

Report By:

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



**Report: TAB REPORT**  
**Function: Test, Adjust, & Balance**  
**Date: 06/19/2024**

**PROJECT**

**06-10-24 PENN STATION - FORT. MILL, SC**

1754 SC-160 WEST

FORT MILL, SC 29708

Client

C&T DESIGN  
4025 PORT UNION RD.  
FAIRFIELD, OH 45014

# National TAB

Project: 06-10-24 PENN STATION - FORT. MILL, SC

## Table Of Contents

<b>Section</b>	<b>Page #</b>
Summary	3
Remarks	4
Balance Schedule	6
Site Pictures	7
Checklists	14
AHU/RTU	25
FAN - Kitchen Exhaust	29
FAN - Exhaust	32
FAN - Supply	34
Kitchen Hood Type I	35
GRD Layout	38

## Project Summary

The summary below provides a quick understanding of our scope of work and general testing procedures. Enclosed in the report is further detail about your building performance including recommendations, asset data, and pictures. Our focus is to work with the trades to remedy any issues or deficiencies during the actual field balancing and not after the balancing has occurred to achieve a positive environment and outcome. The level of success is determined by the availability of the trades, possible parts needed, or time constraints.

### RTU's (Roof Top Units) w/ Diffusers

Each of the RTU's were measured at their terminal devices or via traverse to establish a total flow for that unit. Each RTU was adjusted to within tolerance of the engineer's design flow. Each outlet was then adjusted to within tolerance of the design flow. Outside air was measured by reading the intake air opening with a velocity grid and multiplying by the free area. The outside air damper was adjusted until the airflow was within the design requirements. Any equipment that fell outside of that tolerance is noted throughout the report.

### Kitchen Exhaust Hood & Associated Fans

Each kitchen exhaust fan was measured at the hood filter bay utilizing a velocity matrix and a manufacturer's correction factor. Each filter velocity is multiplied by the manufacturer's corrected area. The sum of these readings equals the total flow of the exhaust fans. The total flow of the exhaust was then adjusted to within tolerance of the design flow. . Any EF's that fell outside of this tolerance is noted throughout the report.

### MUA (Make Up Air Unit) w/ PSP

Total flow for the MAU (Make-up Air Unit) unit was measured by readings taken at the discharge of the hood's perforated supply plenum. Readings taken with a velocity matrix were averaged and multiplied by a manufacturer's corrected area. Adjustments to the fan speed were made in order to bring the unit to within design tolerance. Any MUA's that fell outside of this tolerance is noted throughout the report.

### General Exhaust Fans w/ Grilles

The general exhaust fans were measured by reading each air device with a flow hood. The total airflow for each fan is equivalent to the sum of these readings. Fan speed was then adjusted so that the airflow was within tolerance of design. Each terminal device was balanced to within tolerance of the design volume using the installed volume dampers. Any equipment that fell outside of this tolerance is noted throughout the report.

### Final Building Tests

After completing the test and balance the final building pressure was measured. It was confirmed that the building pressure fell within acceptable tolerances of  $-0.02''$  wc to  $+0.02''$  wc and that the pressure measurement coincides with the actual and design net airflow. Any deviations from these standards are noted throughout the report.

The hood capture was tested at the perimeter of the hood and the cook top level with the equipment heat on to ensure satisfactory hood capture and containment.

