

Report By:

**National TAB
1329 E. KEMPER ROAD
SUITE 4210
CINCINNATI, OH 45246**

NATIONAL

TAB

Comfort. Under control.

Report: PRELIM

Function: Test, Adjust, & Balance

Date: 05/16/2023

PROJECT

Mercy Urgent Care-Western Hills (Cincinnati, OH)

5555 Glenway Ave

Cincinnati, OH 45238

Client

Ivey Mechanical Company, LLC

1445 Jamike Dr

Erlanger, KY 41018

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Project: Mercy Urgent Care-Western Hills (Cincinnati, OH)

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SUMMARY

Included in this TAB report for Mercy Health Urgent care, Western Hills is TAB data for two rooftop unit, and 6 ceiling fans. Rooftop units were balanced to within +/-10% by reading air devices and adjusting fan speed via motor pulley adjustment. Air devices were then balanced to within +/- 10% unless noted. Restroom ceiling exhaust fans were read with a flow hood and flow was reported as read. It will be noted that Exhaust fans 3-6 Where installed as Greenheck SP-A200 (Spec'd to be SP-A50 per MSET) and were overperforming by an average of 50 cfm from design flow due to them being a larger fan. It should also be noted that these fans turn on with the lights and do not run fulltime.

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Project: Mercy Urgent Care-Western Hills (Cincinnati, OH)

System/Unit: AHU/RTU



Comfort. Under control.

Asset: RTU-1

AREA:109

Unit Data		
	Design	Actual
MFG	NA	CARRIER
Serial Num	-	4522P42433
Model Num	NA	48TCEM08A2A5A0A0A0
Configuration	-	VERTICAL
Num OA Filters 1	-	1
OA Filter Size 1	-	35X20
Num PreFilter 1	-	4
PreFilter Size 1	-	16X20X2

Test Data		
	Design	Actual
SF CFM	2950	3017
SF RPM	-	912
RA CFM	2510	2508
OA CFM	500	509
RL Voltage	208	205.2/204.1/201.7
RL Amperage	-	5.39/6.26/5.94
OA Damper Position	-	4.55V
Brake Horse Power	-	1.93

Motor Data		
	Design	Actual
Motor MFG	-	MARATHON
Frame	-	56HZ
Horsepower	-	2.9
Motor Rpm	-	1725
Phase	-	3
Rated Voltage	-	208
Rated Amperage	-	8.8
Service Factor	-	1.15

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.69"
Fan Suction SP	-	-0.99"
Fan Discharge SP	-	0.63"
Total ESP	-	1.32"
Fan Total SP	-	1.62"

Drive Data		
	Design	Actual
Motor Sheave Size	-	1VM50
Motor Bore Size	-	0.875"
Motor Sheave SetPt	-	1.5 TURNS OUT
Fan Sheave Size	-	AFD84
Fan Sheave Bore	-	1"
Belt CL Distance	-	17.5"
Num of Belts	-	1
Belt Size	-	AX52

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Project: Mercy Urgent Care-Western Hills (Cincinnati, OH)

AHU/RTU



Comfort. Under control.

Diffuser Supply (GRD)

RTU-1/109

Asset							
Asset Name	Location	Type	Size	DESIGN CFM	CFM(1)	FINAL CFM	% to design
1-1	101	CD-1	8	150	103	151	100.7
1-2	101	CD-1	8	150	176	163	108.7
1-3	101	CD-1	8	150	134	159	106.0
1-4	101	CD-1	8	150	133	162	108.0
1-5	101	CD-1	8	150	130	163	108.7
1-6	101	CD-1	8	150	166	159	106.0
1-7	102	CD-2	6	50	75	54	108.0
1-8	129	CD-1	10	250	239	271	108.4
1-9	128	CD-1	10	250	227	271	108.4
1-10	126	CD-1	10	250	250	255	102.0
1-11	125	CD-1	10	250	230	252	100.8
1-12	124	CD-1	10	150	242	156	104.0
1-13	124	CD-1	8	150	148	146	97.3
1-14	122	CD-1	8	250	64	234	93.6
1-15	111	CD-1	10	350	171	329	94.0
1-16	109	CD-2	6	100	69	92	92.0

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Project: Mercy Urgent Care-Western Hills (Cincinnati, OH)

System/Unit: AHU/RTU



Comfort. Under control.

