3 1725 3 1725 3 1550	7.5 7.5 7.5 7.5 12.3 7.5 REMOTE CONTROLLER ( SATE LIFT TO PROVIDE AND INSTA  CTION REQUIREMENT  PAN RPM  952 1085 895 1300 1479 1450 1550 1132	8.5  8.5  8.5  13.6  8.5  PREMTVC2)  LL CHECK VALVE ON CONDENSA  S  OPERATING POWER (HP)  0.04 GREENH  0.05 GREENH  0.06 GREENH  0.08 GREENH  1.16 GREENH  0.03 GREENH	BASIS OF DES  MODEL NO. OPE WE (L  BECK G-099-VG BECK G-099-VG BECK G-099-VG BECK G-097-VG BECK G-160-VG BECK G-160-VG BECK SQ-70 AIRE DU180HFA	LG   LG   LG   LG   LG   LG   LG   LG	ARNU093M1A4  ARNU073TRD4  ARNU073TRD4  ARNU073TRD4  ARNU123M1A4  ARNU073M1A4  ARNU073M1A4  ARNU073M1A4  ARNU073M1A4  ION  ELECTRICAL DATA  S/PHASE MOTOR HF  20/1 1/4  20/1 1/4  20/1 1/4  20/1 1/4  20/1 1/4  20/1 1/4  20/1 1/4  20/1 1/4	NOTES  2,3,5,6,7,8,10,12,14  2,3,5,15,22  2,3,15,22	29 29 56 56 56  CEILIN  EQUIPMET NO.	208/1 1.6  208/1 0.2  208/1 0.2  208/1 1.6  208/1 1.6  208/1 1.6   VIG FANS  NT LOCATION	1.6 - 5,6-9  0.2 - 1-3,5-9  0.2 - 1-3,5-9  1.6 - 6-9  1.6 - 6-9  PERFORMA  AIR FLOW RATE (CFM)	2. CU-1 TO BE IN 3. ELECTRICAL 1 4. LOW AMBIENT  ERV UNIT  ERV-1  ERV-1  NOTES: 1. SEE 'E' DRAWINGS BE POWERED BY S 2. 0.5 HP MOTOR BY  NCE/CONSTRUCTION REQ  FAN SIZE WIDTH (INCHES)  56 HIGH	NTERLOCKED WITH BC TO PROVIDE DISCONN IT BAFFLE KIT (ZLABKAS  NO. LOC  F  S FOR DISCONNECT AN SEPARATE FEED). Y FACTORY.  QUIREMENTS  FAN TYPE  SH EFFICIENCY/LOW	EATION SYSTEM S  CATION SYSTEM S  OOF RTU- D POWER INFORMATION (ERV  BASIS OF DESIGN INFORMATION  MNF MODEL NO.	BASE PAN HEATER BASE PAN HEATER LOW AMBIENT BAF  P  SERVED  CFM  7 TO 3. FA 4. FA 5. ER  ELECTRI  VOLTS/PHASE	ERFORMANCE/COREQUIREN  EXT S. P. (IN. W.C.)  COTORY LOW AMBIENT KIT COTORY MOTORIZED INTAKE DAIN RV-1 SHALL BE INTERLOCKED WITCH CALL DATA  WATTS  NOTES	MAX. OUTLET VELOCI (FPM)  807  MPER KIT TH RTU-1  AIR SCF  AS-1  NOTES:	TEMPMASTER  RUBBER  NO. AREA SERVED  TUNROUT GEAR (107)	PERFORMANCE/COMEQUIREME  CFM EXT S. P. (IN. W.C.)	NOMINAL DIMENSIONS (IN.)  45 X 33 X 34  NSTRUCTION INTS  MOTOR RPM MNF	BASIS OF DESIGN INI  MODEL NO.  NOMINAL OPERATING WEIG (LBS.)  A63	FORMATION  NOMINAL PERATING WEIGHT (LBS.)  VOLTS/PHASE  208/3  ELECTRICAL  VOLTS/ PHASE MO	MOTOR HP  1/2  DATA NOTES  FOR HP	FLA
AHU-2-3 AHU-2-4 AHU-2-5 AHU-3-1 AHU-3-2 NOTES: 1. CASSETTE PAR 2. CEILING CASSI 3. OA CONNECTION  EXHAUST  EQUIPMENT NO.  EF-1 EF-2 EF-3 EF-4 EF-5 EF-6 EF-7 KEF-1 VXH-1 VXH-2	CEILING CASSETTE CEILING CASSETTE CEILING CASSETTE EDIUM STATIC DUCTED EL (PT-QCHW0) ETTE FLANGE (PTVK430) IN  ROOF ROOF ROOF CEILING ROOF CEILING ROOF CEILING ROOF CEILING ROOF	RADIO/COMMU  EMS OFFIC  BUNK RI  BUNK RI  DECON/SCB  EMS STORAGE, ICE TOILE  4. AHU TO 5. AHU TO 6. ELECTR  SYSTEM S  MEN AND WOMEN  EXERCISE RO  SINGLE OCC BATHR J.C. (1:  DECON/SCBA FI  APPARATUS BAY (G)  EMS/POLICE STOF	ERVED  S BATHROOM  COM (122)  COOM (124 & 125),  COOM (122)  COOM (124 & 125),  COOM (120)  COOM (120)  COOLERS (105), BAY  CO	R-410A R-	265 265 265 399 372  MULTISITE CRC2 F BUILT IN CONDEN: 'M' CONTRACTOR  RMANCE/CONSTRUC  P. (IN. MOTOR F  3 1725 3 1725 3 1725 3 1725 3 1725 3 1725 3 1725 3 1725 5 1132	7.5 7.5 7.5 7.5 12.3 7.5 REMOTE CONTROLLER ( SATE LIFT TO PROVIDE AND INSTA  CTION REQUIREMENT  PAN RPM  PAN RPM  952 1085 895 1300 1479 1450 1550 1132 3490	8.5  8.5  8.5  13.6  8.5  PREMTVC2)  LL CHECK VALVE ON CONDENSA  S  OPERATING POWER (HP)  0.04  GREENH  0.05  GREENH  0.06  GREENH  0.08  GREENH  1.16  GREENH  0.03  GREENH  -  CAPTIVEA	BASIS OF DES  MODEL NO. OPEN WE (L  BECK G-099-VG BECK G-099-VG BECK G-099-VG BECK G-097-VG BECK G-160-VG BECK G-160-VG BECK G-160-VG BECK G-160-VG BECK G-160-VG BECK SQ-70	LG   LG   LG   LG   LG   LG   LG   LG	ARNU093M1A4  ARNU073TRD4  ARNU073TRD4  ARNU073TRD4  ARNU123M1A4  ARNU073M1A4  ARNU073M1A4  ION  ELECTRICAL DATA  S/PHASE MOTOR HF  20/1 1/4  20/1 1/4  20/1 1/4  20/1 1/4  20/1 1/4  20/1 1/4  20/1 1/4  20/1 1/5  20/1 1/4  30/3 2  20/1 1/30  08/3 1.5	A1 X 29 X 10  25 X 25 X 10  25 X 25 X 10  25 X 25 X 10  41 X 29 X 10  41 X 29 X 10  A1 X 29 X 10  NOTES  2,3,5,6,7,8,9,10,12  2,3,5,6,7,8,10,12,13  2,3,5,6,7,8,10,12,14  2,3,5,15,22  2,3,6,7,8,10,11,12  1-4,6,7,8,11,12  2,3,15,22  2,19,20,21	29 29 56 56 56  CEILIN  EQUIPMEN NO.	208/1 1.6  208/1 0.2  208/1 0.2  208/1 0.2  208/1 1.6  208/1 1.6  208/1 1.6  APPARATUS BA	1.6 - 5,6-9  0.2 - 1-3,5-9  0.2 - 1-3,5-9  1.6 - 6-9  1.6 - 6-9  PERFORMA  AIR FLOW RATE (CFM)  AY 5436  AY 5437	2. CU-1 TO BE IN 3. ELECTRICAL 1 4. LOW AMBIENT  ERV UNIT  ERV-1  ERV-1  NOTES: 1. SEE 'E' DRAWINGS BE POWERED BY S 2. 0.5 HP MOTOR BY  NCE/CONSTRUCTION REQ  FAN SIZE WIDTH (INCHES)  56 HIGH  HIGH	NO. LOC  S FOR DISCONNECT AN SEPARATE FEED).  Y FACTORY.  QUIREMENTS  FAN TYPE  SH EFFICIENCY/LOW  SPEED  SH EFFICIENCY/LOW	EATION SYSTEM S  CATION SYSTEM S  OOF RTU- D POWER INFORMATION (ERV  BASIS OF DESIGN INFORMATION MNF MODEL NO.  QMARK 56201CLSK	BASE PAN HEATER BASE PAN HEATER LOW AMBIENT BAF  P  SERVED  CFM  7 TO 3. FA 4. FA 5. ER  ELECTRI  VOLTS/PHASE	ERFORMANCE/COREQUIREM  EXT S. P. (IN. W.C.)  COTORY LOW AMBIENT KIT COTORY MOTORIZED INTAKE DAIN RV-1 SHALL BE INTERLOCKED WITE CAL DATA  WATTS  NOTES  67.1 1,3	MAX. OUTLET VELOCI (FPM)  807  MPER KIT TH RTU-1  AIR SCF  EQUIPMENT  AS-1  NOTES:  1. PROVIDE . 2. DISCONNE	TEMPMASTER  RUBBER  NO. AREA SERVED	VP011B12H2AM11  PERFORMANCE/COMEQUIREME  CFM EXT S. P. (IN. W.C.)  1000 -	NOMINAL DIMENSIONS (IN.)  45 X 33 X 34  NSTRUCTION INTS  MOTOR RPM MNF	BASIS OF DESIGN INI  MODEL NO.  NOMINAL OPERATING WEIG (LBS.)  A63	FORMATION  NOMINAL PERATING WEIGHT (LBS.)  VOLTS/PHASE  208/3  ELECTRICAL  VOLTS/ PHASE MO	MOTOR HP  1/2  DATA NOTES  FOR HP	FLA
AHU-2-3 AHU-2-4 AHU-2-5 AHU-3-1 AHU-3-2 NOTES: 1. CASSETTE PAR 2. CEILING CASSI 3. OA CONNECTIO  EXHAUST  EQUIPMENT NO.  EF-1 EF-2 EF-3 EF-4 EF-5 EF-6 EF-7 KEF-1 VXH-1 VXH-2 NOTES: 1. 0-10 VDC INPI 2. NEMA 1 DISCO	CEILING CASSETTE CEILING CASSETTE CEILING CASSETTE IEDIUM STATIC DUCTED IEDIUM STATIC DUCTED IEL (PT-QCHW0) ETTE FLANGE (PTVK430) IN  ROOF ROOF CEILING ROOF CEILING ROOF CEILING ROOF ROOF CEILING ROOF ROOF ROOF ROOF ROOF ROOF ROOF ROO	RADIO/COMMU  EMS OFFIC  BUNK RI  BUNK RI  DECON/SCB  EMS STORAGE, ICE TOILE  4. AHU TO 5. AHU TO 6. ELECTR  SYSTEM S  MEN AND WOMEN  EXERCISE RO  SINGLE OCC BATHR J.C. (1:  DECON/SCBA F  APPARATUS BAY (G  EMS/POLICE STOF	ERVED  S BATHROOM  COM (122)  COOM (124 & 125),  COOM (122)  COOM (124 & 125),  COOM (120)  COOM (120)  COOLERS (105), BAY  CO	R-410A R-	265 265 265 399 372  MULTISITE CRC2 F BUILT IN CONDEN. 'M' CONTRACTOR  RMANCE/CONSTRUC  P. (IN. MOTOR F C.)  A 1725 A 172	7.5 7.5 7.5 7.5 12.3 7.5 REMOTE CONTROLLER ( SATE LIFT TO PROVIDE AND INSTA  CTION REQUIREMENT  RPM FAN RPM  952 1085 895 1300 1479 1450 1550 1132 3490 3490 CCCUPANCY SENSOR, B	8.5  8.5  8.5  13.6  8.5  13.6  8.5  PREMTVC2)  LL CHECK VALVE ON CONDENSA  SS  OPERATING POWER (HP)  0.04 GREENH  0.05 GREENH  0.04 GREENH  0.06 GREENH  1.16 GREENH  1.16 GREENH  0.03 GREENH  1.16 GREENH  1.16 GREENH  1.17 GREENH  1.18 GREENH  1.19 GREENH  1.19 GREENH  1.19 GREENH  1.10 GREENH  1.11 GREENH	BASIS OF DES  MODEL NO. OPE WE (L  BECK G-099-VG BECK G-099-VG BECK G-099-VG BECK G-097-VG BECK G-160-VG BECK G-160-VG BECK G-160-VG BECK G-160-VG BECK SQ-70 BECK SQ	LG	ARNU093M1A4  ARNU073TRD4  ARNU073TRD4  ARNU073TRD4  ARNU123M1A4  ARNU073M1A4  ARNU073M1A4  ARNU073M1A4  ARNU073M1A4  ARNU073M1A4  ION  ELECTRICAL DATA  S/PHASE MOTOR HF  20/1 1/4  20/1 1/4  20/1 1/4  20/1 1/4  20/1 1/4  20/1 1/5  20/1 1/30  08/3 1.5  30/3 3  3  19. GREASE 20. STAND/ 21. KEF-1 T	A1 X 29 X 10  25 X 25 X 10  25 X 25 X 10  25 X 25 X 10  41 X 29 X 10  41 X 29 X 10  41 X 29 X 10  A1 X 29 X 10  A1 X 29 X 10  2,3,5,6,7,8,9,10,12  2,3,5,6,7,8,10,12,13  2,3,5,6,7,8,10,12,14  2,3,5,15,22  2,3,6,7,8,10,11,12  1-4,6,7,8,11,12  2,3,15,22  2,19,20,21  2,16,18  2,17,18  E BOX  ARD CURB ASSEMBLY O BE INTERLOCKED WITH KI	29 29 56 56 56  CEILIN  EQUIPMET NO.  CF-1  CF-2  CF-3	208/1 1.6  208/1 0.2  208/1 0.2  208/1 1.6  208/1 1.6  208/1 1.6  208/1 1.6  APPARATUS BA  APPARATUS BA	1.6 - 5,6-9  0.2 - 1-3,5-9  0.2 - 1-3,5-9  0.2 - 1-3,5-9  1.6 - 6-9  1.6 - 6-9  PERFORMA  AIR FLOW RATE (CFM)  AY 5436  AY 5437  AY 5438	2. CU-1 TO BE IN 3. ELECTRICAL 1 4. LOW AMBIENT  ERV UNIT  ERV-1  ERV-1  NOTES:  1. SEE 'E' DRAWINGS BE POWERED BY S 2. 0.5 HP MOTOR BY  NCE/CONSTRUCTION REQ  FAN SIZE WIDTH (INCHES)  56 HIGH  56 HIGH	NO. LOC  S FOR DISCONNECT AN SEPARATE FEED).  Y FACTORY.  QUIREMENTS  FAN TYPE  SH EFFICIENCY/LOW SPEED  SH EFFICIENCY/LOW  SPEED  SH EFFICIENCY/LOW	EATION SYSTEM S  CATION SYSTEM S  CATION SYSTEM S  COOP RTU-  D POWER INFORMATION (ERV  D POWER INFORMATION  MNF MODEL NO.  QMARK 56201CLSK  QMARK 56201CLSK	BASE PAN HEATER BASE PAN HEATER LOW AMBIENT BAF  P  SERVED  CFM  7 TO 3. FA 4. FA 5. ER  ELECTRI  VOLTS/PHASE  120/1  120/1	ERFORMANCE/COREQUIREM  EXT S. P. (IN. W.C.)  COTORY LOW AMBIENT KIT COTORY MOTORIZED INTAKE DAMENT AND	MAX. OUTLET VELOCI (FPM)  807  MPER KIT TH RTU-1  AIR SCF  EQUIPMENT  AS-1  NOTES:  1. PROVIDE A 2. DISCONNE 3. PROVIDE A	TEMPMASTER  TEMPMASTER  TO AREA SERVED  TUNROUT GEAR (107)  AND INSTALL REMOTE 3-SPEED VECT SWITCH BY ELECTRICAL TRA	VP011B12H2AM11  PERFORMANCE/COMEQUIREME  CFM EXT S. P. (IN. W.C.)  1000 -  WALL SWITCH ADE RATION	NOMINAL DIMENSIONS (IN.)  45 X 33 X 34  NSTRUCTION INTS  MOTOR RPM MNF	BASIS OF DESIGN INI  MODEL NO.  NOMINAL OPERATING WER (LBS.)  BASIS OF DESIGN INI NOMINAL DIMENSIONS L x W x H (IN.)  AirHAWK 1000  44.5 x 25.8 x 14	FORMATION  NOMINAL PERATING WEIGHT (LBS.)  103  120/1  VOLTS/PHASE  MOTOR AND MOTOR AN	MOTOR HP  1/2  DATA NOTES  FOR HP	FLA
AHU-2-3  AHU-2-4  AHU-2-5  AHU-3-1  AHU-3-2  NOTES:  1. CASSETTE PAR 2. CEILING CASSI 3. OA CONNECTION  EXHAUST  EQUIPMENT NO.  EF-1  EF-2  EF-3  EF-4  EF-5  EF-6  EF-7  KEF-1  VXH-1  VXH-2  NOTES:  1. 0-10 VDC INPI 2. NEMA 1 DISCO 3. JUNCTION BC 4. 208 VAC MOT  4. 208 VAC MOT  AHU-2-3  AHU-2-4  AHU-2-5  AHU-2-1  AHU-3-2  NOTES:  1. 0-10 VDC INPI 2. NEMA 1 DISCO 3. JUNCTION BC 4. 208 VAC MOT 4	CEILING CASSETTE CEILING CASSETTE CEILING CASSETTE EDIUM STATIC DUCTED EL (PT-QCHW0) ETTE FLANGE (PTVK430) N  FANS  LOCATION  ROOF ROOF ROOF ROOF ROOF ROOF ROOF R	RADIO/COMMU EMS OFFIC  BUNK RI  BUNK RI  DECON/SCB EMS STORAGE, ICE TOILE  4. AHU TO 5. AHU TO 6. ELECTR  SYSTEM S  MEN AND WOMEN EXERCISE RO SINGLE OCC BATHR J.C. (1:  DECON/SCBA FI APPARATUS BAY (G EMS/POLICE STOR KITCHEN APPARATUS BAY APPARATUS BAY  5. 115 \( \) (VCD 6. WIRNI	PERVED  Separations (110)  E/BUNK (127)  DOM (128)  DOM (129)  A ROOM (102)  COOLERS (105), BAY  ET (103)  BE INTERLOCKED WITH BE INTERLOCKED WITH ICAL TO PROVIDE DISCO  SERVED  SERVED  CONTINUOUS  AS DETECTION)  RAGE GARAGE  HOOD  (VEHICLES)  (VEHICLES)  (AC MOTORIZED DAMPE -20-PB-12X12 & TFB120)  COR - VARI-GREEN EC MC	R-410A R-	265  265  265  399  372  MULTISITE CRC2 F BUILT IN CONDEN: 'M' CONTRACTOR  RMANCE/CONSTRUCT  P. (IN. MOTOR F  3 1725  3 1725  3 1725  3 1725  3 1550  5 1132  - 3490  INTERLOCKED WITH CONTRAL CONTROL DIAL FOR BUINTER LOCKED WITH CONTROL DIAL FOR BUINTER LOCKED WITH STANDARD CURB CAF	7.5 7.5 7.5 7.5 7.5 12.3 7.5 REMOTE CONTROLLER ( SATE LIFT TO PROVIDE AND INSTA  CTION REQUIREMENT  PAN RPM  PAN RPM  952 1085 895 1300 1479 1450 1550 1132 3490 3490 CCCUPANCY SENSOR, B ALANCING PROGRAMMABLE TIMEO	8.5  8.5  8.5  13.6  8.5  13.6  8.5  PREMTVC2)  LL CHECK VALVE ON CONDENSA  S  OPERATING POWER (HP)  0.04  GREENH  0.05  GREENH  0.06  GREENH  0.08  GREENH  1.16  GREENH  0.03  GREENH  -  CAPTIVE  -  PLYMOVI  Y CONTRACT 'E'  LOCK, BY CONTRACT 'E'	BASIS OF DES  MODEL NO. OPE WE (L  BECK G-099-VG BECK G-099-VG BECK G-099-VG BECK G-097-VG BECK G-160-VG BECK G-160-VG BECK G-160-VG BECK SQ-70 AIRE DU180HFA BECK SQ-70 AI	LG	ARNU093M1A4  ARNU073TRD4  ARNU073TRD4  ARNU073TRD4  ARNU073TRD4  ARNU073M1A4  ARNU0	A1 X 29 X 10  25 X 25 X 10  25 X 25 X 10  25 X 25 X 10  41 X 29 X 10  41 X 29 X 10  41 X 29 X 10  A1 X 29 X 10  A1 X 29 X 10  2,3,5,6,7,8,9,10,12  2,3,5,6,7,8,10,12,13  2,3,5,6,7,8,10,12,14  2,3,5,15,22  2,3,6,7,8,10,11,12  1-4,6,7,8,11,12  2,3,15,22  2,19,20,21  2,16,18  2,17,18  E BOX  ARD CURB ASSEMBLY O BE INTERLOCKED WITH KI	29 29 56 56 56  CEILIN  EQUIPMET NO.  CF-1  CF-2  CF-3	208/1 1.6  208/1 0.2  208/1 0.2  208/1 0.2  208/1 1.6  208/1 1.6  208/1 1.6  APPARATUS BA  APPARATUS BA  APPARATUS BA	1.6 - 5,6-9  0.2 - 1-3,5-9  0.2 - 1-3,5-9  0.2 - 1-3,5-9  1.6 - 6-9  1.6 - 6-9  AIR FLOW RATE (CFM)  AY 5436  AY 5437  AY 5438  AY 5439	2. CU-1 TO BE IN 3. ELECTRICAL 1 4. LOW AMBIENT  ERV UNIT  ERV-1  ERV-1  NOTES:  1. SEE 'E' DRAWINGS BE POWERED BY S 2. 0.5 HP MOTOR BY  NCE/CONSTRUCTION REQ  FAN SIZE WIDTH (INCHES)  56 HIGH  56 HIGH  56 HIGH	NO. LOC  SFOR DISCONNECT AN SEPARATE FEED). Y FACTORY.  QUIREMENTS  FAN TYPE  SH EFFICIENCY/LOW SPEED  SH EFFICIENCY/LOW	EATION SYSTEM S  CATION	BASE PAN HEATER BASE PAN HEATER LOW AMBIENT BAF  P  SERVED  CFM  7 TO 3. FA 4. FA 5. ER  ELECTRIC  VOLTS/PHASE  120/1  120/1	ERFORMANCE/CC REQUIREN  EXT S. P. (IN. W.C.)  0.5  COTORY LOW AMBIENT KIT COTORY MOTORIZED INTAKE DAN RV-1 SHALL BE INTERLOCKED WITH COTORY MOTORIZED WITH COTO	MAX. OUTLET VELOCI (FPM)  807  MPER KIT TH RTU-1  AIR SCF  EQUIPMENT  AS-1  NOTES:  1. PROVIDE A 2. DISCONNE 3. PROVIDE A	TEMPMASTER  TEMPMASTER  TO NO. AREA SERVED  TUNROUT GEAR (107)  AND INSTALL REMOTE 3-SPEED VECT SWITCH BY ELECTRICAL TRAND INSTALL WITH CARBON FILT  ANCH CONTROL	VP011B12H2AM11  PERFORMANCE/COMEQUIREME  CFM EXT S. P. (IN. W.C.)  1000 -  WALL SWITCH ADE RATION	NOMINAL DIMENSIONS (IN.)  45 X 33 X 34  NSTRUCTION INTS  MOTOR RPM MNF  - AirHAWK  NUMBER OF	BASIS OF DESIGN INI  MODEL NO.  NOMINAL OPERATING WER (LBS.)  BASIS OF DESIGN INI  NOMINAL L x W x H (IN.)  AirHAWK 1000 44.5 x 25.8 x 14	FORMATION  NOMINAL PERATING WEIGHT (LBS.)  103  120/1  SN INFORMATION  NOMINAL ELECTRICAL  VOLTS/ PHASE  MO  TOUR PROPERTION  NOMINAL ELECTRICAL  RECTRICAL  VOLTS/ PHASE  NOMINAL ELECTRICAL	MOTOR HP  1/2  DATA NOTES  FOR HP	FLA 3.4 1-5
