BRUNSWICK
COMMUNITY COLLEGE

Brunswick Community College

Pool HVAC system replacement

Scope of Work

1. LOTO Pool HVAC equipment
2. Recover refrigerant in system and disconnect electrical components
3. Remove old condenser and packaged unit on roof
4. Install new condenser and packaged unit on roof
5. Test unit for proper operation
6. Remove old equipment and clean debris
7. Commission equipment and train facilities staff in operation

Brunswick CC

PPK-340-GU-X-A3ET2313D5E5AF4H

Model	80 Ton 2 - compressor dehumidifier
Unit Subseries	Pool Water Heater, Titanium, Non-Vented
Unit Location	Outdoor
Cabinet	Horizontal 2-in Double Walled - Return Plenum - Top [Left Side Access]
Supply Voltage	460V-480V/3PH
Unit Control	CommandPak c/w Building Communication and Remote Panel
Building Communication	BACNet
Refrigerant	R410A
Disconnect	Fused Disconnect Unit Mounted
Outdoor Air	OA Inlet Motorized Damper & Filter
Exhaust Fan	Unit mounted Exhaust Fan
Space Heating	Unit mounted electric heater - Separate power connection
Heat Control	Modulating - factory wired electric heating control
Air Conditioning	Air Cooled A/C - For Use With Remote Outdoor Air Cooled Equipment
OAFC Model	NG-V-52
OAFC Voltage	460V-480V/3PH
Warranty	2 years on driveline, 5 years on compressor, 5 years on coils
Supply Air CFM	31000
Outdoor Air CFM	6700
Exhaust Air CFM	2500
Supply Air Orientation	Top Supply
Outdoor Air Orientation	Right
Pool Water Connection	Bottom
Condensate Drain	Side
Heating Capacity	200.0 kW

Brunswick CC

PPK-340-GU-X-A3ET2313D5E5AF4H

Unit Data	
Refrigerant Charge (including remote OACC and line set, compared to all DX systems)	176lbs vs 760lbs

Design Data	
Outdoor Air (CFM)	6700
ESP	0.0 inches
Room Conditions (°FDB/%RH)	82/60
Unit Total Airflow (CFM)	31000

Electrical Data	
Unit Voltage (V/Ph/Hz)	460V-480V/3PH/60
Unit Full Load Amps - FLA (A)	196.3
Unit MCA (A) (min circuit ampacity)	213
Unit MOP (A) (max overcurrent protect)	250

Supply Air Blower	
Airflow (CFM)	31000
Type	Plenum
Unit ESP (in WC)	2.0
ESP Supply Air	1.5 inches
ESP Return Air	0.5 inches
Number of Motors	2
Motor HP	25.0
Motor FLA (A)	28.5
Motor Drive	VFD

Exhaust Air Blower	
Exhaust Air (CFM)	2500
Type	Plenum
ESP	0.0 inches
Number of Motors	1
Motor HP	4.8
Motor FLA (A)	6.0
Motor Drive	Direct Drive

Compressor	
Type	Scroll
Number of compressors	2
Refrigerant	R410A
Motor RLA/LRA (A)	64.1/299.0

Evaporator Coil	
Sensible Capacity (MBH)	630.2
Total Capacity (MBH)	1145.8
Moisture Removal Capacity (Lbs/h)	477.4
Circuits	2
Condensate Drain Connection	1.25

Reheat Coil	
Total Heat Rejection (MBH)	1432.2
Control Type	Full Modulation

Glycol Pump	
Number of Motors	1
Motor HP	2.125
Motor FLA (A)	5.1

Pool Heating	
Type	Titanium Plate
Capacity (MBH)	780
Water Flow Rate (GPM)	120
Water Pressure Drop (PSI Max)	10
Connection Size (in)	2
Connection Type	Stub
Connection Stub Material	PVC
Maximum Circuit Pressure Rating (PSI)	100

Auxiliary Heat	
Location	Unit Mounted
Type	Electric Heater
Capacity (kW)	200.0
FLA (A)	251.0
MCA (A)	252
MOP (A)	350
Control	Modulated

Fluid Cooled A/C	
Fluid Flow Rate (GPM)	180.0
Fluid Pressure Drop (PSI)	6.7
Connection Size, in/out	3
Connection Type	Butterfly valve
Brazed Plate HX Volume (US Gal)	0.00
Fluid System Fill (US Gal)	74.0
Recom'd Field Line Size (in, ID), Option A	4
Max Total Equivalent Length (ft), Option A	500
Recom'd Field Line Size (in, ID), Option B	4
Max Total Equivalent Length (ft), Option B	900