Asset: RTU-2

AREA:105

Unit Data		
	Design	Actual
MFG	NA	CARRIER
Serial Num	-	4522P42435
Model Num	NA	48TCEM08A2A5A0A0A05
Configuration	-	VERTICAL
Num OA Filters 1	-	1
OA Filter Size 1	-	20X35
Num PreFilter 1	-	4
PreFilter Size 1	-	16X20X2

Test Data		
	Design	Actual
SF CFM	3050	2986
SF RPM	-	972
RA CFM	2550	2438
OA CFM	500	548
RL Voltage	208	205.3/203.9/20202.1
RL Amperage	-	6.1/6.55/6.8
OA Damper Position	-	4.10V
Brake Horse Power	-	2.13

Motor Data		
	Design	Actual
Motor MFG	-	MARATHON
Frame	-	56HZ
Horsepower	-	2.9
Motor Rpm	-	1725
Phase	-	3
Rated Voltage	-	208
Rated Amperage	-	8.8
Service Factor	-	1.15

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.66"
Fan Suction SP	-	-0.96"
Fan Discharge SP	-	0.80"
Total ESP	-	1.46"
Fan Total SP	-	1.76"

Drive Data		
	Design	Actual
Motor Sheave Size	-	1VM50
Motor Bore Size	-	0.875"
Motor Sheave SetPt	-	0 TURNS OUT
Fan Sheave Size	-	AFD84
Fan Sheave Bore	-	1"
Belt CL Distance	-	17.5"
Num of Belts	-	1
Belt Size	-	AX52

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Project: Mercy Urgent Care-Western Hills (Cincinnati, OH)

AHU/RTU



Comfort. Under control.

Diffuser Supply (GRD)

RTU-2/105

Asset							
Asset Name	Location	Type	Size	DESIGN CFM	CFM(1)	FINAL CFM	% to design
2-1	118	CD-2	6	50	75	48	96.0
2-2	120	CD-1	8	200	146	185	92.5
2-3	127	CD-1	6	100	191	103	103.0
2-4	120	CD-1	8	200	191	185	92.5
2-5	114	CD-1	8	150	81	154	102.7
2-6	113	CD-2	6	50	77	46	92.0
2-7	112	CD-2	6	50	81	48	96.0
2-8	107	CD-2	6	100	64	96	96.0
2-9	110	CD-1	6	100	100	110	110.0
2-10	106	CD-1	8	250	196	232	92.8
2-11	127	CD-1	6	100	70	97	97.0
2-12	127	CD-1	8	150	193	144	96.0
2-13	127	CD-1	8	150	191	143	95.3
2-14	117	CD-1	8	200	191	196	98.0
2-15	114	CD-1	8	150	217	160	106.7
2-16	110	CD-1	8	150	177	142	94.7
2-17	116	CD-1	6	100	93	108	108.0
2-18	110	CD-1	6	100	97	103	103.0
2-19	115	CD-1	6	100	97	93	93.0
2-20	104	CD-1	8	200	163	211	105.5
2-21	103	CD-1	8	200	195	191	95.5
2-22	105	CD-1	8	200	261	191	95.5

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Project: Mercy Urgent Care-Western Hills (Cincinnati, OH)

System/Unit: FAN - Exhaust



Comfort. Under control.

Asset: EF-1

AREA:109

Unit Data		
	Design	Actual
MFG	NA	GREENHECK
Model Num	NA	SP-B150-QD
Serial Num	-	156030281-0012
Type	-	CEILING

Test Data		
	Design	Actual
CFM	152	0
RL Voltage	-	0
RL Amperage	-	0
Total ESP	0.409	NOT ACCESSIBLE

Motor Data		
	Design	Actual
Motor MFG	-	GREENHECK
Frame	-	NOT LISTED
Horsepower	-	128W
Motor Rpm	-	1050
Phase	-	1
Voltage (rated)	-	115
Amperage (rated)	-	1.8
Service Factor	-	1

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Project: Mercy Urgent Care-Western Hills (Cincinnati, OH)

System/Unit: FAN - Exhaust



Comfort. Under control.

