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**Report: pre**

**Function: Test, Adjust, & Balance**

**Date: 03/10/2026**

**Completed By: National TAB**

# PROJECT

## CMS Second Ward Medical Magnet High School (Charlotte, NC)

Charlotte

Charlotte, NC

### Client

Rodgers Builders

PO Box 18446

Charlotte, NC 28218

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## System/Unit: AHU-DUAL FAN

Asset: DOAS1

AREA:

UNIT DATA - SUPPLY		
	Design	Actual
Manufacturer	NA	NA
Model Number	NA	NA
Serial Number	-	
No. Pre-Filters / Size (1)	-	
No. Pre-Filters / Size (2)	-	
No. Pre-Filters / Size (3)	-	
No. Final Filters / Size (1)	-	
No. Final Filters / Size (2)	-	
No. Final Filters / Size (3)	-	

MOTOR DATA - SUPPLY	
	Actual
Motor MFG / Frame	
Horsepower / RPM	
Rated Volts / Phase	
Rated Amperage / SF	

DRIVE DATA - SUPPLY	
	Actual
Motor Sheave Size / Bore	
Fan Sheave Size / Bore	
Belt CL Distance	
No. Belts / Size	

TEST DATA - SUPPLY		
	Design	Actual
Total CFM	-	
Return CFM	-	
OA CFM	-	
Fan RPM	-	
VFD Speed	-	
RL Voltage	-	
RL Amperage	-	
Motor B.H.P.	-	

PERFORMANCE DATA - SUPPLY		
	Design	Actual
Static Pressure Stpt	-	
Suction S.P.	-	
Discharge S.P.	-	
Total S.P.	-	
HEPA Filters P.D.	-	
Reheat Coil P.D.	-	
DX Coil P.D.	-	
Condenser Coil P.D.	-	
Chilled Water Coil P.D.	-	
Pre Heat Coil P.D.	-	
Final Filters P.D.	-	
Heat Wheel P.D.	-	
Pre-Filters P.D.	-	
Total ESP	-	

UNIT DATA - EXHAUST/RETURN		
	Design	Actual
Manufacturer	-	
Model Number	-	
Serial Number	-	
No. Pre-Filters / Size (1)	-	
No. Pre-Filters / Size (2)	-	
No. Pre-Filters / Size (3)	-	
No. Pre-Filters / Size (4)	-	
No. Pre-Filters / Size (5)	-	
No. Pre-Filters / Size (6)	-	

MOTOR DATA - EXHAUST/RETURN	
	Actual
Motor MFG / FRAME	
Horsepower / RPM	
Rated Volts / Phase	
Rated Amperage / SF	

DRIVE DATA - EXHAUST/RETURN	
	Actual
Motor Sheave Size / Bore	
Fan Sheave Size / Bore	
Belt CL Distance	
No. Belts / Size	

TEST DATA - EXHAUST/RETURN		
	Design	Actual
Total CFM	-	
Relief CFM	-	
Fan RPM	-	
VFD Speed	-	
RL Voltage	-	
RL Amperage	-	
Motor B.H.P.	-	

PERFORMANCE DATA - EXHAUST/RETURN		
	Design	Actual
Static Pressure Stpt	-	
Suction S.P.	-	
Discharge S.P.	-	
Total S.P.	-	
Heat Wheel P.D.	-	
Pre-Filters P.D.	-	
Total ESP	-	

TEMPERATURES		
	Design	Actual
OA Temp (db/wb)	-	
RA Temp (db/wb)	-	
MA Temp (db/wb)	-	
SA Temp (db/wb)	-	



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## System/Unit: Energy Recovery Unit

Asset: ERU1

AREA:

Supply Unit Data	
	Actual
Manufacturer	NA
Model Number	NA
Serial Number	
Configuration	
No. Pre Filters/Size	

Exhaust Unit Data	
	Actual
Manufacturer	
Model Number	
Serial Number	
Configuration	
No. Pre Filters/Size	

