Report By:

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

NATIONAL TAB

Comfort. Under control.

Report: TAB Report
Function: Test, Adjust, & Balance
Date: 12/19/2022

PROJECT

CMS E.E. Waddell High Reno (Charlotte, NC)

730 Nations Ford Rd

Charlotte, NC 28217

Client

Action Mechanical Inc.

PO Box 7325

CHARLOTTE, NC 28241

FaciliBuild
make it easy

National TAB

Project: CMS E.E. Waddell High Reno (Charlotte, NC)

Table Of Contents

VAV - Single Duct

VAV/

Asset								
Asset Name	**Type**	**Inlet Size**	**Design Max CFM**	**Max CFM**	**Design Min CFM**	**Min CFM**	**Design Heat CFM**	**Heat CFM**
VAV-1	VAV	10"	1250	674	320	322	630	674

FaciliBuild
make it easy

Diffuser Supply (GRD)

RTU-3 DIFFUSER/

Asset								
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**FINAL CFM**	**% to design**
3-1	301	A	12	460		239	239	52.0

Asset	Notes
3-1	AHU 3 at full speed

FaciliBuild make it easy

Diffuser Supply (GRD)

VAV-1/301A

Asset								
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**FINAL CFM**	**% to design**
3.1-1	301A	A	12"12"	400		257	257	64.3
3.1-2	301A	A	12"12"	400		166	166	41.5
3.1-3	301A	A	12"12"	400		251	251	62.8

Asset	Notes
3-1	AHU 3 at full speed

FaciliBuild make it easy

National TAB

Project: CMS E.E. Waddell High Reno (Charlotte, NC)

System/Unit: FAN - Exhaust

Comfort. Under control.

Asset: EF1 AREA:

Unit Data		
	Design	**Actual**
MFG	GREENHECK	GREENHECK
Model Num	USF-12	USF-12
Serial Num	-	20512849
Type	-	UTILITY SET

Motor Data		
	Design	**Actual**
Motor MFG	-	WEG
Frame	-	56
Horsepower	-	0.25
Motor Rpm	-	1740
Phase	-	1
Voltage (rated)	-	115
Amperage (rated)	-	2.9
Service Factor	-	1.35

Drive Data		
	Design	**Actual**
Motor Sheave Size	-	VL34
Motor Bore Size	-	0.625
Fan Sheave Size	-	AK58
Fan Sheave Bore	-	1.0
Belt CL Distance	-	7.75
Num of Belts	-	1
Belt Size	-	3L280

Test Data		
	Design	**Actual**
CFM	870	456
Fan RPM	1187	1070
RL Voltage	-	118
RL Amperage	-	2.8
Suction ESP	-	0.39
Discharge ESP	-	0.21
Total ESP	0.50	0.60
Brake Horse Power	-	0.24

Completed By: Scott Springer

Notes: NO HORSEPOWER REMAINING TO INCREASE FAN SPEED/CFM

FaciliBuild make it easy

National TAB

Project: CMS E.E. Waddell High Reno (Charlotte, NC)

System/Unit: FAN - Exhaust

Comfort. Under control.

Asset: EF2 AREA:

Unit Data		
	Design	**Actual**
MFG	GREENHECK	GREENHECK
Model Num	USF-12	USF-12
Serial Num	-	20512850
Type	-	UTILITY SET

Motor Data		
	Design	**Actual**
Motor MFG	-	WEG
Frame	-	56
Horsepower	-	0.25
Motor Rpm	-	1740
Phase	-	1
Voltage (rated)	-	115
Amperage (rated)	-	2.9
Service Factor	-	1.35

Drive Data		
	Design	**Actual**
Motor Sheave Size	-	VL34
Motor Bore Size	-	0.625
Fan Sheave Size	-	AK58
Fan Sheave Bore	-	1.0
Belt CL Distance	-	7.75
Num of Belts	-	1
Belt Size	-	3L280

Test Data		
	Design	**Actual**
CFM	870	507
Fan RPM	1187	1061
RL Voltage	-	118
RL Amperage	-	2.8
Suction ESP	-	0.38
Discharge ESP	-	0.22
Total ESP	0.50	0.60
Brake Horse Power	-	.24

Completed By: Scott Springer

Notes: NO HORSEPOWER REMAINING TO INCREASE FAN SPEED/CFM

FaciliBuild make it easy

National TAB

Project: CMS E.E. Waddell High Reno (Charlotte, NC)

System/Unit: FAN - Exhaust

Comfort. Under control.

Asset: EF3 AREA:

Unit Data		
	Design	**Actual**
MFG	GREENHECK	GREENHECK
Model Num	USF-12	USF-12
Serial Num	-	20512851
Type	-	UTILITY SET

Motor Data		
	Design	**Actual**
Motor MFG	-	WEG
Frame	-	CRE
Horsepower	-	0.25
Motor Rpm	-	1740
Phase	-	1
Voltage (rated)	-	115
Amperage (rated)	-	2.9
Service Factor	-	1.35

Drive Data		
	Design	**Actual**
Motor Sheave Size	-	VL34
Motor Bore Size	-	0.625
Fan Sheave Size	-	AK58
Fan Sheave Bore	-	1.0
Belt CL Distance	-	7.75
Num of Belts	-	1
Belt Size	-	3L280

Test Data		
	Design	**Actual**
CFM	870	482
Fan RPM	1187	1098
RL Voltage	-	118
RL Amperage	-	2.8
Suction ESP	-	0.39
Discharge ESP	-	0.20
Total ESP	0.50	0.59
Brake Horse Power	-	0.24

Completed By: Scott Springer

Notes:

FaciliBuild make it easy

National TAB

Project: CMS E.E. Waddell High Reno (Charlotte, NC)

System/Unit: FAN - Exhaust

Comfort. Under control.