Asset: EF-2

AREA:107

Unit Data		
	Design	Actual
MFG	NA	GREENHECK
Model Num	NA	SP-B150-QD
Serial Num	-	156030281-0021
Type	-	CEILING

Test Data		
	Design	Actual
CFM	152	149
RL Voltage	-	119.5
RL Amperage	-	1.75
Total ESP	0.409	NOT ACCESSIBLE

Motor Data		
	Design	Actual
Motor MFG	-	GREENHECK
Frame	-	NOT LISTED
Horsepower	-	128W
Motor Rpm	-	1050
Phase	-	1
Voltage (rated)	-	115
Amperage (rated)	-	1.8
Service Factor	-	1

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Project: Mercy Urgent Care-Western Hills (Cincinnati, OH)

System/Unit: FAN - Exhaust



Comfort. Under control.

Asset: EF-3

AREA:102

Unit Data		
	Design	Actual
MFG	NA	GREENHECK
Model Num	NA	SP-A200-QD
Serial Num	-	21979788
Type	-	CEILING

Test Data		
	Design	Actual
CFM	96	149
RL Voltage	-	120.1
RL Amperage	-	0.45
Total ESP	0.653	NOT ACCESSIBLE

Motor Data		
	Design	Actual
Motor MFG	-	GREENHECK
Frame	-	NOT LISTED
Horsepower	-	0.025
Motor Rpm	-	900
Phase	-	1
Voltage (rated)	-	115
Amperage (rated)	-	0.46
Service Factor	-	1

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Project: Mercy Urgent Care-Western Hills (Cincinnati, OH)

System/Unit: FAN - Exhaust



Comfort. Under control.

Asset: EF-4

AREA:112

Unit Data		
	Design	Actual
MFG	NA	GREENHECK
Model Num	NA	SP-A200-QD
Serial Num	-	21979780
Type	-	CEILING

Test Data		
	Design	Actual
CFM	96	136
RL Voltage	-	119.8
RL Amperage	-	0.44
Total ESP	0.653	NOT LISTED

Motor Data		
	Design	Actual
Motor MFG	-	GREENHECK
Frame	-	NOT LISTED
Horsepower	-	0.025
Motor Rpm	-	900
Phase	-	1
Voltage (rated)	-	115
Amperage (rated)	-	0.46
Service Factor	-	1

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Project: Mercy Urgent Care-Western Hills (Cincinnati, OH)

System/Unit: FAN - Exhaust



Comfort. Under control.

Asset: EF-5

AREA:113

Unit Data		
	Design	Actual
MFG	NA	GREENHECK
Model Num	NA	SP-A200-QD
Serial Num	-	21979789
Type	-	CEILING

Test Data		
	Design	Actual
CFM	96	129
RL Voltage	-	119.7
RL Amperage	-	0.43
Total ESP	0.653	NOT ACCESSIBLE

Motor Data		
	Design	Actual
Motor MFG	-	GREENHECK
Frame	-	NOT LISTED
Horsepower	-	0.025
Motor Rpm	-	900
Phase	-	1
Voltage (rated)	-	115
Amperage (rated)	-	0.46
Service Factor	-	1

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Project: Mercy Urgent Care-Western Hills (Cincinnati, OH)

System/Unit: FAN - Exhaust



Comfort. Under control.

Asset: EF-6

AREA:118

Unit Data		
	Design	Actual
MFG	NA	GREENHECK
Model Num	NA	SP-A200-QD
Serial Num	-	21979786
Type	-	CEILING

Test Data		
	Design	Actual
CFM	96	134
RL Voltage	-	119.8
RL Amperage	-	0.43
Total ESP	0.653	NOT ACCESSIBLE

Motor Data		
	Design	Actual
Motor MFG	-	GREENHECK
Frame	-	NOT LISTED
Horsepower	-	0.025
Motor Rpm	-	900
Phase	-	1
Voltage (rated)	-	115
Amperage (rated)	-	0.46
Service Factor	-	1

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