## Issue List

- RTU-2 SGRD -3 MISSING DAMPER



**06-10-24 PENN STATION - FORT. MILL, SC**

**Project Issue Information**

**Issue Name :** RTU-2 SGRD -3 MISSING DAMPER  
**Description :** 20% HIGH ON DIFFUSER, NO DAMPER.  
**Created By :** National TAB                      **Assigned To :** National TAB - Brianna Biggs  
**Status :** Open  
**Priority :** Urgent                                      **Asset Tag :**  
**Originated Date :** 06/21/2024 - JOASH ALBIN - National TAB

## National TAB

### Project: 06-10-24 PENN STATION - FORT. MILL, SC

- [Open](#) PENN\_STATION\_BALANCE\_SCHEDULE\_.xlsx

**CheckList List**

- TECH - SITE PICTURES



## 06-10-24 PENN STATION - FORT. MILL, SC

### CheckList Information

**Name :** TECH - SITE PICTURES **Status :** Completed  
**Assigned Organization :** National TAB **Asset :**  
**Requesting Organization :** National TAB  
**Created Date :** 06/12/2024 - Brianna Biggs - National TAB  
**Completed Date :** 06/13/2024 - JOASH ALBIN - National TAB

### CheckList Item Details

STORE FRONT Yes

**Comment:**



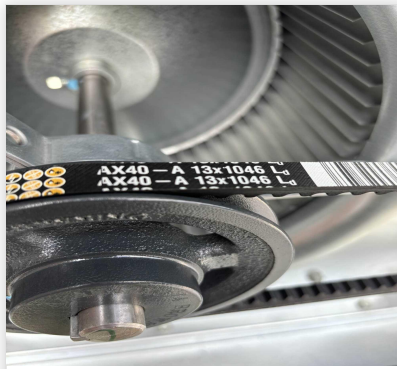
IMG\_7752  
06/13/2024

RTU-1 Yes

**Comment:**



IMG\_7755  
06/13/2024



IMG\_7756  
06/13/2024



IMG\_7754  
06/13/2024

RTU-2

Yes

Comment:



IMG\_7753  
06/13/2024



IMG\_7762  
06/13/2024

KEF-1

Yes

Comment:



IMG\_7765  
06/13/2024



IMG\_7764  
06/13/2024



IMG\_7763  
06/13/2024

KEF-2

Yes

Comment:



IMG\_7766  
06/13/2024



IMG\_7767  
06/13/2024



IMG\_7768  
06/13/2024

KEF-3

Yes

Comment:



IMG\_7770  
06/13/2024



IMG\_7771  
06/13/2024



IMG\_7769  
06/13/2024

EF-4

Yes

Comment:



IMG\_7784  
06/13/2024

MUA-1

Yes

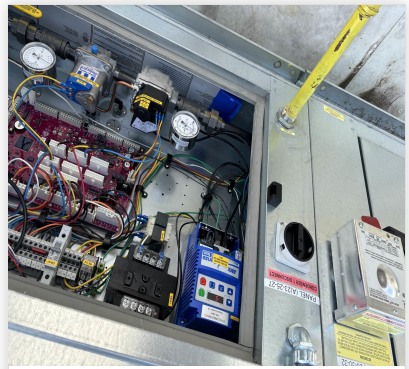
Comment:



IMG\_7776  
06/13/2024



IMG\_7772  
06/13/2024



IMG\_7773  
06/13/2024

HD-1

Yes

Comment:



image  
06/13/2024

HD-2

Yes

Comment:

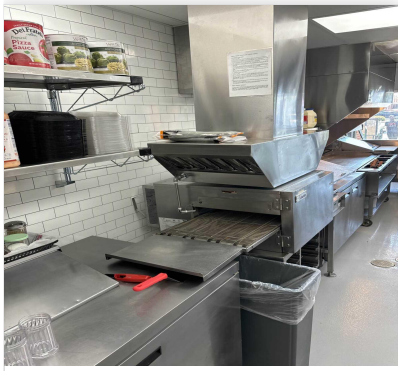


image  
06/13/2024

HD-3

Yes

Comment:



image  
06/13/2024

## CheckList List

- TECH - STEP 1: INITIAL WALKTHROUGH
- TECH - STEP 2: UNIT DATA AND EVAL
- TECH - STEP 3: TEST, ADJUST AND BALANCE
- TECH - STEP 4: FINAL TESTS



## 06-10-24 PENN STATION - FORT. MILL, SC

### CheckList Information

**Name :** TECH - STEP 1: INITIAL WALKTHROUGH **Status :** Completed  
**Assigned Organization :** National TAB **Asset :**  
**Requesting Organization :** National TAB  
**Created Date :** 06/12/2024 - Brianna Biggs - National TAB  
**Completed Date :** 06/13/2024 - JOASH ALBIN - National TAB

### CheckList Item Details

#### INITIAL SITE WALKTHROUGH

Review Plan Review Checklist, has it been signed off and meets our standards to start balancing? If not contact processor to ensure job is ready.