Supply Motor Data	
	Actual
Motor MFG	
Frame	
Horsepower	
Motor Rpm	
Phase	
Voltage (rated)	
Amperage (rated)	
Service Factor	

Exhaust Motor Data	
	Actual
Motor MFG	
Frame	
Horsepower	
Motor Rpm	
Phase	
Voltage (rated)	
Amperage (rated)	
Service Factor	

Supply Drive Data	
	Actual
Motor Sheave Size	
Motor Bore Size	
Fan Sheave Size	
Fan Sheave Bore	
Belt CL Distance	
Num of Belts	
Belt Size	

Exhaust Drive Data	
	Actual
Motor Sheave Size	
Motor Bore Size	
Fan Sheave Size	
Fan Sheave Bore	
Belt CL Distance	
Num of Belts	
Belt Size	

Supply Test Data		
	Design	Actual
Total CFM	-	
Fan RPM	-	
VFD Speed	-	
RL Voltage	-	
RL Amperage	-	
Motor B.H.P.	-	

Exhaust Test Data		
	Design	Actual
Total CFM	-	
Fan RPM	-	
VFD Speed	-	
RL Voltage	-	
RL Amperage	-	
Motor B.H.P.	-	

Supply Performance Data		
	Design	Actual
Suction S.P.	-	
Discharge S.P.	-	
Total S.P.	-	
Cooling Coil P.D.	-	
Heating Coil P.D.	-	
Heat Exchanger P.D.	-	
Heat Wheel P.D.	-	
Pre Filters P.D.	-	
Total ESP	-	
EAT Summer DB/WB	-	
LAT Summer DB/WB	-	
EAT Winter DB/WB	-	
LAT Winter DB/WB	-	

Exhaust Performance Data		
	Design	Actual
Suction S.P.	-	
Discharge S.P.	-	
Total S.P.	-	
Cooling Coil P.D.	-	
Heating Coil P.D.	-	
Heat Exchanger P.D.	-	
Heat Wheel P.D.	-	
Pre-Filters P.D.	-	
Total ESP	-	
EAT Summer DB/WB	-	
LAT Summer DB/WB	-	
EAT Winter DB/WB	-	
LAT Winter DB/WB	-	



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## VAV - Single Duct

### Assets/

Asset										
Asset Name	Design Service	Service	Inlet Size	Design Max CFM	Max CFM	Design Min CFM	Min CFM	Design Heat CFM	Heat CFM	Ak (max)
VAV1										

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## System/Unit: Heat Pump

Asset: HP1

AREA:

Unit Data		
	Design	Actual
Unit MFG	NA	NA
Model Num	NA	NA
Serial Num	-	
Type	-	
Configuration	-	
Num Filters Size 1	-	
Filter Size 1	-	

Test Data		
	Design	Actual
SA CFM	-	
SFAN RPM	-	
Motor Speed Setpt	-	
RL Voltage	-	
RL Amperage	-	
RA CFM	-	
OA CFM	-	

Motor Data		
	Design	Actual
Motor MFG	-	
Frame	-	
Horsepower	-	
Motor Rpm	-	
Phase	-	
Voltage	-	
Amperage	-	
Brake Horsepower	-	

Performance Data		
	Design	Actual
Suction ESP	-	
Discharge ESP	-	
Total ESP	-	

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## System/Unit: FAN - Supply

Asset: SF1

AREA:

Unit Data		
	Design	Actual
MFG	NA	NA
Model Num	NA	NA
Serial Num	-	
Type	-	
Configuration	-	

Motor Data		
	Design	Actual
Motor MFG	-	
Frame	-	
Horsepower	-	
Motor Rpm	-	
Phase	-	
Voltage (rated)	-	
Amperage (rated)	-	
Service Factor	-	

Drive Data	
	Actual
Motor Sheave Size	
Motor Bore Size	
Fan Sheave Size	
Fan Sheave Bore	
Belt CL Distance	
Num of Belts	
Belt Size	
Belt Alignment Verified	