AHU-2-3  AHU-2-4  AHU-2-5  AHU-3-1  AHU-3-2  NOTES:  1. CASSETTE PAR 2. CEILING CASSI 3. OA CONNECTION  EXHAUST  EQUIPMENT NO.  EF-1  EF-2  EF-3  EF-4  EF-5  EF-6  EF-7  KEF-1  VXH-1  VXH-2  NOTES: 1. 0-10 VDC INPI 2. NEMA 1 DISC 3. JUNCTION BC 4. 208 VAC MOT WITH 115 VAC (TFB120)	CEILING CASSETTE CEILING CASSETTE CEILING CASSETTE IEDIUM STATIC DUCTED IEDIUM STATIC DUCTED IEL (PT-QCHW0) IETTE FLANGE (PTVK430) IN  FANS  LOCATION  ROOF ROOF ROOF CEILING ROOF ROOF CEILING ROOF ROOF CEILING ROOF ROOF CEILING ROOF ROOF ROOF ROOF ROOF ROOF ROOF ROO	RADIO/COMMU EMS OFFIC  BUNK RI  BUNK RI  DECON/SCB EMS STORAGE, ICE TOILE  4. AHU TO 5. AHU TO 6. ELECTR  SYSTEM S  MEN AND WOMEN  EXERCISE RO  SINGLE OCC BATHR J.C. (1:  DECON/SCBA F  APPARATUS BAY (G  EMS/POLICE STOP  KITCHEN  APPARATUS BAY  APPARATUS BAY  APPARATUS BAY  INCOMPRESS  5. 115 \( \) (VCD  6. WIRII  TED  7. MOTE  8. 12° R	PERVED  Separations (110)  E/BUNK (127)  DOM (128)  DOM (129)  A ROOM (102)  COOLERS (105), BAY  ET (103)  BE INTERLOCKED WITH BE INTERLOCKED WITH ICAL TO PROVIDE DISCO  SERVED  SERVED  CONTINUOUS  AS DETECTION)  RAGE GARAGE  HOOD  (VEHICLES)  (VEHICLES)  (AC MOTORIZED DAMPE -20-PB-12X12 & TFB120)  COR - VARI-GREEN EC MC	R-410A R-	265  265  265  399  372  MULTISITE CRC2 F BUILT IN CONDEN: 'M' CONTRACTOR  RMANCE/CONSTRUCT  P. (IN. MOTOR F  3 1725  3 1725  3 1725  3 1725  3 1550  5 1132  - 3490  INTERLOCKED WITH CONTRACTOR BUILTER LOCKED WITH CONTRACTOR	7.5 7.5 7.5 7.5 7.5 12.3 7.5 REMOTE CONTROLLER ( SATE LIFT TO PROVIDE AND INSTA  CTION REQUIREMENT  RPM FAN RPM  952 1085 895 1300 1479 1450 1550 1132 3490 3490 CCCUPANCY SENSOR, B ALANCING PROGRAMMABLE TIMECO	8.5  8.5  8.5  13.6  8.5  13.6  8.5  PREMTVC2)  LL CHECK VALVE ON CONDENSA  S  OPERATING POWER (HP)  0.04  GREENH  0.05  GREENH  0.06  GREENH  0.08  GREENH  1.16  GREENH  0.03  GREENH  -  CAPTIVE  -  PLYMOVI  Y CONTRACT 'E'  LOCK, BY CONTRACT 'E'	BASIS OF DES  MODEL NO. OPE WE (I  BECK G-099-VG BECK G-099-VG BECK G-099-VG BECK G-097-VG BECK G-160-VG BECK G-160-VG BECK G-160-VG BECK SQ-70 AIRE DU180HFA BENT FUA-4700  14. EF SHALL RUN CONTI 15. UNIVERSAL MOUNTIN 16. VXH-1 TO BE INTERLO 17. VXH-2 TO BE INTERLO 18. VXH-1 & VXH-2 SHALL 18. VXH-1 & VXH-2 SHALL	LG	ARNU093M1A4  ARNU073TRD4  ARNU073TRD4  ARNU073TRD4  ARNU073TRD4  ARNU073M1A4  ARNU0	A1 X 29 X 10  25 X 25 X 10  25 X 25 X 10  25 X 25 X 10  41 X 29 X 10  41 X 29 X 10  41 X 29 X 10  A1 X 29 X 10  A1 X 29 X 10  2,3,5,6,7,8,9,10,12  2,3,5,6,7,8,10,12,13  2,3,5,6,7,8,10,12,14  2,3,5,15,22  2,3,6,7,8,10,11,12  1-4,6,7,8,11,12  2,3,15,22  2,19,20,21  2,16,18  2,17,18  E BOX  ARD CURB ASSEMBLY O BE INTERLOCKED WITH KI	29 29 56 56 56 CF-1 CF-2 CF-3 CF-4	208/1 1.6  208/1 0.2  208/1 0.2  208/1 0.2  208/1 1.6  208/1 1.6  208/1 1.6  APPARATUS BA  APPARATUS BA  APPARATUS BA  APPARATUS BA	1.6 - 5,6-9  0.2 - 1-3,5-9  0.2 - 1-3,5-9  0.2 - 1-3,5-9  1.6 - 6-9  1.6 - 6-9  1.6 - 6-9  AIR FLOW RATE (CFM)  AY 5436  AY 5437  AY 5438  AY 5439  AY 5439	2. CU-1 TO BE IN 3. ELECTRICAL 1 4. LOW AMBIENT  ERV UNIT  ERV-1  ERV-1  NOTES:  1. SEE 'E' DRAWINGS BE POWERED BY 3 2. 0.5 HP MOTOR BY  NCE/CONSTRUCTION REQ  FAN SIZE WIDTH (INCHES)  56 HIGH 56 HIGH 56 HIGH 56 HIGH 56 HIGH 56 HIGH	NO. LOC  SFOR DISCONNECT AN SEPARATE FEED).  Y FACTORY.  QUIREMENTS  FAN TYPE  SH EFFICIENCY/LOW SPEED	EATION SYSTEM S  CATION	BASE PAN HEATER BASE PAN HEATER LOW AMBIENT BAF  P  SERVED  CFM  7 TO 3. FA 4. FA 5. ER  ELECTRI  VOLTS/PHASE  120/1  120/1  120/1	ERFORMANCE/COREQUIREM  EXT S. P. (IN. W.C.)  0.5  COTORY LOW AMBIENT KIT COTORY MOTORIZED INTAKE DAN EV-1 SHALL BE INTERLOCKED WITH CALL DATA  WATTS  67.1  1,3  67.1  2,3  67.1  2,3	MAX. OUTLET VELOCI (FPM)  807  MPER KIT TH RTU-1  AIR SCF  EQUIPMENT  AS-1  NOTES:  1. PROVIDE AS-1  VRF BR	TEMPMASTER  TEMPMASTER  TO NO. AREA SERVED  TUNROUT GEAR (107)  AND INSTALL REMOTE 3-SPEED VECT SWITCH BY ELECTRICAL TRAND INSTALL WITH CARBON FILT  ANCH CONTROL	PERFORMANCE/COMEQUIREME  CFM EXT S. P. (IN. W.C.)  1000 -  WALL SWITCH ADE RATION  L BOXES	NOMINAL DIMENSIONS (IN.)  45 X 33 X 34  NSTRUCTION ENTS  MOTOR RPM MNF  - AirHAWK	BASIS OF DESIGN INI  MODEL NO.  NOMINAL OPERATING WER (LBS.)  BASIS OF DESIGN INI  NOMINAL L x W x H (IN.)  AirHAWK 1000 44.5 x 25.8 x 14	FORMATION  NOMINAL PERATING WEIGHT (LBS.)  103  120/1  SN INFORMATION  NOMINAL FIECT	DATA NOTES TOR HP  1/6  1-3  TRICAL DATA  NOT	FLA 3.4 1-5
AHU-2-3  AHU-2-4  AHU-2-5  AHU-3-1  AHU-3-2  NOTES:  1. CASSETTE PAR 2. CEILING CASSI 3. OA CONNECTION  EXHAUST  EQUIPMENT NO.  EF-1  EF-2  EF-3  EF-4  EF-5  EF-6  EF-7  KEF-1  VXH-1  VXH-2  NOTES: 1. 0-10 VDC INPI 2. NEMA 1 DISC 3. JUNCTION BC 4. 208 VAC MOT WITH 115 VAC (TFB120)	CEILING CASSETTE CEILING CASSETTE CEILING CASSETTE EDIUM STATIC DUCTED EDIUM STATIC DUCTED EL (PT-QCHW0) ETTE FLANGE (PTVK430) N  FANS  LOCATION  ROOF ROOF ROOF CEILING ROOF CEILING ROOF ROOF CEILING ROOF CEILING ROOF CONCENTROLL MINING CONCENTROLL OLITION CONCENTROLL CONCENTROLL CONCENTROLL CONCENTROLL CONCENTROLL CONCENTROLL CONCENTROLL	RADIO/COMMU EMS OFFIC  BUNK RI  BUNK RI  DECON/SCB EMS STORAGE, ICE TOILE  4. AHU TO 5. AHU TO 6. ELECTR  SYSTEM S  MEN AND WOMEN EXERCISE RC  SINGLE OCC BATHR J.C. (1:  DECON/SCBA FI  APPARATUS BAY (G  EMS/POLICE STOFI  KITCHEN  APPARATUS BA'  (VCD  6. WIRILI  TED 7. MOTT 8. 12" R  LED VENTIL	ERVED  ERVED  Soom (128)  COOLERS (105), BAY  TO (103)  BE INTERLOCKED WITH BE INTERLOCKED WITH BE INTERLOCKED WITH ICAL TO PROVIDE DISCO  COOM (122)  COOM (122)  COOM (122)  COOM (122)  CONTINUOUS)  AS DETECTION)  RAGE GARAGE  HOOD  TO (VEHICLES)	R-410A   R-4	265 265 265 265 399 372  MULTISITE CRC2 F BUILT IN CONDEN: 'M' CONTRACTOR  RMANCE/CONSTRUC  P. (IN. MOTOR F C.) MOTOR F 3 1725 3 1725 3 1725 3 1725 3 1725 3 1725 3 1725 3 1725 3 1725 3 1726 5 1132 - 3490  INTERLOCKED WITH V  DESIGN CO2	7.5 7.5 7.5 7.5 7.5 12.3 7.5 REMOTE CONTROLLER ( SATE LIFT TO PROVIDE AND INSTA  CTION REQUIREMENT  PAN RPM  PAN RPM  952 1085 895 1300 1479 1450 1550 1132 3490 3490 3490 CCCUPANCY SENSOR, B ALANCING PROGRAMMABLE TIMECO VALL SWITCH, BY CONTI	8.5  8.5  8.5  8.5  13.6  8.5  PREMTVC2)  LL CHECK VALVE ON CONDENSA  S  OPERATING POWER (HP)  0.04  GREENH  0.05  GREENH  0.06  GREENH  0.08  GREENH  1.16  GREENH  0.03  GREENH  -  CAPTIVE/ - PLYMOVI  Y CONTRACT 'E'  LOCK, BY CONTRACT 'E'  RACT 'E'  OUTDOOR AIRFLOW AT	BASIS OF DESIGN CO2	LG	ARNU093M1A4  ARNU073TRD4  ARNU073TRD4  ARNU073TRD4  ARNU073TRD4  ARNU073M1A4  ARNU0	A1 X 29 X 10  25 X 25 X 10  25 X 25 X 10  25 X 25 X 10  41 X 29 X 10  41 X 29 X 10  41 X 29 X 10  A1 X 29 X 10  A1 X 29 X 10  2,3,5,6,7,8,9,10,12  2,3,5,6,7,8,10,12,13  2,3,5,6,7,8,10,12,14  2,3,5,15,22  2,3,6,7,8,10,11,12  1-4,6,7,8,11,12  2,3,15,22  2,19,20,21  2,16,18  2,17,18  E BOX  ARD CURB ASSEMBLY O BE INTERLOCKED WITH KI	29 29 56 56 56 56 56 56 56 56 56 56 56 56 56	208/1 1.6  208/1 0.2  208/1 0.2  208/1 0.2  208/1 1.6  208/1 1.6  208/1 1.6  APPARATUS BA  APPARATUS BA  APPARATUS BA  APPARATUS BA  OUTBUILDING  OUTBUILDING	1.6 - 5,6-9  0.2 - 1-3,5-9  0.2 - 1-3,5-9  0.2 - 1-3,5-9  1.6 - 6-9  1.6 - 6-9  AIR FLOW RATE (CFM)  AY 5436  AY 5437  AY 5438  AY 5439  AY 5439  G 5439  G 5439	2. CU-1 TO BE IN 3. ELECTRICAL 1 4. LOW AMBIENT  ERV UNIT  ERV-1  ERV-1  NOTES:  1. SEE 'E' DRAWINGS BE POWERED BY SEPOWERED BY SEPOWER	NO. LOC  SFOR DISCONNECT AN SEPARATE FEED).  Y FACTORY.  QUIREMENTS  FAN TYPE  SH EFFICIENCY/LOW SPEED	EATION SYSTEM S  EATION SYSTEM S  D POWER INFORMATION (ERV  D POWER INFORMATION (ERV  D POWER INFORMATION (ERV  MNF MODEL NO.  QMARK 56201CLSK	BASE PAN HEATER BASE PAN HEATER LOW AMBIENT BAF  P  SERVED  CFM  TO 3. FA 4. FA 5. ER  ELECTRIC  VOLTS/PHASE  120/1  120/1  120/1  120/1  120/1  120/1  120/1  120/1	ERFORMANCE/CC REQUIREM  EXT S. P. (IN. W.C.)  0.5  CCTORY LOW AMBIENT KIT CTORY MOTORIZED INTAKE DAM EX-1 SHALL BE INTERLOCKED WITE COLUMN AND CALL DATA  WATTS  67.1 1,3  67.1 1,3  67.1 2,3  67.1 2,3  67.1 2,3  67.1 3,4  67.1 3,4	MAX. OUTLET VELOCI (FPM)  807  MPER KIT TH RTU-1  AIR SCF  EQUIPMENT  AS-1  NOTES:  1. PROVIDE AS-1  VRF BR	TEMPMASTER  TEMPMASTER  TEMPMASTER  TONO. AREA SERVED  TUNROUT GEAR (107)  AND INSTALL REMOTE 3-SPEED (107)  ECT SWITCH BY ELECTRICAL TRAND INSTALL WITH CARBON FILT  ANCH CONTROL  T NO. LOCATION  CEILING, TUNROUT GEAR (107)  CEILING, TUNROUT GEAR (107)  CEILING, TUNROUT GEAR (107)	PERFORMANCE/COMEQUIREME  CFM EXT S. P. (IN. W.C.)  1000 -  WALL SWITCH ADE RATION  L BOXES  INDOOR UNITS SERVED  1U-1-1. AHU-1-2, AHU-1-3, AHU-1-AHU-1-6	NOMINAL DIMENSIONS (IN.)  45 X 33 X 34  STRUCTION MNF  - AirHAWK  NUMBER OF BRANCHES MNF  4. 5 LG	BASIS OF DESIGN INI  MODEL NO.  NOMINAL OPERATING WER (LBS.)  BASIS OF DESIGN INI  NOMINAL L x W x H (IN.)  AirHAWK 1000 44.5 x 25.8 x 14	FORMATION  NOMINAL PERATING WEIGHT (LBS.)  103  120/1  SN INFORMATION  NOMINAL OPERATING WEIGHT (LBS.)  NOMINAL OPERATING WEIGHT (LBS.)  NOMINAL OPERATING WEIGHT (LBS.)  NOMINAL OPERATING WEIGHT (LBS.)	DATA NOTES TOR HP  1/6  1-3  TRICAL DATA  NOT	FLA 3.4 1-5
AHU-2-3  AHU-2-4  AHU-2-5  AHU-3-1  AHU-3-2  NOTES:  1. CASSETTE PAR 2. CEILING CASSI 3. OA CONNECTIO  EXHAUST  EQUIPMENT NO.  EF-1  EF-2  EF-3  EF-4  EF-5  EF-6  EF-7  KEF-1  VXH-1  VXH-2  NOTES:  1. 0-10 VDC INPI 2. NEMA 1 DISCO 3. JUNCTIONS 4. 208 VAC MOT WITH 115 VAC (TFB120)  DEMAND	CEILING CASSETTE CEILING CASSETTE CEILING CASSETTE EDIUM STATIC DUCTED ELICITE FLANGE (PTVK430) FANS  LOCATION  ROOF ROOF ROOF ROOF CEILING ROOF ROOF CEILING ROOF ROOF CEILING ROOF CEILING ROOF CEILING ROOF CONTROLL CONTROLL CONCENTR (I	RADIO/COMMU EMS OFFIC  BUNK RI  BUNK RI  DECON/SCB EMS STORAGE, ICE TOILE  4. AHU TO 5. AHU TO 6. ELECTR  SYSTEM S  MEN AND WOMEN EXERCISE RI  SINGLE OCC BATHR J.C. (1:  DECON/SCBA F  APPARATUS BAY (G  EMS/POLICE STOF  KITCHEN  APPARATUS BAY  APPARATUS BAY  15. 115 \( (VCD 6. WIRI) 7. MOTI  8. 12" R  ALED VENTIL  MUM CO2  ATION (CS-min)  PM)	ERVED  ERVED  Soom (128)  COOLERS (105), BAY  TO (103)  BE INTERLOCKED WITH BE INTERLOCKED WITH BE INTERLOCKED WITH ICAL TO PROVIDE DISCO  COOM (122)  COOM (122)  COOM (122)  COOM (122)  CONTINUOUS)  AS DETECTION)  RAGE GARAGE  HOOD  TO (VEHICLES)	R-410A   R-4	265 265 265 265 399 372  MULTISITE CRC2 F BUILT IN CONDEN: 'M' CONTRACTOR  RMANCE/CONSTRUC  P. (IN. MOTOR F C.) MOTOR F 3 1725 3 1725 3 1725 3 1725 3 1725 3 1725 3 1725 3 1725 3 1725 3 1726 5 1132 - 3490  INTERLOCKED WITH V  DESIGN CO2	7.5 7.5 7.5 7.5 7.5 12.3 7.5 REMOTE CONTROLLER ( SATE LIFT TO PROVIDE AND INSTA  CTION REQUIREMENT  PAN RPM  952 1085 895 1300 1479 1450 1550 1132 3490 3490 CCCUPANCY SENSOR, B ALANCING PROGRAMMABLE TIMECO VALL SWITCH, BY CONTI	8.5  8.5  8.5  13.6  8.5  PREMTVC2)  LL CHECK VALVE ON CONDENSA  SS  OPERATING POWER (HP)  0.04 GREENH  0.05 GREENH  0.06 GREENH  0.08 GREENH  1.16 GREENH  1.16 GREENH  0.03 GREENH  1.16 GREENH  1.17 GREENH  1.18 GREENH  1.19 GREENH  1.19 GREENH  1.10 GREENH  1.11 GREENH  1.11 GREENH  1.11 GREENH  1.11 GREENH  1.11 GREENH  1.12 GREENH  1.13 GREENH  1.14 GREENH  1.15 GREENH  1.15 GREENH  1.16 GREENH  1.17 GREENH  1.18 GREENH  1.19 GREENH  1.10 GREENH  1.11 GREENH  1.11 GREENH  1.12 GREENH  1.13 GREENH  1.14 GREENH  1.15 GREENH  1.16 GREENH  1.17 GREENH  1.18 GREENH  1.19 GREENH  1.10 GREENH  1.11 GREENH  1.11 GREENH  1.12 GREENH  1.13 GREENH  1.14 GREENH  1.15 GREENH  1.16 GREENH  1.17 GREENH  1.18 GREENH  1.19 GREENH  1.10 GREENH  1.11 GREENH  1.11 GREENH  1.12 GREENH  1.13 GREENH  1.14 GREENH  1.15 GREENH  1.16 GREENH  1.17 GREENH  1.18 GREENH  1.19 GREENH  1.10 GREENH  1.11 GREENH  1.11 GREENH  1.12 GREENH  1.13 GREENH  1.14 GREENH  1.15 GREENH  1.16 GREENH  1.17 GREENH  1.18 GREENH  1.18 GREENH  1.18 GREENH  1.19 GREENH  1.10 GREENH  1.11 GREENH  1.11 GREENH  1.11 GREENH  1.12 GREENH  1.12 GREENH  1.13 GREENH  1.14 GREENH  1.15 GREENH  1.16 GREENH  1.17 GREENH  1.18	BASIS OF DESIGN CO2	LG	ARNU093M1A4  ARNU073TRD4  ARNU073TRD4  ARNU073TRD4  ARNU073TRD4  ARNU073M1A4  ARNU0	A1 X 29 X 10  25 X 25 X 10  25 X 25 X 10  25 X 25 X 10  41 X 29 X 10  41 X 29 X 10  41 X 29 X 10  A1 X 29 X 10  A1 X 29 X 10  2,3,5,6,7,8,9,10,12  2,3,5,6,7,8,10,12,13  2,3,5,6,7,8,10,12,14  2,3,5,15,22  2,3,6,7,8,10,11,12  1-4,6,7,8,11,12  2,3,15,22  2,19,20,21  2,16,18  2,17,18  E BOX  ARD CURB ASSEMBLY O BE INTERLOCKED WITH KI	29 29 56 56 56	208/1 1.6  208/1 0.2  208/1 0.2  208/1 1.6  208/1 1.6  208/1 1.6  208/1 1.6   APPARATUS BA  APPARATUS BA  APPARATUS BA  APPARATUS BA  APPARATUS BA  OUTBUILDING  OUTBUILDING  OUTBUILDING	1.6 - 5,6-9  0.2 - 1-3,5-9  0.2 - 1-3,5-9  0.2 - 1-3,5-9  1.6 - 6-9  1.6 - 6-9  1.6 - 6-9  AIR FLOW RATE (CFM)  AY 5436  AY 5437  AY 5438  AY 5439  G 5439  G 5439  G 5439	2. CU-1 TO BE IN 3. ELECTRICAL 1 4. LOW AMBIENT  ERV UNIT  ERV-1  ERV-1  NOTES:  1. SEE 'E' DRAWINGS BE POWERED BY S 2. 0.5 HP MOTOR BY  NCE/CONSTRUCTION REQ  FAN SIZE WIDTH (INCHES)  56 HIGH	NO. LOC  S FOR DISCONNECT AN SEPARATE FEED). Y FACTORY.  CH EFFICIENCY/LOW SPEED  SH EFFICIENCY/LOW SPEED	EATION SYSTEM S  CATION SITEM S  CATION SYSTEM S  CATION SITEM S  CATION S	BASE PAN HEATER BASE PAN HEATER LOW AMBIENT BAF  P  SERVED  CFM  TO 3. FA 4. FA 5. ER  ELECTRI  VOLTS/PHASE  120/1  120/1  120/1  120/1  120/1  120/1	ERFORMANCE/CC REQUIREN  EXT S. P. (IN. W.C.)  0.5  COTORY LOW AMBIENT KIT CTORY MOTORIZED INTAKE DAM EV-1 SHALL BE INTERLOCKED WITH COLOR WITH	MAX. OUTLET VELOCI (FPM)  807  MPER KIT TH RTU-1  AIR SCF  EQUIPMENT  AS-1  NOTES:  1. PROVIDE 2. DISCONNE 3. PROVIDE 3.  VRF BR  EQUIPMENT  BCB-1  BCB-2	TITY MNF  TEMPMASTER  TEMPMASTER  TOO. AREA SERVED  TUNROUT GEAR (107)  AND INSTALL REMOTE 3-SPEED VECT SWITCH BY ELECTRICAL TRAND INSTALL WITH CARBON FILT  ANCH CONTROL  T NO. LOCATION  T NO. LOCATION  CEILING, TUNROUT GEAR (107)  CEILING, AF	PERFORMANCE/COMEQUIREME  CFM EXT S. P. (IN. W.C.)  1000 -  WALL SWITCH ADE RATION  L BOXES  INDOOR UNITS SERVED	NOMINAL DIMENSIONS (IN.)  45 X 33 X 34  STRUCTION MNF  - AirHAWK  NUMBER OF BRANCHES MNF  4. 5 LG	BASIS OF DESIGN INI  MODEL NO.  BASIS OF DESIGN INI  MODEL NO.  BASIS OF DESIGN INI  NOMINAL L x W x H (IN.)  BASIS OF DESIGN NOMINAL L x W x H (IN.)  BASIS OF DESIGN NOMINAL DIMENSIONS L x W x H (IN.)	FORMATION  NOMINAL PERATING WEIGHT (LBS.)  103  120/1  SN INFORMATION  NOMINAL OPERATING WEIGHT (LBS.)  68  208	DATA NOTES  FOR HP  1/6  1-3  TRICAL DATA  MCA (A)  RATED AMPS: 1	FLA 3.4 1-5
