

**Report By:**

Chetu Development  
Test add 11  
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Noida, AL 44444



**Report: Test**

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

**Date: 11/13/2023**

# PROJECT

## CINCINNATI REHAB HOSPITAL (BLUE ASH, OH)

Test main street1

Noida, CA 28972

### Client

Vipul Company

dfghfdgfdg

ggfhghgfhfgdh, AZ 45545

# Chetu Development

Project: CINCINNATI REHAB HOSPITAL (BLUE ASH, OH)

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# Chetu Development

Project: CINCINNATI REHAB HOSPITAL (BLUE ASH, OH)

## System/Unit: AHU-DUAL FAN



Asset: RTU-1

AREA:

UNIT DATA - SUPPLY		
	Design	Actual
Manufacturer	TRANE	TRANE
Model Number	SFHLLF554M	SFHLLF554M
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)	-	

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

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

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

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

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

TEST DATA - EXHAUST/RETURN		
	Design	Actual
Total 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.	-	
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.	-	
Air Blender P.D.	-	
Total ESP	-	

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	-	



# Chetu Development

Project: CINCINNATI REHAB HOSPITAL (BLUE ASH, OH)

## AHU-DUAL FAN



VAV - Single Duct

RTU-1/

Asset	MFG	Model Num	Serial Num	Design Service	Service	Type	Inlet Size
VRH 1-1	TRANE	VCEF08					
	<b>Design Max CF<sub>M</sub></b>	<b>Max CFM</b>	<b>Design Min CFM</b>	<b>Min CFM</b>	<b>Design Heat CF<sub>M</sub></b>	<b>Heat CFM</b>	<b>Ak (max)</b>
	<b>Ak (min)</b>	<b>Ak (heat)</b>	<b>Damper SetPt</b>	<b>Diversity Test 1</b>	<b>Diversity Test 2</b>	<b>Design EAT (F - db/wb)</b>	<b>EAT (F - db/wb)</b>
	<b>Design LAT (F - db/wb)</b>	<b>LAT (F - db/wb)</b>	<b>Inlet SP</b>	<b>Discharge SP</b>			
VRH 1-2	TRANE	VCEF10					
	<b>Design Max CF<sub>M</sub></b>	<b>Max CFM</b>	<b>Design Min CFM</b>	<b>Min CFM</b>	<b>Design Heat CF<sub>M</sub></b>	<b>Heat CFM</b>	<b>Ak (max)</b>
	<b>Ak (min)</b>	<b>Ak (heat)</b>	<b>Damper SetPt</b>	<b>Diversity Test 1</b>	<b>Diversity Test 2</b>	<b>Design EAT (F - db/wb)</b>	<b>EAT (F - db/wb)</b>
	<b>Design LAT (F - db/wb)</b>	<b>LAT (F - db/wb)</b>	<b>Inlet SP</b>	<b>Discharge SP</b>			
VRH 1-3	TRANE	VCEF10					
	<b>Design Max CF<sub>M</sub></b>	<b>Max CFM</b>	<b>Design Min CFM</b>	<b>Min CFM</b>	<b>Design Heat CF<sub>M</sub></b>	<b>Heat CFM</b>	<b>Ak (max)</b>
	<b>Ak (min)</b>	<b>Ak (heat)</b>	<b>Damper SetPt</b>	<b>Diversity Test 1</b>	<b>Diversity Test 2</b>	<b>Design EAT (F - db/wb)</b>	<b>EAT (F - db/wb)</b>
	<b>Design LAT (F - db/wb)</b>	<b>LAT (F - db/wb)</b>	<b>Inlet SP</b>	<b>Discharge SP</b>			
VRH 1-4	TRANE	VCEF08					
	<b>Design Max CF<sub>M</sub></b>	<b>Max CFM</b>	<b>Design Min CFM</b>	<b>Min CFM</b>	<b>Design Heat CF<sub>M</sub></b>	<b>Heat CFM</b>	<b>Ak (max)</b>
	<b>Ak (min)</b>	<b>Ak (heat)</b>	<b>Damper SetPt</b>	<b>Diversity Test 1</b>	<b>Diversity Test 2</b>	<b>Design EAT (F - db/wb)</b>	<b>EAT (F - db/wb)</b>
	<b>Design LAT (F - db/wb)</b>	<b>LAT (F - db/wb)</b>	<b>Inlet SP</b>	<b>Discharge SP</b>			
VRH 1-5	TRANE	VCEF08					

	<b>Design Max CFM</b>	<b>Max CFM</b>	<b>Design Min CFM</b>	<b>Min CFM</b>	<b>Design Heat CFM</b>	<b>Heat CFM</b>	<b>Ak (max)</b>
	<b>Ak (min)</b>	<b>Ak (heat)</b>	<b>Damper SetPt</b>	<b>Diversity Test 1</b>	<b>Diversity Test 2</b>	<b>Design EAT (F - db/wb)</b>	<b>EAT (F - db/wb)</b>
	<b>Design LAT (F - db/wb)</b>	<b>LAT (F - db/wb)</b>	<b>Inlet SP</b>	<b>Discharge SP</b>			
VRH 1-6	<b>MFG</b>	<b>Model Num</b>	<b>Serial Num</b>	<b>Design Service</b>	<b>Service</b>	<b>Type</b>	<b>Inlet Size</b>
	TRANE	VCEF08					
	<b>Design Max CFM</b>	<b>Max CFM</b>	<b>Design Min CFM</b>	<b>Min CFM</b>	<b>Design Heat CFM</b>	<b>Heat CFM</b>	<b>Ak (max)</b>
	<b>Ak (min)</b>	<b>Ak (heat)</b>	<b>Damper SetPt</b>	<b>Diversity Test 1</b>	<b>Diversity Test 2</b>	<b>Design EAT (F - db/wb)</b>	<b>EAT (F - db/wb)</b>
	<b>Design LAT (F - db/wb)</b>	<b>LAT (F - db/wb)</b>	<b>Inlet SP</b>	<b>Discharge SP</b>			
VRH 1-7	<b>MFG</b>	<b>Model Num</b>	<b>Serial Num</b>	<b>Design Service</b>	<b>Service</b>	<b>Type</b>	<b>Inlet Size</b>
	TRANE	VCEF08					
	<b>Design Max CFM</b>	<b>Max CFM</b>	<b>Design Min CFM</b>	<b>Min CFM</b>	<b>Design Heat CFM</b>	<b>Heat CFM</b>	<b>Ak (max)</b>
	<b>Ak (min)</b>	<b>Ak (heat)</b>	<b>Damper SetPt</b>	<b>Diversity Test 1</b>	<b>Diversity Test 2</b>	<b>Design EAT (F - db/wb)</b>	<b>EAT (F - db/wb)</b>
	<b>Design LAT (F - db/wb)</b>	<b>LAT (F - db/wb)</b>	<b>Inlet SP</b>	<b>Discharge SP</b>			
VRH 1-8	<b>MFG</b>	<b>Model Num</b>	<b>Serial Num</b>	<b>Design Service</b>	<b>Service</b>	<b>Type</b>	<b>Inlet Size</b>
	TRANE	VCEF08					
	<b>Design Max CFM</b>	<b>Max CFM</b>	<b>Design Min CFM</b>	<b>Min CFM</b>	<b>Design Heat CFM</b>	<b>Heat CFM</b>	<b>Ak (max)</b>
	<b>Ak (min)</b>	<b>Ak (heat)</b>	<b>Damper SetPt</b>	<b>Diversity Test 1</b>	<b>Diversity Test 2</b>	<b>Design EAT (F - db/wb)</b>	<b>EAT (F - db/wb)</b>
	<b>Design LAT (F - db/wb)</b>	<b>LAT (F - db/wb)</b>	<b>Inlet SP</b>	<b>Discharge SP</b>			
VRH 1-9	<b>MFG</b>	<b>Model Num</b>	<b>Serial Num</b>	<b>Design Service</b>	<b>Service</b>	<b>Type</b>	<b>Inlet Size</b>
	TRANE	VCEF08					
	<b>Design Max CFM</b>	<b>Max CFM</b>	<b>Design Min CFM</b>	<b>Min CFM</b>	<b>Design Heat CFM</b>	<b>Heat CFM</b>	<b>Ak (max)</b>
	<b>Ak (min)</b>	<b>Ak (heat)</b>	<b>Damper SetPt</b>	<b>Diversity Test 1</b>	<b>Diversity Test 2</b>	<b>Design EAT (F - db/wb)</b>	<b>EAT (F - db/wb)</b>
	<b>Design LAT (F - db/wb)</b>	<b>LAT (F - db/wb)</b>	<b>Inlet SP</b>	<b>Discharge SP</b>			
VRH 1-10	<b>MFG</b>	<b>Model Num</b>	<b>Serial Num</b>	<b>Design Service</b>	<b>Service</b>	<b>Type</b>	<b>Inlet Size</b>
	TRANE	VCEF08					
	<b>Design Max CFM</b>	<b>Max CFM</b>	<b>Design Min CFM</b>	<b>Min CFM</b>	<b>Design Heat CFM</b>	<b>Heat CFM</b>	<b>Ak (max)</b>
	<b>Ak (min)</b>	<b>Ak (heat)</b>	<b>Damper SetPt</b>	<b>Diversity Test 1</b>	<b>Diversity Test 2</b>	<b>Design EAT (F - db/wb)</b>	<b>EAT (F - db/wb)</b>

	Design LAT (F - db/wb)	LAT (F - db/wb)	Inlet SP	Discharge SP			
VRH 1-11	MFG	Model Num	Serial Num	Design Service	Service	Type	Inlet Size
	NA	NA					
	Design Max CFM	Max CFM	Design Min CFM	Min CFM	Design Heat CFM	Heat CFM	Ak (max)
	Ak (min)	Ak (heat)	Damper SetPt	Diversity Test 1	Diversity Test 2	Design EAT (F - db/wb)	EAT (F - db/wb)
	Design LAT (F - db/wb)	LAT (F - db/wb)	Inlet SP	Discharge SP			
VRH 1-12	MFG	Model Num	Serial Num	Design Service	Service	Type	Inlet Size
	NA	NA					
	Design Max CFM	Max CFM	Design Min CFM	Min CFM	Design Heat CFM	Heat CFM	Ak (max)
	Ak (min)	Ak (heat)	Damper SetPt	Diversity Test 1	Diversity Test 2	Design EAT (F - db/wb)	EAT (F - db/wb)
	Design LAT (F - db/wb)	LAT (F - db/wb)	Inlet SP	Discharge SP			
VRH 1-13	MFG	Model Num	Serial Num	Design Service	Service	Type	Inlet Size
	NA	NA					
	Design Max CFM	Max CFM	Design Min CFM	Min CFM	Design Heat CFM	Heat CFM	Ak (max)
	Ak (min)	Ak (heat)	Damper SetPt	Diversity Test 1	Diversity Test 2	Design EAT (F - db/wb)	EAT (F - db/wb)
	Design LAT (F - db/wb)	LAT (F - db/wb)	Inlet SP	Discharge SP			
VRH 1-14	MFG	Model Num	Serial Num	Design Service	Service	Type	Inlet Size
	NA	NA					
	Design Max CFM	Max CFM	Design Min CFM	Min CFM	Design Heat CFM	Heat CFM	Ak (max)
	Ak (min)	Ak (heat)	Damper SetPt	Diversity Test 1	Diversity Test 2	Design EAT (F - db/wb)	EAT (F - db/wb)
	Design LAT (F - db/wb)	LAT (F - db/wb)	Inlet SP	Discharge SP			
VRH 1-15	MFG	Model Num	Serial Num	Design Service	Service	Type	Inlet Size
	NA	NA					
	Design Max CFM	Max CFM	Design Min CFM	Min CFM	Design Heat CFM	Heat CFM	Ak (max)
	Ak (min)	Ak (heat)	Damper SetPt	Diversity Test 1	Diversity Test 2	Design EAT (F - db/wb)	EAT (F - db/wb)
	Design LAT (F - db/wb)	LAT (F - db/wb)	Inlet SP	Discharge SP			
VRH 1-16	MFG	Model Num	Serial Num	Design Service	Service	Type	Inlet Size

	NA	NA					
	Design Max CFM	Max CFM	Design Min CFM	Min CFM	Design Heat CFM	Heat CFM	Ak (max)
	Ak (min)	Ak (heat)	Damper SetPt	Diversity Test 1	Diversity Test 2	Design EAT (F - db/wb)	EAT (F - db/wb)
	Design LAT (F - db/wb)	LAT (F - db/wb)	Inlet SP	Discharge SP			
VRH 1-17	MFG	Model Num	Serial Num	Design Service	Service	Type	Inlet Size
	NA	NA					
	Design Max CFM	Max CFM	Design Min CFM	Min CFM	Design Heat CFM	Heat CFM	Ak (max)
	Ak (min)	Ak (heat)	Damper SetPt	Diversity Test 1	Diversity Test 2	Design EAT (F - db/wb)	EAT (F - db/wb)
	Design LAT (F - db/wb)	LAT (F - db/wb)	Inlet SP	Discharge SP			
VRH 1-18	MFG	Model Num	Serial Num	Design Service	Service	Type	Inlet Size
	NA	NA					
	Design Max CFM	Max CFM	Design Min CFM	Min CFM	Design Heat CFM	Heat CFM	Ak (max)
	Ak (min)	Ak (heat)	Damper SetPt	Diversity Test 1	Diversity Test 2	Design EAT (F - db/wb)	EAT (F - db/wb)
	Design LAT (F - db/wb)	LAT (F - db/wb)	Inlet SP	Discharge SP			
VRH 1-19	MFG	Model Num	Serial Num	Design Service	Service	Type	Inlet Size
	NA	NA					
	Design Max CFM	Max CFM	Design Min CFM	Min CFM	Design Heat CFM	Heat CFM	Ak (max)
	Ak (min)	Ak (heat)	Damper SetPt	Diversity Test 1	Diversity Test 2	Design EAT (F - db/wb)	EAT (F - db/wb)
	Design LAT (F - db/wb)	LAT (F - db/wb)	Inlet SP	Discharge SP			
VRH 1-20	MFG	Model Num	Serial Num	Design Service	Service	Type	Inlet Size
	NA	NA					
	Design Max CFM	Max CFM	Design Min CFM	Min CFM	Design Heat CFM	Heat CFM	Ak (max)
	Ak (min)	Ak (heat)	Damper SetPt	Diversity Test 1	Diversity Test 2	Design EAT (F - db/wb)	EAT (F - db/wb)
	Design LAT (F - db/wb)	LAT (F - db/wb)	Inlet SP	Discharge SP			
VRH 1-21	MFG	Model Num	Serial Num	Design Service	Service	Type	Inlet Size
	NA	NA					
	Design Max CFM	Max CFM	Design Min CFM	Min CFM	Design Heat CFM	Heat CFM	Ak (max)