**Comment:**

Yes

All diffusers and grilles are installed and match design?

**Comment:**

Yes

All hood filters installed and accounted for?

**Comment:**

Yes

Hoods are wired and have power?

**Comment:**

Yes

Hood is free of alarms?

**Comment:**

Yes

Thermostats have power?

**Comment:**

Yes

Have trades/general contractor been notified about any issues and are they created on FaciliBuild?

**Comment:**

Yes



### 06-10-24 PENN STATION - FORT. MILL, SC

#### CheckList Information

**Name :** TECH - STEP 2: UNIT DATA AND EVAL **Status :** Completed

**Assigned Organization :** National TAB **Asset :**

**Requesting Organization :** National TAB

**Created Date :** 06/12/2024 - Brianna Biggs - National TAB

**Completed Date :** 06/13/2024 - JOASH ALBIN - National TAB

#### CheckList Item Details

##### UNIT DATA AND EVALUATION WHILE GATHERING UNIT DATA CHECK THE FOLLOWING:

##### RTU's/AHU's

Economizers are assembled and functional? Yes

**Comment:**

DCV Max damper opening position is set to minimum? Yes

**Comment:**

Free cooling enthalpy set point set for lowest setting (Typically "D") Yes

**Comment:**

Motors are all operating below the FLA rating? Yes

**Comment:**

Are belts tight?

**Comment:**

Yes

If direct drive unit is the speed controller working.

**Comment:**

Yes

Is gas piping installed and valves turned on?

**Comment:**

Yes

Unit free of noticeable noise and vibration

Yes

**Comment:**

Yes

**EF's**

Rotation is correct?

Yes

**Comment:**

Belts are tight?

**Comment:**

N/A

Grease cup installed on hood fan?

Yes

**Comment:**

Hinge kit installed installed on hood fan?

Yes

**Comment:**

Lean fan back. Is grease duct installation adequate and is duct ran all the way to the base of the fan?

Yes

**Comment:**

Flex conduit is long enough so that fan can be completely tilted back?

Yes

**Comment:**

There is no major leakage around base of fan?

Yes

**Comment:**

Is the motor operating below the motor FLA rating?

Yes

**Comment:**

For restroom fan(s) is the back draft damper installed and can it fully open?

Yes

**Comment:**

Unit free of noticeable noise and vibration?

Yes

**Comment:**

**MUA**

Rotation is correct?

Yes

**Comment:**

Gas piping is installed and valves are in on position?

Yes

**Comment:**

Heater tested and is functional?

Yes

**Comment:**

Internal motorized damper is fully opening?

Yes

**Comment:**

Motor is operating below the FLA rating?

Yes

**Comment:**

Unit free of noticeable noise and vibration?

Yes

**Comment:**

**HOODS**

Kitchen equipment installed in proper places?

Yes

**Comment:**

Can kitchen equipment be turned on for final smoke test?