AHU-2-3 AHU-2-4 AHU-2-5 AHU-3-1 AHU-3-2 NOTES: 1. CASSETTE PAR 2. CEILING CASSI 3. OA CONNECTION  EXHAUST  EQUIPMENT NO.  EF-1 EF-2 EF-3 EF-4 EF-5 EF-6 EF-7 KEF-1 VXH-1 VXH-2 NOTES: 1. 0-10 VDC INPI 2. NEW ALD INDI 3. JUNCTION BC 4. 208 VAC MOT WITH 115 VAC (ITFB120)  DEMAND  EQUIPMENT NOTES:	CEILING CASSETTE CEILING CASSETTE CEILING CASSETTE EDIUM STATIC DUCTED EDIUM STATIC DUCTED EL (PT-QCHW0) ETTE FLANGE (PTVK430) N  FANS  LOCATION  ROOF ROOF ROOF ROOF CEILING ROOF ROOF CEILING ROOF ROOF CEILING ROOF CEILING ROOF CEILING ROOF CONTROLL ONLECT SWITCH X MTD. & WIRED DRIZED DAMPER ACTUATRANSFORMER  CONTROLL ONCENTROL ONCENT	RADIO/COMMU EMS OFFIC  BUNK RI  BUNK RI  DECON/SCB EMS STORAGE, ICE  1. AHU TO 5. AHU TO 6. ELECTR  SYSTEM S  MEN AND WOMEN EXERCISE RO  SINGLE OCC BATHR J.C. (1:  DECON/SCBA F  APPARATUS BAY (G  EMS/POLICE STOFI  KITCHEN  APPARATUS BAY  APPARATUS BAY  1. ED VENTIL  APPARATUS BAY  1. ED VENTIL  AUM CO2 ATION (CS-min)  PPM)  OUTDOOR CO2 NTRATION	ERVED  ERVED  CONTINUOUS)  AS DETECTION)  AS DETECTION)  AS DETECTION)  AC MOTORIZED DAMPE  20-PB-12X12 & TFB120)  AC MOTORIZED DAMPE  20-PB-12X12 & TFB120  AC MOTORIZED DAMPE  20-PB-12X12 & TFB120  AC MOTORIZED DAMPE  COPE OF CURB  ATION SCI	R-410A   R-4	265 265 265 265 399 372  MULTISITE CRC2 F BUILT IN CONDEN: 'M' CONTRACTOR  RMANCE/CONSTRUC  P. (IN. MOTOR F C.) MOTOR F 3 1725 3 1725 3 1725 3 1725 3 1725 3 1725 3 1725 3 1725 3 1725 3 1726 5 1132 - 3490  INTERLOCKED WITH V  DESIGN CO2	7.5 7.5 7.5 7.5 7.5 12.3 7.5 REMOTE CONTROLLER ( SATE LIFT TO PROVIDE AND INSTA  CTION REQUIREMENT  PAN RPM  PAN RPM  952 1085 895 1300 1479 1450 1550 1132 3490 3490 3490 CCCUPANCY SENSOR, B ALANCING PROGRAMMABLE TIMECO VALL SWITCH, BY CONTI	8.5  8.5  8.5  8.5  13.6  8.5  PREMTVC2)  LL CHECK VALVE ON CONDENSA  S  OPERATING POWER (HP)  0.04  GREENH  0.05  GREENH  0.06  GREENH  0.08  GREENH  1.16  GREENH  0.03  GREENH  -  CAPTIVE/ - PLYMOVI  Y CONTRACT 'E'  LOCK, BY CONTRACT 'E'  RACT 'E'  OUTDOOR AIRFLOW AT	BASIS OF DESIGN CO2	LG	ARNU093M1A4  ARNU073TRD4  ARNU073TRD4  ARNU073TRD4  ARNU073TRD4  ARNU073M1A4  ARNU0	A1 X 29 X 10  25 X 25 X 10  25 X 25 X 10  25 X 25 X 10  41 X 29 X 10  41 X 29 X 10  41 X 29 X 10  A1 X 29 X 10  A1 X 29 X 10  2,3,5,6,7,8,9,10,12  2,3,5,6,7,8,10,12,13  2,3,5,6,7,8,10,12,14  2,3,5,15,22  2,3,6,7,8,10,11,12  1-4,6,7,8,11,12  2,3,15,22  2,19,20,21  2,16,18  2,17,18  E BOX  ARD CURB ASSEMBLY O BE INTERLOCKED WITH KI	29 29 29 56 56 56 56 56 56 56 56 56 56 56 56 56	208/1 1.6 208/1 0.2 208/1 0.2 208/1 0.2 208/1 1.6 208/1 1.6 208/1 1.6 208/1 1.6 208/1 1.6 208/1 1.6 208/1 1.6 208/1 1.6 208/1 2.6 208/1	1.6 - 5,6-9  0.2 - 1-3,5-9  0.2 - 1-3,5-9  0.2 - 1-3,5-9  1.6 - 6-9  1.6 - 6-9  1.6 - 6-9  AIR FLOW RATE (CFM)  AY 5436  AY 5437  AY 5438  AY 5439  G 5439  G 5439  G 5439  G 5439  G 5439  G 5439  CED BY UNITARY REVERSIBLE SPEE	2. CU-1 TO BE IN 3. ELECTRICAL 1 4. LOW AMBIENT  ERV UNIT  ERV UNIT  ERV-1  NOTES:  1. SEE 'E' DRAWINGS BE POWERED BY S 2. 0.5 HP MOTOR BY  NCE/CONSTRUCTION REQ  FAN SIZE WIDTH (INCHES)  56 HIGH 56 CONTROLLER (CTL120 ASIBLE SPEED CONTROLL	NO. LOCA  SFOR DISCONNECT AN SEPARATE FEED).  Y FACTORY.  CH EFFICIENCY/LOW SPEED  SH EFFICIENCY/LOW SPEED	EATION SYSTEM S  EATION SYSTEM S  D POWER INFORMATION (ERV  D POWER INFORMATION (ERV  D POWER INFORMATION (ERV  MNF MODEL NO.  QMARK 56201CLSK	BASE PAN HEATER BASE PAN HEATER LOW AMBIENT BAF  P  SERVED  CFM  TO 3. FA 4. FA 5. ER  ELECTRIC  VOLTS/PHASE  120/1  120/1  120/1  120/1  120/1  120/1  120/1  120/1	ERFORMANCE/CC REQUIREM  EXT S. P. (IN. W.C.)  0.5  CCTORY LOW AMBIENT KIT CTORY MOTORIZED INTAKE DAM EX-1 SHALL BE INTERLOCKED WITE COLUMN AND CALL DATA  WATTS  67.1 1,3  67.1 1,3  67.1 2,3  67.1 2,3  67.1 2,3  67.1 3,4  67.1 3,4	MAX. OUTLET VELOCI (FPM)  807  MPER KIT TH RTU-1  AIR SCF  EQUIPMENT  AS-1  NOTES:  1. PROVIDE 2  DISCONNE 3. PROVIDE 3  VRF BR  EQUIPMENT  BCB-1  BCB-2  NOTES:  1. SEE ASSO	TEMPMASTER  TEMPMASTER  TEMPMASTER  TUNROUT GEAR (107)  AND INSTALL REMOTE 3-SPEED VECT SWITCH BY ELECTRICAL TRAND INSTALL WITH CARBON FILT  ANCH CONTROL  T NO. LOCATION  CEILING, TUNROUT GEAR (107)	PERFORMANCE/COMEQUIREME  CFM EXT S. P. (IN. W.C.)  1000 -  MALL SWITCH ADE RATION  L BOXES  INDOOR UNITS SERVED  1U-1-1. AHU-1-2, AHU-1-3, AHU-1-AHU-1-6  1U-1-5, AHU-2-1, AHU-2-2, AHU-2-4  AHU-2-4, AHU-2-5	NOMINAL DIMENSIONS (IN.)  A5 X 33 X 34  A5 X 33 X 34  NOTOR RPM MNF  AirHAWK  NUMBER OF BRANCHES MNF  4, 5 LG	BASIS OF DESIGN INI  MODEL NO.  BASIS OF DESIGN INI  NOMINAL DIMENSIONS L x W x H (IN.)  AIRHAWK 1000 44.5 X 25.8 X 14  BASIS OF DESIGN NOMINAL DIMENSIONS L x W x H (IN.)  PRHR083A 46 X 9 X 26	FORMATION  NOMINAL PERATING WEIGHT (LBS.)  103  120/1  SN INFORMATION  NOMINAL VOLTS/ PHASE  103  120/1  SN INFORMATION  NOMINAL OPERATING WEIGHT (LBS.)  AND OPERATING WEIGHT (LBS.)  68  208	DATA NOTES  TOR HP  1/6  1-3  TRICAL DATA  MCA (A)  RATED AMPS: 0.9A  RATED AMPS: 1-	FLA 3.4 1-5
AHU-2-3 AHU-2-4 AHU-2-5 AHU-3-1 AHU-3-2 NOTES: 1. CASSETTE PAR 2. CEILING CASSI 3. OA CONNECTION  EXHAUST  EQUIPMENT NO.  EF-1 EF-2 EF-3 EF-4 EF-5 EF-6 EF-7 KEF-1 VXH-1 VXH-2 NOTES: 1. 0-10 VDC INPI 2. NEMA 1 DISC 3. JUNCTION BO 4. 208 VAC MOT WITH 115 VAC (TFB120)  DEMAND  EQUIPMENT NO  RTU-1 NOTES: 1. SEE SPECIFICA	CEILING CASSETTE CEILING CASSETTE CEILING CASSETTE EDIUM STATIC DUCTED ELICITE FLANGE (PTVK430) ETTE FLANGE (P	RADIO/COMMU EMS OFFIC  BUNK RI  BUNK RI  DECON/SCB  EMS STORAGE, ICE  TOILE  4. AHU TO 5. AHU TO 6. ELECTR  SYSTEM S  MEN AND WOMEN  EXERCISE RI  SINGLE OCC BATHR J.C. (1:  DECON/SCBA F  APPARATUS BAY (G  EMS/POLICE STOF  KITCHEN  APPARATUS BAY  APPARATUS BAY  15. 115 \( (VCD 6. WIRL) 7. MOTI  8. 12" R  APPARATUS BAY  STED VENTIL  MUM CO2  ATION (Cs-min)  PM)  OUTDOOR CO2  NTRATION  SEQUENCE OF OPERA*	ERVED  ERVED  Soom (128)  COOLERS (105), BAY  TO (103)  BE INTERLOCKED WITH BE INTERLOCKED WITH BE INTERLOCKED WITH ICAL TO PROVIDE DISCO  COOM (122)  COOM (122)  COOM (122)  COOM (122)  CONTINUOUS)  AS DETECTION)  RAGE GARAGE  HOOD  TO (VEHICLES)	R-410A   R-4	265 265 265 265 399 372  MULTISITE CRC2 F BUILT IN CONDEN: 'M' CONTRACTOR  RMANCE/CONSTRUC  P. (IN. MOTOR F C.) MOTOR F 3 1725 3 1725 3 1725 3 1725 3 1725 3 1725 3 1725 3 1725 3 1725 3 1726 5 1132 - 3490  INTERLOCKED WITH V  DESIGN CO2	7.5 7.5 7.5 7.5 7.5 12.3 7.5 REMOTE CONTROLLER ( SATE LIFT TO PROVIDE AND INSTA  CTION REQUIREMENT  PAN RPM  PAN RPM  952 1085 895 1300 1479 1450 1550 1132 3490 3490 3490 CCCUPANCY SENSOR, B ALANCING PROGRAMMABLE TIMECO VALL SWITCH, BY CONTI	8.5  8.5  8.5  8.5  13.6  8.5  PREMTVC2)  LL CHECK VALVE ON CONDENSA  S  OPERATING POWER (HP)  0.04  GREENH  0.05  GREENH  0.06  GREENH  0.08  GREENH  1.16  GREENH  0.03  GREENH  -  CAPTIVE/ - PLYMOVI  Y CONTRACT 'E'  LOCK, BY CONTRACT 'E'  RACT 'E'  OUTDOOR AIRFLOW AT	BASIS OF DESIGN CO2	LG	ARNU093M1A4  ARNU073TRD4  ARNU073TRD4  ARNU073TRD4  ARNU073TRD4  ARNU073M1A4  ARNU0	A1 X 29 X 10  25 X 25 X 10  25 X 25 X 10  25 X 25 X 10  41 X 29 X 10  41 X 29 X 10  41 X 29 X 10  A1 X 29 X 10  A1 X 29 X 10  2,3,5,6,7,8,9,10,12  2,3,5,6,7,8,10,12,13  2,3,5,6,7,8,10,12,14  2,3,5,15,22  2,3,6,7,8,10,11,12  1-4,6,7,8,11,12  2,3,15,22  2,19,20,21  2,16,18  2,17,18  E BOX  ARD CURB ASSEMBLY O BE INTERLOCKED WITH KI	29 29 29 56 56 56 56 56 56 56 56 56 56 56 56 56	208/1 1.6 208/1 0.2 208/1 0.2 208/1 0.2 208/1 1.6 208/1 1.6 208/1 1.6 208/1 1.6 208/1 1.6 208/1 1.6 208/1 1.6 208/1 1.6 208/1 2.6 208/1	1.6 - 5,6-9  0.2 - 1-3,5-9  0.2 - 1-3,5-9  0.2 - 1-3,5-9  1.6 - 6-9  1.6 - 6-9  1.6 - 6-9  AIR FLOW RATE (CFM)  AY 5436  AY 5437  AY 5438  AY 5439  G 5439  G 5439  G 5439  G 5439  G 5439  G 5439	2. CU-1 TO BE IN 3. ELECTRICAL 1 4. LOW AMBIENT  ERV UNIT  ERV-1  ERV-1  NOTES:  1. SEE 'E' DRAWINGS BE POWERED BY SEE OWNERED BY SEE OWNERD BY SE	NO. LOCA  SFOR DISCONNECT AN SEPARATE FEED).  Y FACTORY.  CH EFFICIENCY/LOW SPEED  SH EFFICIENCY/LOW SPEED	EATION SYSTEM S  EATION SYSTEM S  D POWER INFORMATION (ERV  D POWER INFORMATION (ERV  D POWER INFORMATION (ERV  MNF MODEL NO.  QMARK 56201CLSK	BASE PAN HEATER BASE PAN HEATER LOW AMBIENT BAF  P  SERVED  CFM  1 900  7 TO 3. FA 4. FA 5. ER  ELECTRIC  VOLTS/PHASE  120/1  120/1  120/1  120/1  120/1  120/1  120/1	ERFORMANCE/CC REQUIREN  EXT S. P. (IN. W.C.)  0.5  CCTORY LOW AMBIENT KIT CTORY MOTORIZED INTAKE DAN RV-1 SHALL BE INTERLOCKED WITH COLOR CALL DATA  WATTS  67.1 1,3  67.1 1,3  67.1 2,3  67.1 2,3  67.1 2,3  67.1 3,4  67.1 3,5	MAX. OUTLET VELOCI (FPM)  807  MPER KIT TH RTU-1  AIR SCF  EQUIPMENT  AS-1  NOTES:  1. PROVIDE 2  DISCONNE 3. PROVIDE 3  EQUIPMENT  BCB-1  BCB-2  NOTES:  1. SEE ASSO 2. BCB-1 & B 3. DISCONNE	TEMPMASTER  TEMPMASTER  TEMPMASTER  TUNROUT GEAR (107)  AND INSTALL REMOTE 3-SPEED VECT SWITCH BY ELECTRICAL TRAND INSTALL WITH CARBON FILT  ANCH CONTROL  T NO. LOCATION  CEILING, TUNROUT GEAR (107)	PERFORMANCE/COMEQUIREME  CFM EXT S. P. (IN. W.C.)  1000 -  WALL SWITCH ADE RATION  L BOXES  INDOOR UNITS SERVED  1U-1-1. AHU-1-2, AHU-1-3, AHU-1-AHU-1-6  1U-1-5, AHU-2-1, AHU-2-2, AHU-2-AHU-2-4, AHU-2-5  TROL OPTION INTERLOCKS. ITH CU-1	NOMINAL DIMENSIONS (IN.)  A5 X 33 X 34  A5 X 33 X 34  NOTOR RPM MNF  AirHAWK  NUMBER OF BRANCHES MNF  4, 5 LG	BASIS OF DESIGN INI  MODEL NO.  BASIS OF DESIGN INI  NOMINAL DIMENSIONS L x W x H (IN.)  AIRHAWK 1000 44.5 X 25.8 X 14  BASIS OF DESIGN NOMINAL DIMENSIONS L x W x H (IN.)  PRHR083A 46 X 9 X 26	FORMATION  NOMINAL PERATING WEIGHT (LBS.)  103  120/1  SN INFORMATION  NOMINAL VOLTS/ PHASE  103  120/1  SN INFORMATION  NOMINAL OPERATING WEIGHT (LBS.)  AND OPERATING WEIGHT (LBS.)  68  208	DATA NOTES  TOR HP  1/6  1-3  TRICAL DATA  MCA (A)  RATED AMPS: 0.9A  RATED AMPS: 1-	FLA 3.4 1-5
AHU-2-3 AHU-2-4 AHU-2-5 AHU-3-1 AHU-3-2 NOTES: 1. CASSETTE PAR 2. CEILING CASSI 3. OA CONNECTION  EXHAUST  EQUIPMENT NO.  EF-1 EF-2 EF-3 EF-4 EF-5 EF-6 EF-7 KEF-1 VXH-1 VXH-2 NOTES: 1. 0-10 VDC INPI 2. NEMA 1 DISC 3. JUNCTION BO 4. 208 VAC MOT WITH 115 VAC (TFB120)  DEMAND  EQUIPMENT NO  RTU-1  NOTES: 1. SEE SPECIFICA	CEILING CASSETTE CEILING CASSETTE CEILING CASSETTE EDIUM STATIC DUCTED EDIUM STATIC DUCTED EL (PT-QCHW0) ETTE FLANGE (PTVK430) N  FANS  LOCATION  ROOF ROOF ROOF ROOF CEILING ROOF ROOF CEILING ROOF ROOF CEILING ROOF CEILING ROOF CEILING ROOF CONTROLL ONLECT SWITCH X MTD. & WIRED DRIZED DAMPER ACTUATRANSFORMER  CONTROLL ONCENTROL ONCENT	RADIO/COMMU EMS OFFIC  BUNK RI  BUNK RI  DECON/SCB  EMS STORAGE, ICE  TOILE  4. AHU TO 5. AHU TO 6. ELECTR  SYSTEM S  MEN AND WOMEN  EXERCISE RI  SINGLE OCC BATHR J.C. (1:  DECON/SCBA F  APPARATUS BAY (G  EMS/POLICE STOF  KITCHEN  APPARATUS BAY  APPARATUS BAY  15. 115 \( (VCD 6. WIRL) 7. MOTI  8. 12" R  APPARATUS BAY  STED VENTIL  MUM CO2  ATION (Cs-min)  PM)  OUTDOOR CO2  NTRATION  SEQUENCE OF OPERA*	ERVED  ERVED  CONTINUOUS)  AS DETECTION)  AS DETECTION)  AS DETECTION)  AC MOTORIZED DAMPE  20-PB-12X12 & TFB120)  AC MOTORIZED DAMPE  20-PB-12X12 & TFB120  AC MOTORIZED DAMPE  20-PB-12X12 & TFB120  AC MOTORIZED DAMPE  COPE OF CURB  ATION SCI	R-410A   R-4	265 265 265 399 372  MULTISITE CRC2 F BUILT IN CONDEN: 'M' CONTRACTOR  RMANCE/CONSTRUC  P. (IN. MOTOR F  3 1725 3 1725 3 1725 3 1725 3 1725 3 1725 3 1725 3 1725 4 1725 4 1725 5 1132 - 3490 INTERLOCKED WITH CONTROL DIAL FOR BUITH INTERLOCKED WITH V  STANDARD CURB CAFINTERLOCKED WITH V  DESIGN CO2 (CS-de	7.5 7.5 7.5 7.5 7.5 12.3 7.5 REMOTE CONTROLLER ( SATE LIFT TO PROVIDE AND INSTA  CTION REQUIREMENT  PAN RPM  PAN RPM  952 1085 895 1300 1479 1450 1550 1132 3490 3490 3490 CCCUPANCY SENSOR, B ALANCING PROGRAMMABLE TIMECO VALL SWITCH, BY CONTI	8.5 8.5 8.5 8.5 13.6 8.5 PREMTVC2) LL CHECK VALVE ON CONDENSA S OPERATING POWER (HP)  0.04 GREENH 0.05 GREENH 0.06 GREENH 0.08 GREENH 1.16 GREENH 0.03 GREENH 0.03 GREENH 0.04 CAPTIVE/ - PLYMOVI - PLYMOVI Y CONTRACT 'E' RACT 'E' OUTDOOR AIRFLOW AT CONCENTRATION (Vot-	BASIS OF DESIGN CO2 - MODEL NO. OPE WE (U  BECK G-099-VG  BECK G-099-VG  BECK G-099-VG  BECK G-097-VG  BECK G-160-VG  BECK G-160-VG  BECK SQ-70  AIRE DU180HFA  FUA-4700  14. EF SHALL RUN CONTIL 15. UNIVERSAL MOUNTIN 16. VXH-1 TO BE INTERLO 17. VXH-2 TO BE INTERLO 18. VXH-1 & VXH-2 SHALL RAILS (SEE PLANS)  T DESIGN CO2 -design) (CFM)  REMARK	LG	ARNU093M1A4  ARNU073TRD4  ARNU073TRD4  ARNU073TRD4  ARNU073TRD4  ARNU073M1A4  ARNU0	A1 X 29 X 10  25 X 25 X 10  25 X 25 X 10  25 X 25 X 10  41 X 29 X 10  41 X 29 X 10  41 X 29 X 10  A1 X 29 X 10  A1 X 29 X 10  2,3,5,6,7,8,9,10,12  2,3,5,6,7,8,10,12,13  2,3,5,6,7,8,10,12,14  2,3,5,15,22  2,3,6,7,8,10,11,12  1-4,6,7,8,11,12  2,3,15,22  2,19,20,21  2,16,18  2,17,18  E BOX  ARD CURB ASSEMBLY O BE INTERLOCKED WITH KI	29 29 56 56 56 56 56 56 56 56 56 56 56 56 56	208/1 1.6 208/1 0.2 208/1 0.2 208/1 0.2 208/1 1.6 208/1 1.6 208/1 1.6 208/1 1.6 208/1 1.6 208/1 1.6 208/1 1.6 208/1 1.6 208/1 2.6 208/1	1.6 - 5,6-9  0.2 - 1-3,5-9  0.2 - 1-3,5-9  0.2 - 1-3,5-9  1.6 - 6-9  1.6 - 6-9  1.6 - 6-9  AIR FLOW RATE (CFM)  AY 5436  AY 5437  AY 5438  AY 5439  G 5439  ED BY UNITARY REVERSIBLE SPEELED BY UNITARY REVERSIBLE BY UNITARY REVERSIBLE BY UNITARY REVERSIBLE BY	2. CU-1 TO BE IN 3. ELECTRICAL 1 4. LOW AMBIENT  ERV UNIT  ERV UNIT  ERV-1  NOTES:  1. SEE 'E' DRAWINGS BE POWERED BY S 2. 