

**Report By:**

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



**Report: TAB REPORT**  
**Function: Test, Adjust, & Balance**  
**Date: 12/09/2024**  
**Completed By: National TAB**

**PROJECT**  
**12-02-24 FREDDY'S SUMMERVILLE, SC**

2401 North Main Street

Summerville, SC 29486

**Client**

Charleston Custard, LLC

# National TAB

Project: 12-02-24 FREDDY'S SUMMERVILLE, SC

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## 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.

### 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

- HOOD1 / Alarm: Temp Sensor
- RTU1 / Condensate Line
- RTU1 / Economizer Controller



**12-02-24 FREDDY'S SUMMERVILLE, SC**

**Project Issue Information**

**Issue Name :** HOOD1 / Alarm: Temp Sensor  
**Description :** Hood1 has a alarm flashing on the screen for missing temp. sensor.  
**Created By :** National TAB                      **Assigned To :** National TAB - Dale Wheeler  
**Status :** Open  
**Priority :** Medium                                      **Asset Tag :**  
**Originated Date :** 12/06/2024 - Dale Wheeler - National TAB

Project Issue File Details



12/06/2024



**12-02-24 FREDDY'S SUMMERVILLE, SC**

**Project Issue Information**

**Issue Name :** RTU1 / Condensate Line  
**Description :** RTU1 condensate line is not installed.  
**Created By :** National TAB                      **Assigned To :** National TAB - Dale Wheeler  
**Status :** Open  
**Priority :** Medium                                      **Asset Tag :**  
**Originated Date :** 12/06/2024 - Dale Wheeler - National TAB

Project Issue File Details



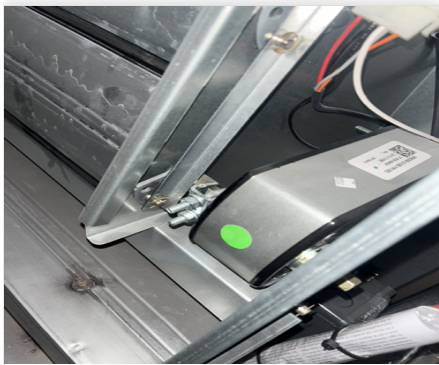


**12-02-24 FREDDY'S SUMMERVILLE, SC**

**Project Issue Information**

**Issue Name :** RTU1 / Economizer Controller  
**Description :** RTU1 economizer is not responding to controller, econ was set manually due to this issue.  
**Created By :** National TAB                      **Assigned To :** National TAB - Dale Wheeler  
**Status :** Open  
**Priority :** High                                      **Asset Tag :**  
**Originated Date :** 12/06/2024 - Dale Wheeler - National TAB

Project Issue File Details



12/06/2024

### AIR BALANCE SCHEDULE

UNIT	AREA SERVED	HVAC SUPPLY		HVAC RETURN		HVAC OUTDOOR		OA %		HOOD MAKE-UP		HOOD EXHAUST		GENERAL EXH.	
		DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL
DOAS-1	KITCHEN	2300	2161	0	0	2300	2161	100.0%	100.0%						
RTU-1	DINING	4800	4439	4400	4022	400	417	8.3%	9.4%						
EF-1	RESTROOM													110	105
EF-2	RESTROOM													110	102
KEF-1	HOOD 1											1600	1506		
KEF-2	HOOD 2											775	738		
<b>TOTALS</b>		7100	6600	4400	4022	2700	2578			0	0	2375	2244	220	207

#### NET BUILDING AIRFLOW CALCULATION

TOTALS	DESIGN	ACTUAL
TOTAL OA	2700	2578
TOTAL EXHAUST	2595	2451
<b>NET AIRFLOW</b>	<b>105</b>	<b>127</b>

DOOR TESTED	BUILDING PRESSURE MEASUREMENTS (IN. H2O)
FRONT	0.015
SIDE	0.015
REAR	0.014
<b>AVERAGE</b>	<b>0.0147</b>

#### FINAL CHECKS

- ACTUAL NET AIRFLOW COINCIDES WITH DESIGN: ✓

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- MEASURED PRESSURES COINCIDES WITH ACTUAL NET AIRFLOW: ✓

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- PRESSURE FALLS WITHIN IMC TOLERANCE OF +/-0.02" W.C. ✓

NOTES:

## CheckList List

- TECH - SITE PICTURES



**12-02-24 FREDDY'S SUMMERVILLE, SC**

**CheckList Information**

**Name :** TECH - SITE PICTURES **Status :** Completed  
**Assigned Organization :** National TAB **Asset :**  
**Requesting Organization :** National TAB  
**Created Date :** 12/04/2024 - Brian Turnbough - National TAB  
**Completed Date :** 12/06/2024 - Dale Wheeler - National TAB

**CheckList Item Details**

**STORE FRONT**

**Comment:**



**12/06/2024**

**RTU-1**

**Comment:**



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**DOAS**

**Comment:**

---



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**EF-1**

**Comment:**

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12/06/2024

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EF-2

Comment:



12/06/2024

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KEF-1

Comment:



12/06/2024

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**KEF-2**

**Comment:**

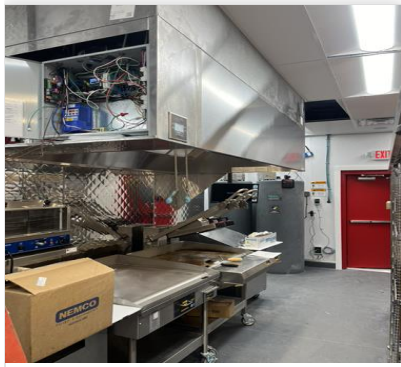


12/06/2024

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**HOOD-1**

**Comment:**



12/06/2024

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**HOOD-2**

**Comment:**



12/06/2024

## **CheckList List**

- TECH - STEP 1: INITIAL SITE WALKTHROUGH
- TECH - STEP 2: UNIT DATA AND EVAL
- TECH - STEP 3: TEST, ADJUST AND BALANCE
- TECH - STEP 4: FINAL TESTS
- TECH - STEP 5: FINAL DOCUMENTATION



12-02-24 FREDDY'S SUMMERVILLE, SC

CheckList Information

**Name :** TECH - STEP 1: INITIAL SITE WALKTHROUGH      **Status :** Completed

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

**Requesting Organization :** National TAB

**Created Date :** 12/04/2024 - Brian Turnbough - National TAB

**Completed Date :** 12/06/2024 - Dale Wheeler - National TAB

CheckList Item Details

INITIAL SITE WALKTHROUGH

All diffusers and grilles are installed and match design?      Yes

Comment:

All hood filters installed and accounted for?      Yes

Comment:

Hoods are wired and have power?      Yes

Comment:

Hood is free of alarms?      No

Comment:

MISSING TEMP. SENSOR ALARM

Thermostats have power?      Yes

Comment:

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

Comment:

YES

**Notes/Comments :**

N/A

**Date :**12/06/2024



12-02-24 FREDDY'S SUMMERVILLE, SC

**CheckList Information**

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

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

**Requesting Organization :** National TAB

**Created Date :** 12/04/2024 - Brian Turnbough - National TAB

**Completed Date :** 12/06/2024 - Dale Wheeler - National TAB

**CheckList Item Details**

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

RTU's/AHU's

<b>Economizers are assembled and functional?</b>	No
--	----

**Comment:**

RTU1 / ECON IS ASSEMBLED BUT IS NOT OPERATIONAL WITH CONTROL BOARD, OUTSIDE AIR DAMPER HAD TO BE SET MANUALLY YES / DOAS UNIT

<b>DCV Max damper opening position is set to minimum?</b>	N/A
---	-----

**Comment:**

<b>Free cooling enthalpy set point set for lowest setting (Typically "D")</b>	N/A
---	-----

**Comment:**

<b>Motors are all operating below the FLA rating?</b>	Yes
---	-----

**Comment:**

**Are belts tight?**

**Comment:**

YES / RTU1

**If direct drive unit is the speed controller working.**

Comment:

Is gas piping installed and valves turned on?

Yes

Comment:

Unit free of noticeable noise and vibration

Yes

Comment:

EF's

Rotation is correct?

Yes

Comment:

Belts are tight?

Comment:

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?** N/A

**Comment:**

CEILING MOUNTED FANS BACKDRAFT DAMPER WAS REMOVED DUE TO NOT OPENING.