May differ from connection size

Remote Outdoor Air Dry Cooler	
Model	NG-V-52
Design Air On Temp (°F)	105 F
Capacity (MBH)	1432.2
Voltage (V/Ph/Hz)	460-480/3/60
Connection Size, in/out	4
Connection Type	Flange
Number of Motors	10
Motor HP	4.5
Motor FLA (A)	4.7
MCA (A)	48
MOP (A)	50
Fluid Fill (by others) (US Gal)	98.0

LEGEND			
AP	Access Pannel	PEA	Purge Exhaust Air
CD	Condensate Drain	PC	Pipe Chase
EA	Exhaust Air	POA	Purge Outside Air
HR	Heat Recovery	RA	Return Air
OA	Outside Air	SA	Supply Air

SELECT OPTIONS	
Disconnect	☐
Side Condensate Drain	☐
Roof Curb (Installed by others)	☐

CAD FILE: DxCX360-M-TT-SEE1P0

DATE: 08/02/23

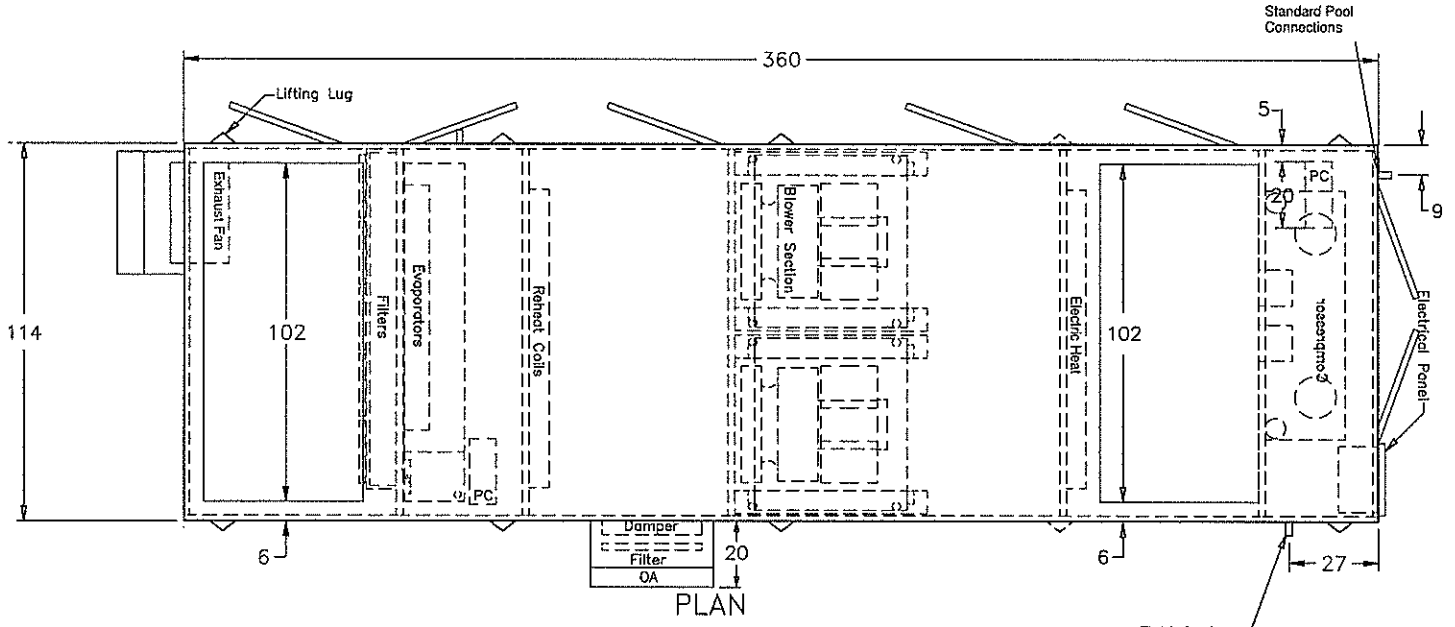
DRAWN BY: KevinMoritz

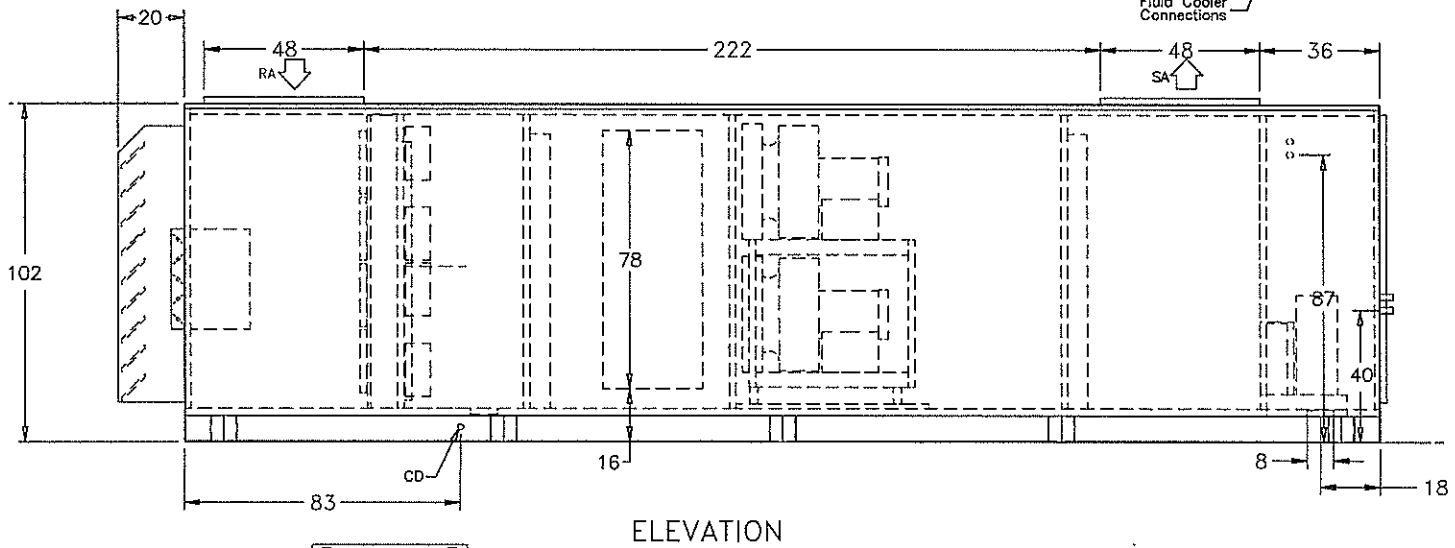
PoolPak® DEHUMIDIFICATION THAT WORKS

REV: 0

SHEET: 1 OF 1

DESCRIPTION: PPK-300_340 OUTDOOR (EF + ELEC)





UNIT OPERATING WEIGHT: 16 500 LBS (A=22%, B=24%, C=30% & D=24%)

36" access required all around

Noise level at 30' (may vary due to installation):
Low speed, 70 dBA
High speed, 78 dBA