0.5 HP MOTOR BY  NCE/CONSTRUCTION REQ  FAN SIZE WIDTH (INCHES)  56 HIGH 56 CONTROLLER (CTL120 ASIBLE SPEED CONTROLL	NO. LOCA  SFOR DISCONNECT AN SEPARATE FEED).  Y FACTORY.  CH EFFICIENCY/LOW SPEED  SH EFFICIENCY/LOW SPEED	EATION SYSTEM S  EATION SYSTEM S  D POWER INFORMATION (ERV  D POWER INFORMATION (ERV  D POWER INFORMATION (ERV  MNF MODEL NO.  QMARK 56201CLSK	BASE PAN HEATER BASE PAN HEATER LOW AMBIENT BAF  P  SERVED  CFM  1 900  7 TO 3. FA 4. FA 5. ER  ELECTRIC  VOLTS/PHASE  120/1  120/1  120/1  120/1  120/1  120/1  120/1	ERFORMANCE/CC REQUIREM  EXT S. P. (IN. W.C.)  0.5  CCTORY LOW AMBIENT KIT CTORY MOTORIZED INTAKE DAM EX-1 SHALL BE INTERLOCKED WITE COLUMN AND CALL DATA  WATTS  67.1 1,3  67.1 1,3  67.1 2,3  67.1 2,3  67.1 2,3  67.1 3,4  67.1 3,4	MAX. OUTLET VELOCI (FPM)  807  MPER KIT TH RTU-1  AIR SCF  EQUIPMENT  AS-1  NOTES:  1. PROVIDE 2  DISCONNE 3. PROVIDE 3  EQUIPMENT  BCB-1  BCB-2  NOTES:  1. SEE ASSO 2. BCB-1 & B 3. DISCONNE	TEMPMASTER  TEMPMASTER  TEMPMASTER  TUNROUT GEAR (107)  AND INSTALL REMOTE 3-SPEED VECT SWITCH BY ELECTRICAL TRAND INSTALL WITH CARBON FILT  ANCH CONTROI  T NO. LOCATION  T NO. LOCATION  CEILING, TUNROUT GEAR (107)  CUATED INDOOR UNIT FOR CONT (107)  COLATED INDOOR UNIT FOR CONT (107)	PERFORMANCE/COME REQUIREME EXT S. P. (IN. W.C.)  1000 -  MALL SWITCH ADE RATION  L BOXES  INDOOR UNITS SERVED  10-1-1. AHU-1-2, AHU-1-3, AHU-1-AHU-1-5, AHU-2-4, AHU-2-5  TROL OPTION INTERLOCKS. ITH CU-1 ADE  ISTRUCTION	NOMINAL DIMENSIONS (IN.)  A5 X 33 X 34  NSTRUCTION INTS  MOTOR RPM MNF  - AirHAWK  NUMBER OF BRANCHES MNF  4, 5 LG  3, 6 LG	BASIS OF DESIGN INI  MODEL NO.  BASIS OF DESIGN INI  NOMINAL DIMENSIONS L x W x H (IN.)  AIRHAWK 1000 44.5 X 25.8 X 14  BASIS OF DESIGN NOMINAL DIMENSIONS L x W x H (IN.)  PRHR083A 46 X 9 X 26	FORMATION  NOMINAL PERATING WEIGHT (LBS.)  103  120/1  SN INFORMATION  NOMINAL VOLTS/ PHASE  103  120/1  SN INFORMATION  NOMINAL OPERATING WEIGHT (LBS.)  AND OPERATING WEIGHT (LBS.)  68  208	DATA NOTES  TOR HP  1/6  1-3  TRICAL DATA  MCA (A)  RATED AMPS: 0.9A  RATED AMPS: 1-	FLA 3.4 1-5
AHU-2-3 AHU-2-4 AHU-2-5 AHU-3-1 AHU-3-2 NOTES: 1. CASSETTE PAR 2. CEILING CASSI 3. OA CONNECTION  EXHAUST  EQUIPMENT NO.  EF-1 EF-2 EF-3 EF-4 EF-5 EF-6 EF-7 KEF-1 VXH-1 VXH-2 NOTES: 1. 0-10 VDC INPI 2. NEMA 1 DISC 3. JUNCTION BC 4. 208 VAC MOT WITH 115 VAC (ITFB120)  DEMAND  EQUIPMENT NO  RTU-1  NOTES: 1. SEE SPECIFICA  ONE-TO-O	CEILING CASSETTE CEILING CASSETTE CEILING CASSETTE EDIUM STATIC DUCTED EDIUM STATIC DUCTED EL (PT-QCHW0) ETTE FLANGE (PTVK430) N  FANS  LOCATION  ROOF ROOF ROOF ROOF CEILING ROOF ROOF CEILING ROOF ROOF CEILING ROOF CEILING ROOF CONTROLL ONLECT SWITCH AND WIRED CRIZED DAMPER ACTUATRANSFORMER  CONTROLL ONLECT SWITCH CONCENTRY (If MEASURED CONCENTRY (If MEASURED CONCENTRY (If MEASURED CONCENTRY (If MEASURED CONCENTRY (III MEASURED CONCEN	RADIO/COMMU EMS OFFIC  BUNK RI  BUNK RI  DECON/SCB EMS STORAGE, ICE TOILE  4. AHU TO 5. AHU TO 6. ELECTR  SYSTEM S  MEN AND WOMEN EXERCISE RC SINGLE OCC BATHR J.C. (1:  DECON/SCBA FI APPARATUS BAY (G EMS/POLICE STOFI KITCHEN APPARATUS BAY  APPARATUS BAY  APPARATUS BAY  STED VENTIL  MUM CO2 ATION (Cs-min) PM)  OUTDOOR CO2 NTRATION  SEQUENCE OF OPERA  YSTEMS	ERVED  ERVED  CONTINUOUS)  AS DETECTION)  AS DETECTION)  AS DETECTION)  AC MOTORIZED DAMPE  20-PB-12X12 & TFB120)  AC MOTORIZED DAMPE  20-PB-12X12 & TFB120  AC MOTORIZED DAMPE  20-PB-12X12 & TFB120  AC MOTORIZED DAMPE  COPE OF CURB  ATION SCI	R-410A   R-4	265 265 265 399 372  MULTISITE CRC2 F BUILT IN CONDEN: 'M' CONTRACTOR  RMANCE/CONSTRUC  P. (IN. MOTOR F  3 1725 3 1725 3 1725 3 1725 3 1725 3 1725 3 1725 3 1725 4 1725 4 1725 5 1132 - 3490 INTERLOCKED WITH CONTROL DIAL FOR BUITH INTERLOCKED WITH V  STANDARD CURB CAFINTERLOCKED WITH V  DESIGN CO2 (CS-de	7.5 7.5 7.5 7.5 12.3 7.5 REMOTE CONTROLLER ( SATE LIFT TO PROVIDE AND INSTA  CTION REQUIREMENT  RPM FAN RPM  952 1085 895 1300 1479 1450 1550 1132 3490 3490 CCUPANCY SENSOR, B ALANCING PROGRAMMABLE TIMECO VALL SWITCH, BY CONTI	8.5 8.5 8.5 8.5 13.6 8.5 PREMTVC2) LL CHECK VALVE ON CONDENSA S OPERATING POWER (HP)  0.04 GREENH 0.05 GREENH 0.06 GREENH 0.08 GREENH 1.16 GREENH 0.03 GREENH 0.03 GREENH 0.04 CAPTIVE/ - PLYMOVI - PLYMOVI Y CONTRACT 'E' RACT 'E' OUTDOOR AIRFLOW AT CONCENTRATION (Vot-	BASIS OF DESIGN CO2 - T DESIGN CO2 - T DESIGN CO2 - CONDI - C MODEL NO. OPE - WE (L - C MODEL NO. OPE - WE - C MODEL - C MODEL NO. OPE - WE - C MODEL NO. OP	LG	ARNU093M1A4  ARNU073TRD4  ARNU073TRD4  ARNU073TRD4  ARNU073TRD4  ARNU073M1A4  ARNU0	41 X 29 X 10  25 X 25 X 10  25 X 25 X 10  41 X 29 X 10  41 X 29 X 10  41 X 29 X 10  NOTES  2,3,5,6,7,8,9,10,12  2,3,5,6,7,8,10,12,13  2,3,5,6,7,8,10,12,14  2,3,5,15,22  2,3,6,7,8,10,11,12  1-4,6,7,8,11,12  2,3,15,22  2,19,20,21  2,16,18  2,17,18  E BOX ARD CURB ASSEMBLY OBE INTERLOCKED WITH KIORS & BRACKETS	29 29 56 56 56 56 56 56 56 56 56 56 56 56 56	208/1 1.6  208/1 0.2  208/1 0.2  208/1 0.2  208/1 1.6  208/1 1.6  208/1 1.6  208/1 1.6  APPARATUS BA  APPARATUS BA  APPARATUS BA  APPARATUS BA  APPARATUS BA  APPARATUS BA  OUTBUILDING  OUTBUILDING  OUTBUILDING  OUTBUILDING  APPARATUS BA  AP	1.6 - 5,6-9  0.2 - 1-3,5-9  0.2 - 1-3,5-9  0.2 - 1-3,5-9  1.6 - 6-9  1.6 - 6-9  1.6 - 6-9  1.6 - 6-9  AIR FLOW RATE (CFM)  AY 5436  AY 5437  AY 5438  AY 5439  G 5439	ERV UNIT  ERV UNIT  ERV UNIT  ERV UNIT  ERV UNIT  ERV-1  NOTES:  1. SEE 'E' DRAWINGS BE POWERED BY 3 2. 0.5 HP MOTOR BY  NCE/CONSTRUCTION REQ  FAN SIZE WIDTH (INCHES)  56 HIGH  57 HIGH  58 SPEED CONTROLLER (CTL12004SPD)  E SPEED CONTROLLER (CTL12004SPD)	NO. LOCA  SFOR DISCONNECT AN SEPARATE FEED).  Y FACTORY.  CH EFFICIENCY/LOW SPEED  SH EFFICIENCY/LOW SPEED	EATION SYSTEM S  EATION SYSTEM S  CATION SITEM S  CATION SYSTEM S  CATION SITEM S  CATION S  CATION SITEM S  CATION S  C	BASE PAN HEATER BASE PAN HEATER LOW AMBIENT BAF  P  SERVED  CFM  TO 3. FA 4. FA 5. ER  ELECTRI  VOLTS/PHASE  120/1  120/1  120/1  120/1  120/1  120/1  120/1  120/1  120/1  120/1	ERFORMANCE/CC REQUIREN  EXT S. P. (IN. W.C.)  0.5  CCTORY LOW AMBIENT KIT CTORY MOTORIZED INTAKE DAN RV-1 SHALL BE INTERLOCKED WITH COLOR CALL DATA  WATTS  67.1 1,3  67.1 1,3  67.1 2,3  67.1 2,3  67.1 2,3  67.1 3,4  67.1 3,5	MAX. OUTLET VELOCI (FPM)  807  MPER KIT TH RTU-1  AIR SCF  EQUIPMENT  AS-1  NOTES:  1. PROVIDE A  2. DISCONNE 3. PROVIDE A  VRF BR  EQUIPMENT  BCB-1  BCB-2  NOTES:  1. SEE ASSO 2. BCB-1 & BCB-1  BCB-2  TUNIT HEATI	TEMPMASTER  TEMPMASTER  TEMPMASTER  TO AREA SERVED  TUNROUT GEAR (107)  AND INSTALL REMOTE 3-SPEED VECT SWITCH BY ELECTRICAL TRAND INSTALL WITH CARBON FILT  ANCH CONTROL  T NO. LOCATION  T NO. LOCATION  T NO. LOCATION  TUNROUT GEAR (107)  CEILING, TUNROUT GEAR (107)	PERFORMANCE/COMEQUIREME  CFM EXT S. P. (IN. W.C.)  1000 -  MALL SWITCH ADE RATION  L BOXES  INDOOR UNITS SERVED  1U-1-1. AHU-1-2, AHU-1-3, AHU-1-AHU-1-6  1U-1-5, AHU-2-1, AHU-2-2, AHU-2-AHU-2-4, AHU-2-5  TROL OPTION INTERLOCKS. TH CU-1 ADE  STRUCTION NTS  ATING COIL DATA	NOMINAL DIMENSIONS (IN.)  NOMINAL DIMENSIONS (IN.)  A5 X 33 X 34  A5 X 33 X 34  NOTOR RPM MNF  AirHAWK  NUMBER OF BRANCHES MNF  4, 5 LG  3, 6 LG  BASIS OF DESI	BASIS OF DESIGN INI  MODEL NO. DIMENSIONS L x W x H (IN.)  AirHAWK 1000 44.5 x 25.8 x 14  BASIS OF DESIGN INI  BAS	## Control	DATA NOTES  TOR HP  1/6  1-3  TRICAL DATA  MCA (A)  RATED AMPS: 0.9A  RATED AMPS: 1-	FLA 3.4 1-5
AHU-2-3 AHU-2-4 AHU-2-5 AHU-3-1 AHU-3-2 NOTES: 1. CASSETTE PAR 2. CEILING CASSI 3. OA CONNECTION  EXHAUST  EQUIPMENT NO.  EF-1 EF-2 EF-3 EF-4 EF-5 EF-6 EF-7 KEF-1 VXH-1 VXH-2 NOTES: 1. 0-10 VDC INPI 2. NEMA 1 DISC 3. JUNCTION BO 4. 208 VAC MOT WITH 115 VAC (TFB120)  DEMAND  EQUIPMENT NO  RTU-1 NOTES: 1. SEE SPECIFICA	CEILING CASSETTE CEILING CASSETTE CEILING CASSETTE EDIUM STATIC DUCTED EDIUM STATIC DUCTED EL (PT-QCHW0) ETTE FLANGE (PTVK430) N  FANS  LOCATION  ROOF ROOF ROOF CEILING ROOF CEILING ROOF ROOF CEILING ROOF CEILING ROOF CEILING ROOF CONTROLL ONLECT SWITCH X MTD. & WIRED DRIZED DAMPER ACTUATRANSFORMER  CONTROLL ONLECT SWITCH X MTD. & WIRED CONCENTR (I)  MEASURED CONCENTR (I)  MEASURED CONCENTR SPLIT S	RADIO/COMMU EMS OFFIC  BUNK RI  BUNK RI  DECON/SCB EMS STORAGE, ICE  1. AHU TO 5. AHU TO 6. ELECTR  SYSTEM S  MEN AND WOMEN  EXERCISE RO  SINGLE OCC BATHR J.C. (1:  DECON/SCBA F  APPARATUS BAY (G  EMS/POLICE STOP  KITCHEN  APPARATUS BAY  APPARATUS BAY  1. IS 12' R  APPARATUS BAY  SUMMEN AND WOMEN  EXERCISE RO  SINGLE OCC BATHR J.C. (1:  DECON/SCBA F  APPARATUS BAY  (G)  EMS/POLICE STOP  KITCHEN  APPARATUS BAY  1. IS 12' R  APPARATUS BAY  SEQUENCE OF OPERA  YSTEMS  SYSTEMS  SYSTEMS	ERVED  ERVED  CONTINUOUS)  AS DETECTION)  AS DETECTION)  AS DETECTION)  AC MOTORIZED DAMPE  20-PB-12X12 & TFB120)  AC MOTORIZED DAMPE  20-PB-12X12 & TFB120  AC MOTORIZED DAMPE  20-PB-12X12 & TFB120  AC MOTORIZED DAMPE  COPE OF CURB  ATION SCI	R-410A R-	265 265 265 399 372  MULTISITE CRC2 F BUILT IN CONDEN: 'M' CONTRACTOR  RMANCE/CONSTRUCT  P. (IN. MOTOR F  3 1725 3 1725 3 1725 3 1725 3 1725 3 1725 3 1725 4 1725 4 1725 5 1132 - 3490 - 3490 INTERLOCKED WITH CONTROL DIAL FOR B INTER LOCKED WITH V  DESIGN CO2 AID	7.5 7.5 7.5 7.5 12.3 7.5 REMOTE CONTROLLER ( SATE LIFT TO PROVIDE AND INSTA  CTION REQUIREMENT  RPM FAN RPM  952 1085 895 1300 1479 1450 1550 1132 3490 3490 CCUPANCY SENSOR, B ALANCING PROGRAMMABLE TIMECO VALL SWITCH, BY CONTI	8.5  8.5  13.6  8.5  PREMTVC2)  LL CHECK VALVE ON CONDENSA  S  OPERATING POWER (HP)  0.04  GREENH  0.05  GREENH  0.06  GREENH  0.08  GREENH  1.16  GREENH  0.03  GREENH  1.16  CAPTIVE/  - PLYMOVI  - PLYMOVI  Y CONTRACT 'E'  RACT 'E'  OUTDOOR AIRFLOW AT CONCENTRATION (Vot-	BASIS OF DESIGN CO2 - CONDITION - CONDITIO	LG	ARNU093M1A4  ARNU073TRD4  ARNU073TRD4  ARNU073TRD4  ARNU123M1A4  ARNU073M1A4	41 X 29 X 10  25 X 25 X 10  25 X 25 X 10  41 X 29 X 10  41 X 29 X 10  41 X 29 X 10  NOTES  2,3,5,6,7,8,9,10,12  2,3,5,6,7,8,10,12,13  2,3,5,6,7,8,10,12,14  2,3,5,15,22  2,3,6,7,8,10,11,12  1-4,6,7,8,11,12  2,3,15,22  2,19,20,21  2,16,18  2,17,18  E BOX ARD CURB ASSEMBLY OBE INTERLOCKED WITH KIORS & BRACKETS	29 29 56 56 56 56 56 56 56 56 56 56 56 56 56	208/1 1.6  208/1 0.2  208/1 0.2  208/1 0.2  208/1 1.6  208/1 1.6  208/1 1.6  208/1 1.6  APPARATUS BA  APPARATUS BA  APPARATUS BA  APPARATUS BA  APPARATUS BA  APPARATUS BA  OUTBUILDING	1.6 - 5,6-9  0.2 - 1-3,5-9  0.2 - 1-3,5-9  0.2 - 1-3,5-9  1.6 - 6-9  1.6 - 6-9  1.6 - 6-9  AIR FLOW RATE (CFM)  AY 5436  AY 5437  AY 5438  AY 5439  G 5439	ERV UNIT  ERV UNIT  ERV UNIT  ERV UNIT  ERV UNIT  ERV-1  NOTES:  1. SEE 'E' DRAWINGS BE POWERED BY 3 2. 0.5 HP MOTOR BY  NCE/CONSTRUCTION REQ  FAN SIZE WIDTH (INCHES)  56 HIGH  57 HIGH  58 SPEED CONTROLLER (CTL12004SPD)  E SPEED CONTROLLER (CTL12004SPD)	NO. LOC  S FOR DISCONNECT AN SEPARATE FEED). Y FACTORY.  QUIREMENTS  FAN TYPE  SH EFFICIENCY/LOW SPEED  OUTTON SPEED  OUTTO	EATION SYSTEM S  EATION SYSTEM S  COPOWER INFORMATION (ERV  D POWER INFORMATION (ERV  D POWER INFORMATION  MNF MODEL NO.  QMARK 56201CLSK	BASE PAN HEATER BASE PAN HEATER LOW AMBIENT BAF  P  SERVED  CFM  TO 3. FA 4. FA 5. ER  ELECTRI  VOLTS/PHASE  120/1  120/1  120/1  120/1  120/1  120/1  120/1  120/1  120/1  120/1	ERFORMANCE/CC REQUIREN  EXT S. P. (IN. W.C.)  0.5  COTORY LOW AMBIENT KIT CTORY MOTORIZED INTAKE DAM EV-1 SHALL BE INTERLOCKED WITH COTORY MOTORIZED INTAKE DA	MAX. OUTLET VELOCI (FPM)  807  MPER KIT TH RTU-1  AIR SCF  EQUIPMENT  AS-1  NOTES:  1. PROVIDE 2  DISCONNE  2. DISCONNE  3. PROVIDE 3  FOR BR  EQUIPMENT  BCB-1  BCB-1  BCB-1  BCB-2  NOTES:  1. SEE ASSO  2. BCB-1 & BCB-2  NOTES:  1. AREA SERVED	TEMPMASTER  TEMPMASTER  TEMPMASTER  TUNROUT GEAR (107)  AND INSTALL REMOTE 3-SPEED VECT SWITCH BY ELECTRICAL TRAND INSTALL WITH CARBON FILT  ANCH CONTROL  T NO. LOCATION  T NO. LOCATION  T NO. LOCATION  CEILING, TUNROUT GEAR (107)  CEILING, TUNROUT	PERFORMANCE/COMEQUIREME  CFM EXT S. P. (IN. W.C.)  1000 -  WALL SWITCH ADE RATION  L BOXES  INDOOR UNITS SERVED  3U-1-1. AHU-1-2, AHU-1-3, AHU-1-AHU-1-6  4U-1-5, AHU-2-1, AHU-2-2, AHU-2-AHU-2-4, AHU-2-5  TROL OPTION INTERLOCKS. TH CU-1 ADE  STRUCTION  NTS  ATING COIL DATA	NOMINAL DIMENSIONS (IN.)  A5 X 33 X 34  SSTRUCTION MOTOR RPM MNF  - AirHAWK  NUMBER OF BRANCHES MNF  4, 5 LG  3, 6 LG  BASIS OF DESI	BASIS OF DESIGN INI  MODEL NO. DIMENSIONS L x W x H (IN.)  AirHAWK 1000 44.5 x 25.8 x 14  BASIS OF DESIGN INI  BASIS OF DESIGN INI  NOMINAL L x W x H (IN.)  PRHR083A 46 x 9 x 26  GN INFORMATION	## Control	DATA NOTES  TOR HP  1/6  1-3  TRICAL DATA  MCA (A)  RATED AMPS: 0.9A  RATED AMPS: 1-	FLA 3.4 1-5