**Unit free of noticeable noise and vibration?** Yes

**Comment:**

**MUA**

**Rotation is correct?** N/A

**Comment:**

**Gas piping is installed and valves are in on position?** N/A

**Comment:**

**Heater tested and is functional?** N/A

**Comment:**

**Internal motorized damper is fully opening?** N/A

**Comment:**

**Motor is operating below the FLA rating?** N/A

**Comment:**

**Unit free of noticeable noise and vibration?** N/A

**Comment:**

**HOODS**

**Kitchen equipment installed in proper places?** N/A

**Comment:**

**Can kitchen equipment be turned on for final smoke test?** N/A

**Comment:**

**DOCUMENTATION**

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

Yes

Comment:



12-02-24 FREDDY'S SUMMERVILLE, SC

**CheckList Information**

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

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

**Requesting Organization :** National TAB

**Created Date :** 12/04/2024 - Brian Turnbough - National TAB

**Completed Date :** 12/06/2024 - Dale Wheeler - 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:

SEE NOTES SECTION FOR RTU1 & DOAS UNIT

**Notes/Comments :**

N/A

**Date :**12/06/2024



12-02-24 FREDDY'S SUMMERVILLE, SC

CheckList Information

**Name :** TECH - STEP 4: FINAL TESTS **Status :** Completed

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

**Requesting Organization :** National TAB

**Created Date :** 12/04/2024 - Brian Turnbough - National TAB

**Completed Date :** 12/06/2024 - Dale Wheeler - National TAB

CheckList Item Details

**FINAL TESTS**

**HOOD CAPTURE TEST**

**List equipment turned on for testing**

**Comment:**

NO EQUIPMENT WAS TURNED ON FOR TEST

**List smoke candle type used**

**Comment:**

SMOKE EMITTER

**Smoke test capture - Perimeter of hood**

**Comment:**

100%

**Smoke test capture - Top of cooking surface**

**Comment:**

100%

**WITNESS**

**Date test was completed**

12/04/2024

**Comment:**

12/4/24

---

**TAB tech name / Firm**

**Comment:**

DALE WHEELER / NTAB

---

**Site super name / Firm**

**Comment:**

N/A

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**Owner representative name / Firm (if Applicable)**

**Comment:**

Derek DeVera Charleston Custard, LLC

---

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

**Comment:**

FRONT DOOR +0.015" / BACK DOOR +0.014" / SIDE DOOR 0.015" / ALL SYSTEMS ON

---

**ADDITIONAL**

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

**Comment:**

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**Thermostats are programmed?**

No

**Comment:**

HMI PROGRAMMED BY CAS

---

**Notes/Comments :**

N/A

**Date :**12/06/2024



12-02-24 FREDDY'S SUMMERVILLE, SC

**CheckList Information**

**Name :** TECH - STEP 5: FINAL DOCUMENTATION      **Status :** Not Completed

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

**Requesting Organization :** National TAB

**Created Date :** 12/04/2024 - Brian Turnbough - National TAB

**CheckList Item Details**

**FINAL DOCUMENTATION**

<b>Marked Data capture complete for all assets?</b>	Yes
---	-----

**Comment:**

<b>Picture file sent to processing team or uploaded?</b>	Yes
--	-----

**Comment:**

<b>Balance schedule complete and uploaded?</b>	No
--	----

**Comment:**

<b>Prelim report generated and reviewed?</b>	No
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**Comment:**

# National TAB

Project: 12-02-24 FREDDY'S SUMMERVILLE, SC

System/Unit: AHU/RTU



Asset: DOAS1

AREA:KITCHEN

Unit Data		
	Design	Actual
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Serial Num	-	6549154
Model Num	CASRTU3-I.400-18-15T	CAS-HVAC3-1.200-15-20T
Type	DOAS	DOAS
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	4
OA Filter Size 1	-	15X24
Num Final Filter 1	-	8
Final Filter Size 1	-	24X20X2

Motor Data		
	Design	Actual
Motor MFG	-	NEMA
Frame	-	145T
Horsepower	2.00	1.5
Motor Rpm	-	1740
Phase	3	3
Rated Voltage	208	230
Rated Amperage	-	4.03

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

Test Data		
	Design	Actual
SF CFM	2300	2161
SF RPM	-	DD /1740
RA CFM	0	0
OA CFM	2300	2161
RL Voltage	-	194/195/195
RL Amperage	-	3.5/3.5/3.5
SF Rotation	-	CCW
SF System SetPt	-	53 HZ.
RA Damper Position	-	0%
Min OA Damper Position	-	100%
Min OA Damper Type	-	ECON

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.122"
Fan Suction SP	-	-0.317"
Fan Discharge SP	-	0.444"
Total ESP	0.500"	0.566"
Fan Total SP	-	0.761"

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

Completed By: Dale Wheeler on 12/06/2024

Notes:

[1] PRINTS ARE WRONG. DOAS UNIT IS ONLY CAPABLE OF 2300 CFM PER CAPTIVE AIRE. DIFFUSER DESIGNS WERE ADJUST DUE TO THIS ISSUE.