Dehumidified AIR Solutions

CAD FILE	NG-V-52 rev04
DATE	01/07/19
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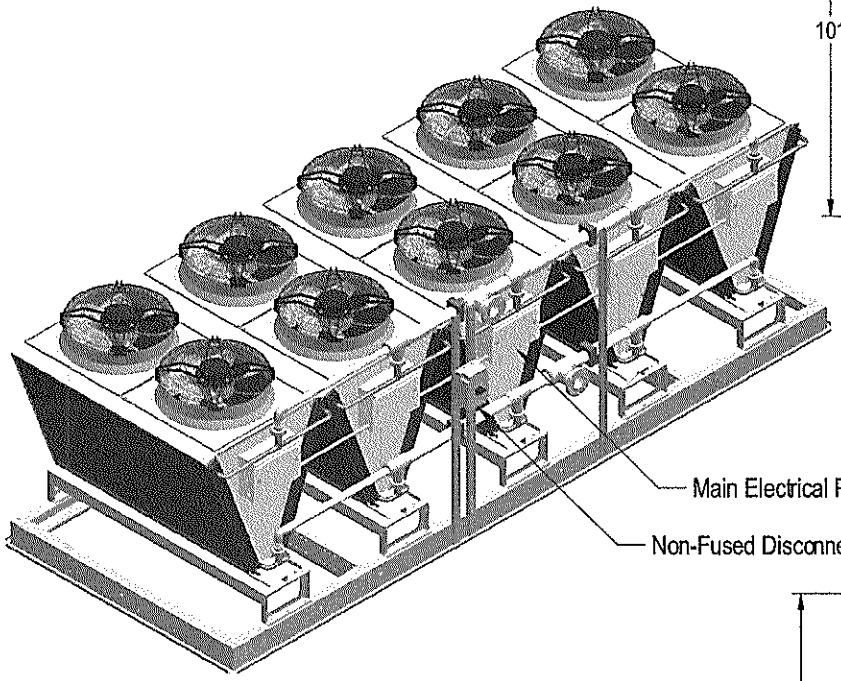
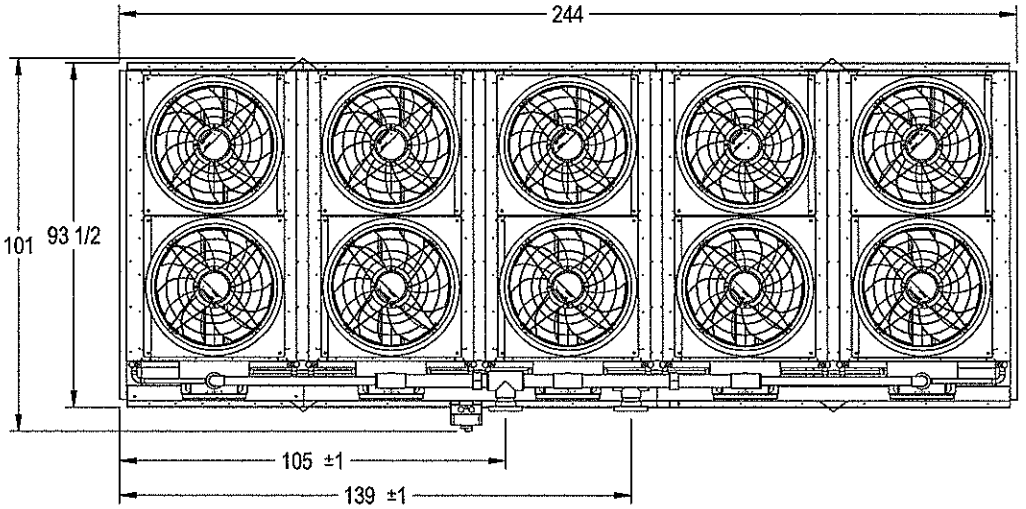
SHEET	1 OF 1

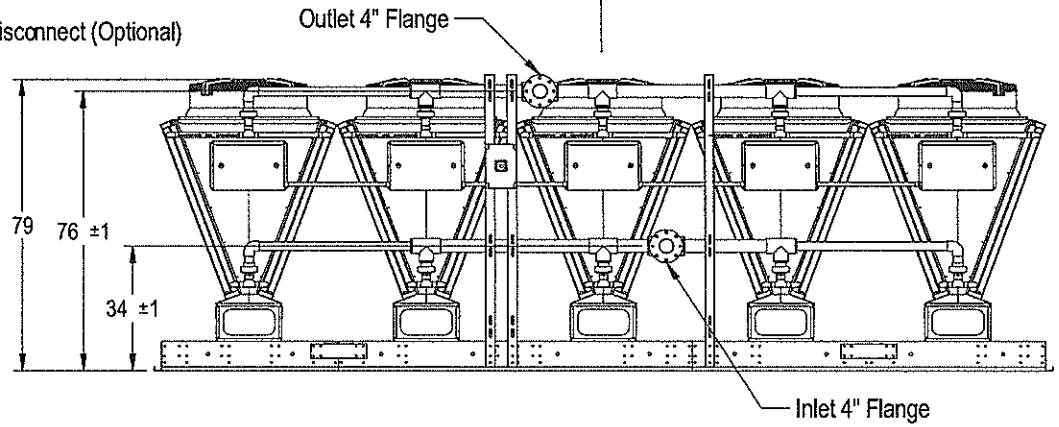
DESCRIPTION

NG-V VERTICAL AIR FLOW





96" of clearance required.



Important note:
Minimum 36" of clearance all the way around for proper air flow.