Yes

**Comment:**

---

**DOCUMENTATION**

---

Have trades/general contractor been notified about any issues and are they created on FaciliBuild? Yes

---

**Comment:**

---



### 06-10-24 PENN STATION - FORT. MILL, SC

#### CheckList Information

**Name :** TECH - STEP 3: TEST, ADJUST AND BALANCE      **Status :** Completed

**Assigned Organization :** National TAB      **Asset :**

**Requesting Organization :** National TAB

**Created Date :** 06/12/2024 - Brianna Biggs - National TAB

**Completed Date :** 06/13/2024 - JOASH ALBIN - National TAB

#### CheckList Item Details

TEST, ADJUST, AND BALANCE ALL EQUIPMENT:

DURING TESTING MAKE NOTE OF THE FOLLOWING:

Is space free of drafting? Yes

Comment:

Is space comfortable in all areas? Yes

Comment:

Is the space free of ventilation noise? Yes

Comment:

If deviations from design were necessary to resolve 1-3 what were they? Otherwise put "NA".

Comment:

Notes/Comments :

N/A

Date :06/13/2024





## 06-10-24 PENN STATION - FORT. MILL, SC

### CheckList Information

**Name :** TECH - STEP 4: FINAL TESTS **Status :** Completed  
**Assigned Organization :** National TAB **Asset :**  
**Requesting Organization :** National TAB  
**Created Date :** 06/12/2024 - Brianna Biggs - National TAB  
**Completed Date :** 06/13/2024 - JOASH ALBIN - National TAB

### CheckList Item Details

#### FINAL TESTS

#### HOOD CAPTURE TEST

List equipment turned on for testing

**Comment:**

HOODS 1-3, all exhaust fans , MAU, and associated RTU

List smoke candle type used

**Comment:**

S-102

Smoke test capture - Perimeter of hood

**Comment:**

Video capture

Smoke test capture - Top of cooking surface

**Comment:**

Video capture

#### WITNESS

Date test was completed

**Comment:**

Video capture

TAB tech name / Firm

**Comment:**

Joash N Albin/ NTAB(video capture)

Site super name / Firm

**Comment:**

Video capture

Owner representative name / Firm (if Applicable)

**Comment:**

Video capture

Building pressure at front & back doors (All Systems On)

**Comment:**

0.12FD/ 0.17BD

**ADDITIONAL**

Do actual net building airflow, design net building airflow, and pressure coincide? If not why? (All three should either be positive or negative)

**Comment:**

Yes

**PROGRAM THERMOSTATS**

Occupied 7:15AM-10:15PM: 68 Heat/72 Cool (NOTE: 3 degree MAX setback)

**Comment:**

Yes

Unoccupied 10:16PM-7:14AM: 65 Heat/75 Cool

**Comment:**

Yes



# National TAB

Project: 06-10-24 PENN STATION - FORT. MILL, SC

## System/Unit: AHU/RTU

Asset: RTU1

AREA:

Unit Data		
	Design	Actual
MFG	LENNOX	TRANE
Serial Num	-	23462384PA
Model Num	ZGA060S4BM1P	GBC060A3ELB0D000
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	1
OA Filter Size 1	-	10X24X1
Num Final Filter 1	-	4
Final Filter Size 1	-	16X16X2
Num Final Filter 2	-	NA
Final Filter Size 2	-	NA

Motor Data		
	Design	Actual
Motor MFG	-	MARATHON
Frame	-	56
Horsepower	-	1
Motor Rpm	-	1725
Phase	1	3
Rated Voltage	208	230
Rated Amperage	-	4.0

Drive Data		
	Design	Actual
Motor Sheave Size	-	4"
Motor Bore Size	-	0.875"
Motor Sheave SetPt	-	1.5
Fan Sheave Size	-	3"
Fan Sheave Bore	-	0.635"
Belt CL Distance	-	16"
Num of Belts	-	1
Belt Size	-	AX40
Belt Alignment	-	GOOD

Test Data		
	Design	Actual
SF CFM	2000	1957
SF RPM	-	1195F/1731M
RA CFM	1400	1410
OA CFM	600	547
RL Voltage	-	210/212/208
RL Amperage	-	3.8/3.9/3.7
SF Rotation	-	CCW
SF System SetPt	-	CONTANT HIGH
RA Damper Position	-	NA
Min OA Damper Position	-	20% /1.3" OPEN
Min OA Damper Type	-	MANUAL
OA Enthalpy Setpt	-	NA