Gas Heat		
	Design	Actual
Heater Operates (y/n)	-	
Flame Status (pass/fail)	-	
Inlet Air Temp SetPt	-	
Discharge Air Temp SetPt	-	
Air Flow Switch SP Actual	-	

Test Data		
	Design	Actual
CFM	-	
SF RPM	-	
Motor RPM	-	
SF System SetPt	-	
RL Voltage	-	
RL Amperage	-	
Total ESP	-	
Fan Discharge SP	-	

General	
	Actual
Fan Rotation Correct	

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## System/Unit: FAN - Exhaust

Asset: EF1

AREA:

Unit Data		
	Design	Actual
MFG	NA	NA
Model Num	NA	NA
Serial Num	-	
Type	-	

Motor Data		
	Design	Actual
Motor MFG	-	
Frame	-	
Horsepower	-	
Motor Rpm	-	
Phase	-	
Voltage (rated)	-	
Amperage (rated)	-	
Service Factor	-	

Drive Data	
	Actual
Motor Sheave Size	
Motor Bore Size	
Motor Sheave SetPt	
Fan Sheave Size	
Fan Sheave Bore	
Belt CL Distance	
Num of Belts	
Belt Size	

Test Data		
	Design	Actual
CFM	-	
Fan RPM	-	
RL Voltage	-	
RL Amperage	-	
Suction ESP	-	
Discharge ESP	-	
Total ESP	-	
Brake Horse Power	-	

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## System/Unit: Kitchen Hood Type I

Asset: HD1

AREA:

Unit Data		
	Design	Actual
MFG	NA	NA
Model Num	NA	NA
Job / Serial Num	-	
Type	-	
Hood length	-	
Hood Width	-	
Supply Plenum Type	-	
Supply Plenum Width	-	
Supply Plenum Length	-	

Test Data Exhaust		
	Design	Actual
Filter Type	-	
Filter Size 1	-	
Filter Size 2	-	
Filter Qty 1	-	
Filter Qty 2	-	
Filter AK factor size 1	-	
Filters AK factor size 2	-	
Filter Total AK Area	-	
Filter1 FPM	-	
Filter2 FPM	-	
Filter3 FPM	-	
Filter4 FPM	-	
Filter5 FPM	-	
Filter6 FPM	-	
Filter7 FPM	-	
Filter8 FPM	-	
Filter9 FPM	-	
Filter10 FPM	-	
Filter11 FPM	-	
Filter12 FPM	-	
Filter Ave FPM(corr)	-	
CFM	-	

Cooking Equipment	
	Actual
Item 1	
Item 2	
Item 3	
Item 4	
Item 5	

Test Data Supply		
	Design	Actual
Total Area	-	
Kv factor (Vel)	-	
Num of Readings	-	
Reading1 FPM	-	
Reading2 FPM	-	
Reading3 FPM	-	
Reading4 FPM	-	
Reading5 FPM	-	
Reading6 FPM	-	
Reading7 FPM	-	
Reading8 FPM	-	
Reading9 FPM	-	
Reading10 FPM	-	
Reading11 FPM	-	
Reading12 FPM	-	
Reading13 FPM	-	
Reading14 FPM	-	
Ave FPM(corr)	-	
CFM	-	

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## System/Unit: Pump

Asset: PUMP1

AREA:

Unit Data		
	Design	Actual
MFG	NA	NA
Model Num	NA	NA
Serial Num	-	
Service	-	
Type	-	
Configuration	-	
Pump RPM	-	
GPM/HD	-	
Impeller Diameter	-	

Motor Data		
	Design	Actual
Motor MFG	-	
Frame	-	
Horsepower	-	
Motor Rpm	-	
Phase	-	
Voltage	-	
Amperage	-	
Service Factor	-	
Efficiency	-	
Power Factor	-	