UNIT OPERATING WEIGHT: 6000 LBS

General Unit Mounting Instructions – Large Cabinets

Supporting the unit lengthwise along the base rails

- Base rails extend 2" past the unit width or length on either side of the cabinet (see Figure 1).

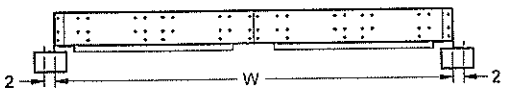


Figure 1 Base detail including unit nominal width "W"

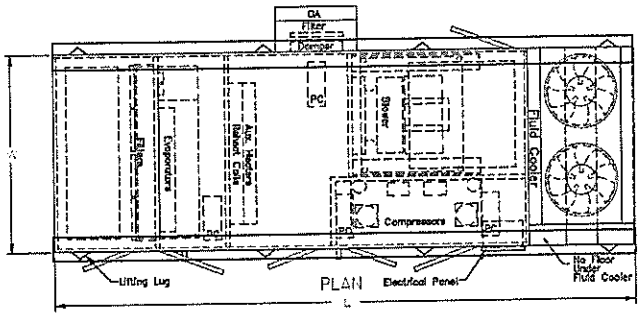


Figure 2 Support beams placed along the unit length "L"

Supporting the unit across the width of the unit

- Supports must be at a maximum of 8' apart.
- Supporting beams should be 12" longer than the nominal unit width "W" from figures 1 and 2 above, extending 6" on either side of the unit.

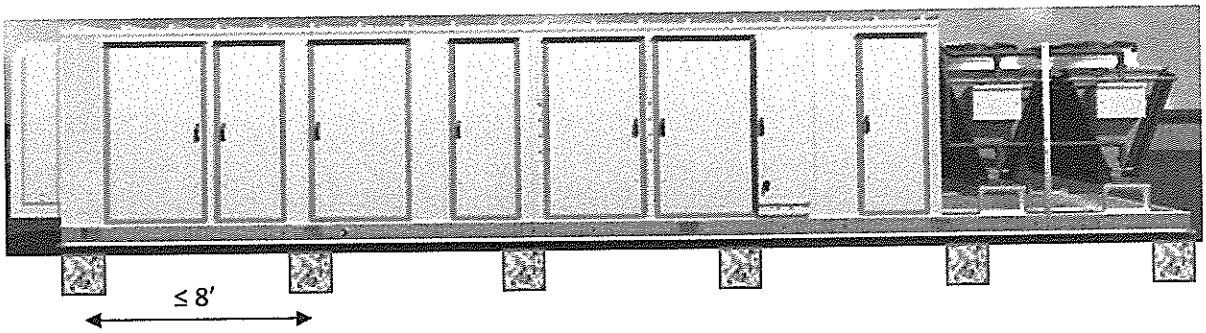


Figure 3 Support beams placed along the unit width "W" + 6" both sides

Supporting the unit with a curb

- Refer to Roof Curb for Modular Units, if applicable, and also see Figure 4 Unit Base Detail with Curb

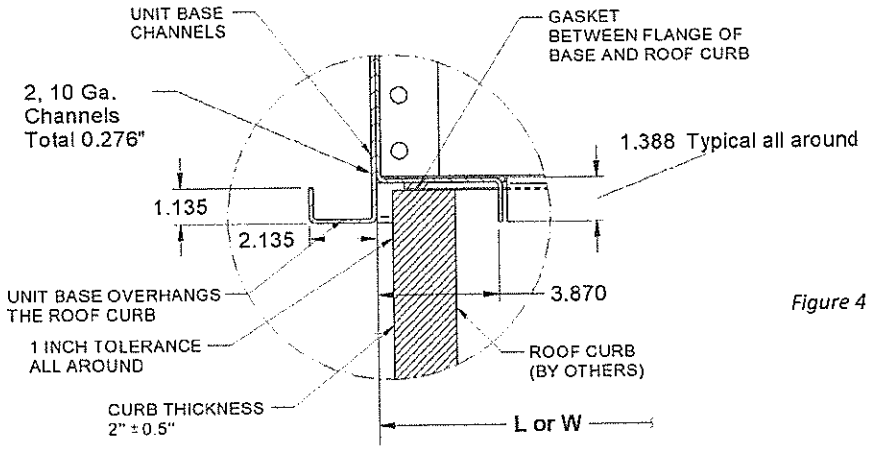


Figure 4 Unit Base Detail with Curb