	<b>Ak (min)</b>	<b>Ak (heat)</b>	<b>Damper SetPt</b>	<b>Diversity Test 1</b>	<b>Diversity Test 2</b>	<b>Design EAT (F - db/wb)</b>	<b>EAT (F - db/wb)</b>
	<b>Design LAT (F - db/wb)</b>	<b>LAT (F - db/wb)</b>	<b>Inlet SP</b>	<b>Discharge SP</b>			
VRH 1-22	<b>MFG</b>	<b>Model Num</b>	<b>Serial Num</b>	<b>Design Service</b>	<b>Service</b>	<b>Type</b>	<b>Inlet Size</b>
	NA	NA					
	<b>Design Max CFM</b>	<b>Max CFM</b>	<b>Design Min CFM</b>	<b>Min CFM</b>	<b>Design Heat CFM</b>	<b>Heat CFM</b>	<b>Ak (max)</b>
	<b>Ak (min)</b>	<b>Ak (heat)</b>	<b>Damper SetPt</b>	<b>Diversity Test 1</b>	<b>Diversity Test 2</b>	<b>Design EAT (F - db/wb)</b>	<b>EAT (F - db/wb)</b>
	<b>Design LAT (F - db/wb)</b>	<b>LAT (F - db/wb)</b>	<b>Inlet SP</b>	<b>Discharge SP</b>			
VRH 1-23	<b>MFG</b>	<b>Model Num</b>	<b>Serial Num</b>	<b>Design Service</b>	<b>Service</b>	<b>Type</b>	<b>Inlet Size</b>
	NA	NA					
	<b>Design Max CFM</b>	<b>Max CFM</b>	<b>Design Min CFM</b>	<b>Min CFM</b>	<b>Design Heat CFM</b>	<b>Heat CFM</b>	<b>Ak (max)</b>
	<b>Ak (min)</b>	<b>Ak (heat)</b>	<b>Damper SetPt</b>	<b>Diversity Test 1</b>	<b>Diversity Test 2</b>	<b>Design EAT (F - db/wb)</b>	<b>EAT (F - db/wb)</b>
	<b>Design LAT (F - db/wb)</b>	<b>LAT (F - db/wb)</b>	<b>Inlet SP</b>	<b>Discharge SP</b>			
VAV 1-24	<b>MFG</b>	<b>Model Num</b>	<b>Serial Num</b>	<b>Design Service</b>	<b>Service</b>	<b>Type</b>	<b>Inlet Size</b>
	TRANE	VCCF06					
	<b>Design Max CFM</b>	<b>Max CFM</b>	<b>Design Min CFM</b>	<b>Min CFM</b>	<b>Design Heat CFM</b>	<b>Heat CFM</b>	<b>Ak (max)</b>
	<b>Ak (min)</b>	<b>Ak (heat)</b>	<b>Damper SetPt</b>	<b>Diversity Test 1</b>	<b>Diversity Test 2</b>	<b>Design EAT (F - db/wb)</b>	<b>EAT (F - db/wb)</b>
	<b>Design LAT (F - db/wb)</b>	<b>LAT (F - db/wb)</b>	<b>Inlet SP</b>	<b>Discharge SP</b>			

**Diffuser Ret/Exh (GRD)**

RTU-1/

Asset												
Asset Name	Model Num	MFG	Type	Size	DESIGN CFM	AK	VEL(1)	CFM(1)	VEL(2)	CFM(2)	FINAL CFM	% to design
R1-1	NA	NA	R1	8	23	7						-
R1-2	NA	NA	R1	8	58	77						-
R1-3	NA	NA	R1	6	7	7						-
R1-4	NA	NA	R1	12	7	7						-
R1-5	NA	NA	R1	12	7	7						-
R1-6	NA	NA	R1	8	7	7						-
R1-7	NA	NA	R2	6	7	8						-
R1-8	NA	NA	R1	6	7	8						-
R1-9	NA	NA	R1	8	7	8						-
R1-10	NA	NA	R2	6	8	8						-
R1-11	NA	NA	R2	6	8	8						-
R1-12	NA	NA	R2	6	8	8						-
R1-13	NA	NA	R2	6	7	8						-
R1-14	NA	NA	R1	12	8	8						-
R1-15	NA	NA	R1	8	78	8						-
R1-16	NA	NA	R4	8	8	8						-
R1-17	NA	NA	R4	8	7	8						-
R1-18	NA	NA	R4	8	8	8						-
R1-19	NA	NA	R4	8	778	8						-
R1-20	NA	NA	R4	8	45	8						-
R1-21	NA	NA	R1	12	54	8						-
R1-22	NA	NA	R1	8	54	8						-
R1-23	NA	NA	R1	14	45	8						-
R1-24	NA	NA	R1	6	9	8						-
R1-25	NA	NA	R1	12	89	8						-
R1-26	NA	NA	R1	12	9	8						-
R1-27	NA	NA	R1	10	8	8						-
R1-28	NA	NA	R1	6	7	8						-
R1-29	NA	NA	R1	10	6	8						-
R1-30	NA	NA	R1	6	6	8						-
R1-31	NA	NA	R1	8	4	8						-
R1-32	NA	NA	R2	10	34	8						-
R1-33	NA	NA	R1	8	23	8						-
R1-34	NA	NA	R1	32	2	8						-
R1-35	NA	NA	R1	33	23	8						-
R1-36	NA	NA	R1	2	6	8						-
R1-37	NA	NA	R1	3	35	8						-
R1-38	NA	NA	R3	4	5	8						-
R1-39	NA	NA	R1	5	6	8						-
Total					1518			0		0	0	0%

Diffuser Supply (GRD)

VRH 1-1/

Asset				
Asset Name	Location	a7	FINAL CFM	% to design
1-01-1				
1-01-2				
1-01-3				
Total			0	

VRH 1-2/

Asset				
Asset Name	Location	a7	FINAL CFM	% to design
1-02-1				
1-02-2				
Total			0	

**VRH 1-3/**

<b>Asset</b>				
<b>Asset Name</b>	<b>Location</b>	<b>a7</b>	<b>FINAL CFM</b>	<b>% to design</b>
1-03-1				
1-03-2				
1-03-3				
1-03-4				
Total			0	

**VRH 1-4/**

<b>Asset</b>				
<b>Asset Name</b>	<b>Location</b>	<b>a7</b>	<b>FINAL CFM</b>	<b>% to design</b>
1-04-1				
1-04-2				
Total			0	

**VRH 1-5/**

<b>Asset</b>				
<b>Asset Name</b>	<b>Location</b>	<b>a7</b>	<b>FINAL CFM</b>	<b>% to design</b>
1-05-1				
1-05-2				
1-05-3				
1-05-4				
Total			0	

**VRH 1-6/**

<b>Asset</b>				
<b>Asset Name</b>	<b>Location</b>	<b>a7</b>	<b>FINAL CFM</b>	<b>% to design</b>
1-06-1				
1-06-2				
1-06-3				
Total			0	

**VRH 1-7/**

<b>Asset</b>				
<b>Asset Name</b>	<b>Location</b>	<b>a7</b>	<b>FINAL CFM</b>	<b>% to design</b>
1-07-1				
1-07-2				
1-07-3				
Total			0	

**VRH 1-8/**

<b>Asset</b>				
<b>Asset Name</b>	<b>Location</b>	<b>a7</b>	<b>FINAL CFM</b>	<b>% to design</b>
1-08-1				
1-08-2				
1-08-3				
1-08-4				
Total			0	

**VRH 1-9/**

<b>Asset</b>				
<b>Asset Name</b>	<b>Location</b>	<b>a7</b>	<b>FINAL CFM</b>	<b>% to design</b>
1-09-1				
1-09-2				
Total			0	

**VRH 1-10/**

<b>Asset</b>				
<b>Asset Name</b>	<b>Location</b>	<b>a7</b>	<b>FINAL CFM</b>	<b>% to design</b>
1-10-1				
1-10-2				
1-10-3				
Total			0	



# Chetu Development

Project: CINCINNATI REHAB HOSPITAL (BLUE ASH, OH)

## System/Unit: AHU-DUAL FAN



Asset: RTU-2

AREA:

UNIT DATA - SUPPLY		
	Design	Actual
Manufacturer	TRANE	TRANE
Model Number	SFHLF704M	SFHLF704M
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)	-	

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

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

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

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

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

TEST DATA - EXHAUST/RETURN		
	Design	Actual
Total 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.	-	
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.	-	
Air Blender P.D.	-	
Total ESP	-	

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	-	



# Chetu Development

Project: CINCINNATI REHAB HOSPITAL (BLUE ASH, OH)

## AHU-DUAL FAN



VAV - Single Duct

RTU-2/

Asset	MFG	Model Num	Serial Num	Design Service	Service	Type	Inlet Size
VRH 2-1	TRANE	VCEF16					
	<b>Design Max CF<sub>M</sub></b>	<b>Max CFM</b>	<b>Design Min CFM</b>	<b>Min CFM</b>	<b>Design Heat CF<sub>M</sub></b>	<b>Heat CFM</b>	<b>Ak (max)</b>
	<b>Ak (min)</b>	<b>Ak (heat)</b>	<b>Damper SetPt</b>	<b>Diversity Test 1</b>	<b>Diversity Test 2</b>	<b>Design EAT (F - db/wb)</b>	<b>EAT (F - db/wb)</b>
	<b>Design LAT (F - db/wb)</b>	<b>LAT (F - db/wb)</b>	<b>Inlet SP</b>	<b>Discharge SP</b>			
VRH 2-2	TRANE	VCEF10					
	<b>Design Max CF<sub>M</sub></b>	<b>Max CFM</b>	<b>Design Min CFM</b>	<b>Min CFM</b>	<b>Design Heat CF<sub>M</sub></b>	<b>Heat CFM</b>	<b>Ak (max)</b>
	<b>Ak (min)</b>	<b>Ak (heat)</b>	<b>Damper SetPt</b>	<b>Diversity Test 1</b>	<b>Diversity Test 2</b>	<b>Design EAT (F - db/wb)</b>	<b>EAT (F - db/wb)</b>
	<b>Design LAT (F - db/wb)</b>	<b>LAT (F - db/wb)</b>	<b>Inlet SP</b>	<b>Discharge SP</b>			
VRH 2-3	TRANE	VCEF08					
	<b>Design Max CF<sub>M</sub></b>	<b>Max CFM</b>	<b>Design Min CFM</b>	<b>Min CFM</b>	<b>Design Heat CF<sub>M</sub></b>	<b>Heat CFM</b>	<b>Ak (max)</b>
	<b>Ak (min)</b>	<b>Ak (heat)</b>	<b>Damper SetPt</b>	<b>Diversity Test 1</b>	<b>Diversity Test 2</b>	<b>Design EAT (F - db/wb)</b>	<b>EAT (F - db/wb)</b>
	<b>Design LAT (F - db/wb)</b>	<b>LAT (F - db/wb)</b>	<b>Inlet SP</b>	<b>Discharge SP</b>			
VRH 2-4	TRANE	VCEF06					
	<b>Design Max CF<sub>M</sub></b>	<b>Max CFM</b>	<b>Design Min CFM</b>	<b>Min CFM</b>	<b>Design Heat CF<sub>M</sub></b>	<b>Heat CFM</b>	<b>Ak (max)</b>
	<b>Ak (min)</b>	<b>Ak (heat)</b>	<b>Damper SetPt</b>	<b>Diversity Test 1</b>	<b>Diversity Test 2</b>	<b>Design EAT (F - db/wb)</b>	<b>EAT (F - db/wb)</b>
	<b>Design LAT (F - db/wb)</b>	<b>LAT (F - db/wb)</b>	<b>Inlet SP</b>	<b>Discharge SP</b>			
VRH 2-5	NA	NA					