Asset: EF-4 AREA:GENERAL EXHAUST

Unit Data		
	Design	**Actual**
MFG	NA	GREENHECK
Model Num	NA	G-140-VG
Serial Num	-	20518303
Type	-	CRE

Test Data		
	Design	**Actual**
CFM	1300	1348
RL Voltage	-	284
RL Amperage	-	2.0
Total ESP	0.50	0.42

Motor Data		
	Design	**Actual**
Motor MFG	-	VARIGREEN
Horsepower	-	0.50
Motor Rpm	-	300-1750
Phase	-	1
Voltage (rated)	-	277
Amperage (rated)	-	3.2

Completed By: Scott Springer

Notes:

FaciliBuild make it easy

National TAB

Project: CMS E.E. Waddell High Reno (Charlotte, NC)

System/Unit: FAN - Exhaust

Comfort. Under control.

Asset: EF-5 AREA:

Unit Data		
	Design	**Actual**
MFG	NA	GREENHECK
Model Num	NA	SP-A510

Test Data		
	Design	**Actual**
CFM	350	400

Motor Data		
	Design	**Actual**
Horsepower	-	224 W
Motor Rpm	-	1015
Phase	-	1
Voltage (rated)	-	115
Amperage (rated)	-	3.3

Completed By: Scott Springer

Notes:

FaciliBuild make it easy

National TAB

Project: CMS E.E. Waddell High Reno (Charlotte, NC)

System/Unit: FAN - Exhaust

Comfort. Under control.

Asset: EF-6 AREA:

Unit Data		
	Design	**Actual**
MFG	NA	GREENHECK
Model Num	NA	SP-A390-VG

Test Data		
	Design	**Actual**
CFM	175	340

Motor Data		
	Design	**Actual**
Horsepower	-	26 W
Motor Rpm	1099	1099
Phase	1	1
Voltage (rated)	115	115
Amperage (rated)	-	1.5

Completed By: Scott Springer

Notes:

FaciliBuild make it easy

National TAB

Project: CMS E.E. Waddell High Reno (Charlotte, NC)

System/Unit: FAN - Exhaust

Comfort. Under control.

Asset: EF-7 AREA:

Unit Data		
	Design	**Actual**
MFG	NA	GREENHECK
Model Num	NA	SP-A390-VG

Test Data		
	Design	**Actual**
CFM	175	330

Motor Data		
	Design	**Actual**
Horsepower	-	26 W
Motor Rpm	1099	1099
Phase	1	1
Voltage (rated)	115	115
Amperage (rated)	-	1.5

Completed By: Scott Springer

Notes:

FaciliBuild make it easy

National TAB

Project: CMS E.E. Waddell High Reno (Charlotte, NC)

System/Unit: FAN - Exhaust

Comfort. Under control.

Asset: EF-8 AREA:

Unit Data		
	Design	**Actual**
MFG	NA	GREENHECK
Model Num	NA	SP-A90-130-VG

Test Data		
	Design	**Actual**
CFM	129	131

Motor Data		
	Design	**Actual**
Motor MFG	-	Baldor
Horsepower	-	12 W
Motor Rpm	-	1041
Phase	-	1
Voltage (rated)	-	115
Amperage (rated)	-	0.29

Completed By: Scott Springer

Notes:

FaciliBuild make it easy

National TAB

Project: CMS E.E. Waddell High Reno (Charlotte, NC)

System/Unit: FAN - Exhaust

Comfort. Under control.

Asset: EF-9 AREA:

Unit Data		
	Design	**Actual**
MFG	NA	GREENHECK
Model Num	NA	SP-A90-130-VG

Test Data		
	Design	**Actual**
CFM	129	132

Motor Data		
	Design	**Actual**
Horsepower	-	12 W
Motor Rpm	-	1041
Phase	-	1
Voltage (rated)	-	115
Amperage (rated)	-	0.29

Completed By: Scott Springer

Notes:

FaciliBuild make it easy

National TAB

Project: CMS E.E. Waddell High Reno (Charlotte, NC)

System/Unit: FAN - Exhaust

Comfort. Under control.

Asset: EF-10 AREA:

Unit Data		
	Design	**Actual**
MFG	NA	GREENHECK
Model Num	NA	SP-A90-130-VG

Test Data		
	Design	**Actual**
CFM	129	115

Motor Data		
	Design	**Actual**
Horsepower	-	12 W
Motor Rpm	-	1041
Phase	-	1
Voltage (rated)	-	115
Amperage (rated)	-	0.29

Completed By: Scott Springer

Notes:

FaciliBuild make it easy

National TAB

Project: CMS E.E. Waddell High Reno (Charlotte, NC)

System/Unit: FAN - Exhaust

Comfort. Under control.

Asset: EF-11 AREA:

Unit Data		
	Design	**Actual**
MFG	NA	GREENHECK
Model Num	NA	SP-A90-130-VG

Test Data		
	Design	**Actual**
CFM	129	122

Motor Data		
	Design	**Actual**
Horsepower	-	12 W
Motor Rpm	1041	1041
Phase	1	1
Voltage (rated)	115	115
Amperage (rated)	-	0.29

Completed By: Scott Springer

Notes:

FaciliBuild make it easy