 VOLTS/ PHASE
 MCA (A)
 VOLTS/ PHASE
 MCA (A)
 MOCP (A)

 18.3
 74.1
 208/1
 5
 208/1
 10
 15
 1-6

2. BUILT IN THERMOSTAT.

DSEU-1-IT/DSCU-1-IT SPLIT IT ROOM 22.0 13.4

LITTLE GIANT CONDENSATE PUMP (VCCA-20ULS)

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 PROVIDE AND INSTALL TEMS-1 SUPPORT RAILS BY THYBAR CONTRACTOR TO PROVIDE AND INSTALL DISCONNECT SWITCH DISCONNECT SWITCH BY ELECTRICAL TRADE

R-410A

13.6

118 -4 LG LSN120HSV5 LSU120HSV5 33 X 8 X 13 33 X 14 X 22

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CONSULTANTS:

HEATING HOT W	VATER BOILERS	5																
							PERFORMANCE/COM	NSTRUCTION RE	EQUIREMENTS					BASIS OF DESIGN INFORMATION	I			
EQUIPMENT NO.	LOCATION	RATED GROSS INPUT (MBH)	RATED GROSS OUTPUT (MBH)			WATER DATA			GAS DATA		BOILER			NOTATIVE BINEFICION		ELECTR	RICAL DATA	MECHANICAL NOTES
			` ,	BOILER EFFICIENCY (%)	RATED PRESS. (PSIG)	INLET TEMP. (DEG. F)	OUTLET TEMP. (DEG. F)	CFH	MIN PRESSURE (IN. W.C.)	MAX PRESSURE (IN. W.C.)	VENT SIZE (IN)	MANUFACTURER	MODEL NO.	NOMINAL DIMENSIONS (L x W x H)	WEIGHT (LBS.)	VOLTAGE/PHASE	FLA (A)	
B-1, B-2	BOILER ROOM	199	185	95	30	64.2	110	199	5.0	13.0	3"	TRIANGLE TUBE	INSTINCT SOLO 199	22 X 22 X 41	225	120 V / 1-PH	10	1-16

- INTERNAL CIRCULATOR PUMP
- PROVIDE AND INSTALL TEKMAR 294 SMART BOILER CONTROLLER WITH 24 V TRANSFORMER (BC-1). MODULATING BURNER, 8:1 TURN DOWN ASME RELIEF VALVE SET AT 30 PSI FLOOR STANDING BOILER
- TRIM CONTROLS TO HAVE INTERLOCK WITH BREAK GLASS STATION AND GAS DETECTION PROVIDE CONDENSATE TRAP AND NEUTRALIZATION ASSEMBLY PROVIDE AND INSTALL SEISMIC PEDESTAL ASSEMBLY. BOILER SHALL BE INSTALLED ON SEISMIC PEDESTAL.

- 9. BUILT IN WATER PRESSURE STIFASS

  10. PROVIDE OUTDOOR TEMPERATURE SENSOR

  11. SINGLE POINT POWER FEED

  12. TYPE 439 STAINLESS STEEL WATER TUBE HEAT EXCHANGER

  13. LOW WATER PRESSURE SWITCH

  14. PROVIDE FIELD INSTALLED LOW WATER CUT OFF

  15. DROWNED DROWNED BY AND TEMPERATURE ON 1055
- PROVIDE PRESSURE AND TEMPERATURE GAUGES
   PROVIDE AND INSTALL CONDENSATE NEUTRALIZATION KIT

HEATING	<b>HOT WATER</b>	PLIMPS

				PER	RFORMANCE/CONSTRUC	CTION REQUIREMEN	TS			BASIS	OF DESIGN INFORMATI	ON		
EQMT. NO.	LOCATION	QUANTITY	SYSTEM SERVED	WORKING FLUID	FLOW RATE (GPM)	TOTAL HEAD (FT.)	HP (W)	PUMP SPEED (RPM)	MNF	MODEL NO.	NOMINAL DIMENSIONS L x W x H	NOMINAL OPERATING WEIGHT (LBS.)	VOLTS/ PHASE	MECHANICAL NOTES
P-1	BOILER ROOM	1	RADIANT FLOOR ZONE 1	WATER	2.0	3.0	0.12 (86)	-	ARMSTRONG	COMPASS H 20-20 CI FLANGE	6.5 x 7.08 x 4	8.0000	120 / 1	1-5
P-2	BOILER ROOM	1	RADIANT FLOOR ZONE 2	WATER	2.0	3.0	0.12 (86)	-	ARMSTRONG	COMPASS H 20-20 CI FLANGE	6.5 x 7.08 x 4	8.0000	120 / 1	1-5
P-3	BOILER ROOM	1	RADIANT FLOOR ZONE 3	WATER	0.4	3.0	0.12 (86)	-	ARMSTRONG	COMPASS H 20-20 CI FLANGE	6.5 x 7.08 x 4	8.0000	120 / 1	1-5
P-4	BOILER ROOM	1	RADIANT FLOOR ZONE 4	WATER	0.4	3.0	0.12 (86)	-	ARMSTRONG	COMPASS H 20-20 CI FLANGE	6.5 x 7.08 x 4	8.0000	120 / 1	1-5

NOTES:

1. CAST IRON ASSEMBLY

BACNET CAPABLE EC MOTOR

PROVIDE AND INSTALL MAGNA CLEAN COMMERCIAL MAGNETIC SEPARATOR UPSTREAM OF PUMP (SEE PLANS MS-1 & MS-2).
PROVIDE AND INSTALL TEKMAR tN2 WIRING CENTER 314 (PC-1).
INTERFACE/INTERLOCK PUMP WITH TEKMAR tN2 WIRING CENTER 314 AND PROVIDE TEKMAR 009 TRANSFORMER FOR WIRING CENTER.

GAS	DETECTION	SYSTEM				
EQMT.	LOCATION	SYSTEM SERVED		BASIS OF DESIG	N INFORMATION	
NO.	200/111011	OTOTEM SERVED	MNF	MODEL NO.	NOMINAL DIMENSIONS L" x W" x H"	VOLTS / PHASE
GD-1	APPARATUS BAY WALL	APPARATUS BAY(101)	CRITICAL ENVIRONMENT TECHNOLOGIES	TCO NO2B	10 X 9 X 4	115

CRITICAL

TECHNOLOGIES

NOTES:

1. INCLUDE FOUR CHANNEL DIGITAL CONTROLLER IN NEMA 4 ENCLOSURE FOR WALL MOUNT.

2. LED DISPLAY FOR ALL FOUR CHANNELS FOR NO2 AND CO

3. INCLUDE (2) NITROGEN DIOXIDE SENSORS AND (2) CARBON MONOXIDE SENSORS

1. SECURES CONFIGURABLE ALARM OUTPLITS WITH ISOLATION RELAYS FOR INTERLOCK WITH

GD-2 | MECHANICAL ROOM | MECHANICAL ROOM | ENVIRONMENT | TCO ESH-A-CCH4

- PROVIDE CONFIGURABLE ALARM OUTPUTS WITH ISOLATION RELAYS FOR INTERLOCK WITH THE EF & FACP.

  115V LINE VOLTAGE POWER FEED
- INTERLOCK APPARATUS BAY EXHAUST FAN EF-6 WITH GAS DETECTION.
  PROVIDE PANEL MOUNTED AUDIBLE ALARM AND SILENCING SWITCH.
  PROVIDE ALARM HORN WITH STROBE.
  PROVIDE STARTUP, TEST AND CALIBRATION REPORT.
- LED DISPLAY FOR BOTH CHANNELS FOR CO AND CH4
  INCLUDE (2) CARBON MONOXIDE SENSORS AND (2) METHANE SENSORS PROVIDE CONFIGURABLE ALARM OUTPUTS WITH ISOLATION RELAYS FOR INTERLOCK WITH THE BOILERS B-1 & B-2 & FACP.
- 115V LINE VOLTAGE POWER FEED
  - 14. HSV LINE VOLTAGE POWER FEED
    15. INTERLOCK BOILERS B-1 & B-2 TRIM CONTROLS WITH GAS DETECTION.
    16. PROVIDE PANEL MOUNTED AUDIBLE ALARM AND SILENCING SWITCH. 17. PROVIDE TANEL WIGOTYLD ADDIBLE ALARM HOR WITH STROBE.
    18. PROVIDE STARTUP, TEST AND CALIBRATION REPORT.

### **EXPANSION TANKS**

			PERFOR	MANCE/CONSTRUCTION REQUI	REMENTS			BASIS OF DESIGN INFORMATION			
EQUIPMENT NO.	LOCATION	SYSTEM SERVED		SYSTEM DATA		MNF	MODEL NO.	NOMINAL DIMENSION DIA. x H	ACCEPTANCE VOLUME	NOMINAL OPERATING WEIGHT	NOTES
			TANK VOLUME (GAL.)	MAX. OPERATING PRESS. RANGE (PSIG)	MAX. OPERATING TEMP. RANGE (DEG. F)	MINIF	MODEL NO.	NOMINAL DIMENSION DIA. X H	(GAL.)	(LBS.)	
ET-1	MECHANICAL ROOM	RADIANT BOILERS	6.0	75	220	WATTS	ETX-60	12 X 18	3	6	1

10. INCLUDE DUAL CHANNEL DIGITAL CONTROLLER IN NEMA 4 ENCLOSURE FOR WALL MOUNT.

1. EXPANSION TANK SHALL BE INDEPENDENTLY SUPPORTED FROM THE PIPING SYSTEM AND SHALL BE PRESSURIZED TO MEET THE INCOMING PRESSURE OF THE WATER SYSTEM. REFER TO MANUFACTURER INSTRUCTIONS FOR PROPER ORIENTATION.