	<b>Design Max CFM</b>	<b>Max CFM</b>	<b>Design Min CFM</b>	<b>Min CFM</b>	<b>Design Heat CFM</b>	<b>Heat CFM</b>	<b>Ak (max)</b>
	<b>Ak (min)</b>	<b>Ak (heat)</b>	<b>Damper SetPt</b>	<b>Diversity Test 1</b>	<b>Diversity Test 2</b>	<b>Design EAT (F - db/wb)</b>	<b>EAT (F - db/wb)</b>
	<b>Design LAT (F - db/wb)</b>	<b>LAT (F - db/wb)</b>	<b>Inlet SP</b>	<b>Discharge SP</b>			
VRH 2-6	<b>MFG</b>	<b>Model Num</b>	<b>Serial Num</b>	<b>Design Service</b>	<b>Service</b>	<b>Type</b>	<b>Inlet Size</b>
	NA	NA					
	<b>Design Max CFM</b>	<b>Max CFM</b>	<b>Design Min CFM</b>	<b>Min CFM</b>	<b>Design Heat CFM</b>	<b>Heat CFM</b>	<b>Ak (max)</b>
	<b>Ak (min)</b>	<b>Ak (heat)</b>	<b>Damper SetPt</b>	<b>Diversity Test 1</b>	<b>Diversity Test 2</b>	<b>Design EAT (F - db/wb)</b>	<b>EAT (F - db/wb)</b>
	<b>Design LAT (F - db/wb)</b>	<b>LAT (F - db/wb)</b>	<b>Inlet SP</b>	<b>Discharge SP</b>			
VRH 2-7	<b>MFG</b>	<b>Model Num</b>	<b>Serial Num</b>	<b>Design Service</b>	<b>Service</b>	<b>Type</b>	<b>Inlet Size</b>
	NA	NA					
	<b>Design Max CFM</b>	<b>Max CFM</b>	<b>Design Min CFM</b>	<b>Min CFM</b>	<b>Design Heat CFM</b>	<b>Heat CFM</b>	<b>Ak (max)</b>
	<b>Ak (min)</b>	<b>Ak (heat)</b>	<b>Damper SetPt</b>	<b>Diversity Test 1</b>	<b>Diversity Test 2</b>	<b>Design EAT (F - db/wb)</b>	<b>EAT (F - db/wb)</b>
	<b>Design LAT (F - db/wb)</b>	<b>LAT (F - db/wb)</b>	<b>Inlet SP</b>	<b>Discharge SP</b>			
VRH 2-8	<b>MFG</b>	<b>Model Num</b>	<b>Serial Num</b>	<b>Design Service</b>	<b>Service</b>	<b>Type</b>	<b>Inlet Size</b>
	NA	NA					
	<b>Design Max CFM</b>	<b>Max CFM</b>	<b>Design Min CFM</b>	<b>Min CFM</b>	<b>Design Heat CFM</b>	<b>Heat CFM</b>	<b>Ak (max)</b>
	<b>Ak (min)</b>	<b>Ak (heat)</b>	<b>Damper SetPt</b>	<b>Diversity Test 1</b>	<b>Diversity Test 2</b>	<b>Design EAT (F - db/wb)</b>	<b>EAT (F - db/wb)</b>
	<b>Design LAT (F - db/wb)</b>	<b>LAT (F - db/wb)</b>	<b>Inlet SP</b>	<b>Discharge SP</b>			
VRH 2-9	<b>MFG</b>	<b>Model Num</b>	<b>Serial Num</b>	<b>Design Service</b>	<b>Service</b>	<b>Type</b>	<b>Inlet Size</b>
	NA	NA					
	<b>Design Max CFM</b>	<b>Max CFM</b>	<b>Design Min CFM</b>	<b>Min CFM</b>	<b>Design Heat CFM</b>	<b>Heat CFM</b>	<b>Ak (max)</b>
	<b>Ak (min)</b>	<b>Ak (heat)</b>	<b>Damper SetPt</b>	<b>Diversity Test 1</b>	<b>Diversity Test 2</b>	<b>Design EAT (F - db/wb)</b>	<b>EAT (F - db/wb)</b>
	<b>Design LAT (F - db/wb)</b>	<b>LAT (F - db/wb)</b>	<b>Inlet SP</b>	<b>Discharge SP</b>			
VRH 2-10	<b>MFG</b>	<b>Model Num</b>	<b>Serial Num</b>	<b>Design Service</b>	<b>Service</b>	<b>Type</b>	<b>Inlet Size</b>
	NA	NA					
	<b>Design Max CFM</b>	<b>Max CFM</b>	<b>Design Min CFM</b>	<b>Min CFM</b>	<b>Design Heat CFM</b>	<b>Heat CFM</b>	<b>Ak (max)</b>
	<b>Ak (min)</b>	<b>Ak (heat)</b>	<b>Damper SetPt</b>	<b>Diversity Test 1</b>	<b>Diversity Test 2</b>	<b>Design EAT (F - db/wb)</b>	<b>EAT (F - db/wb)</b>

	Design LAT (F - db/wb)	LAT (F - db/wb)	Inlet SP	Discharge SP			
VRH 2-11	MFG	Model Num	Serial Num	Design Service	Service	Type	Inlet Size
	NA	NA					
	Design Max CFM	Max CFM	Design Min CFM	Min CFM	Design Heat CFM	Heat CFM	Ak (max)
	Ak (min)	Ak (heat)	Damper SetPt	Diversity Test 1	Diversity Test 2	Design EAT (F - db/wb)	EAT (F - db/wb)
	Design LAT (F - db/wb)	LAT (F - db/wb)	Inlet SP	Discharge SP			
VRH 2-12	MFG	Model Num	Serial Num	Design Service	Service	Type	Inlet Size
	NA	NA					
	Design Max CFM	Max CFM	Design Min CFM	Min CFM	Design Heat CFM	Heat CFM	Ak (max)
	Ak (min)	Ak (heat)	Damper SetPt	Diversity Test 1	Diversity Test 2	Design EAT (F - db/wb)	EAT (F - db/wb)
	Design LAT (F - db/wb)	LAT (F - db/wb)	Inlet SP	Discharge SP			
VRH 2-13	MFG	Model Num	Serial Num	Design Service	Service	Type	Inlet Size
	NA	NA					
	Design Max CFM	Max CFM	Design Min CFM	Min CFM	Design Heat CFM	Heat CFM	Ak (max)
	Ak (min)	Ak (heat)	Damper SetPt	Diversity Test 1	Diversity Test 2	Design EAT (F - db/wb)	EAT (F - db/wb)
	Design LAT (F - db/wb)	LAT (F - db/wb)	Inlet SP	Discharge SP			
VRH 2-14	MFG	Model Num	Serial Num	Design Service	Service	Type	Inlet Size
	NA	NA					
	Design Max CFM	Max CFM	Design Min CFM	Min CFM	Design Heat CFM	Heat CFM	Ak (max)
	Ak (min)	Ak (heat)	Damper SetPt	Diversity Test 1	Diversity Test 2	Design EAT (F - db/wb)	EAT (F - db/wb)
	Design LAT (F - db/wb)	LAT (F - db/wb)	Inlet SP	Discharge SP			
VRH 2-15	MFG	Model Num	Serial Num	Design Service	Service	Type	Inlet Size
	NA	NA					
	Design Max CFM	Max CFM	Design Min CFM	Min CFM	Design Heat CFM	Heat CFM	Ak (max)
	Ak (min)	Ak (heat)	Damper SetPt	Diversity Test 1	Diversity Test 2	Design EAT (F - db/wb)	EAT (F - db/wb)
	Design LAT (F - db/wb)	LAT (F - db/wb)	Inlet SP	Discharge SP			
VRH 2-16	MFG	Model Num	Serial Num	Design Service	Service	Type	Inlet Size

	NA	NA					
	<b>Design Max CFM</b>	<b>Max CFM</b>	<b>Design Min CFM</b>	<b>Min CFM</b>	<b>Design Heat CFM</b>	<b>Heat CFM</b>	<b>Ak (max)</b>
	<b>Ak (min)</b>	<b>Ak (heat)</b>	<b>Damper SetPt</b>	<b>Diversity Test 1</b>	<b>Diversity Test 2</b>	<b>Design EAT (F - db/wb)</b>	<b>EAT (F - db/wb)</b>
	<b>Design LAT (F - db/wb)</b>	<b>LAT (F - db/wb)</b>	<b>Inlet SP</b>	<b>Discharge SP</b>			
VRH 2-17	<b>MFG</b>	<b>Model Num</b>	<b>Serial Num</b>	<b>Design Service</b>	<b>Service</b>	<b>Type</b>	<b>Inlet Size</b>
	NA	NA					
	<b>Design Max CFM</b>	<b>Max CFM</b>	<b>Design Min CFM</b>	<b>Min CFM</b>	<b>Design Heat CFM</b>	<b>Heat CFM</b>	<b>Ak (max)</b>
	<b>Ak (min)</b>	<b>Ak (heat)</b>	<b>Damper SetPt</b>	<b>Diversity Test 1</b>	<b>Diversity Test 2</b>	<b>Design EAT (F - db/wb)</b>	<b>EAT (F - db/wb)</b>
	<b>Design LAT (F - db/wb)</b>	<b>LAT (F - db/wb)</b>	<b>Inlet SP</b>	<b>Discharge SP</b>			
VRH 2-18	<b>MFG</b>	<b>Model Num</b>	<b>Serial Num</b>	<b>Design Service</b>	<b>Service</b>	<b>Type</b>	<b>Inlet Size</b>
	NA	NA					
	<b>Design Max CFM</b>	<b>Max CFM</b>	<b>Design Min CFM</b>	<b>Min CFM</b>	<b>Design Heat CFM</b>	<b>Heat CFM</b>	<b>Ak (max)</b>
	<b>Ak (min)</b>	<b>Ak (heat)</b>	<b>Damper SetPt</b>	<b>Diversity Test 1</b>	<b>Diversity Test 2</b>	<b>Design EAT (F - db/wb)</b>	<b>EAT (F - db/wb)</b>
	<b>Design LAT (F - db/wb)</b>	<b>LAT (F - db/wb)</b>	<b>Inlet SP</b>	<b>Discharge SP</b>			
VRH 2-19	<b>MFG</b>	<b>Model Num</b>	<b>Serial Num</b>	<b>Design Service</b>	<b>Service</b>	<b>Type</b>	<b>Inlet Size</b>
	NA	NA					
	<b>Design Max CFM</b>	<b>Max CFM</b>	<b>Design Min CFM</b>	<b>Min CFM</b>	<b>Design Heat CFM</b>	<b>Heat CFM</b>	<b>Ak (max)</b>
	<b>Ak (min)</b>	<b>Ak (heat)</b>	<b>Damper SetPt</b>	<b>Diversity Test 1</b>	<b>Diversity Test 2</b>	<b>Design EAT (F - db/wb)</b>	<b>EAT (F - db/wb)</b>
	<b>Design LAT (F - db/wb)</b>	<b>LAT (F - db/wb)</b>	<b>Inlet SP</b>	<b>Discharge SP</b>			
VRH 2-20	<b>MFG</b>	<b>Model Num</b>	<b>Serial Num</b>	<b>Design Service</b>	<b>Service</b>	<b>Type</b>	<b>Inlet Size</b>
	NA	NA					
	<b>Design Max CFM</b>	<b>Max CFM</b>	<b>Design Min CFM</b>	<b>Min CFM</b>	<b>Design Heat CFM</b>	<b>Heat CFM</b>	<b>Ak (max)</b>
	<b>Ak (min)</b>	<b>Ak (heat)</b>	<b>Damper SetPt</b>	<b>Diversity Test 1</b>	<b>Diversity Test 2</b>	<b>Design EAT (F - db/wb)</b>	<b>EAT (F - db/wb)</b>
	<b>Design LAT (F - db/wb)</b>	<b>LAT (F - db/wb)</b>	<b>Inlet SP</b>	<b>Discharge SP</b>			
VRH 2-21	<b>MFG</b>	<b>Model Num</b>	<b>Serial Num</b>	<b>Design Service</b>	<b>Service</b>	<b>Type</b>	<b>Inlet Size</b>
	NA	NA					
	<b>Design Max CFM</b>	<b>Max CFM</b>	<b>Design Min CFM</b>	<b>Min CFM</b>	<b>Design Heat CFM</b>	<b>Heat CFM</b>	<b>Ak (max)</b>

	<b>Ak (min)</b>	<b>Ak (heat)</b>	<b>Damper SetPt</b>	<b>Diversity Test 1</b>	<b>Diversity Test 2</b>	<b>Design EAT (F - db/wb)</b>	<b>EAT (F - db/wb)</b>
	<b>Design LAT (F - db/wb)</b>	<b>LAT (F - db/wb)</b>	<b>Inlet SP</b>	<b>Discharge SP</b>			
VRH 2-22	<b>MFG</b>	<b>Model Num</b>	<b>Serial Num</b>	<b>Design Service</b>	<b>Service</b>	<b>Type</b>	<b>Inlet Size</b>
	NA	NA					
	<b>Design Max CFM</b>	<b>Max CFM</b>	<b>Design Min CFM</b>	<b>Min CFM</b>	<b>Design Heat CFM</b>	<b>Heat CFM</b>	<b>Ak (max)</b>
	<b>Ak (min)</b>	<b>Ak (heat)</b>	<b>Damper SetPt</b>	<b>Diversity Test 1</b>	<b>Diversity Test 2</b>	<b>Design EAT (F - db/wb)</b>	<b>EAT (F - db/wb)</b>
	<b>Design LAT (F - db/wb)</b>	<b>LAT (F - db/wb)</b>	<b>Inlet SP</b>	<b>Discharge SP</b>			
VRH 2-23	<b>MFG</b>	<b>Model Num</b>	<b>Serial Num</b>	<b>Design Service</b>	<b>Service</b>	<b>Type</b>	<b>Inlet Size</b>
	NA	NA					
	<b>Design Max CFM</b>	<b>Max CFM</b>	<b>Design Min CFM</b>	<b>Min CFM</b>	<b>Design Heat CFM</b>	<b>Heat CFM</b>	<b>Ak (max)</b>
	<b>Ak (min)</b>	<b>Ak (heat)</b>	<b>Damper SetPt</b>	<b>Diversity Test 1</b>	<b>Diversity Test 2</b>	<b>Design EAT (F - db/wb)</b>	<b>EAT (F - db/wb)</b>
	<b>Design LAT (F - db/wb)</b>	<b>LAT (F - db/wb)</b>	<b>Inlet SP</b>	<b>Discharge SP</b>			
VRH 2-24	<b>MFG</b>	<b>Model Num</b>	<b>Serial Num</b>	<b>Design Service</b>	<b>Service</b>	<b>Type</b>	<b>Inlet Size</b>
	NA	NA					
	<b>Design Max CFM</b>	<b>Max CFM</b>	<b>Design Min CFM</b>	<b>Min CFM</b>	<b>Design Heat CFM</b>	<b>Heat CFM</b>	<b>Ak (max)</b>
	<b>Ak (min)</b>	<b>Ak (heat)</b>	<b>Damper SetPt</b>	<b>Diversity Test 1</b>	<b>Diversity Test 2</b>	<b>Design EAT (F - db/wb)</b>	<b>EAT (F - db/wb)</b>
	<b>Design LAT (F - db/wb)</b>	<b>LAT (F - db/wb)</b>	<b>Inlet SP</b>	<b>Discharge SP</b>			
VRH 2-25	<b>MFG</b>	<b>Model Num</b>	<b>Serial Num</b>	<b>Design Service</b>	<b>Service</b>	<b>Type</b>	<b>Inlet Size</b>
	NA	NA					
	<b>Design Max CFM</b>	<b>Max CFM</b>	<b>Design Min CFM</b>	<b>Min CFM</b>	<b>Design Heat CFM</b>	<b>Heat CFM</b>	<b>Ak (max)</b>
	<b>Ak (min)</b>	<b>Ak (heat)</b>	<b>Damper SetPt</b>	<b>Diversity Test 1</b>	<b>Diversity Test 2</b>	<b>Design EAT (F - db/wb)</b>	<b>EAT (F - db/wb)</b>
	<b>Design LAT (F - db/wb)</b>	<b>LAT (F - db/wb)</b>	<b>Inlet SP</b>	<b>Discharge SP</b>			
VRH 2-26	<b>MFG</b>	<b>Model Num</b>	<b>Serial Num</b>	<b>Design Service</b>	<b>Service</b>	<b>Type</b>	<b>Inlet Size</b>
	NA	NA					
	<b>Design Max CFM</b>	<b>Max CFM</b>	<b>Design Min CFM</b>	<b>Min CFM</b>	<b>Design Heat CFM</b>	<b>Heat CFM</b>	<b>Ak (max)</b>
	<b>Ak (min)</b>	<b>Ak (heat)</b>	<b>Damper SetPt</b>	<b>Diversity Test 1</b>	<b>Diversity Test 2</b>	<b>Design EAT (F - db/wb)</b>	<b>EAT (F - db/wb)</b>
	<b>Design LAT (F - db/wb)</b>	<b>LAT (F - db/wb)</b>	<b>Inlet SP</b>	<b>Discharge SP</b>			