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.37"
Fan Suction SP	-	-0.83"
Fan Discharge SP	-	0.41"
Total ESP	-	0.78"
Fan Total SP	-	1.24"

General		
	Design	Actual
Fan Rotation Correct	-	Yes
Unit Filters Clean	-	Yes
Condensate Drain Installed	-	Yes

Completed By: JOASH ALBIN on 06/16/2024



# National TAB

Project:06-10-24 PENN STATION - FORT. MILL, SC

## AHU/RTU

### Diffuser Supply (GRD)

#### RTU1/

Asset									
Asset Name	Location	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
SGRD1	DINING	10"	10"	300	1	350	303	297	99.0
SGRD2	DINING	10"	10"	320	1	385	307	299	93.4
SGRD3	DINING	10"	10"	360	1	310	335	345	95.8
SGRD4	DINING	10"	10"	300	1	279	301	300	100.0
SGRD5	DINING	10"	10"	300	1	250	267	305	101.7
SGRD6	DINING	10"	10"	320	1	241	260	312	97.5
SGRD7	DINING	8"	8"	100	1	125	170	99	99.0
Total				2000		1940	1943	1957	97.85%

Completed By: JOASH ALBIN on 06/16/2024



# National TAB

Project: 06-10-24 PENN STATION - FORT. MILL, SC

## System/Unit: AHU/RTU

Asset: RTU2

AREA:

Unit Data		
	Design	Actual
MFG	LENNOX	LENNOX
Serial Num	-	23462313PA
Model Num	ZGA060S4BM1P	GBC060A3ELB0
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	1
OA Filter Size 1	-	10X24
Num Final Filter 1	-	4
Final Filter Size 1	-	16X16X2
Num Final Filter 2	-	NA
Final Filter Size 2	-	NA

Motor Data		
	Design	Actual
Motor MFG	-	MARATHON
Frame	-	56
Horsepower	-	1
Motor Rpm	-	1725
Phase	1	3
Rated Voltage	208	208
Rated Amperage	-	4

Drive Data		
	Design	Actual
Motor Sheave Size	-	4"
Motor Bore Size	-	0.875
Motor Sheave SetPt	-	2
Fan Sheave Size	-	3"
Fan Sheave Bore	-	0.625
Belt CL Distance	-	16"
Num of Belts	-	1
Belt Size	-	AX40
Belt Alignment	-	GOOD

Test Data		
	Design	Actual
SF CFM	2000	1994
SF RPM	-	1184F/1722M
RA CFM	1400	1425
OA CFM	600	569
RL Voltage	-	210/212/208
RL Amperage	-	3.7/3/7/3.9
SF Rotation	-	CCW
SF System SetPt	-	NA
RA Damper Position	-	NA
Min OA Damper Position	-	20%/1.3" OPEN
Min OA Damper Type	-	MANUALLY SET
OA Enthalpy Setpt	-	NA

Performance Data		
	Design	Actual
MA Plenum SP	-	0.45"
Fan Suction SP	-	0.81"
Fan Discharge SP	-	0.49"
Total ESP	-	0.94"
Fan Total SP	-	1.30"

General		
	Design	Actual
Fan Rotation Correct	-	YES
Unit Filters Clean	-	YES
Condensate Drain Installed	-	YES

Completed By: JOASH ALBIN on 06/16/2024



# National TAB

Project:06-10-24 PENN STATION - FORT. MILL, SC

## AHU/RTU

### Diffuser Supply (GRD)

#### RTU2/

Asset									
Asset Name	Location	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
SGRD1	MENS RR		6"	50	1	43	49	49	98.0
SGRD2	WOMENS RR		6"	50	1	41	51	51	102.0
SGRD3	PREP		10"	400	1	475	480	480	120.0
SGRD4	PREP		10"	400	1	360	363	383	95.8
SGRD5	PREP		10"	400	1	350	358	358	89.5
SGRD6	KITCHEN		8"	250	1	235	238	238	95.2
SGRD7	KITCHEN		8"	225	1	215	220	220	97.8
SGRD8	KITCHEN		8"	225	1	205	215	215	95.6
Total				2000		1924	1974	1994	99.7%