"VIBRATION ISOLATION / SEISMIC & WIND RESTRAINTS SCHEDULE [20	2020 New Jersey Building Code, SDC = C, RISK CAT = IV"]
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UNIT TAG	EQUIPMENT TYPE	"LOCATION (FL LEVEL)"	MOUNTING METHOD	BASE TYPE	MANUF	ISOLATOR TYPE	NOM. DEFL., IN.	RESTRAINT REQ'D	SEISMIC COMPONENT IMPORTANCE FACTOR, Ip	NOTES (1,2, TYP.)
AHU-1-1 - AHU1-6, AHU-2-1 - AHU-2-5, AHU-3-1 - AHU-3-2, DSEU-1-IT	EVAPORATOR UNIT	VARIOUS	SUSPENDED	-	VIBRO-ACOUSTICS	SHR	2	SEIS	1.5	1,2,4,5
BCB-1 & BCB-2	BRANCH CONTROLLER	TURNOUT GEAR	SUSPENDED	-	VIBRO-ACOUSTICS	SHR	2	SEIS	1.5	1,2,4,5
AS-1 & AS-2	AIR SCRUBBER	TURNOUT GEAR	SUSPENDED	-	VIBRO-ACOUSTICS	SHR	2	SEIS	1.5	1,2,4,5
CNDP-1	COND. PUMP	IT ROOM	SUSPENDED	-	VIBRO-ACOUSTICS	SHR	2	SEIS	1.5	1,2,4,5
CU-1, CU-2	CONDENSING UNIT	LOW ROOF	ROOF	-	VIBRO-ACOUSTICS	NP	0.18	SEIS/WIND	1.5	1,2,4,5
DSCU-1-IT	CONDENSING UNIT	LOW ROOF	ROOF	-	VIBRO-ACOUSTICS	NP	0.18	SEIS/WIND	1.5	1,2,4,5
DOAS-1	DEDICATED OUTDOOR AIR UNIT	LOW ROOF	ROOF	RC	VIBRO-ACOUSTICS	VCR	2	SEIS/WIND	1.5	1,2,4,5
EDH-1	ELECTRIC DUCT HEATER	DECON ROOM	SUSPENDED	-	VIBRO-ACOUSTICS	SHR	2	SEIS	1.5	1,2,5,6
EF-1-EF-3, EF-5, EF-6	EXHAUST FAN	VARIOUS	ROOF	RC	VIBRO-ACOUSTICS	VCR	2	SEIS/WIND	1.5	1,2
EF-4, EF-7	EXHAUST FAN	VARIOUS	SUSPENDED	-	VIBRO-ACOUSTICS	SHR	2	SEIS	1.5	1,2,5,6
ERV-1	ENERGY RECOVERY VENTILATOR	LOW ROOF	ROOF	RC	VIBRO-ACOUSTICS	VCR	2	SEIS/WIND	1.5	1,2,5
ERV-2	ENERGY RECOVERY VENTILATOR	DECON ROOM	SUSPENDED	-	VIBRO-ACOUSTICS	SHR	2	SEIS	1.5	1,2,5,6,
EUH-1	ELECTRIC UNIT HEATER	VESTIBULE	SUSPENDED	-	VIBRO-ACOUSTICS	SHR	2	SEIS	1.5	1,2,5
KEF-1	KITCHEN EXHAUST FAN	LOW ROOF	ROOF	RC	VIBRO-ACOUSTICS	VCR	1.5	SEIS/WIND	1.5	1,2,6,7
MUA-1	KITCHEN MAKE UP AIR UNIT	LOW ROOF	ROOF	RC	VIBRO-ACOUSTICS	VCR	-	SEIS/WIND	1.5	1,2,4,5
RTU-1, RTU-2	PACKAGED ROOFTOP UNIT	LOW ROOF	ROOF	RC	VIBRO-ACOUSTICS	VCR	2	SEIS/WIND	1.5	1,2,4,5
UH-1 - UH-3	GAS FIRED UNIT HEATER	OUTBUILDING	SUSPENDED	-	VIBRO-ACOUSTICS	SHR	2	SEIS	1.5	1,2,5,6
VXH-1, VXH-2	VEHICLE EXHAUST FAN	HIGH ROOF	ROOF	-	VIBRO-ACOUSTICS	-	-	SEIS/WIND	1.5	1,2,7
B-1, B-2	BOILER	MECH. ROOM	FLOOR	-	VIBRO-ACOUSTICS	-	-	SEIS	1.5	1,2,4,5
ET-1	EXPANSION TANK	MECH. ROOM	SUSPENDED	-	VIBRO-ACOUSTICS	SHR	2	SEIS	1.5	1,2
P-1 - P-4	INLINE CIRCULATOR PUMPS	MECH. ROOM	SUSPENDED	-	VIBRO-ACOUSTICS	SHR	2	SEIS	1.5	1,2,4,5,8
NOTES:		BASE TYPE:		<u>IS</u>	SOLATOR TYPE:					

NP - RUBBER PAD

SIPS - SEISMIC INLINE PUMP STANDS

SFS - SEISMIC FLOOR MOUNT

SHR - SPRING + RUBBER HANGER

CIB - CONCRETE INERTIA BASE

RC: ROOF CURB

VCR - ADJUSTABLE SPRING CURB

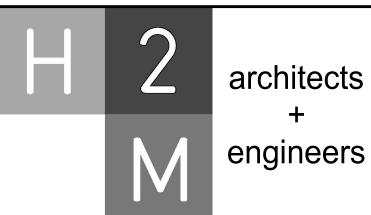
RADIANT FLOOR MANIFOLDS													
PERFORMANCE/CONSTRUCTION REQUIREMENTS													
EQMT. NO.	AREA SERVED	ZONE	FLOOR AREA SERVED <sup>2</sup> 1		ŀ	HEATING COI	L DATA				NOTES		
EQWIT. IVO.	MENGLIVED	SERV SERV		TOTAL CAPACITY (BTU/HR)	HOT WATER COIL			MNF	MODEL NO.	NOMINAL DIMENSIONS L"xW"xH"	NOTES		
					EWT (°F)	GPM	CIRCUITS						
RFM-1	APPARATUS BAY	1	2493	12502	84.2	2	10	WATTS	D3803010SS	24x4x12	1-8		
RFM-2	APPARATUS BAY	2	2653	12488	84.2	2	10	WATTS	D3803010SS	24x4x12	1-8		
RFM-3	APPARATUS BAY	3	338	2295	84.2	0.4	2	WATTS	D3803002SS	8x4x12	1-8		
RFM-4	APPARATUS BAY	4	236	1023	84.2	0.2	1	WATTS	D3803002SS	8x4x12	1-8		

- NOTES:

  1. MANIFOLD TO BE CONSTRUCTED OF STAINLESS STEEL.

  2. SURFACE MOUNT MANIFOLDS.

  3. PROVIDE CONTROL VALVE FOR EACH MANIFOLD
- 4. PROVIDE CONTROL VALVES FOR EACH ZONE
  5. GC TO PROVIDE REMOVABLE ALUMINUM COVER TO FLOOR W/ SLOPE TOP
- PROVIDE TERMINAL BEND SUPPORTS AT FLOOR TO WALL TRANSITIONS
- PROVIDE CIRCUIT ISOLATION CAPS
   PROVIDE ONE TEKMARNET THERMOSTAT 532 FOR EACH MANIFOLD. EACH THERMOSTAT IS TO TIE INTO TN2 WIRING CENTER 314 LOCATED IN MECHANICAL ROOM.



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MARK	DATE	DESCRIPTION
00	NOV 3, 2023	90% NFC

### JOHN CHRIS MORRIS III, P.E.

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AS SHOWN

BOME2201

# **Borough of** Metuchen

# **EMERGENCY SERVICES CENTER**



1 SAFETY PLACE METUCHEN, NJ 08840 **BOROUGH OF METUCHEN COUNTY OF MIDDLESEX NEW JERSEY** 

90% - NFC

SHEET TITLE

**HVAC SCHEDULES** 

M 601.00

1. BASIS OF DESIGN: VIBRO-ACOUSTICS.

4. PROVIDE FLEXIBLE PIPING CONNECTORS

7. PROVIDE SEISMIC UPLIFT STOP WASHER.

8. SUPPORT INLINE PUMP AT FLANGE CONNECTION.

2. SEISMICALLY RATED FOR PROJECT CONDITIONS.

3. STAND SUPPORT MUST BE ABLE TO MEET CALCULATED SEISMIC LOADS

5. PROVIDE TYPE SHR OR SFS ISOLATORS ON ADJACENT PIPING/DUCTWORK.

6. PROVIDE SEISMIC RESTRAINT CABLES. PROVIDE ROD STIFFENERS AS REQUIRED.

HUUL	) $INF$	ORMATION	- JUB#67	87310																
					MAX							EXH/	AUST PI	LENUM			TOTAL		HOOD C	ONF
HOOD	TAG	MODEL	MANUFACTURER	LENGTH	COOKING	TYPE	APPLIANCE	DESIGN	TOTAL				RISER(	S)			SUPPLY	HOOD	END TO	
NO	IAG	MODEL	WANDFACTURER	LENGTH	TEMP	1175	DUTY	CFM/FT	EXH CFM	WIDTH	LENG	HEIGHT	DIA	CFM	VEL	SP	CFM	CONSTRUCTION	END	RO
4		5424	CADTIVE AIDE	01.011	600		LIE AVOZ	205	2025			4"	4.4"	2025	4004	0.040"	4000	430 SS	AL ONE	AL C
1		ND-2-PSP-F	CAPTIVEAIRE	9' 0"	DEG	I	HEAVY	225	2025			4"	14"	2025	1894	-0.843"	1620	WHERE EXPOSED	ALONE	ALO
иооі	INTE	ODMATION																		

1 FAN

HOOI	OINF(	ORMATION															
				FILTER(S	3)			LIGHT(S)					UTILITY CABINET(S)			FIRE	НООГ
HOOD NO	TAG								WIRE			FI	RE SYSTEM	ELECTRICAL	SWITCHES	SYSTEM	
NO	IAG	TYPE	QTY	' HEIGHT	LENGTH	EFFICIENCY @ 7 MICRONS	QTY	TYPE	GUARD	LOCATION	SIZE	TYPE	SIZE	MODEL#	QUANTITY	PIPING WE	
1		CAPTRATE SOLO FILTER	6	20"	16"	85% SEE FILTER SPEC	3	RECESSED ROUND	NO	WALL MNT	12"x48"x24"	TANK FS	4.0/4.0	DCV-1111	1 LIGHT	YES	520
'		CALITICATE SOLOTIETER	L	20	10	03/0 GEET IETER GFEG		NECESSED NOOND	NO	WALL WINT	12 840 824	TANKTO	4.0/4.0	DCV-1111	1 FAN	123	LBS

PERFORATED SUPPLY PLENUM(S)HOOD TAG POS LENGTH WIDTH HEIGHT TYPE WIDTH LENG DIA CFM SP

SC ELECTRICAL 2.500 CAPTIVEAIRE SYSTEMS

BACKSPLASH 80.00" HIGH X 108.00" LONG 430 SS VERTICAL

						MUA	12"	28"		810	0.211"		
ALL	-MOU	NT $l$	UTILITY	CABIN	ET								
						UTIL	ITY CABI	NET(S)					
000					FIF	RE SYSTE	М		ELEC	CTRICAL	-	SWITCHES	
NO NO	LOCAT	ION	SIZE	T	/PE		SIZE		МС	DDEL#		QUANTITY	WEIGHT
												1 LIGHT	

FIRE S	SYSTE	M INFORMATIC	ON - JO	B#6187310				
FIRE					FLOW	v	INSTALLATION	I
SYSTEM NO	TAG	TYPE		SIZE		s	SYSTEM	LOCATION ON HOOD
1		TANK FS		4.0/4.0	28		WALL UTILITY CABINET LEFT	N/A
GAS VA	ALVE(S	')						
FIRE SYSTEM NO	TAG	TYPE	SIZE	SUPPLIED BY				
1	1	1	1					

FIRE YSTEM NO	TAG	KEY NUMBER - PART DESCRIPTION	QTY BY FACTORY	QTY B' DIST
		0 - 0 - TANK FIRE SUPPRESSION MAINTENANCE GUIDE UTILITY CABINET LABEL SHEET.	1	0
		0 - 0 - TANK FIRE SUPPRESSION POST-DISCHARGE PROCEDURE UTILITY CABINET LABEL SHEET.	1	0
		0 - 0 - 12-F28021-32144-OT-360 DUCT FIRE THERMOSTAT WITH 12 FOOT WIRE LEADS. NO, CLOSE ON TEMP RISE AT 360°F.	1	0
		0 - 0 - 4429K153 1/2" MALE NPT TO 1/2" FEMALE NPT ELBOW, BRASS.	2	0
		0 - 0 - 4429K422 1/2" X 1/4" BRASS REDUCING BUSHING.	1	0
		0 - 0 - 79525 1/2" 90 PRO-PRESS ELBOW WITH 1/2" NPT FEMALE CONNECTION, VIEGA.	1	0
		0 - 0 - 79580 1/2" X 1/2" PRO-PRESS TEE X 1/2" NPT FEMALE CONNECTION, VIEGA.	2	0
		0 - 0 - 87-120042-001 SECONDARY ACTUATOR VALVE (SVA) - SINGLE ACTUATOR, REQUIRES PRIMARY RELEASE ACTUATOR, TANK FIRE SUPPRESSION.	1	0
		0 - 0 - 87-120045-001 HOSE, SECONDARY ACTUATOR HOSE, 7.5" BRAIDED STAINLESS STEEL, TANK FIRE SUPPRESSION.	1	0
		0 - 0 - 87-300001-001 TANK - PRESSURIZED TANK USED FOR TANK FIRE SUPPRESSION.	2	0
		0 - 0 - 87-300030-001 PRIMARY ACTUATOR KIT (PAK) - ACTUATOR AND RELEASE SOLENOID ASSEMBLY, ONE NEEDED PER FIRE SYSTEM, SUPERVISED, TANK FIRE SUPPRESSION.	1	0
		0 - 0 - 87-300152-001 HARDWARE, SVA BOLTS, TANK FIRE SUPPRESSION.	8	0
1		0 - 0 - 98694A115 HARDWARE, DATANKLOCK LOCKING BRACKET SQUARE NUTS 5/16" ZINC, TANK FIRE SUPPRESSION.	4	0
		0 - 0 - A0034332 JUNCTION BOX FOR MANUAL PULL STATION. 1.5" DEEP BACK BOX, RED COLOR.	1	0
		0 - 0 - A31484 1/4" NPT SCHRADER VALVE AND CAP, JB INDUSTRIES. 1/4" FLARE X 1/4" MPT HALF UNION. USED ON TANK SERVICE PORT.	1	0
		0 - 0 - DATANKLOCK DISCHARGE ADAPTER TANK LOCKING PLATE FOR FIRE SYSTEM TANK INSTALLATION IN UTILITY CABINETS, TANK FIRE SUPPRESSION.	2	0
		0 - 0 - SLPCON-30FT SUPERVISED LOOP CONNECTION KIT. CONTAINS THE PARTS NEEDED TO CONNECT THE SUPERVISED LOOP BETWEEN HOODS WITH UPTO 29' GAP. KIT CONTAINS 32 FEET OF BLACK MG WIRE, 32 FEET OF TAN MG WIRE, 30 FEET OF FLEXIBLE CONDUIT, AND TWO 7/8" CONNECTORS.	2	0
		0 - 0 - TANK STRAP TANK STRAP - USED FOR TANK FIRE SUPPRESSION.	6	0
		0 - 0 - TFS-UCTANKBRACKET TANK BRACKET FOR FIRE SYSTEM TANK INSTALLATION IN UTILITY CABINETS, TANK FIRE SUPPRESSION.	2	0
		0 - 0 - WK-283952-000 DISCHARGE ADAPTER, TANK FIRE SUPPRESSION.	2	0
		34 - 34 - A0034331 24VDC SINGLE ACTION MANUAL ACTUATION DEVICE (PUSH/PULL STATION) WITH PROTECTIVE COVER, ONE (1) NORMALLY OPEN CONTACT. RED COLOR.	1	0
		ADDITIONAL PARTS TO BE DETERMINED		

#### SYSTEM DESIGN VERIFICATION (SDV)

IF ORDERED, CAS SERVICE WILL PERFORM A SYSTEM DESIGN VERIFICATION (SDV) ONCE ALL EQUIPMENT HAS HAD A COMPLETE START UP PER THE OPERATION AND INSTALLATION MANUAL. TYPICALLY, THE SDV WILL BE PERFORMED AFTER ALL INSPECTIONS ARE COMPLETE.

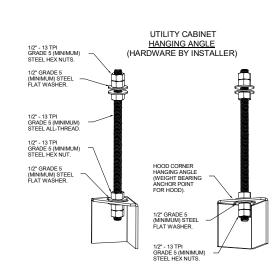
ANY FIELD RELATED DISCREPANCIES THAT ARE DISCOVERED DURING THE SDV WILL BE BROUGHT TO THE ATTENTION OF THE GENERAL CONTRACTOR AND CORRESPONDING TRADES ON SITE. THESE ISSUES WILL BE DOCUMENTED AND FORWARDED TO THE APPROPRIATE SALES OFFICE. IF CAS SERVICE HAS TO RESOLVE A DISCREPANCY THAT IS A FIELD ISSUE, THE GENERAL CONTRACTOR WILL BE NOTIFIED AND BILLED FOR THE WORK. SHOULD A RETURN TRIP BE REQUIRED DUE TO ANY FIELD RELATED DISCREPANCY THAT CANNOT BE RESOLVED DURING THE SDV, THERE WILL BE ADDITIONAL TRIP CHARGES.

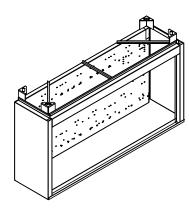
DURING THE SDV, CAS SERVICE WILL ADDRESS ANY DISCREPANCY THAT IS THE FAULT OF THE MANUFACTURER. SHOULD A RETURN TRIP BE REQUIRED, THE GENERAL CONTRACTOR AND APPROPRIATE SALES OFFICE WILL BE NOTIFIED. THERE WILL BE NO ADDITIONAL CHARGES FOR MANUFACTURER DISCREPANCIES.

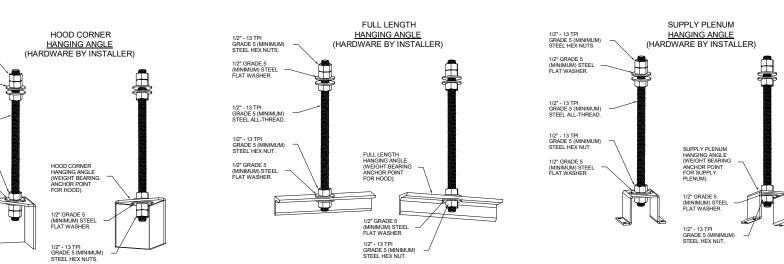
#### WALL-MOUNT UTILITY CABINET ASSEMBLY INSTRUCTIONS

HANGING ANGLE MUST BE SUPPORTED WITH 1/2" - 13 TPI GRADE 5 (MINIMUM) ALL-THREAD. SANDWICH HANGING ANGLES AND CEILING ANCHOR POINTS WITH 1/2" GRADE 5 (MINIMUM) STEEL FLAT WASHERS AND 1/2" - 13 TPI GRADE 5 (MINIMUM) HEX NUTS AS SHOWN. MUST USE DOUBLED HEX NUT CONFIGURATION BENEATH UTILITY CABINET HANGING ANGLES AND ABOVE CEILING ANCHORS. MAINTAIN 1/4" OF EXPOSED THREADS BENEATH BOTTOM HEX NUT. TORQUE ALL HEX NUTS TO 57 FT-LBS.

CABINET TO BE HUNG BY HOOD INSTALLER. SEE UTILITY CABINET SCHEDULE FOR CABINET SIZE.







ASSEMBLY INSTRUCTIONS

1/2" - 13 TPI GRADE 5 (MINIMUM) STEEL HEX NUTS.

1/2" GRADE 5 (MINIMUM) STEEL FLAT WASHER.

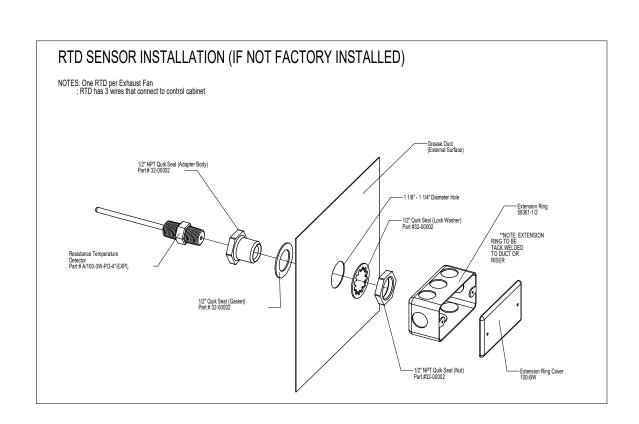
1/2" - 13 TPI GRADE 5 (MINIMUM) STEEL HEX NUT.

ASSEMBLY INSTRUCTIONS ASSEMBLY INSTRUCTIONS HANGING ANGLE MUST BE SUPPORTED WITH 1/2" - 13 TPI GRADE 5
(MINIMUM) ALL-THREAD. SANDWICH HANGING ANGLES AND CEILING
ANCHOR POINTS WITH 1/2" GRADE 5 (MINIMUM) STEEL FLAT
WASHERS AND 1/2" - 13 TPI GRADE 5 (MINIMUM) HEX NUTS AS
SHOWN, MUST USE DOUBLED HEX NUT CONFIGURATION ABOVE
CEILING ANCHORS. SINGLE HEX NUT BENEATH HANGING ANGLE IS
ACCEPTABLE FOR PSP HANGING ANGLES. MAINTAIN 1/4" OF
EVENSED TUBEADS BENEATH BOTTOM HEX NUT TOPOLE ALL HEY ASSEMBLY INSTRUCTIONS

HANGING ANGLE MUST BE SUPPORTED WITH 1/2" - 13 TPI GRADE 5 (MINIMUM) ALL-THREAD. SANDWICH HANGING ANGLES AND CEILING ANCHOR POINTS WITH 1/2" GRADE 5 (MINIMUM) STEEL FLAT WASHERS AND 1/2" - 13 TPI GRADE 5 (MINIMUM) HEX NUTS AS SHOWN. MUST USE DOUBLED HEX NUT CONFIGURATION BENEATH HOOD HANGING ANGLES AND ABOVE CEILING ANCHORS. MAINTAIN 1/4" OF EXPOSED THREADS BENEATH BOTTOM HEX NUT. TORQUE ALL HEX NUTS TO 57 FT-LBS.

HANGING ANGLE MUST BE SUPPORTED WITH 1/2" - 13 TPI GRADE 5 (MINIMUM) ALL-THREAD. SANDWICH HANGING ANGLES AND CEILING ANCHOR POINTS WITH 1/2" GRADE 5 (MINIMUM) STEEL FLAT WASHERS AND 1/2" - 13 TPI GRADE 5 (MINIMUM) HEX NUTS AS SHOWN. MUST USE DOUBLED HEX NUT CONFIGURATION ABOVE CEILING ANCHORS. SINGLE HEX NUT BENEATH HANGING ANGLE IS ACCEPTABLE FOR FULL LENGTH HANGING ANGLES. MAINTAIN 1/4" OF EXPOSED THREADS BENEATH BOTTOM HEX NUT. TORQUE ALL HEX NUTS TO 57 FT-LBS.