VRH 2-27	<b>MFG</b>	<b>Model Num</b>	<b>Serial Num</b>	<b>Design Service</b>	<b>Service</b>	<b>Type</b>	<b>Inlet Size</b>
	NA	NA					
	<b>Design Max CFM</b>	<b>Max CFM</b>	<b>Design Min CFM</b>	<b>Min CFM</b>	<b>Design Heat CFM</b>	<b>Heat CFM</b>	<b>Ak (max)</b>
	<b>Ak (min)</b>	<b>Ak (heat)</b>	<b>Damper SetPt</b>	<b>Diversity Test 1</b>	<b>Diversity Test 2</b>	<b>Design EAT (F - db/wb)</b>	<b>EAT (F - db/wb)</b>
	<b>Design LAT (F - db/wb)</b>	<b>LAT (F - db/wb)</b>	<b>Inlet SP</b>	<b>Discharge SP</b>			
VRH 2-28	<b>MFG</b>	<b>Model Num</b>	<b>Serial Num</b>	<b>Design Service</b>	<b>Service</b>	<b>Type</b>	<b>Inlet Size</b>
	NA	NA					
	<b>Design Max CFM</b>	<b>Max CFM</b>	<b>Design Min CFM</b>	<b>Min CFM</b>	<b>Design Heat CFM</b>	<b>Heat CFM</b>	<b>Ak (max)</b>
	<b>Ak (min)</b>	<b>Ak (heat)</b>	<b>Damper SetPt</b>	<b>Diversity Test 1</b>	<b>Diversity Test 2</b>	<b>Design EAT (F - db/wb)</b>	<b>EAT (F - db/wb)</b>
	<b>Design LAT (F - db/wb)</b>	<b>LAT (F - db/wb)</b>	<b>Inlet SP</b>	<b>Discharge SP</b>			
VRH 2-29	<b>MFG</b>	<b>Model Num</b>	<b>Serial Num</b>	<b>Design Service</b>	<b>Service</b>	<b>Type</b>	<b>Inlet Size</b>
	NA	NA					
	<b>Design Max CFM</b>	<b>Max CFM</b>	<b>Design Min CFM</b>	<b>Min CFM</b>	<b>Design Heat CFM</b>	<b>Heat CFM</b>	<b>Ak (max)</b>
	<b>Ak (min)</b>	<b>Ak (heat)</b>	<b>Damper SetPt</b>	<b>Diversity Test 1</b>	<b>Diversity Test 2</b>	<b>Design EAT (F - db/wb)</b>	<b>EAT (F - db/wb)</b>
	<b>Design LAT (F - db/wb)</b>	<b>LAT (F - db/wb)</b>	<b>Inlet SP</b>	<b>Discharge SP</b>			
VRH 2-30	<b>MFG</b>	<b>Model Num</b>	<b>Serial Num</b>	<b>Design Service</b>	<b>Service</b>	<b>Type</b>	<b>Inlet Size</b>
	NA	NA					
	<b>Design Max CFM</b>	<b>Max CFM</b>	<b>Design Min CFM</b>	<b>Min CFM</b>	<b>Design Heat CFM</b>	<b>Heat CFM</b>	<b>Ak (max)</b>
	<b>Ak (min)</b>	<b>Ak (heat)</b>	<b>Damper SetPt</b>	<b>Diversity Test 1</b>	<b>Diversity Test 2</b>	<b>Design EAT (F - db/wb)</b>	<b>EAT (F - db/wb)</b>
	<b>Design LAT (F - db/wb)</b>	<b>LAT (F - db/wb)</b>	<b>Inlet SP</b>	<b>Discharge SP</b>			
VRH 2-31	<b>MFG</b>	<b>Model Num</b>	<b>Serial Num</b>	<b>Design Service</b>	<b>Service</b>	<b>Type</b>	<b>Inlet Size</b>
	NA	NA					
	<b>Design Max CFM</b>	<b>Max CFM</b>	<b>Design Min CFM</b>	<b>Min CFM</b>	<b>Design Heat CFM</b>	<b>Heat CFM</b>	<b>Ak (max)</b>
	<b>Ak (min)</b>	<b>Ak (heat)</b>	<b>Damper SetPt</b>	<b>Diversity Test 1</b>	<b>Diversity Test 2</b>	<b>Design EAT (F - db/wb)</b>	<b>EAT (F - db/wb)</b>
	<b>Design LAT (F - db/wb)</b>	<b>LAT (F - db/wb)</b>	<b>Inlet SP</b>	<b>Discharge SP</b>			
VRH 2-32	<b>MFG</b>	<b>Model Num</b>	<b>Serial Num</b>	<b>Design Service</b>	<b>Service</b>	<b>Type</b>	<b>Inlet Size</b>
	NA	NA					
	<b>Design Max CFM</b>	<b>Max CFM</b>	<b>Design Min CFM</b>	<b>Min CFM</b>	<b>Design Heat CFM</b>	<b>Heat CFM</b>	<b>Ak (max)</b>

Ak (min)	Ak (heat)	Damper SetPt	Diversity Test 1	Diversity Test 2	Design EAT (F - db/wb)	EAT (F - db/wb)
Design LAT (F - db/wb)	LAT (F - db/wb)	Inlet SP	Discharge SP			

**Diffuser Ret/Exh (GRD)**

**RTU-2/**

Asset												
Asset Name	Model Num	MFG	Type	Size	DESIGN CFM	AK	VEL(1)	CFM(1)	VEL(2)	CFM(2)	FINAL CFM	% to design
R2-1	NA	NA										
R2-2	NA	NA										
R2-3	NA	NA										
R2-4	NA	NA										
R2-5	NA	NA										
R2-6	NA	NA										
R2-7	NA	NA										
R2-8	NA	NA										
R2-9	NA	NA										
R2-10	NA	NA										
R2-11	NA	NA										
R2-12	NA	NA										
R2-13	NA	NA										
R2-14	NA	NA										
R2-15	NA	NA										
R2-16	NA	NA										
R2-17	NA	NA										
R2-18	NA	NA										
R2-19	NA	NA										
R2-20	NA	NA										
R2-21	NA	NA										
R2-22	NA	NA										
R2-23	NA	NA										
R2-24	NA	NA										
R2-25	NA	NA										
R2-26	NA	NA										
R2-27	NA	NA										
R2-28	NA	NA										
R2-29	NA	NA										
R2-30	NA	NA										
R2-31	NA	NA										
R2-32	NA	NA										
R2-33	NA	NA										
R2-34	NA	NA										
Total					0			0		0	0	0%

**Diffuser Supply (GRD)**

**VRH 2-1/**

Asset				
Asset Name	Location	a7	FINAL CFM	% to design
2-01-1				
2-01-2				
Total			0	

**VRH 2-2/**

<b>Asset</b>				
<b>Asset Name</b>	<b>Location</b>	<b>a7</b>	<b>FINAL CFM</b>	<b>% to design</b>
2-02-1				
2-02-2				
2-02-3				
Total			0	

**VRH 2-3/**

<b>Asset</b>				
<b>Asset Name</b>	<b>Location</b>	<b>a7</b>	<b>FINAL CFM</b>	<b>% to design</b>
2-03-1				
2-03-2				
2-03-4				
2-03-5				
V2-03-3				
Total			0	

**VRH 2-4/**

<b>Asset</b>				
<b>Asset Name</b>	<b>Location</b>	<b>a7</b>	<b>FINAL CFM</b>	<b>% to design</b>
2-04-1				
2-04-2				
2-04-3				
Total			0	



# Chetu Development

Project: CINCINNATI REHAB HOSPITAL (BLUE ASH, OH)

## System/Unit: AHU-DUAL FAN



Asset: RTU-3

AREA:

UNIT DATA - SUPPLY		
	Design	Actual
Manufacturer	TRANE	TRANE
Model Number	SFHLLF604M	SFHLLF604M
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		
	Design	Actual
Motor MFG / Frame	-	
Horsepower / RPM	-	
Rated Volts / Phase	-	
Rated Amperage / SF	-	

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

TEST DATA - SUPPLY		
	Design	Actual
Total 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.	-	
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.	-	
Air Blender 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		
	Design	Actual
Motor MFG / FRAME	-	
Horsepower / RPM	-	
Rated Volts / Phase	-	
Rated Amperage / SF	-	

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

TEST DATA - EXHAUST/RETURN		
	Design	Actual
Total 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	-	



# Chetu Development

Project: CINCINNATI REHAB HOSPITAL (BLUE ASH, OH)

## AHU-DUAL FAN



VAV - Single Duct

RTU-3/

Asset	MFG	Model Num	Serial Num	Design Service	Service	Type	Inlet Size
VRH 3-1	TRANE	VCEF16				HEAT	16
	<b>Design Max CFM</b>	<b>Max CFM</b>	<b>Design Min CFM</b>	<b>Min CFM</b>	<b>Design Heat CFM</b>	<b>Heat CFM</b>	<b>Ak (max)</b>
	2395						
	<b>Ak (min)</b>	<b>Ak (heat)</b>	<b>Damper SetPt</b>	<b>Diversity Test 1</b>	<b>Diversity Test 2</b>	<b>Design EAT (F - db/wb)</b>	<b>EAT (F - db/wb)</b>
	<b>Design LAT (F - db/wb)</b>	<b>LAT (F - db/wb)</b>	<b>Inlet SP</b>	<b>Discharge SP</b>			
VRH 3-2	TRANE	VCEF10				HEAT	10
	<b>Design Max CFM</b>	<b>Max CFM</b>	<b>Design Min CFM</b>	<b>Min CFM</b>	<b>Design Heat CFM</b>	<b>Heat CFM</b>	<b>Ak (max)</b>
	555						
	<b>Ak (min)</b>	<b>Ak (heat)</b>	<b>Damper SetPt</b>	<b>Diversity Test 1</b>	<b>Diversity Test 2</b>	<b>Design EAT (F - db/wb)</b>	<b>EAT (F - db/wb)</b>
	<b>Design LAT (F - db/wb)</b>	<b>LAT (F - db/wb)</b>	<b>Inlet SP</b>	<b>Discharge SP</b>			
VRH 3-3	TRANE	VCEF12				HEAT	12
	<b>Design Max CFM</b>	<b>Max CFM</b>	<b>Design Min CFM</b>	<b>Min CFM</b>	<b>Design Heat CFM</b>	<b>Heat CFM</b>	<b>Ak (max)</b>
	1200						
	<b>Ak (min)</b>	<b>Ak (heat)</b>	<b>Damper SetPt</b>	<b>Diversity Test 1</b>	<b>Diversity Test 2</b>	<b>Design EAT (F - db/wb)</b>	<b>EAT (F - db/wb)</b>
	<b>Design LAT (F - db/wb)</b>	<b>LAT (F - db/wb)</b>	<b>Inlet SP</b>	<b>Discharge SP</b>			
VRH 3-4	TRANE	VCEF06				HEAT	6
	<b>Design Max CFM</b>	<b>Max CFM</b>	<b>Design Min CFM</b>	<b>Min CFM</b>	<b>Design Heat CFM</b>	<b>Heat CFM</b>	<b>Ak (max)</b>
	280						
	<b>Ak (min)</b>	<b>Ak (heat)</b>	<b>Damper SetPt</b>	<b>Diversity Test 1</b>	<b>Diversity Test 2</b>	<b>Design EAT (F - db/wb)</b>	<b>EAT (F - db/wb)</b>
	<b>Design LAT (F - db/wb)</b>	<b>LAT (F - db/wb)</b>	<b>Inlet SP</b>	<b>Discharge SP</b>			
VRH 3-6	TRANE	VCEF06				HEAT	6