Completed By: JOASH ALBIN on 06/16/2024



# National TAB

Project: 06-10-24 PENN STATION - FORT. MILL, SC

## System/Unit: FAN - Exhaust

Asset: KEF1

AREA:FRYER HOOD

Unit Data		
	Design	Actual
<b>MFG</b>	CAPTIVEAIRE	CAPTIVEAIRE
<b>Model Num</b>	DU85HFA	EADU85H
<b>Serial Num</b>	-	6351107
<b>Type</b>	UPBLAST	UPBLAST
<b>Configuration</b>	VERTICAL	VERTICAL

Motor Data		
	Design	Actual
<b>Motor MFG</b>	-	TELCO GREEN
<b>Frame</b>	-	48EC
<b>Horsepower</b>	0.750	0.75
<b>Motor Rpm</b>	1	1
<b>Phase</b>	1	1
<b>Voltage (rated)</b>	115	115
<b>Amperage (rated)</b>	-	7.65
<b>Service Factor</b>	-	1

Test Data		
	Design	Actual
<b>CFM</b>	850	808
<b>Fan RPM</b>	1144	DD
<b>Fan Rotation</b>	-	CCW
<b>Motor RPM</b>	-	DD
<b>System SetPt</b>	-	60%
<b>RL Voltage</b>	-	119
<b>RL Amperage</b>	-	4.0
<b>Total ESP</b>	1.150"	1.01"
<b>Fan Inlet SP</b>	-	-1.01"
<b>Fan Discharge SP</b>	-	ATM

Completed By: JOASH ALBIN on 06/21/2024



# National TAB

Project: 06-10-24 PENN STATION - FORT. MILL, SC

## System/Unit: FAN - Exhaust

Asset: KEF2

AREA:OVEN HOOD

Unit Data		
	Design	Actual
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	DU33HFA	DU33HFA
Serial Num	-	6351107
Type	UPBLAST	UPBLAST
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	Actual
Motor MFG	-	TELCO GREEN
Frame	-	48EC
Horsepower	0.333	0.33
Motor Rpm	-	1800
Phase	1	1
Voltage (rated)	115	115
Amperage (rated)	-	3.6
Service Factor	-	1

Test Data		
	Design	Actual
CFM	600	588
Fan RPM	1360	DD
Fan Rotation	-	CCW
Motor RPM	-	DD
System SetPt	-	40%
RL Voltage	-	120
RL Amperage	-	1.86
Total ESP	0.600"	0.71"
Fan Inlet SP	-	-0.71"
Fan Discharge SP	-	ATM

Completed By: JOASH ALBIN on 06/21/2024



# National TAB

Project: 06-10-24 PENN STATION - FORT. MILL, SC

## System/Unit: FAN - Exhaust

Asset: KEF3

AREA:GRILL HOOD

Unit Data		
	Design	Actual
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	DU85HFA	DU85HFA
Serial Num	-	6351107
Type	UPBLAST	UPBLAST
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	Actual
Motor MFG	-	TELCO GREEN
Frame	-	42EC
Horsepower	0.750	0.75
Motor Rpm	-	1800
Phase	1	1
Voltage (rated)	115	115
Amperage (rated)	-	7.65
Service Factor	-	1

Test Data		
	Design	Actual
CFM	1120	1153
Fan RPM	1215	DD
Fan Rotation	-	CCW
Motor RPM	-	DD
System SetPt	-	70%
RL Voltage	-	120
RL Amperage	-	4.81
Total ESP	1.150"	1.17"
Fan Inlet SP	-	-1.17"
Fan Discharge SP	-	ATM