HANGING ANGLE MUST BE SUPPORTED WITH 1/2" - 13 TPI GRADE 5 (MINIMUM) ALL-THREAD. SANDWICH HANGING ANGLES AND CEILING ANCHOR POINTS WITH 1/2" - 13 TPI GRADE 5 (MINIMUM) STEEL FLAT WASHERS AND 1/2" - 13 TPI GRADE 5 (MINIMUM) HEX NUTS AS SHOWN. MUST USE DOUBLED HEX NUT CONFIGURATION ABOVE CEILING ANCHORS. SINGLE HEX NUT BENEATH HANGING ANGLE IS ACCEPTABLE FOR FULL LENGTH HANGING ANGLE S. MAINTAIN 1/4" OF EXPOSED THREADS BENEATH BOTTOM HEX NUT. TORQUE ALL HEX NUTS TO 57 FT-LBS.



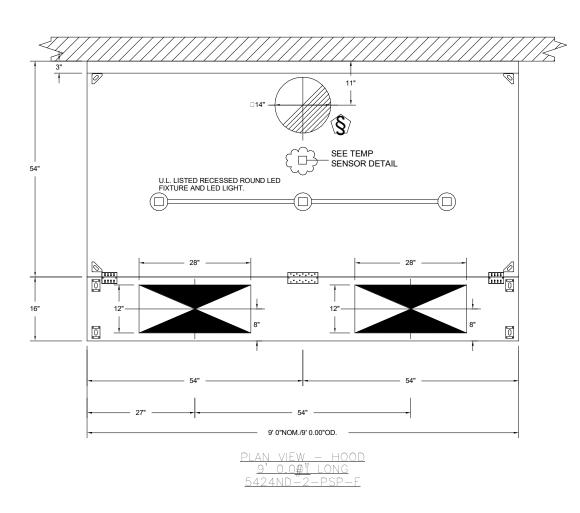
SPECIFICATION: CAPTRATE GREASE-STOP SOLO FILTER THE CAPTRATE GREASE-STOP SOLO FILTER IS A SINGLE-STAGE FILTER FEATURING A UNIQUE S-BAFFLE DESIGN IN CONJUNCTION WITH A SLOTTED REAR BAFFLE DESIGN, TO DELIVER EXCEPTIONAL FILTRATION EFFICIENCY. FILTER IS STAINLESS STEEL CONSTRUCTION, AND SIZED TO FIT INTO STANDARD 2-INCH DEEP HOOD CHANNEL(S).

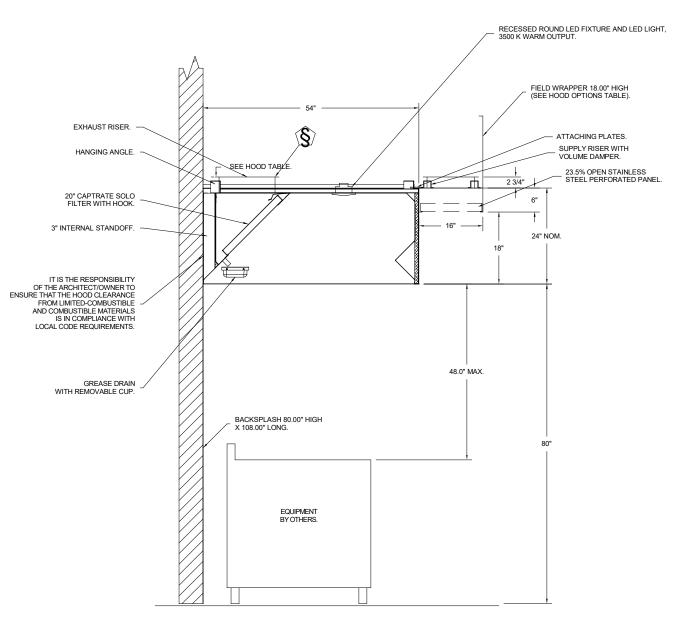
UNITS SHALL INCLUDE STAINLESS STEEL HANDLES AND A FASTENING DEVICE TO SECURE THE TWO COMPONENTS WHEN ASSEMBLED. GREASE EXTRACTION EFFICIENCY PERFORMANCE SHALL REMOVE AT LEAST 75% OF GREASE PARTICLES FIVE MICRONS IN SIZE, AND 85% GREASE PARTICLES SEVEN MICRONS IN SIZE AND LARGER, WITH A CORRESPONDING PRESSURE DROP NOT TO EXCEED 1.0 INCHES OF WATER GAUGE. THE CAPTRATE GREASE-STOP SOLO WAS TESTED TO ASTM STANDARD ASTM F2519-05. MANUFACTURER APPROVED FOR USE IN SOLID FUEL APPLICATIONS AS A SPARK ARRESTER.

PRESSURE DROP VS. FLOW RATE EFFICIENCY VS. PARTICLE DIAMETER

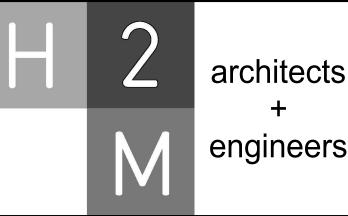
CAPTRATE FILTERS ARE BUILT IN COMPLIANCE WITH:. NFPA #96. NSF STANDARD #2. UL STANDARD #1046. INT. MECH. CODE (IMC).







SECTION VIEW - MODEL 5424ND-2-PSP-F <u> HOOD – #1</u>



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**KITCHEN SCHEDULE 1** 

M 630.00

COOLING

NATURAL

92

ı	UNIT	TAG		DESIGN							_		
	NO	170	TYPE	CFM	ENTERING DB TEMP	ENTERING WB TEMP	LEAVING DB TEMP	LEAVING WB TEMP	ENTERING FLUID TEMP	LEAVING FLUID TEMP	FLUID FLOW RATE	PERCENT GLYCOL	TOTAL CAPACITY
	2		DX	1620	91.0°F	74.0°F	77.8°F	68.5°F					32.9 MBH
	GAS	FIRED	MAK	E-UP A	AIR UNIT(	(S)							
	FAN UNIT NO	TAG	INPUT BTUs	OUTPUT BTUs	TEMP RISE		REQUIRED INPL	JT GAS PRESSURI	Ξ	GAS TYPE	BURNER EFFICIENCY(%)		

7 IN. W.C. - 14 IN. W.C.

		l				 
FAN	<i>OPTI</i>	ONS				
FAN UNIT NO	TAG	QTY			DESCRIPTION	
4		1	GREASE BOX			
1		1	2 YEAR PARTS	WARRANTY		
		1	INLET PRESSU	IRE GAUGE, 0-3	35"	
		1	MANIFOLD PR	ESSURE GAUG	E, -5 TO 15" WC	
		1	SHIP LOOSE G	AS STRAINER 3	3/4"	
		1	CASLINK BUIL	DING MONITOR	ING SYSTEM - INTERNET OR CELLULAR CONNECTION REQUIRED	
		1			MPER FOR A1-D HOUSING - MEETS AMCA CLASS 1A RATING	
2		1	TO 1,800 CFM)	, HASE. COOLING	JLAR PACKAGED COOLING OPTION FOR SIZE 1 DF/EH MUA (1,100  G THERMOSTAT OR PROGRAMMABLE STAT REQUIRED	
		1	DOWNTURN P	LENUM FOR SIZ	ZE 1 DX COIL MODULE	
		1	SEPARATE 120 VFD) - THREE I ONLY		KAGE (REQUIRED AND USED ONLY FOR DCV OR PREWIRE WITH	
		1	2 YEAR PARTS	WARRANTY		

FAN	FAN ACCESSORIES													
FAN UNIT	TAG		EXHAUST			SUPF	PLY							
NO		GREASE CUP	GRAVITY DAMPER	WALL MOUNT	SIDE DISCHARGE	GRAVITY DAMPER	MOTORIZED DAMPER	WALL MOUNT						
1		YES												
2							YES							

59°F

<u>COILS - JOB#6187310</u>

110503 101663

CUF	CURB ASSEMBLIES					
NO	ON FAN	WEIGHT	ITEM	SIZE		
1	# 1	41 LBS	CURB	26.500"W X 26.500"L X 20.000"H VENTED HINGED.		
2	# 2	85 LBS	CURB	21.000"W X 71.000"L X 20.000"H INSULATED.		
	#2		RAIL	6.000"W X 21.000"L X 20.000"H.		

### FAN #1 DU180HFA - EXHAUST FAN

SENSIBLE

CAPACITY

22.5 MBH

LATENT

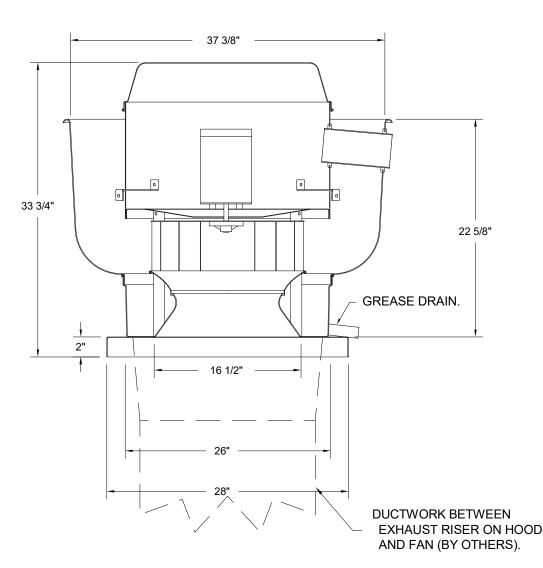
CAPACITY

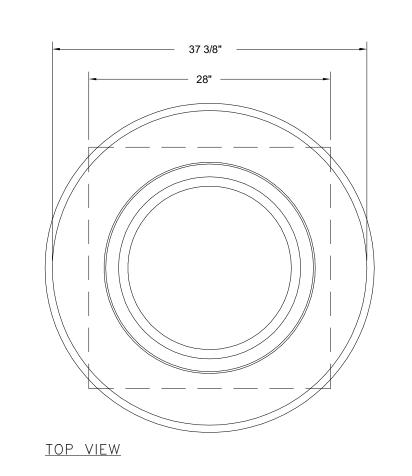
10.4 MBH

ENTERING DB LEAVING DB

TEMP

TEMP





# **FEATURES**:

ENTERING

FLUID TEMP

- DIRECT DRIVE CONSTRUCTION (NO BELTS/PULLEYS). - ROOF MOUNTED FANS. - RESTAURANT MODEL. - UL705 AND UL762 AND ULC-S645 - VARIABLE SPEED CONTROL. - INTERNAL WIRING.

LEAVING

FLUID TEMP

HEATING

FLUID FLOW

RATE

PERCENT

GLYCOL

STEAM

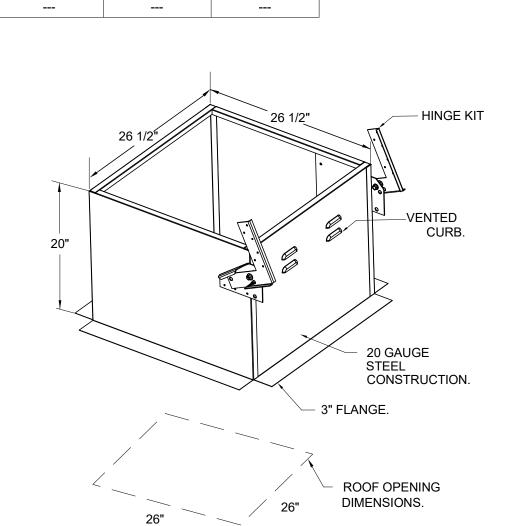
PRESSURE

TOTAL

CAPACITY

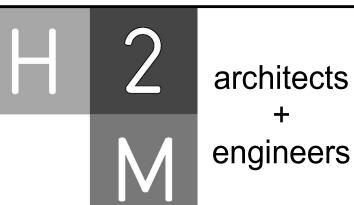
- THERMAL OVERLOAD PROTECTION (SINGLE PHASE). - HIGH HEAT OPERATION 300°F (149°C). - GREASE CLASSIFICATION TESTING. - NEMA 3R SAFETY DISCONNECT SWITCH.
- NORMAL TEMPERATURE TEST EXHAUST FAN MUST OPERATE CONTINUOUSLY WHILE EXHAUSTING AIR AT 300°F (149°C) UNTIL ALL FAN PARTS HAVE REACHED THERMAL EQUILIBRIUM, AND WITHOUT ANY DETERIORATING EFFECTS TO THE FAN WHICH WOULD CAUSE UNSAFE OPERATION.
- ABNORMAL FLARE-UP TEST EXHAUST FAN MUST OPERATE CONTINUOUSLY WHILE EXHAUSTING BURNING GREASE VAPORS AT 600°F (316°C) FOR A PERIOD OF 15 MINUTES WITHOUT THE FAN BECOMING DAMAGED TO ANY EXTENT THAT COULD CAUSE AN UNSAFE CONDITION.

### <u>OPTIONS</u> - GREASE BOX.



SENSIBLE

CAPACITY



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**KITCHEN SCHEDULE 2** 

M 631.00

2. INTAKE HOOD WITH EZ FILTERS. 3. DOWN DISCHARGE - AIR FLOW RIGHT -> LEFT.

4. GAS PRESSURE GAUGE, 0-35", 2.5" DIAMETER, 1/4" THREAD SIZE. 5. GAS PRESSURE GAUGE, -5 TO +15 INCHES WC., 2.5" DIAMETER, 1/4" THREAD SIZE. 6. SHIP LOOSE GAS STRAINER. TO BE INSTALLED UPSTREAM OF UNIT CONNECTION. 3/4" CONNECTION.

7. CASLINK BUILDING MONITORING SYSTEM COMMUNICATIONS MODULE. REQUIRES INTERNET & FIELD WIRED ETHERNET CONNECTION OR 3G CELLULAR SERVICE. INCLUDES REV 3 COMM MODULE, RJ45 TO MODBUS CONVERTER, 3 FT CAT5 CABLE, AND 1 FT OF SHIELDED TWISTED PAIR.

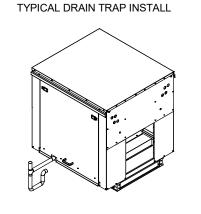
8. MOTORIZED BACK DRAFT DAMPER 16" X 18" FOR SIZE 1 STANDARD & MODULAR HEATER UNITS W/EXTENDED SHAFT, STANDARD GALVANIZED

CONSTRUCTION, 3/4" REAR FLANGE, LOW LEAKAGE, TFB120S ACTUATOR INCLUDED. 9. 3 TON, SINGLE CIRCUIT MODULAR PACKAGED COOLING OPTION FOR SIZE 1 DF/EH MODULAR PACKAGED UNIT. INCLUDES CONDENSER, DX COIL, FILTER/DRYER KIT, THERMAL EXPANSION VALVE, R410A REFRIGERANT, AND REFRIGERANT PIPING. (1,100 TO 1,800 CFM) WHEN ORDERED WITH OPPOSITE AIRFLOW CONDENSERS ACCESS AND COIL PIPING WILL REMAIN IN STANDARD POSITION. DRAIN AND SLEDS WILL MOVE TO THE OPPOSITE SIDE. ANY OTHER CHANGE WILL REQUIRE CLI. CONDENSERS REQUIRE SEPARATE 208V, 3 PHASE POWER SUPPLY UNLESS ORDERED WITH SINGLE POINT CONNECTION. COIL = 2EZ1001N.

10. DOWNTURN PLENUM FOR SIZE 1 COOLING COIL MODULE - REQUIRED FOR DOWN DISCHARGE COOLING COIL APPLICATIONS. 11. SEPARATE 120VAC WIRING PACKAGE FOR MAKE-UP AIR UNITS. OPTION MUST BE SELECTED WHEN MOUNTING VFD IN PREWIRE PANEL OR WITH DCV PACKAGE. PROVIDES SEPARATE 120VAC INPUT TO SUPPLY FAN. THIS 120V SIGNAL MUST BE RUN BY ELECTRICIAN FROM DCV TO

12. HINGED DOUBLE WALL INSULATED DOOR ASSEMBLY (BURNER/BLOWER/MPU SECTION). 13. 2 YEAR PARTS WARRANTY

\*NOTE: SUPPLY DUCT MUST BE INSTALLED TO MEET SMACNA STANDARDS. A MINIMUM STRAIGHT DUCT LENGTH MUST BE MAINTAINED DOWNSTREAM OF UNIT DISCHARGE AS OUTLINED IN AMCA PUBLICATION 201. WHEN USING RECTANGULAR DUCTWORK, ELBOWS MUST BE RADIUS THROAT, RADIUS BACK WITH TURNING VANES. FLEXIBLE DUCTWORK AND SQUARE THROAT/SQUARE BACK ELBOWS SHOULD NOT BE USED. ANY TRANSITION AND/OR TURNS IN THE DUCTWORK WILL CAUSE SYSTEM EFFECT. SYSTEM EFFECT WILL DRASTICALLY INCREASE STATIC PRESSURE AND REDUCE AIRFLOW. DO NOT RELY ON UNIT TO SUPPORT DUCT IN ANY WAY. FAILURE TO PROPERLY SIZE DUCTWORK MAY CAUSE SYSTEM EFFECTS AND REDUCE PERFORMANCE OF THE EQUIPMENT. SUGGESTED STRAIGHT DUCT SIZE IS 14" x 14".



DRAIN TRAP CONFIGURATION. \_NO UNIONS. CLEAN OUT. **→** 12" MIN.

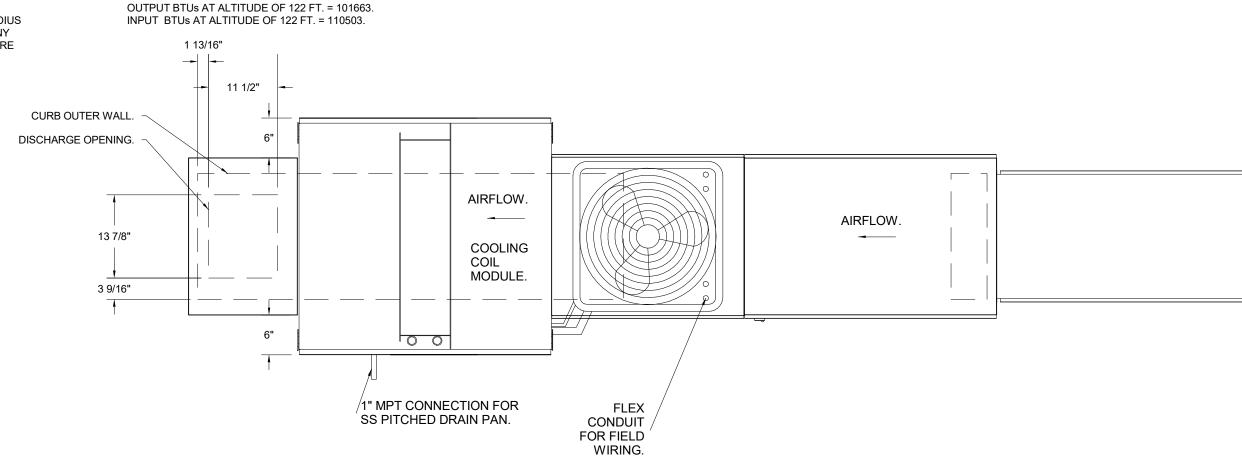
1) 1" DIAMETER PVC PIPE ONLY. 2) USE ONLY LOW PROFILE COUPLINGS. 3) ADD CLEAN OUT AS SHOWN.

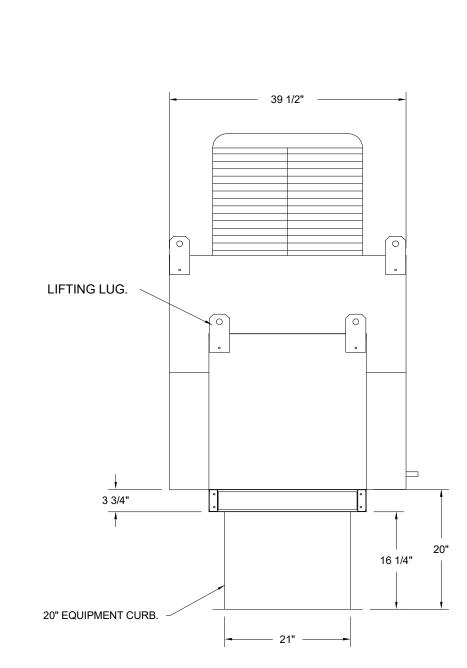
RECOMMENDED COOLING COIL

SUPPLY SIDE HEATER INFORMATION:

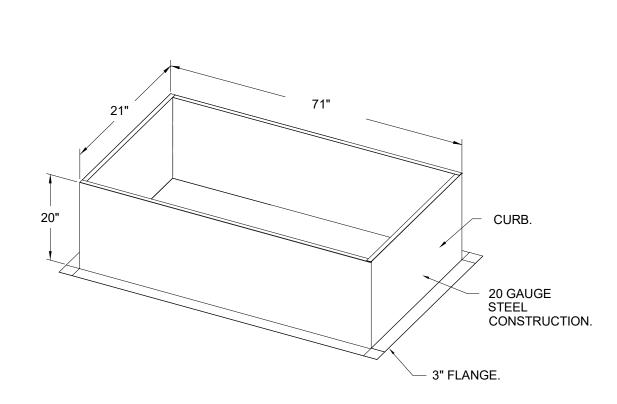
WINTER TEMPERATURE = 16°F. TEMP. RISE = 59°F. BTUs CALCULATED OFF ACTUAL AIR DENSITY.