	<b>Design Max CFM</b>	<b>Max CFM</b>	<b>Design Min CFM</b>	<b>Min CFM</b>	<b>Design Heat CFM</b>	<b>Heat CFM</b>	<b>Ak (max)</b>
	200						
	<b>Ak (min)</b>	<b>Ak (heat)</b>	<b>Damper SetPt</b>	<b>Diversity Test 1</b>	<b>Diversity Test 2</b>	<b>Design EAT (F - db/wb)</b>	<b>EAT (F - db/wb)</b>
	<b>Design LAT (F - db/wb)</b>	<b>LAT (F - db/wb)</b>	<b>Inlet SP</b>	<b>Discharge SP</b>			
VRH 3-7	<b>MFG</b>	<b>Model Num</b>	<b>Serial Num</b>	<b>Design Service</b>	<b>Service</b>	<b>Type</b>	<b>Inlet Size</b>
	TRANE	VCEF12				HEAT	12
	<b>Design Max CFM</b>	<b>Max CFM</b>	<b>Design Min CFM</b>	<b>Min CFM</b>	<b>Design Heat CFM</b>	<b>Heat CFM</b>	<b>Ak (max)</b>
	1000						
	<b>Ak (min)</b>	<b>Ak (heat)</b>	<b>Damper SetPt</b>	<b>Diversity Test 1</b>	<b>Diversity Test 2</b>	<b>Design EAT (F - db/wb)</b>	<b>EAT (F - db/wb)</b>
	<b>Design LAT (F - db/wb)</b>	<b>LAT (F - db/wb)</b>	<b>Inlet SP</b>	<b>Discharge SP</b>			
VRH 3-8	<b>MFG</b>	<b>Model Num</b>	<b>Serial Num</b>	<b>Design Service</b>	<b>Service</b>	<b>Type</b>	<b>Inlet Size</b>
	TRANE	VCEF08				HEAT	8
	<b>Design Max CFM</b>	<b>Max CFM</b>	<b>Design Min CFM</b>	<b>Min CFM</b>	<b>Design Heat CFM</b>	<b>Heat CFM</b>	<b>Ak (max)</b>
	420						
	<b>Ak (min)</b>	<b>Ak (heat)</b>	<b>Damper SetPt</b>	<b>Diversity Test 1</b>	<b>Diversity Test 2</b>	<b>Design EAT (F - db/wb)</b>	<b>EAT (F - db/wb)</b>
	<b>Design LAT (F - db/wb)</b>	<b>LAT (F - db/wb)</b>	<b>Inlet SP</b>	<b>Discharge SP</b>			
VRH 3-9	<b>MFG</b>	<b>Model Num</b>	<b>Serial Num</b>	<b>Design Service</b>	<b>Service</b>	<b>Type</b>	<b>Inlet Size</b>
	TRANE	VCEF08				HEAT	8
	<b>Design Max CFM</b>	<b>Max CFM</b>	<b>Design Min CFM</b>	<b>Min CFM</b>	<b>Design Heat CFM</b>	<b>Heat CFM</b>	<b>Ak (max)</b>
	400						
	<b>Ak (min)</b>	<b>Ak (heat)</b>	<b>Damper SetPt</b>	<b>Diversity Test 1</b>	<b>Diversity Test 2</b>	<b>Design EAT (F - db/wb)</b>	<b>EAT (F - db/wb)</b>
	<b>Design LAT (F - db/wb)</b>	<b>LAT (F - db/wb)</b>	<b>Inlet SP</b>	<b>Discharge SP</b>			
VRH 3-10	<b>MFG</b>	<b>Model Num</b>	<b>Serial Num</b>	<b>Design Service</b>	<b>Service</b>	<b>Type</b>	<b>Inlet Size</b>
	TRANE	VCEF08				HEAT	8
	<b>Design Max CFM</b>	<b>Max CFM</b>	<b>Design Min CFM</b>	<b>Min CFM</b>	<b>Design Heat CFM</b>	<b>Heat CFM</b>	<b>Ak (max)</b>
	400						
	<b>Ak (min)</b>	<b>Ak (heat)</b>	<b>Damper SetPt</b>	<b>Diversity Test 1</b>	<b>Diversity Test 2</b>	<b>Design EAT (F - db/wb)</b>	<b>EAT (F - db/wb)</b>
	<b>Design LAT (F - db/wb)</b>	<b>LAT (F - db/wb)</b>	<b>Inlet SP</b>	<b>Discharge SP</b>			
VRH 3-11	<b>MFG</b>	<b>Model Num</b>	<b>Serial Num</b>	<b>Design Service</b>	<b>Service</b>	<b>Type</b>	<b>Inlet Size</b>
	TRANE	VCEF08				HEAT	8
	<b>Design Max CFM</b>	<b>Max CFM</b>	<b>Design Min CFM</b>	<b>Min CFM</b>	<b>Design Heat CFM</b>	<b>Heat CFM</b>	<b>Ak (max)</b>
	400	387					
	<b>Ak (min)</b>	<b>Ak (heat)</b>	<b>Damper SetPt</b>	<b>Diversity Test 1</b>	<b>Diversity Test 2</b>	<b>Design EAT (F - db/wb)</b>	<b>EAT (F - db/wb)</b>

	<b>Design LAT (F - db/wb)</b>	<b>LAT (F - db/wb)</b>	<b>Inlet SP</b>	<b>Discharge SP</b>			
VRH 3-12	<b>MFG</b>	<b>Model Num</b>	<b>Serial Num</b>	<b>Design Service</b>	<b>Service</b>	<b>Type</b>	<b>Inlet Size</b>
	TRANE	VCEF08				HEAT	8
	<b>Design Max CFM</b>	<b>Max CFM</b>	<b>Design Min CFM</b>	<b>Min CFM</b>	<b>Design Heat CFM</b>	<b>Heat CFM</b>	<b>Ak (max)</b>
	400	392					
	<b>Ak (min)</b>	<b>Ak (heat)</b>	<b>Damper SetPt</b>	<b>Diversity Test 1</b>	<b>Diversity Test 2</b>	<b>Design EAT (F - db/wb)</b>	<b>EAT (F - db/wb)</b>
	<b>Design LAT (F - db/wb)</b>	<b>LAT (F - db/wb)</b>	<b>Inlet SP</b>	<b>Discharge SP</b>			
VRH 3-13	<b>MFG</b>	<b>Model Num</b>	<b>Serial Num</b>	<b>Design Service</b>	<b>Service</b>	<b>Type</b>	<b>Inlet Size</b>
	TRANE	VCEF08				HEAT	8
	<b>Design Max CFM</b>	<b>Max CFM</b>	<b>Design Min CFM</b>	<b>Min CFM</b>	<b>Design Heat CFM</b>	<b>Heat CFM</b>	<b>Ak (max)</b>
	400	398					
	<b>Ak (min)</b>	<b>Ak (heat)</b>	<b>Damper SetPt</b>	<b>Diversity Test 1</b>	<b>Diversity Test 2</b>	<b>Design EAT (F - db/wb)</b>	<b>EAT (F - db/wb)</b>
	<b>Design LAT (F - db/wb)</b>	<b>LAT (F - db/wb)</b>	<b>Inlet SP</b>	<b>Discharge SP</b>			
VRH 3-14	<b>MFG</b>	<b>Model Num</b>	<b>Serial Num</b>	<b>Design Service</b>	<b>Service</b>	<b>Type</b>	<b>Inlet Size</b>
	TRANE	VCEF08				HEAT	8
	<b>Design Max CFM</b>	<b>Max CFM</b>	<b>Design Min CFM</b>	<b>Min CFM</b>	<b>Design Heat CFM</b>	<b>Heat CFM</b>	<b>Ak (max)</b>
	400						
	<b>Ak (min)</b>	<b>Ak (heat)</b>	<b>Damper SetPt</b>	<b>Diversity Test 1</b>	<b>Diversity Test 2</b>	<b>Design EAT (F - db/wb)</b>	<b>EAT (F - db/wb)</b>
	<b>Design LAT (F - db/wb)</b>	<b>LAT (F - db/wb)</b>	<b>Inlet SP</b>	<b>Discharge SP</b>			
VRH 3-15	<b>MFG</b>	<b>Model Num</b>	<b>Serial Num</b>	<b>Design Service</b>	<b>Service</b>	<b>Type</b>	<b>Inlet Size</b>
	TRANE	VCEF08				HEAT	6
	<b>Design Max CFM</b>	<b>Max CFM</b>	<b>Design Min CFM</b>	<b>Min CFM</b>	<b>Design Heat CFM</b>	<b>Heat CFM</b>	<b>Ak (max)</b>
	220	216					
	<b>Ak (min)</b>	<b>Ak (heat)</b>	<b>Damper SetPt</b>	<b>Diversity Test 1</b>	<b>Diversity Test 2</b>	<b>Design EAT (F - db/wb)</b>	<b>EAT (F - db/wb)</b>
	<b>Design LAT (F - db/wb)</b>	<b>LAT (F - db/wb)</b>	<b>Inlet SP</b>	<b>Discharge SP</b>			
VRH 3-16	<b>MFG</b>	<b>Model Num</b>	<b>Serial Num</b>	<b>Design Service</b>	<b>Service</b>	<b>Type</b>	<b>Inlet Size</b>
	TRANE	VCEF08				HEAT	8
	<b>Design Max CFM</b>	<b>Max CFM</b>	<b>Design Min CFM</b>	<b>Min CFM</b>	<b>Design Heat CFM</b>	<b>Heat CFM</b>	<b>Ak (max)</b>
	460	448					
	<b>Ak (min)</b>	<b>Ak (heat)</b>	<b>Damper SetPt</b>	<b>Diversity Test 1</b>	<b>Diversity Test 2</b>	<b>Design EAT (F - db/wb)</b>	<b>EAT (F - db/wb)</b>
	<b>Design LAT (F - db/wb)</b>	<b>LAT (F - db/wb)</b>	<b>Inlet SP</b>	<b>Discharge SP</b>			
VRH 3-17	<b>MFG</b>	<b>Model Num</b>	<b>Serial Num</b>	<b>Design Service</b>	<b>Service</b>	<b>Type</b>	<b>Inlet Size</b>

	TRANE	VCEF08				HEAT	8
	<b>Design Max CFM</b>	<b>Max CFM</b>	<b>Design Min CFM</b>	<b>Min CFM</b>	<b>Design Heat CFM</b>	<b>Heat CFM</b>	<b>Ak (max)</b>
	400						
	<b>Ak (min)</b>	<b>Ak (heat)</b>	<b>Damper SetPt</b>	<b>Diversity Test 1</b>	<b>Diversity Test 2</b>	<b>Design EAT (F - db/wb)</b>	<b>EAT (F - db/wb)</b>
	<b>Design LAT (F - db/wb)</b>	<b>LAT (F - db/wb)</b>	<b>Inlet SP</b>	<b>Discharge SP</b>			
VRH 3-18	<b>MFG</b>	<b>Model Num</b>	<b>Serial Num</b>	<b>Design Service</b>	<b>Service</b>	<b>Type</b>	<b>Inlet Size</b>
	TRANE	VCEF08				HEAT	8
	<b>Design Max CFM</b>	<b>Max CFM</b>	<b>Design Min CFM</b>	<b>Min CFM</b>	<b>Design Heat CFM</b>	<b>Heat CFM</b>	<b>Ak (max)</b>
	410	422					
	<b>Ak (min)</b>	<b>Ak (heat)</b>	<b>Damper SetPt</b>	<b>Diversity Test 1</b>	<b>Diversity Test 2</b>	<b>Design EAT (F - db/wb)</b>	<b>EAT (F - db/wb)</b>
	<b>Design LAT (F - db/wb)</b>	<b>LAT (F - db/wb)</b>	<b>Inlet SP</b>	<b>Discharge SP</b>			
VRH 3-19	<b>MFG</b>	<b>Model Num</b>	<b>Serial Num</b>	<b>Design Service</b>	<b>Service</b>	<b>Type</b>	<b>Inlet Size</b>
	TRANE	VCEF08				HEAT	8
	<b>Design Max CFM</b>	<b>Max CFM</b>	<b>Design Min CFM</b>	<b>Min CFM</b>	<b>Design Heat CFM</b>	<b>Heat CFM</b>	<b>Ak (max)</b>
	400	420					
	<b>Ak (min)</b>	<b>Ak (heat)</b>	<b>Damper SetPt</b>	<b>Diversity Test 1</b>	<b>Diversity Test 2</b>	<b>Design EAT (F - db/wb)</b>	<b>EAT (F - db/wb)</b>
	<b>Design LAT (F - db/wb)</b>	<b>LAT (F - db/wb)</b>	<b>Inlet SP</b>	<b>Discharge SP</b>			
VRH 3-20	<b>MFG</b>	<b>Model Num</b>	<b>Serial Num</b>	<b>Design Service</b>	<b>Service</b>	<b>Type</b>	<b>Inlet Size</b>
	TRANE	VCEF08				HEAT	8
	<b>Design Max CFM</b>	<b>Max CFM</b>	<b>Design Min CFM</b>	<b>Min CFM</b>	<b>Design Heat CFM</b>	<b>Heat CFM</b>	<b>Ak (max)</b>
	410	402					
	<b>Ak (min)</b>	<b>Ak (heat)</b>	<b>Damper SetPt</b>	<b>Diversity Test 1</b>	<b>Diversity Test 2</b>	<b>Design EAT (F - db/wb)</b>	<b>EAT (F - db/wb)</b>
	<b>Design LAT (F - db/wb)</b>	<b>LAT (F - db/wb)</b>	<b>Inlet SP</b>	<b>Discharge SP</b>			
VRH 3-21	<b>MFG</b>	<b>Model Num</b>	<b>Serial Num</b>	<b>Design Service</b>	<b>Service</b>	<b>Type</b>	<b>Inlet Size</b>
	TRANE	VCEF08				HEAT	8
	<b>Design Max CFM</b>	<b>Max CFM</b>	<b>Design Min CFM</b>	<b>Min CFM</b>	<b>Design Heat CFM</b>	<b>Heat CFM</b>	<b>Ak (max)</b>
	450	444					
	<b>Ak (min)</b>	<b>Ak (heat)</b>	<b>Damper SetPt</b>	<b>Diversity Test 1</b>	<b>Diversity Test 2</b>	<b>Design EAT (F - db/wb)</b>	<b>EAT (F - db/wb)</b>
	<b>Design LAT (F - db/wb)</b>	<b>LAT (F - db/wb)</b>	<b>Inlet SP</b>	<b>Discharge SP</b>			
VRH 3-22	<b>MFG</b>	<b>Model Num</b>	<b>Serial Num</b>	<b>Design Service</b>	<b>Service</b>	<b>Type</b>	<b>Inlet Size</b>
	TRANE	VCEF06				HEAT	6
	<b>Design Max CFM</b>	<b>Max CFM</b>	<b>Design Min CFM</b>	<b>Min CFM</b>	<b>Design Heat CFM</b>	<b>Heat CFM</b>	<b>Ak (max)</b>
	200						