Completed By: JOASH ALBIN on 06/21/2024



# National TAB

Project: 06-10-24 PENN STATION - FORT. MILL, SC

## System/Unit: FAN - Exhaust

Asset: EF4

AREA:

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

Motor Data		
	Design	Actual
Motor MFG	-	NL
Frame	-	NL
Horsepower	-	NL
Motor Rpm	-	NL
Phase	-	1
Voltage (rated)	-	120
Amperage (rated)	-	0.9
Service Factor	-	1

Test Data		
	Design	Actual
CFM	75	72
Fan RPM	-	NA
Fan Rotation	-	CCW
Motor RPM	-	NA
System SetPt	-	High
RL Voltage	-	122
RL Amperage	-	0.86
Total ESP	-	Na
Fan Inlet SP	-	Na
Fan Discharge SP	-	Na

Completed By: JOASH ALBIN on 06/13/2024



# National TAB

Project: 06-10-24 PENN STATION - FORT. MILL, SC

## System/Unit: FAN - Exhaust

Asset: EF5

AREA:

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

Motor Data		
	Design	Actual
Motor MFG	-	NL
Frame	-	NL
Horsepower	-	NL
Motor Rpm	-	NL
Phase	-	1
Voltage (rated)	-	120
Amperage (rated)	-	0.9
Service Factor	-	1

Test Data		
	Design	Actual
CFM	75	71
Fan RPM	-	NL
Fan Rotation	-	CCW
Motor RPM	-	NA
System SetPt	-	High
RL Voltage	-	121
RL Amperage	-	0.81
Total ESP	-	NA
Fan Inlet SP	-	NA
Fan Discharge SP	-	NA

Completed By: JOASH ALBIN on 06/13/2024



# National TAB

Project: 06-10-24 PENN STATION - FORT. MILL, SC

## System/Unit: FAN - Supply

Asset: MUA1

AREA:COOKLINE (HD1 & HD3)

Unit Data		
	Design	Actual
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	EA1-D.250-15D-MPU	EA1-D.250-15D-MPU
Serial Num	-	6351107
Type	MUA	MUA
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	Actual
Motor MFG	-	WESTINGHOUSE
Frame	-	145T
Horsepower	2	2
Motor Rpm	-	1740
Phase	3	3
Voltage (rated)	208	230
Amperage (rated)	-	5.48
Service Factor	-	1.15

Gas Heat		
	Design	Actual
Heater Operates (y/n)	-	YES
Flame Status (pass/fail)	-	PASS
Inlet Air Temp SetPt	55	55
Discharge Air Temp SetPt	60	60/74 FOR COOLING
Air Flow Switch SP Actual	-	0.27

Test Data		
	Design	Actual
CFM	1630	1651
SF RPM	1898	DD
Motor RPM	-	DD
SF System SetPt	-	53.5Hz
RL Voltage	-	208
RL Amperage	-	3.5/3.3/3.1
Total ESP	-	0.28"
Fan Discharge SP	-	NA

General		
	Design	Actual
Fan Rotation Correct	-	YES

Completed By: JOASH ALBIN on 06/21/2024



# National TAB

Project: 06-10-24 PENN STATION - FORT. MILL, SC

System/Unit: Kitchen Hood Type I

Asset: HD1

AREA:

Unit Data		
	Design	Actual
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	3650 ELPX - 246 ACPSP ONLY	3650 ELPX - 246 ACPSP ONLY
Job / Serial Num	-	6351107
Type	TYPE I CANOPY	TYPE I CANOPY
Hood length	50"	50"
Hood Width	36"	36"
Supply Plenum Type	-	ACPSP
Supply Plenum Width	14"	14"
Supply Plenum Length	50"	50"