Test Data		
	Design	Actual
Pump Off Pres	-	
Pump Dead Head Pres	-	
Act Impeller Dia (IN)	-	
Valve Open GPM	-	
Valve Open Diff (FT)	-	
Final Suction Pres (FT)	-	
Final Discharge Pres (FT)	-	
Total Head Pres (FT)	-	
Final GPM	-	
Pump Rotation	-	
Motor RPM	-	
Pump RPM	-	
Motor Frequency	-	
System SetPt	-	
RL Voltage	-	
RL Amperage	-	
Brake Horse Power	-	

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## System/Unit: Boiler

Asset: BLR1

AREA:

Unit Data	
	Actual
MFG	NA
Model Num	NA
Serial Num	

Test Data		
	Design	Actual
GPM	-	
EWT (F)	-	
LWT (F)	-	
Hot Water Delta P	-	

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## System/Unit: Chiller

Asset: CHLR1

AREA:

Unit Data		
	Design	Actual
MFG	NA	NA
Model Num	NA	NA
Serial Num	-	
Type	-	
Size	-	
Service	-	

Condensor Fan	
	Actual
Fan Alignment	
Fan Rotation	
Fan 1 Motor RLA	
Fan 1 Motor RLV	
Fan 2 Motor RLA	
Fan 2 Motor RLV	
Fan 3 Motor RLA	
Fan 3 Motor RLV	

Compressors	
	Actual
MFG	
Model Num	
Serial Num	
Refrigerant Charge	
Refrigerant Type	
Comp 1 RLV	
Comp 1 RLA	
Comp 2 RLV	
Comp 2 RLA	
Comp 1 Suction Pres	
Comp 2 Suction Pres	
Comp 1 Discharge Pres	
Comp 2 Discharge Pres	
Circuit 1 Superheat	
Circuit 2 Superheat	
Comp 1 Liquid Line Temp	
Comp 2 Liquid Line Temp	
Circuit 1 SubCooling	
Circuit 2 SubCooling	
KW Input	
CrankCase HTR Amps	
Cond Water Ctrl SetPt	
LP Cutout Setting	
HP Cutout Setting	

Test Data-Evaporator		
	Design	Actual
Water Treatment Type	-	
Water Treatment %	-	
Water Temp	-	
GPM	-	
Cv	-	
Balance Valve Setting	-	
Balance Valve Delta P	-	
EWT (F)	-	
LWT (F)	-	
Water Temp Delta T (F)	-	
ENT Water Pres	-	
LVG Water Pres	-	
CHW Delta P	-	
Low Limit Temp Cut-off SetPt	-	
Inlet GPM Temp SetPt	-	
Discharge GPM Temp SetPt	-	
Water Temp MAX Drop SetPt	-	
GPM Flow Switch Setting	-	
GPM Flow Switch CTRL Voltage	-	
GPM Switch Proved (Pass/Fail)	-	
Mech Cool Temp SetPt-ON	-	
Free Cool Temp SetPt-OFF	-	

Test Data-Condenser		
	Design	Actual
Water Treatment Type	-	
Water Treatment %	-	
Water Temp	-	
CW GPM	-	
Cv	-	
Balance Valve Setting	-	
Balance Valve Diff Pres	-	
EWT (F)	-	
LWT (F)	-	
Water Temp Delta T (F)	-	
ENT Water Pres	-	
LVG Water Pres	-	
CHW Delta P	-	

<b>General</b>	
	<b>Actual</b>
<b>Oil Level Checked</b>	
<b>Oil Failure Differential</b>	
<b>Ref Level Checked</b>	
<b>Relief Valve Setting</b>	
<b>Unloader SetPt</b>	
<b>% Cylinders Unloaded</b>	
<b>Purge Operation Checked</b>	
<b>Bearing Temp</b>	
<b>Vane Position</b>	
<b>Demand Limit</b>	
<b>Low Temp Cutout Setting</b>	

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**Circuit Setter**

**Assets/**

Asset								
Asset Name	Location	Size	Type	Design GPM	Range (PSID)	Actual DP (PSID)	Final GPM	% to Design
CS1								
CS2								
CS3								
CS4								
CS5								
CS6								
CS7								
CS8								
CS9								
CS10								
Total				0			0	0%