	<b>Ak (min)</b>	<b>Ak (heat)</b>	<b>Damper SetPt</b>	<b>Diversity Test 1</b>	<b>Diversity Test 2</b>	<b>Design EAT (F - db/wb)</b>	<b>EAT (F - db/wb)</b>
	<b>Design LAT (F - db/wb)</b>	<b>LAT (F - db/wb)</b>	<b>Inlet SP</b>	<b>Discharge SP</b>			
VRH 3-23	<b>MFG</b>	<b>Model Num</b>	<b>Serial Num</b>	<b>Design Service</b>	<b>Service</b>	<b>Type</b>	<b>Inlet Size</b>
	TRANE	VCEF14				HEAT	14
	<b>Design Max CFM</b>	<b>Max CFM</b>	<b>Design Min CFM</b>	<b>Min CFM</b>	<b>Design Heat CFM</b>	<b>Heat CFM</b>	<b>Ak (max)</b>
	1260	1256					
	<b>Ak (min)</b>	<b>Ak (heat)</b>	<b>Damper SetPt</b>	<b>Diversity Test 1</b>	<b>Diversity Test 2</b>	<b>Design EAT (F - db/wb)</b>	<b>EAT (F - db/wb)</b>
	<b>Design LAT (F - db/wb)</b>	<b>LAT (F - db/wb)</b>	<b>Inlet SP</b>	<b>Discharge SP</b>			
VRH 3-24	<b>MFG</b>	<b>Model Num</b>	<b>Serial Num</b>	<b>Design Service</b>	<b>Service</b>	<b>Type</b>	<b>Inlet Size</b>
	TRANE	VCEF08				HEAT	8
	<b>Design Max CFM</b>	<b>Max CFM</b>	<b>Design Min CFM</b>	<b>Min CFM</b>	<b>Design Heat CFM</b>	<b>Heat CFM</b>	<b>Ak (max)</b>
	400	420					
	<b>Ak (min)</b>	<b>Ak (heat)</b>	<b>Damper SetPt</b>	<b>Diversity Test 1</b>	<b>Diversity Test 2</b>	<b>Design EAT (F - db/wb)</b>	<b>EAT (F - db/wb)</b>
	<b>Design LAT (F - db/wb)</b>	<b>LAT (F - db/wb)</b>	<b>Inlet SP</b>	<b>Discharge SP</b>			
VRH 3-25	<b>MFG</b>	<b>Model Num</b>	<b>Serial Num</b>	<b>Design Service</b>	<b>Service</b>	<b>Type</b>	<b>Inlet Size</b>
	TRANE	VCEF08				HEAT	8
	<b>Design Max CFM</b>	<b>Max CFM</b>	<b>Design Min CFM</b>	<b>Min CFM</b>	<b>Design Heat CFM</b>	<b>Heat CFM</b>	<b>Ak (max)</b>
	400	422					
	<b>Ak (min)</b>	<b>Ak (heat)</b>	<b>Damper SetPt</b>	<b>Diversity Test 1</b>	<b>Diversity Test 2</b>	<b>Design EAT (F - db/wb)</b>	<b>EAT (F - db/wb)</b>
	<b>Design LAT (F - db/wb)</b>	<b>LAT (F - db/wb)</b>	<b>Inlet SP</b>	<b>Discharge SP</b>			
VRH 3-26	<b>MFG</b>	<b>Model Num</b>	<b>Serial Num</b>	<b>Design Service</b>	<b>Service</b>	<b>Type</b>	<b>Inlet Size</b>
	TRANE	VCEF08				HEAT	8
	<b>Design Max CFM</b>	<b>Max CFM</b>	<b>Design Min CFM</b>	<b>Min CFM</b>	<b>Design Heat CFM</b>	<b>Heat CFM</b>	<b>Ak (max)</b>
	400	399					
	<b>Ak (min)</b>	<b>Ak (heat)</b>	<b>Damper SetPt</b>	<b>Diversity Test 1</b>	<b>Diversity Test 2</b>	<b>Design EAT (F - db/wb)</b>	<b>EAT (F - db/wb)</b>
	<b>Design LAT (F - db/wb)</b>	<b>LAT (F - db/wb)</b>	<b>Inlet SP</b>	<b>Discharge SP</b>			
VRH 3-27	<b>MFG</b>	<b>Model Num</b>	<b>Serial Num</b>	<b>Design Service</b>	<b>Service</b>	<b>Type</b>	<b>Inlet Size</b>
	TRANE	VCEF08				HEAT	8
	<b>Design Max CFM</b>	<b>Max CFM</b>	<b>Design Min CFM</b>	<b>Min CFM</b>	<b>Design Heat CFM</b>	<b>Heat CFM</b>	<b>Ak (max)</b>
	400	377					
	<b>Ak (min)</b>	<b>Ak (heat)</b>	<b>Damper SetPt</b>	<b>Diversity Test 1</b>	<b>Diversity Test 2</b>	<b>Design EAT (F - db/wb)</b>	<b>EAT (F - db/wb)</b>
	<b>Design LAT (F - db/wb)</b>	<b>LAT (F - db/wb)</b>	<b>Inlet SP</b>	<b>Discharge SP</b>			

VRH 3-28	<b>MFG</b>	<b>Model Num</b>	<b>Serial Num</b>	<b>Design Service</b>	<b>Service</b>	<b>Type</b>	<b>Inlet Size</b>
	TRANE	VCEF08				HEAT	8
	<b>Design Max CFM</b>	<b>Max CFM</b>	<b>Design Min CFM</b>	<b>Min CFM</b>	<b>Design Heat CFM</b>	<b>Heat CFM</b>	<b>Ak (max)</b>
	400						
	<b>Ak (min)</b>	<b>Ak (heat)</b>	<b>Damper SetPt</b>	<b>Diversity Test 1</b>	<b>Diversity Test 2</b>	<b>Design EAT (F - db/wb)</b>	<b>EAT (F - db/wb)</b>
	<b>Design LAT (F - db/wb)</b>	<b>LAT (F - db/wb)</b>	<b>Inlet SP</b>	<b>Discharge SP</b>			
VRH 3-29	<b>MFG</b>	<b>Model Num</b>	<b>Serial Num</b>	<b>Design Service</b>	<b>Service</b>	<b>Type</b>	<b>Inlet Size</b>
	TRANE	VCEF08				HEAT	8
	<b>Design Max CFM</b>	<b>Max CFM</b>	<b>Design Min CFM</b>	<b>Min CFM</b>	<b>Design Heat CFM</b>	<b>Heat CFM</b>	<b>Ak (max)</b>
	400	418					
	<b>Ak (min)</b>	<b>Ak (heat)</b>	<b>Damper SetPt</b>	<b>Diversity Test 1</b>	<b>Diversity Test 2</b>	<b>Design EAT (F - db/wb)</b>	<b>EAT (F - db/wb)</b>
	<b>Design LAT (F - db/wb)</b>	<b>LAT (F - db/wb)</b>	<b>Inlet SP</b>	<b>Discharge SP</b>			
VRH 3-30	<b>MFG</b>	<b>Model Num</b>	<b>Serial Num</b>	<b>Design Service</b>	<b>Service</b>	<b>Type</b>	<b>Inlet Size</b>
	TRANE	VCEF08				HEAT	8
	<b>Design Max CFM</b>	<b>Max CFM</b>	<b>Design Min CFM</b>	<b>Min CFM</b>	<b>Design Heat CFM</b>	<b>Heat CFM</b>	<b>Ak (max)</b>
	400	402					
	<b>Ak (min)</b>	<b>Ak (heat)</b>	<b>Damper SetPt</b>	<b>Diversity Test 1</b>	<b>Diversity Test 2</b>	<b>Design EAT (F - db/wb)</b>	<b>EAT (F - db/wb)</b>
	<b>Design LAT (F - db/wb)</b>	<b>LAT (F - db/wb)</b>	<b>Inlet SP</b>	<b>Discharge SP</b>			
VRH 3-31	<b>MFG</b>	<b>Model Num</b>	<b>Serial Num</b>	<b>Design Service</b>	<b>Service</b>	<b>Type</b>	<b>Inlet Size</b>
	TRANE	VCEF08				HEAT	6
	<b>Design Max CFM</b>	<b>Max CFM</b>	<b>Design Min CFM</b>	<b>Min CFM</b>	<b>Design Heat CFM</b>	<b>Heat CFM</b>	<b>Ak (max)</b>
	230	226					
	<b>Ak (min)</b>	<b>Ak (heat)</b>	<b>Damper SetPt</b>	<b>Diversity Test 1</b>	<b>Diversity Test 2</b>	<b>Design EAT (F - db/wb)</b>	<b>EAT (F - db/wb)</b>
	<b>Design LAT (F - db/wb)</b>	<b>LAT (F - db/wb)</b>	<b>Inlet SP</b>	<b>Discharge SP</b>			

**Diffuser Ret/Exh (GRD)**

**RTU-3/**

<b>Asset</b>												
<b>Asset Name</b>	<b>Model Num</b>	<b>MFG</b>	<b>Type</b>	<b>Size</b>	<b>DESIGN CFM</b>	<b>AK</b>	<b>VEL(1)</b>	<b>CFM(1)</b>	<b>VEL(2)</b>	<b>CFM(2)</b>	<b>FINAL CFM</b>	<b>% to design</b>
R3-1	NA	NA										
R3-2	NA	NA										
R3-3	NA	NA										
R3-4	NA	NA										
R3-5	NA	NA										
R3-6	NA	NA										
R3-7	NA	NA										
R3-8	NA	NA										
R3-9	NA	NA										
R3-10	NA	NA										
R3-11	NA	NA										
R3-12	NA	NA										
R3-13	NA	NA										
R3-14	NA	NA										
R3-15	NA	NA										
R3-16	NA	NA										
R3-17	NA	NA										
R3-18	NA	NA										
R3-19	NA	NA										
R3-20	NA	NA										
R3-21	NA	NA										
R3-22	NA	NA										
R3-23	NA	NA										
R3-24	NA	NA										
R3-25	NA	NA										
R3-26	NA	NA										
R3-27	NA	NA										
R3-28	NA	NA										
R3-29	NA	NA										
R3-30	NA	NA										
R3-31	NA	NA										
R3-32	NA	NA										
R3-33	NA	NA										
R3-34	NA	NA										
R3-35	NA	NA										
R3-36	NA	NA										
R3-37	NA	NA										
<b>Total</b>					0			0		0	0	0%

**Diffuser Supply (GRD)**

**VRH 3-1/**

<b>Asset</b>				
<b>Asset Name</b>	<b>Location</b>	<b>a7</b>	<b>FINAL CFM</b>	<b>% to design</b>
3-01-1				
3-01-2				
3-01-3				
3-01-4				
<b>Total</b>			0	

**VRH 3-2/**

<b>Asset</b>				
<b>Asset Name</b>	<b>Location</b>	<b>a7</b>	<b>FINAL CFM</b>	<b>% to design</b>
3-02-1				
3-02-2				
<b>Total</b>			0	

**VRH 3-3/**

<b>Asset</b>				
<b>Asset Name</b>	<b>Location</b>	<b>a7</b>	<b>FINAL CFM</b>	<b>% to design</b>
3-03-1				
3-03-2				
3-03-3				
Total			0	

**VRH 3-4/**

<b>Asset</b>				
<b>Asset Name</b>	<b>Location</b>	<b>a7</b>	<b>FINAL CFM</b>	<b>% to design</b>
3-04-1				
3-04-2				
Total			0	



# Chetu Development

Project: CINCINNATI REHAB HOSPITAL (BLUE ASH, OH)

## System/Unit: FAN - Supply



Asset: MAU-1

AREA: KITCHEN HOOD

Unit Data		
	Design	Actual
MFG	NA	GREENHECK
Model Num	NA	RV-25-12.5I-J
Serial Num	-	19355387
Type	-	GAS FIRED
Series	-	
Configuration	-	VERTICAL
Num Filters Size 1	-	
Filter Size 1	-	
Num Filters Size 2	-	
Filter Size 2	-	

Motor Data		
	Design	Actual
Motor MFG	-	BALDOR
Frame	-	145T
Horsepower	-	2.00
Motor Rpm	-	1750
Phase	-	3
Voltage (rated)	-	460
Amperage (rated)	-	2.8
Service Factor	-	1.15
Efficiency	-	
Power Factor	-	

Drive Data		
	Design	Actual
Motor Sheave MFG	-	
Motor Sheave Size	-	
Motor Bore Size	-	
Motor Sheave SetPt	-	
Fan Sheave MFG	-	
Fan Sheave Size	-	
Fan Sheave Bore	-	
Belt CL Distance	-	
Num of Belts	-	
Belt MFG	-	
Belt Size	-	
Belt Tension (deflection)	-	
Belt Alignment Verified	-	

Test Data		
	Design	Actual
CFM	2600	
SF RPM	1625	
SF Rotation	-	
Motor RPM	-	
Motor Frequency	-	
SF System SetPt	-	
RL Voltage	-	460
RL Amperage	-	
Suction ESP	-	
Discharge ESP	-	
Total ESP	-	1.6
Fan Inlet SP	-	
Fan Discharge SP	-	
Freeze Stat Setpt	-	
Total Fan SP	-	
Brake Horse Power	-	
Compressor Lockout Setpt	-	

Combustion Fan Motor Data		
	Design	Actual
Motor MFG	-	
Frame	-	
Horsepower	-	
Phase	-	
Voltage	-	
Amperage	-	

Combustion Gas Duct		
	Design	Actual
Duct Type	-	
Gauge & Material	-	
Size	-	
Minimum Rise:Run	-	
Room properly ventilated	-	
Space pres condition	-	
Flue backdrafts eliminated	-	
Flue Terminates Properly	-	

Gas Heat		
	Design	Actual
BTUH	-	
EAT (db/wb)	-	
LAT (db/wb)	-	
Gas Type	-	
Burner Type	-	
Burner Construction	-	
Input BTUH (rated)	-	
Output BTUH (rated)	-	
Gas Inlet Pres	-	
Gas Low Fire Pres	-	
Gas High Fire Pres	-	
Gas Valve Low Fire CTRL Voltage	-	
Low Fire Temp Rise (F)	-	
Gas Valve High Fire CTRL Voltage	-	
High Fire Temp Rise (F)	-	
Pilot Ignition Status (pass/fail)	-	
Gas Valve Pilot Ignition CTRL Voltage	-	
Flame Proving Switch Type	-	
Flame proof CTRL Voltage	-	
Single or Dual Bank	-	
Staged or Modulating	-	
Heater Operates (y/n)	-	
Combustion Blower Operates (y/n)	-	
Flame Status (pass/fail)	-	
High Limit Temp Cut-off SetPt	-	
Inlet Air Temp SetPt	-	
Discharge Air Temp SetPt	-	
Temp Rise SetPt	-	
Air Flow Switch SP SetPt	-	
Air Flow Switch SP Actual	-	
Air Flow Switch CTRL Voltage	-	
Air Flow Switch Proved (Pass/Fail)	-	
Space Temp SetPt-ON	-	
Space Temp SetPt-OFF	-	
Flame Modulates Properly	-	

Chilled Water Coil		
	Design	Actual
BTUH	-	
EAT (db/wb)	-	
LAT (db/wb)	-	
Coil Size (hxl)	-	
Coil Area	-	
Coil Face Velocity	-	
GPM CIRCUIT 1	-	
Water Inlet Temp (F)	-	
Water Discharge Temp (F)	-	
Water Coil Delta P	-	
GPM CIRCUIT 2	-	
Inlet SP	-	
Discharge SP	-	
Coil Delta SP	-	

Evaporator DX Coil		
	Design	Actual
BTUH	-	
EAT (db/wb)	-	
LAT (db/wb)	-	
Coil Size (hxl)	-	
Coil Area	-	
Coil Face Velocity	-	
Refrigeration Type	-	
Circuit 1 SetPt (F)	-	
Circuit 1 EAT (db/wb)	-	
Circuit 1 LAT (db/wb)	-	
Circuit 2 SetPt (F)	-	
Circuit 2 EAT (db/wb)	-	
Circuit 2 LAT (db/wb)	-	
Inlet SP	-	
Discharge SP	-	
Coil Delta SP	-	