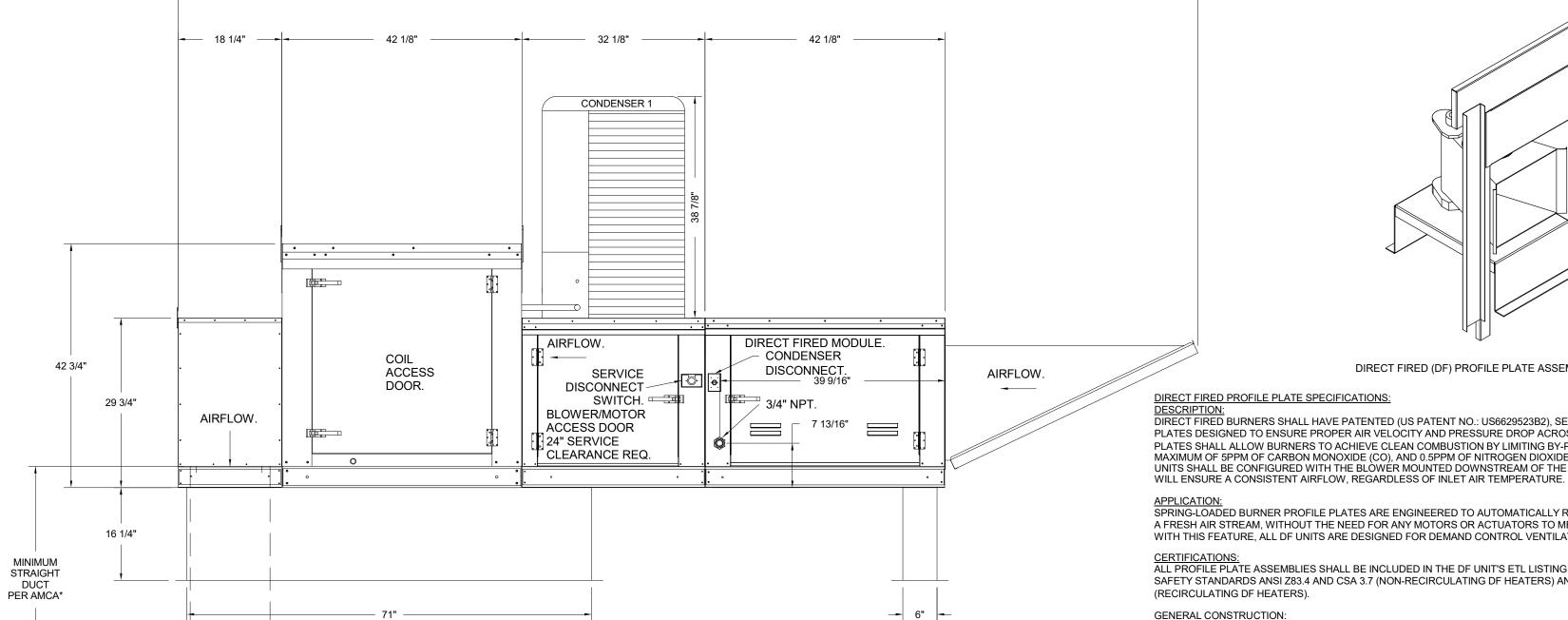
OUTPUT BTUs AT ALTITUDE OF 0.0 FT. = 102112. INPUT BTUs AT ALTITUDE OF 0.0 FT. = 110991.

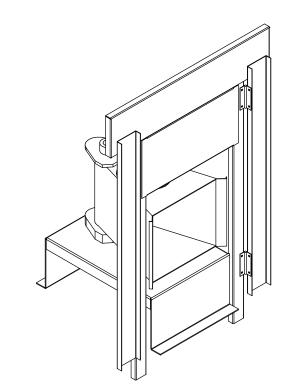




OPTIONS: - FULL BOTTOM CORNERS.







DIRECT FIRED (DF) PROFILE PLATE ASSEMBLY

DIRECT FIRED PROFILE PLATE SPECIFICATIONS:

DESCRIPTION:
DIRECT FIRED BURNERS SHALL HAVE PATENTED (US PATENT NO.: US6629523B2), SELF-ADJUSTING PROFILE PLATES DESIGNED TO ENSURE PROPER AIR VELOCITY AND PRESSURE DROP ACROSS THE BURNER. PROFILE PLATES SHALL ALLOW BURNERS TO ACHIEVE CLEAN COMBUSTION BY LIMITING BY-PRODUCT LEVELS TO A MAXIMUM OF 5PPM OF CARBON MONOXIDE (CO), AND 0.5PPM OF NITROGEN DIOXIDE (NO2), DIRECT FIRED UNITS SHALL BE CONFIGURED WITH THE BLÒWÉR MOUNTED DOWNSTREAM OF THE BURNER. THIS ARRANGEMENT

APPLICATION:
SPRING-LOADED BURNER PROFILE PLATES ARE ENGINEERED TO AUTOMATICALLY REACT TO THE MOMENTUM OF A FRESH AIR STREAM, WITHOUT THE NEED FOR ANY MOTORS OR ACTUATORS TO MECHANICALLY ADJUST THEM. WITH THIS FEATURE, ALL DF UNITS ARE DESIGNED FOR DEMAND CONTROL VENTILATION (DCV) REQUIREMENTS.

CERTIFICATIONS:
ALL PROFILE PLATE ASSEMBLIES SHALL BE INCLUDED IN THE DF UNIT'S ETL LISTING AND COMPLY WITH COMBINED SAFETY STANDARDS ANSI Z83.4 AND CSA 3.7 (NON-RECIRCULATING DF HEATERS) AND ANSI Z83.18

GENERAL CONSTRUCTION:
-PROFILE PLATES SHALL BE FORMED FROM G90 GALVANIZED STEEL. -PROFILE PLATES SHALL VARY IN SIZE PER UNIT.

-PROFILE PLATES SHALL BE MOUNTED ALONG THE SAME PLANE AS THE DISCHARGE OF THE BURNER. -DESIGN SHALL INCORPORATE PROPERLY TORQUED, PERMANENTLY MOUNTED SPRING HINGES.

-SPRING HINGES SHALL BE MADE FROM PLATED STEEL.

architects

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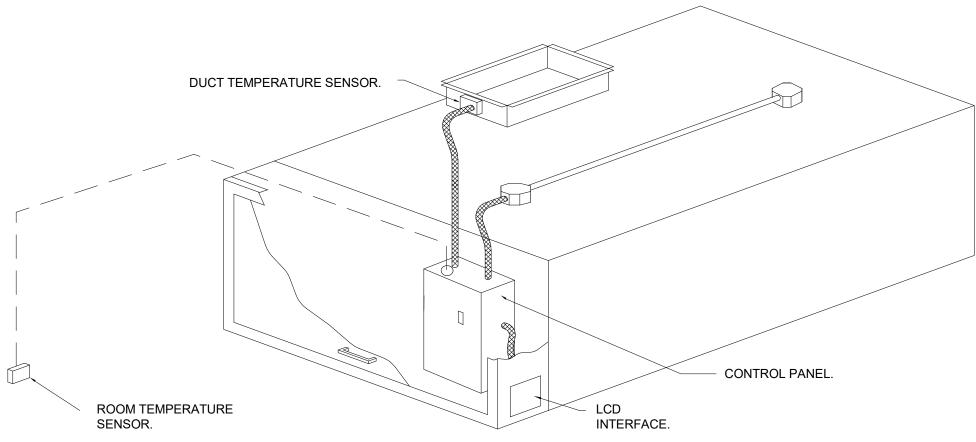
**KITCHEN SCHEDULE 3** 

M 632.00

### DEMAND CONTROL VENTILATION HOOD CONTROL PANEL SPECIFICATIONS:

- CONTROLS SHALL BE LISTED BY ETL (UL 508A) AND SHALL COMPLY WITH DEMAND VENTILATION SYSTEM TURNDOWN REQUIREMENTS OUTLINED IN IECC 403.7.5 (2021).
- THE CONTROL ENCLOSURE SHALL BE NEMA 1 RATED AND LISTED FOR INSTALLATION INSIDE OF THE EXHAUST HOOD UTILITY CABINET. THE CONTROL ENCLOSURE MAY BE CONSTRUCTED OF STAINLESS STEEL OR PAINTED STEEL.
- TEMPERATURE PROBE(S) LOCATED IN THE EXHAUST DUCT RISER(S) SHALL BE CONSTRUCTED OF STAINLESS STEEL.
- A DIGITAL CONTROLLER SHALL BE PROVIDED TO ACTIVATE THE HOOD EXHAUST FANS DYNAMICALLY BASED ON A FIXED DIFFERENTIAL BETWEEN THE AMBIENT AND DUCT TEMPERATURES SENSORS. THIS FUNCTION SHALL MEET THE REQUIREMENTS OF IMC 507.1.1.
- A DIGITAL CONTROLLER SHALL PROVIDE ADJUSTABLE HYSTERESIS SETTINGS TO PREVENT CYCLING OF THE FANS AFTER THE COOKING APPLIANCES HAVE BEEN TURNED OFF AND/OR THE HEAT IN THE EXHAUST SYSTEM IS REDUCED.
- A DIGITAL CONTROLLER SHALL PROVIDE AN ADJUSTABLE MINIMUM FAN RUN-TIME SETTING TO PREVENT FAN CYCLING.
- VARIABLE FREQUENCY DRIVES (VFDS) SHALL BE PROVIDED FOR FANS AS REQUIRED. THE DIGITAL CONTROLLER SHALL MODULATE THE VFDS BETWEEN A MINIMUM SETPOINT AND A MAXIMUM SETPOINT ON DEMAND. THE DUCT TEMPERATURE SENSOR INPUT(S) TO THE DIGITAL CONTROLLER SHALL BE USED TO CALCULATE THE SPEED REFERENCE SIGNAL.
- THE VFD SPEED RANGE OF OPERATION SHALL BE FROM 0% TO 100% FOR THE SYSTEM, WITH THE ACTUAL MINIMUM SPEED SET AS REQUIRED TO MEET MINIMUM VENTILATION REQUIREMENTS.
- AN INTERNAL ALGORITHM TO THE DIGITAL CONTROLLER SHALL MODULATE SUPPLY FAN VFD SPEED PROPORTIONAL TO ALL EXHAUST FANS THAT ARE LOCATED IN THE SAME FAN GROUP AS THE SUPPLY FAN.
- THE SYSTEM SHALL OPERATE IN PREP MODE DURING LIGHT COOKING LOAD OR COOL DOWN MODE WHEN SUFFICIENT HEAT REMAINS UNDERNEATH THE HOOD SYSTEM AFTER COOKING OPERATIONS HAVE COMPLETED. OPERATION DURING EITHER OF THESE PERIODS WILL DISABLE THE SUPPLY FANS AND PROVIDE AN EXHAUST FAN SPEED THAT IS EQUAL TO THE MINIMUM VENTILATION REQUIREMENT.
- A DIGITAL CONTROLLER SHALL DISABLE THE SUPPLY FAN(S), ACTIVATE THE EXHAUST FAN(S), ACTIVATE THE APPLIANCE SHUNT TRIP, AND DISABLE AN ELECTRIC GAS VALVE AUTOMATICALLY WHEN FIRE CONDITION IS DETECTED ON A COVERED HOOD.
- A DIGITAL CONTROLLER SHALL ALLOW FOR EXTERNAL BMS FAN CONTROL VIA DRY CONTACT (EXTERNAL CONTROL SHALL NOT OVERRIDE FAN OPERATION LOGIC AS REQUIRED BY CODE).
- AN LCD INTERFACE SHALL BE PROVIDED WITH THE FOLLOWING FEATURES:
  - A. ON/OFF PUSH BUTTON FAN & LIGHT SWITCH ACTIVATION.
- B. INTEGRATED GAS VALVE RESET FOR ELECTRONIC GAS VALVES (NO RESET RELAY REQUIRED).
- C. VFD FAULT DISPLAY WITH AUDIBLE & VISUAL ALARM NOTIFICATION.
- D. DUCT TEMPERATURE SENSOR FAILURE DETECTION WITH AUDIBLE & VISUAL ALARM NOTIFICATION.

  E. MIS-WIRED DUCT TEMPERATURE SENSOR DETECTION WITH AUDIBLE & VISUAL ALARM NOTIFICATION.
- F. A SINGLE LOW VOLTAGE CAT-5 RJ45 WIRING CONNECTION.
- F. A SINGLE LOW VOLTAGE CAT-5 RJ45 WIRING CONNECTION.
  G. AN ENERGY SAVINGS INDICATOR THAT UTILIZES MEASURED KWH FROM THE VFDS.

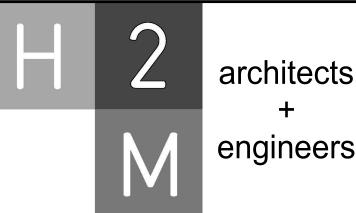


TYPICAL HOOD CONTROL PANEL INSTALLATION

# **SEQUENCE OF OPERATIONS:**

THE HOOD CONTROL PANEL IS CAPABLE OF OPERATING IN ONE OR MORE OF THE FOLLOWING STATES AT ANY GIVEN TIME:

- <u>AUTOMATIC:</u> THE SYSTEM OPERATES BASED ON THE DIFFERENTIAL BETWEEN ROOM TEMPERATURE AND THE TEMPERATURE AT THE HOOD CAVITY OR EXHAUST DUCT COLLAR. FANS ACTIVATE AT A CONFIGURABLE TEMPERATURE DIFFERENTIAL THRESHOLD. DEPENDING ON THE JOB CONFIGURATION EACH FAN ZONE CAN BE CONFIGURED AS STATIC OR DYNAMIC. THESE TERMS REFER TO WHETHER A VARIABLE MOTOR (SUCH AS EC MOTORS OR VFD DRIVEN MOTORS) MODULATE WITH TEMPERATURE. IF THE PANEL IS EQUIPPED WITH VARIABLE SPEED FANS AND THE ZONE IS DEFINED AS "DYNAMIC", THESE WILL MODULATE WITHIN A USER-DEFINED RANGE BASED ON THE TEMPERATURE DIFFERENTIAL. PANELS EQUIPPED WITH VARIABLE SPEED FANS AND A FAN ZONE DEFINED AS "STATIC", FANS WILL RUN AT A SET SPEED CALCULATED FOR THE DRIVE. DEMAND CONTROL VENTILATION SYSTEMS ARE CAPABLE OF MODULATING EXHAUST AND MAKE UP AIR FAN SPEEDS PER THE REQUIREMENTS OUTLINED IN IECC 403.7.5 (2021).
- MANUAL: THE SYSTEM OPERATES BASED ON HUMAN INPUT FROM AN HMI.
- SCHEDULE: A WEEKLY SCHEDULE CAN BE SET TO RUN FANS FOR A SPECIFIED PERIOD THROUGHOUT THE DAY. THERE ARE THREE OCCUPIED TIMES PER DAY TO ALLOW FOR THE USER TO SET UP A TIME THAT IS SUITABLE TO THEIR NEEDS. ANY TIME THAT IS WITHIN THE DEFINED OCCUPIED TIME, THE SYSTEM WILL RUN AT MODULATION MODE AND FOLLOW THE FAN PROCEDURE ALGORITHM BASED ON TEMPERATURE DURING THIS TIME. DURING UNOCCUPIED TIME, THE SYSTEM WILL HAVE AN EXTRA OFFSET TO PREVENT UNINTENDED ACTIVATION OF THE SYSTEM DURING A TIME WHERE THE SYSTEM IS NOT BEING OCCUPIED.
- <u>OTHER:</u> THE SYSTEM OPERATES BASED ON THE INPUT FROM AN EXTERNAL SOURCE (DDC, BMS OR HARD-WIRED INTERLOCK).
- FIRE: UPON ACTIVATION OF THE HOOD FIRE SUPPRESSION SYSTEM, THE EXHAUST FAN WILL COME ON OR CONTINUE TO TO RUN, THE HOOD MAKEUP AIR WILL SHUTDOWN, AND A SIGNAL WILL BE SENT FOR ACTIVATING THE SHUNT TRIP BREAKER PROVIDED BY THE ELECTRICIAN. FUEL GAS WILL SHUT OFF VIA A MECHANICAL/ELECTRICAL GAS VALVE ACTUATED BY THE HOOD FIRE SUPPRESSION SYSTEM.



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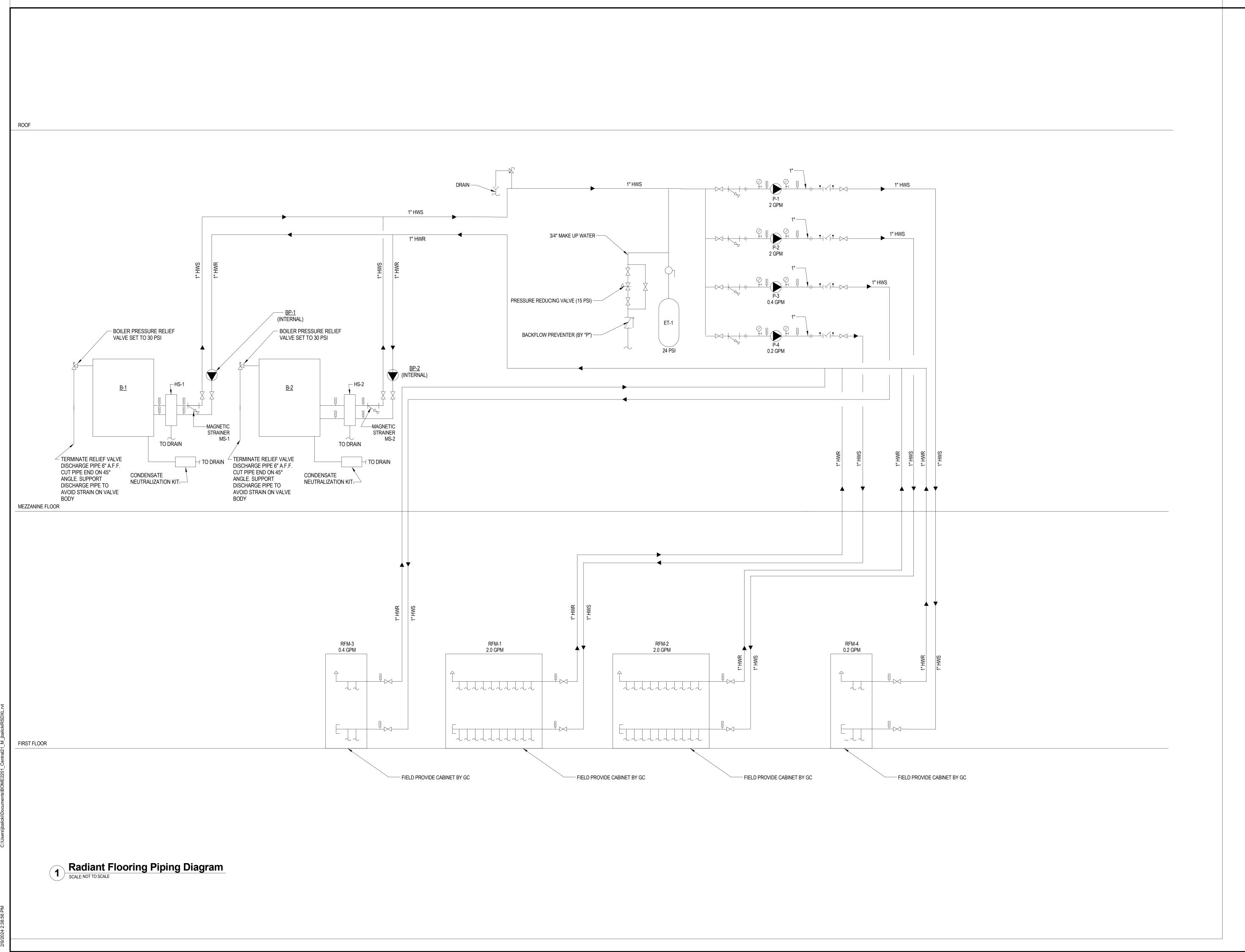
TUS **90% - NFC** 

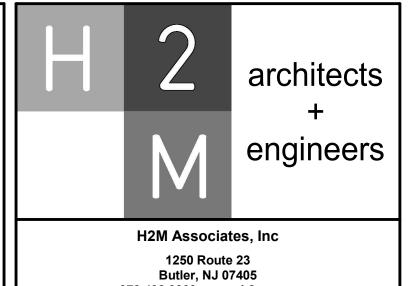
SHEET TITLE

KITCHEN SCHEDULE 4

DRAWING

M 633.00

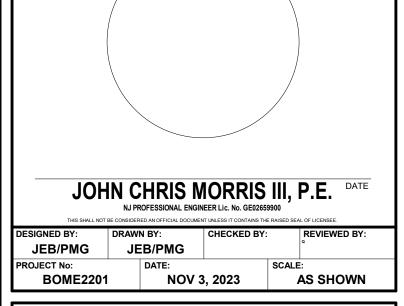




Engineering Certificate of Authorization No.: 24GA28019100

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MARK	DATE	DESCRIPTION



# Borough of Metuchen

EMERGENCY SERVICES CENTER

1 SAFETY PLACE
METUCHEN, NJ 08840
BOROUGH OF METUCHEN
COUNTY OF MIDDLESEX
NEW JERSEY

STATUS

90% - NFC

SHEET TIT

RADIANT FLOOR PIPING DIAGRAM

DRAWING

M 640.00