Test Data Supply		
	Design	Actual
Total AK Area	4.86	4.86
Kv factor (Vel)	0.89	0.89
Num of Readings	-	6
Reading1 FPM	-	155
Reading2 FPM	-	153
Reading3 FPM	-	142
Reading4 FPM	-	143
Reading5 FPM	-	158
Reading6 FPM	-	121
Ave FPM(corr)	-	129
CFM	630	628

Test Data Exhaust		
	Design	Actual
Filter Type	CAPTRATE SOLO	CAPTRATE SOLO
Filter Size 1	16X16	16X16
Filter Qty 1	3	3
Filter AK factor size 1	1.62	1.62
Filter Total AK Area	4.86	4.86
Filter1 FPM	-	195
Filter2 FPM	-	178
Filter3 FPM	-	188
Filter Ave FPM(corr)	-	166
CFM	850	808

Cooking Equipment		
	Design	Actual
Item 1	-	FRYER
Item 2	-	
Item 3	-	
Item 4	-	
Item 5	-	

Completed By: JOASH ALBIN on 06/21/2024



# National TAB

Project: 06-10-24 PENN STATION - FORT. MILL, SC

System/Unit: Kitchen Hood Type I

Asset: HD2

AREA:

Unit Data		
	Design	Actual
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	4412 PS OVN	4412 PS OVN
Job / Serial Num	-	6351107
Type	TYPE I CANOPY	TYPE I CANOPY
Hood length	21.25	21.25"
Hood Width	44"	44"

Test Data Exhaust		
	Design	Actual
Filter Type	SS BAFFLE	BAFFLE
Filter Size 1	10X20	10X20
Filter Qty 1	2	2
Filter AK factor size 1	22X10	22X10
Filter Total AK Area	3.36	3.36
Filter1 FPM	-	196
Filter2 FPM	-	194
Filter Ave FPM(corr)	-	175
CFM	600	588

Cooking Equipment		
	Design	Actual
Item 1	-	SANDWICH COOKER
Item 2	-	

Completed By: JOASH ALBIN on 06/16/2024



# National TAB

Project: 06-10-24 PENN STATION - FORT. MILL, SC

## System/Unit: Kitchen Hood Type I

Asset: HD3

AREA:

Unit Data		
	Design	Actual
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	3650 ELPX - 246 ACPSP ONLY	3650 ELPX - 246 ACPSP ONLY
Job / Serial Num	-	6351107
Type	TYPE I CANOPY	TYPE I CANOPY
Hood length	72"	72"
Hood Width	36"	36"
Supply Plenum Type	-	ACPSP
Supply Plenum Width	14"	14"
Supply Plenum Length	72"	72"

Test Data Exhaust		
	Design	Actual
Filter Type	CAPTRATE SOLO	CAPTRATE SOLO
Filter Size 1	16X16	16X16
Filter Qty 1	4	4
Filter AK factor size 1	1.62	1.62
Filter Total AK Area	6.48	6.48
Filter1 FPM	-	225
Filter2 FPM	-	190
Filter3 FPM	-	191
Filter4 FPM	-	195
Filter Ave FPM(corr)	-	178
CFM	1120	1153

Cooking Equipment		
	Design	Actual
Item 1	-	GRIDDLE
Item 2	-	
Item 3	-	
Item 4	-	
Item 5	-	

Test Data Supply		
	Design	Actual
Total AK Area	7	7
Kv factor (Vel)	0.89	0.89
Num of Readings	-	6
Reading1 FPM	-	165
Reading2 FPM	-	157
Reading3 FPM	-	177
Reading4 FPM	-	175
Reading5 FPM	-	160
Reading6 FPM	-	152
Reading7 FPM	-	
Reading8 FPM	-	
Reading9 FPM	-	
Reading10 FPM	-	
Reading11 FPM	-	
Reading12 FPM	-	
Reading13 FPM	-	
Reading14 FPM	-	
Ave FPM(corr)	-	146
CFM	1000	1023

Completed By: JOASH ALBIN on 06/21/2024