Evaporative Cooler		
	Design	Actual
BTUH	-	
EAT (db/wb)	-	
LAT (db/wb)	-	
EAT SetPt (F)	-	
Filter Media Size (hxl)	-	
Filter Media Area	-	
Filter Media Face Velocity	-	
EWT (F)	-	
LWT (F)	-	
Inlet SP	-	
Discharge SP	-	
Coil Delta SP	-	

Electric Coil		
	Design	Actual
KW	-	
EAT (db/wb)	-	
LAT (db/wb)	-	
BTUH	-	
Coil Size (hxl)	-	
Coil Area	-	
Coil Face Velocity	-	
Voltage	-	
Heat Stage 1 RL (A)	-	
Heat Stage 2 RL (A)	-	
Heat Stage 3 RL (A)	-	
Heat Stage 4 RL (A)	-	
Heat Stage 5 RL (A)	-	
Heat Stage 6 RL (A)	-	
Inlet SP	-	
Discharge SP	-	
Coil Delta SP	-	
High Limit Temp Cut-off SetPt	-	
Temp Rise SetPt	-	
Discharge Temp SetPt	-	
Inlet Air Temp SetPt	-	
Air Flow Switch SP	-	
Air Flow Switch CTRL Voltage	-	
Space Temp SetPt-ON	-	
Space Temp SetPt-OFF	-	
Coil Staging Functional	-	

Hot Water Coil		
	Design	Actual
BTUH	-	
EAT (db/wb)	-	
LAT (db/wb)	-	
Coil Size (hxl)	-	
Coil Area	-	
Coil Face Velocity	-	
GPM CIRCUIT 1	-	
EWT (F)	-	
LWT (F)	-	
Water Coil Delta P	-	
GPM CIRCUIT 2	-	
Inlet SP	-	
Discharge SP	-	
Coil Delta SP	-	

Steam Coil		
	Design	Actual
BTUH	-	
EAT (db/wb)	-	
LAT (db/wb)	-	
Coil Size (hxl)	-	
Coil Area	-	
Coil Face Velocity	-	
Steam Coil-Circuit 1 Delta P	-	
Steam Inlet Temp (F)	-	
Steam Discharge Temp (F)	-	
Steam Coil-Circuit 2 Delta P	-	
Inlet SP	-	
Discharge SP	-	
Coil Delta SP	-	

Compressors		
	Design	Actual
Refrigerant Charge	-	
Refrigerant Type	-	
Comp 1 RLA	-	
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	-	

General		
	Design	Actual
Unit free of Damage	-	
Unit Completely Assembled	-	
Unit Leveled	-	
Curb & Unit Installed Air Tight	-	
Controls Complete	-	
Fan Rotation Correct	-	
Fan Belt Condition	-	
Unit Filters Clean	-	
Evap Coil Clean	-	
Evap Coil Free of Frost	-	
Condensor Coil Clean	-	
Condensor Fins Straight	-	
Refrigerant Sight Glass Dry	-	
Condensate Drain Installed	-	
Crankcase Heaters Operate	-	

**Condensor DX Coil**

	<b>Design</b>	<b>Actual</b>
<b>BTUH</b>	-	
<b>EAT (db/wb)</b>	-	
<b>LAT (db/wb)</b>	-	
<b>Coil Size (hxl)</b>	-	
<b>Coil Area</b>	-	
<b>Coil Face Velocity</b>	-	
<b>Refrigeration Type</b>	-	
<b>Circuit 1 SetPt (F)</b>	-	
<b>CIRCUIT 1 EAT (db/wb)</b>	-	
<b>CIRCUIT 1 LAT (db/wb)</b>	-	
<b>Circuit 2 SetPt (F)</b>	-	
<b>CIRCUIT 2 EAT (db/wb)</b>	-	
<b>CIRCUIT 2 LAT (db/wb)</b>	-	

**Condensor Fan**

	<b>Design</b>	<b>Actual</b>
<b>Fan Alignment</b>	-	
<b>Fan Rotation</b>	-	
<b>Fan 1 Motor RLA</b>	-	
<b>Fan 1 Motor RLV</b>	-	
<b>Fan 2 Motor RLA</b>	-	
<b>Fan 2 Motor RLV</b>	-	



# Chetu Development

Project: CINCINNATI REHAB HOSPITAL (BLUE ASH, OH)

System/Unit: FAN - Exhaust



Asset: EF-1

AREA:

Unit Data		
	Design	Actual
MFG	NA	PENNBARRY
Model Num	NA	FX24BH
Serial Num	-	D22GZ15897
Type	-	CRE UPBLAST
Series	-	
Configuration	-	

Motor Data		
	Design	Actual
Motor MFG	-	BALDOR
Frame	-	182
Horsepower	-	3.0
Motor Rpm	-	1765
Phase	-	3
Voltage (rated)	-	208
Amperage (rated)	-	8.4
Service Factor	-	1.15
Efficiency	-	
Power Factor	-	

Drive Data		
	Design	Actual
Motor Sheave MFG	-	VP65
Motor Sheave Size	-	VP65
Motor Bore Size	-	1-1/8"
Motor Sheave SetPt	-	2 open
Fan Sheave MFG	-	
Fan Sheave Size	-	8.75"
Fan Sheave Bore	-	1"
Belt CL Distance	-	8.3"
Num of Belts	-	1
Belt MFG	-	
Belt Size	-	A36
Belt Tension (deflection)	-	
Belt Alignment Verified	-	

Test Data		
	Design	Actual
CFM	3020	2988
Fan RPM	1223	780
Fan Rotation	-	
Motor RPM	-	
Motor Frequency	-	
System SetPt	-	
RL Voltage	-	211.9/212.2/212.1
RL Amperage	-	4.9/4.6/4.7
Suction ESP	-	-0.68"
Discharge ESP	-	ATM
Total ESP	2.2	0.68"
Fan Inlet SP	-	
Fan Discharge SP	-	
Total Fan SP	-	



# Chetu Development

Project: CINCINNATI REHAB HOSPITAL (BLUE ASH, OH)

## FAN - Exhaust



**Diffuser Ret/Exh (GRD)**

EF-1/

Asset												
Asset Name	Model Num	MFG	Type	Size	DESIGN CFM	AK	VEL(1)	CFM(1)	VEL(2)	CFM(2)	FINAL CFM	% to design
E2-1	NA	NA	E1	10X10	350	1		464			366	104.6
E2-2	NA	NA	E2	8X8	100	1		96			102	102.0
E2-3	NA	NA	E2	8X8	100	1		102			101	101.0
E2-4	NA	NA	E2	8X8	100	1		94			98	98.0
E2-5	NA	NA	E1	8X8	40	1		39			43	107.5
E2-6	NA	NA	E2	8X8	100	1		96			94	94.0
E2-7	NA	NA	E2	8X8	100	1		98			96	96.0
E2-8	NA	NA	E2	8X8	100	1		95			94	94.0
E2-9	NA	NA	E2	8X8	100	1		107			95	95.0
E2-10	NA	NA	E2	8X8	100	1		75			92	92.0
E2-11	NA	NA	E2	8X8	100	1		83			90	90.0
E2-12	NA	NA	E2	8X8	100	1		99			94	94.0
E2-13	NA	NA	E2	8X8	100	1		76			90	90.0
E2-14	NA	NA	E2	8X8	100	1		86			90	90.0
E2-15	NA	NA	E2	8X8	100	1		66			93	93.0
E2-16	NA	NA	E2	8X8	100	1		66			97	97.0
E2-17	NA	NA	E2	8X8	100	1		69			92	92.0
E2-18	NA	NA	E2	8X8	100	1		97			104	104.0
E2-19	NA	NA	E2	8X8	100	1		107			102	102.0
E2-20	NA	NA	E2	8X8	100	1		92			94	94.0
E2-21	NA	NA	E2	8X8	100	1		101			107	107.0
E2-22	NA	NA	E2	8X8	105	1		153			98	93.3
E2-23	NA	NA	E2	8X8	80	1		73			82	102.5
E2-24	NA	NA	E2	8X8	100	1		109			108	108.0
E2-25	NA	NA	E2	8X8	80	1		79			80	100.0
E2-26	NA	NA	E1	8X8	105	1		110			110	104.8
E2-27	NA	NA	E2	8X8	80	1		78			86	107.5
E2-28	NA	NA	E2	8X8	100	1		107			108	108.0
E2-29	NA	NA	E2	8X8	80	1		68			82	102.5
<b>Total</b>					<b>3020</b>			<b>2985</b>		<b>0</b>	<b>2988</b>	<b>98.94%</b>



# Chetu Development

Project: CINCINNATI REHAB HOSPITAL (BLUE ASH, OH)

System/Unit: FAN - Exhaust



Asset: EF-2

AREA:

Unit Data		
	Design	Actual
MFG	NA	PENNBARRY
Model Num	NA	FX24BH
Serial Num	-	D22GZ15898
Type	-	CRE UPBLAST
Series	-	
Configuration	-	

Motor Data		
	Design	Actual
Motor MFG	-	Baldor
Frame	-	145
Horsepower	-	1.50
Motor Rpm	-	1755
Phase	-	3
Voltage (rated)	-	208
Amperage (rated)	-	4.4
Service Factor	-	1.15
Efficiency	-	
Power Factor	-	

Drive Data		
	Design	Actual
Motor Sheave MFG	-	
Motor Sheave Size	-	VP60
Motor Bore Size	-	7/8"
Motor Sheave SetPt	-	2 open
Fan Sheave MFG	-	
Fan Sheave Size	-	8"
Fan Sheave Bore	-	1"
Belt CL Distance	-	6.25"
Num of Belts	-	1
Belt MFG	-	
Belt Size	-	A31
Belt Tension (deflection)	-	
Belt Alignment Verified	-	

Test Data		
	Design	Actual
CFM	4845	4215
Fan RPM	926	960
Fan Rotation	-	
Motor RPM	-	
Motor Frequency	-	
System SetPt	-	
RL Voltage	-	211.2/211.3/210.3
RL Amperage	-	4.2/4.0/4.0
Suction ESP	-	-0.71"
Discharge ESP	-	ATM
Total ESP	1.7	0.71"
Fan Inlet SP	-	
Fan Discharge SP	-	
Total Fan SP	-	



# Chetu Development

Project: CINCINNATI REHAB HOSPITAL (BLUE ASH, OH)

## FAN - Exhaust



**Diffuser Ret/Exh (GRD)**

EF-2/

Asset												
Asset Name	Model Num	MFG	Type	Size	DESIGN CFM	AK	VEL(1)	CFM(1)	VEL(2)	CFM(2)	FINAL CFM	% to design
E1-1	NA	NA	E2	8X8	100	1		256				-
E1-2	NA	NA	E2	8X8	100	1		174				-
E1-3	NA	NA	E2	8X8	80	1		138				-
E1-4	NA	NA	E2	8X8	130	1		148				-
E1-5	NA	NA	E1	8X8	250	1		387				-
E1-6	NA	NA	E1	8X8	250	1		288				-
E1-7	NA	NA	E2	8X8	130	1		138				-
E1-8	NA	NA	E2	8X8	80	1		120				-
E1-9	NA	NA	DUCT	16X4	200	1		185				-
E1-10	NA	NA	DUCT	16X4	400	1		371				-
E1-11	NA	NA	E2	8X8	140	1		105				-
E1-12	NA	NA	E2	8X8	90	1		139				-
E1-13	NA	NA	E2	8X8	90	1		96				-
E1-14	NA	NA	E1	14X14	1000	1		691				-
E1-15	NA	NA	E2	8X8	130	1		94				-
E1-16	NA	NA	E2	8X8	75	1		76				-
E1-17	NA	NA	E1	8X8	150	1		139				-
E1-18	NA	NA	E1	8X8	260	1		166				-
E1-19	NA	NA	E2	8X8	110	1		42				-
E1-20	NA	NA	E1	14X14	1000	1		442				-
E1-21	NA	NA	E3	8X8	80	1		20				-
<b>Total</b>					4845			4215		0	0	0%



# Chetu Development

Project: CINCINNATI REHAB HOSPITAL (BLUE ASH, OH)

System/Unit: FAN - Exhaust



Asset: EF-3

AREA:

Unit Data		
	Design	Actual
MFG	NA	PENNBARRY
Model Num	NA	FX24BH
Serial Num	-	D22GZ15899
Type	-	CRE UPBLAST
Series	-	
Configuration	-	

Motor Data		
	Design	Actual
Motor MFG	-	BALDOR
Frame	-	145
Horsepower	-	1.50
Motor Rpm	-	1755
Phase	-	3
Voltage (rated)	-	208
Amperage (rated)	-	4.4
Service Factor	-	1.15
Efficiency	-	
Power Factor	-	

Drive Data		
	Design	Actual
Motor Sheave MFG	-	
Motor Sheave Size	-	VP44
Motor Bore Size	-	7/8"
Motor Sheave SetPt	-	5 open
Fan Sheave MFG	-	
Fan Sheave Size	-	8"
Fan Sheave Bore	-	1"
Belt CL Distance	-	7.25"
Num of Belts	-	1
Belt MFG	-	
Belt Size	-	A30
Belt Tension (deflection)	-	
Belt Alignment Verified	-	

Test Data		
	Design	Actual
CFM	2655	2688
Fan RPM	961	697
Fan Rotation	-	
Motor RPM	-	
Motor Frequency	-	
System SetPt	-	
RL Voltage	-	212.2/212.6/211.3
RL Amperage	-	2.87/2.68/2.76
Suction ESP	-	-0.49"
Discharge ESP	-	ATM
Total ESP	1.8	0.49"
Fan Inlet SP	-	
Fan Discharge SP	-	
Total Fan SP	-	
Brake Horse Power	-	0.944



# Chetu Development

Project: CINCINNATI REHAB HOSPITAL (BLUE ASH, OH)

## FAN - Exhaust



**Diffuser Ret/Exh (GRD)**

EF-3/

Asset												
Asset Name	Model Num	MFG	Type	Size	DESIGN CFM	AK	VEL(1)	CFM(1)	VEL(2)	CFM(2)	FINAL CFM	% to design
E3-1	NA	NA	E2	8X8	100			188		116	105	105.0
E3-2	NA	NA	E2	8X8	100			173		103	103	103.0
E3-3	NA	NA	E2	8X8	100			145		105	105	105.0
E3-4	NA	NA	E2	8X8	100			170		112	102	102.0
E3-5	NA	NA	E2	8X8	100			146		108	108	108.0
E3-6	NA	NA	E2	8X8	100			144		112	112	112.0
E3-7	NA	NA	E2	8X8	100			155		107	107	107.0
E3-8	NA	NA	E2	8X8	100			158		110	110	110.0
E3-9	NA	NA	E2	8X8	100			157		111	109	109.0
E3-10	NA	NA	E2	8X8	100			142		105	105	105.0
E3-11	NA	NA	E2	8X8	100			145		113	107	107.0
E3-12	NA	NA	E2	8X8	100			124		115	108	108.0
E3-13	NA	NA	E2	8X8	100			119		101	101	101.0
E3-14	NA	NA	E2	8X8	100			135		102	102	102.0
E3-15	NA	NA	E2	8X8	100			199		105	105	105.0
E3-16	NA	NA	E2	8X8	100			145		93	97	97.0
E3-17	NA	NA	E2	8X8	100			145		95	95	95.0
E3-18	NA	NA	E2	8X8	100			134		93	99	99.0
E3-19	NA	NA	E2	8X8	100			127		98	98	98.0
E3-20	NA	NA	E2	8X8	110			123		104	104	94.5
E3-21	NA	NA	E2	8X8	125			129		118	118	94.4
E3-22	NA	NA	E2	8X8	120			72		102	102	85.0
E3-23	NA	NA	E1	8X8	200			163		187	187	93.5
E3-24	NA	NA	E2	8X8	10			78		97	97	970.0
E3-25	NA	NA	E2	8X8	100			110		102	102	102.0
<b>Total</b>					2565			3526		2714	2688	104.8%



# Chetu Development

Project: CINCINNATI REHAB HOSPITAL (BLUE ASH, OH)

System/Unit: FAN - Exhaust



Asset: EF-4

AREA:

Unit Data		
	Design	Actual
MFG	NA	PENNBARRY
Model Num	NA	FX18BH
Serial Num	-	D22GZ15900
Type	-	CRE UPBLAST
Series	-	
Configuration	-	

Motor Data		
	Design	Actual
Motor MFG	-	Baldor
Frame	-	145
Horsepower	-	2.0
Motor Rpm	-	1760
Phase	-	3
Voltage (rated)	-	460
Amperage (rated)	-	2.8
Service Factor	-	1.15
Efficiency	-	
Power Factor	-	

Drive Data		
	Design	Actual
Motor Sheave MFG	-	
Motor Sheave Size	-	VL44
Motor Bore Size	-	7/8"
Motor Sheave SetPt	-	1 open
Fan Sheave MFG	-	
Fan Sheave Size	-	Ak54
Fan Sheave Bore	-	3/4"
Belt CL Distance	-	6.25"
Num of Belts	-	1
Belt MFG	-	
Belt Size	-	A25
Belt Tension (deflection)	-	
Belt Alignment Verified	-	

Test Data		
	Design	Actual
CFM	3250	3269
Fan RPM	1283	1385
Fan Rotation	-	
Motor RPM	-	
Motor Frequency	-	
System SetPt	-	
RL Voltage	-	489.6/490.1/491.7
RL Amperage	-	2.7/2.7/2.6
Suction ESP	-	-1.22
Discharge ESP	-	ATM
Total ESP	1.7	1.22
Fan Inlet SP	-	
Fan Discharge SP	-	
Total Fan SP	-	
Brake Horse Power	-	1.85



# Chetu Development

Project: CINCINNATI REHAB HOSPITAL (BLUE ASH, OH)

System/Unit: FAN - Exhaust



Asset: EF-5

AREA:

Unit Data		
	Design	Actual
MFG	NA	PENNBARRY
Model Num	NA	FX12BH
Serial Num	-	D22GZ15901
Type	-	CRE UPBLAST
Series	-	D22GZ15901
Configuration	-	

Motor Data		
	Design	Actual
Motor MFG	-	Baldor
Frame	-	56
Horsepower	-	0.75
Motor Rpm	-	1750
Phase	-	1
Voltage (rated)	-	120
Amperage (rated)	-	7
Service Factor	-	1.15
Efficiency	-	
Power Factor	-	

Drive Data		
	Design	Actual
Motor Sheave MFG	-	
Motor Sheave Size	-	VP400
Motor Bore Size	-	5/8"
Motor Sheave SetPt	-	7 open
Fan Sheave MFG	-	
Fan Sheave Size	-	Ak44
Fan Sheave Bore	-	3/4"
Belt CL Distance	-	5"
Num of Belts	-	1
Belt MFG	-	
Belt Size	-	4L210T
Belt Tension (deflection)	-	
Belt Alignment Verified	-	

Test Data		
	Design	Actual
CFM	760	777
Fan RPM	1476	1248
Fan Rotation	-	
Motor RPM	-	
Motor Frequency	-	
System SetPt	-	
RL Voltage	-	119.9
RL Amperage	-	5.28/5.30
Suction ESP	-	-0.81"
Discharge ESP	-	ATM
Total ESP	1.7	0.81"
Fan Inlet SP	-	
Fan Discharge SP	-	
Total Fan SP	-	
Brake Horse Power	-	0.56



# Chetu Development

Project: CINCINNATI REHAB HOSPITAL (BLUE ASH, OH)

## FAN - Exhaust



Diffuser Ret/Exh (GRD)

EF-5/

Asset												
Asset Name	Model Num	MFG	Type	Size	DESIGN CFM	AK	VEL(1)	CFM(1)	VEL(2)	CFM(2)	FINAL CFM	% to design
E5-1	NA	NA	E1	8X8	170	1		342			173	101.8
E5-2	NA	NA	E2	8X8	100	1		53			96	96.0
E5-3	NA	NA	E3	10X12	490	1		566			508	103.7
Total					760			961		0	777	102.24%



# Chetu Development

Project: CINCINNATI REHAB HOSPITAL (BLUE ASH, OH)

System/Unit: FAN - Exhaust



Asset: EF-6

AREA:

Unit Data		
	Design	Actual
MFG	NA	PENNBARRY
Model Num	NA	FX12BH
Serial Num	-	D22GZ15902
Type	-	CRE UPBLAST
Series	-	
Configuration	-	

Motor Data		
	Design	Actual
Motor MFG	-	Us Motor
Frame	-	56
Horsepower	-	0.50
Motor Rpm	-	1725
Phase	-	1
Voltage (rated)	-	120
Amperage (rated)	-	4.0
Service Factor	-	1.15
Efficiency	-	
Power Factor	-	

Drive Data		
	Design	Actual
Motor Sheave MFG	-	VP350
Motor Sheave Size	-	VP350
Motor Bore Size	-	0.625"
Motor Sheave SetPt	-	7 Open
Fan Sheave MFG	-	
Fan Sheave Size	-	AL54
Fan Sheave Bore	-	0.75"
Belt CL Distance	-	5.875"
Num of Belts	-	1
Belt MFG	-	
Belt Size	-	4L230
Belt Tension (deflection)	-	
Belt Alignment Verified	-	

Test Data		
	Design	Actual
CFM	600	600
Fan RPM	1259	845
Fan Rotation	-	
Motor RPM	-	
Motor Frequency	-	
System SetPt	-	
RL Voltage	-	120
RL Amperage	-	2.52/2.48
Suction ESP	-	-0.42"
Discharge ESP	-	ATM
Total ESP	1.25	0.42"
Fan Inlet SP	-	
Fan Discharge SP	-	
Total Fan SP	-	
Brake Horse Power	-	0.312



# Chetu Development

Project: CINCINNATI REHAB HOSPITAL (BLUE ASH, OH)

## FAN - Exhaust



### Diffuser Ret/Exh (GRD)

EF-6/

Asset												
Asset Name	Model Num	MFG	Type	Size	DESIGN CFM	AK	VEL(1)	CFM(1)	VEL(2)	CFM(2)	FINAL CFM	% to design
E6-1	NA	NA	E3	12X12	500	1		724		496	492	98.4
E6-2	NA	NA	E2	8X8	100	1		274		191	97	97.0
Total					600			998		687	589	98.17%



# Chetu Development

Project: CINCINNATI REHAB HOSPITAL (BLUE ASH, OH)

System/Unit: FAN - Exhaust



Asset: EF-7

AREA:

Unit Data		
	Design	Actual
MFG	NA	PENNBARRY
Model Num	NA	SX100BC
Serial Num	-	E22MZ56057
Type	-	INLINE
Series	-	
Configuration	-	

Motor Data		
	Design	Actual
Motor MFG	-	BALDOR
Frame	-	56
Horsepower	-	0.33
Motor Rpm	-	1740
Phase	-	1
Voltage (rated)	-	115
Amperage (rated)	-	3.4
Service Factor	-	1
Efficiency	-	
Power Factor	-	

Drive Data		
	Design	Actual
Motor Sheave MFG	-	
Belt Size	-	
Belt Tension (deflection)	-	
Belt Alignment Verified	-	

Test Data		
	Design	Actual
CFM	300	312
Fan Rotation	-	
Motor RPM	-	
Motor Frequency	-	
System SetPt	-	
RL Voltage	-	121
RL Amperage	-	2.8
Suction ESP	-	-0.87
Discharge ESP	-	0.44
Total ESP	1.5	1.31
Fan Inlet SP	-	
Fan Discharge SP	-	
Total Fan SP	-	
Brake Horse Power	-	0.252



# Chetu Development

Project: CINCINNATI REHAB HOSPITAL (BLUE ASH, OH)

## FAN - Exhaust



Diffuser Ret/Exh (GRD)

EF-7/

Asset												
Asset Name	Model Num	MFG	Type	Size	DESIGN CFM	AK	VEL(1)	CFM(1)	VEL(2)	CFM(2)	FINAL CFM	% to design
E6-1	NA	NA	E3	10X10								
Total					0			0		0	0	0%



# Chetu Development

Project: CINCINNATI REHAB HOSPITAL (BLUE ASH, OH)

## System/Unit: Kitchen Hood Type I



Asset: HD1

AREA:1DI003

Unit Data		
	Design	Actual
MFG	NA	CAPTIVEAIRE
Model Num	NA	6030 ND-2
Job / Serial Num	-	4893978
Type	1	
Hood length	-	192"
Hood Width	-	60"
Hood Height	-	
Num of EXH Risers	-	
EXH Riser size 1	-	
EXH Riser Size 2	-	
Num of Supply Risers	-	
Supply Riser Size	-	
Supply Plenum Type	-	ASP
Supply Plenum Width	-	16"
Supply Plenum Length	-	192"

Test Data Exhaust		
	Design	Actual
Filter Type	X-TRACTOR SS	BAFFLE SS
Filter Size 1	20X16	20"x16"
Filter Qty 1	12	12
Filter AK factor size 1	2.25	2.08
Filter Total AK Area	23.7	24.96
Kv factor (Vel)	-	
Plenum SP	-	
Riser SP	-	
Filter1 FPM	-	130
Filter2 FPM	-	129
Filter3 FPM	-	134
Filter4 FPM	-	133
Filter5 FPM	-	125
Filter6 FPM	-	126
Filter7 FPM	-	136
Filter8 FPM	-	138
Filter9 FPM	-	132
Filter10 FPM	-	136
Filter11 FPM	-	133
Filter12 FPM	-	134
Filter High FPM(corr)	-	131
Filter Low FPM (corr)	-	
Filter Ave FPM(corr)	-	
CFM	3250	3269

Test Data Supply		
	Design	Actual
Plenum SP	21.33	
AK factor	0.91	
Total AK 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	-	
High FPM(corr)	-	
Low FPM(corr)	-	
Ave FPM(corr)	-	
CFM	-	

Cooking Equipment		
	Design	Actual
Item 1	-	MICROWAVE
Item 2	-	STEAMER
Item 3	-	CONVECTION OVEN
Item 4	-	GAS STOVE/FLAT TOP
Item 5	-	FRYER
Item 6	-	
Item 7	-	
Item 8	-	
Item 9	-	
Item 10	-	

Performance Data		
	Design	Actual
Exh-Supply Net CFM	-	
Smoke Generation Type	-	
Cooking Equip Heat On	-	
Hood Capture %	-	
Smoke Capture @ Equip Surface %	-	
Smoke Capture @ Perim of Hood %	-	
Heat Loss (Box Shadow) %	-	
Rated Heat of Equip	-	
Supply Re-Entrainment %	-	
Exh Riser1 Pos (Left End)	-	
Exh Riser2 Pos (Right End)	-	
End Panels Installed (Y/N)	-	
Space Offset Temp Riser 1	-	
Heat Sensor High SetPt Riser 1	-	
Space Offset Temp Riser 2	-	
Heat Sensor High SetPt Riser 2	-	
Space Offset Temp Riser 3	-	
Heat Sensor High SetPt Riser 3	-	
Space Offset Temp Riser 4	-	
Heat Sensor High SetPt Riser 4	-	
Riser Temp F (idle) Riser 1	-	
Riser Temp F (idle) Riser 2	-	
Riser Temp F (idle) Riser 3	-	
Riser Temp F (idle) Riser 4	-	
Ambient Room Temp	-	
100% override functional	-	
electronic Gas Valve shut- off f(x)	-	

General		
	Design	Actual
Third Party Witness	-	
Third Party Company	-	
Tech Witness	-	
Tech Company	-	
Code Official Witness	-	
Jurisdiction	-	
Service/Startup Performed By	-	

## Issue List

- aaa
- tst



**CINCINNATI REHAB HOSPITAL (BLUE ASH, OH)**

**Project Issue Information**

**Issue Name :** aaa  
**Description :** aa  
**Created By :** Chetu Development      **Assigned To :** Chetu Development - gourav1 Kumar  
**Status :** Open  
**Priority :** Urgent      **Asset Tag :**  
**Originated Date :** 11/14/2023 - Gulshan Kumar - Chetu Development



**CINCINNATI REHAB HOSPITAL (BLUE ASH, OH)**

**Project Issue Information**

**Issue Name :** tst  
**Description :** tdt  
**Created By :** Chetu Development      **Assigned To :** Chetu Development - gourav1 Kumar  
**Status :** Open  
**Priority :** Urgent      **Asset Tag :**  
**Originated Date :** 11/14/2023 - Gulshan Kumar - Chetu Development