Written By: Dale Wheeler on 12/06/2024

**National TAB**  
 Project:12-02-24 FREDDY'S SUMMERVILLE, SC  
**AHU/RTU**



**Diffuser Supply (GRD)**

**DOAS1/KITCHEN**

<b>Asset</b>									
<b>Asset Name</b>	<b>Location</b>	<b>Type</b>	<b>Size</b>	<b>DESIGN CFM</b>	<b>AK</b>	<b>CFM(1)</b>	<b>CFM(2)</b>	<b>FINAL CFM</b>	<b>% to design</b>
DOAS1-SGRD1	KITCHEN	C	12"	325	1	310	294	295	90.8
DOAS1-SGRD2	KITCHEN	C	12"	400	1	394	352	378	94.5
DOAS1-SGRD3	KITCHEN	C	12"	300	1	300	333	310	103.3
DOAS1-SGRD4	KITCHEN	D	12"	150	1	139	167	139	92.7
DOAS1-SGRD5	KITCHEN	C	12"	375	1	345	388	345	92.0
DOAS1-SGRD6	KITCHEN	C	12"	425	1	378	302	394	92.7
DOAS1-SGRD7	KITCHEN	C	12"	325	1	312	378	300	92.3
<b>Total</b>				2300		2178	2214	2161	93.96%

# National TAB

Project: 12-02-24 FREDDY'S SUMMERVILLE, SC

System/Unit: AHU/RTU



Asset: RTU1

AREA:DINING

Unit Data		
	Design	Actual
MFG	CAPTIVEAIRE	YORK
Serial Num	-	N2E4339759
Model Num	CASRTU3- I.400-18-15T	ZJ150N24R2B5DCE1A2
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	1
OA Filter Size 1	-	29X20.5"
Num Final Filter 1	-	4
Final Filter Size 1	-	20X24X2

Test Data		
	Design	Actual
SF CFM	4800	4439
SF RPM	-	1202
RA CFM	4400	4022
OA CFM	400	417
RL Voltage	-	210/210/209
RL Amperage	-	13.4/13.3/13.4
SF Rotation	-	CW
RA Damper Position	-	6.0"
Min OA Damper Position	-	0.25"
Min OA Damper Type	-	ECON

Motor Data		
	Design	Actual
Motor MFG	-	BALDOR
Frame	-	184T
Horsepower	-	5.0
Motor Rpm	-	1750
Phase	3	3
Rated Voltage	208	208
Rated Amperage	-	13.5

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.832"
Fan Suction SP	-	-1.30"
Fan Discharge SP	-	1.27"
Total ESP	0.8"	2.1"
Fan Total SP	-	2.57"

Drive Data	
	Actual
Motor Sheave Size	VP56
Motor Bore Size	1 1/8"
Motor Sheave SetPt	2.5 TURNS OUT
Fan Sheave Size	7.0"
Fan Sheave Bore	1.0"
Belt CL Distance	19 1/8"
Num of Belts	1
Belt Size	BX56
Belt Alignment	GOOD

General	
	Actual
Fan Rotation Correct	YES
Unit Filters Clean	YES
Condensate Drain Installed	NO

Completed By: Dale Wheeler on 12/06/2024

Notes:  
[1] DINING ROOM DIFFUSER DESIGNS WERE ADJUSTED TO BE WITHIN UNIT TOTAL.

Written By: Dale Wheeler on 12/06/2024

# National TAB

Project: 12-02-24 FREDDY'S SUMMERVILLE, SC

## AHU/RTU



**Diffuser Supply (GRD)**

**RTU1/DINING**

Asset									
Asset Name	Location	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
RTU1-SGRD1	DINING	A	12"	450	1	345	389	412	91.6
RTU1-SGRD2	DINING	A	12"	450	1	399	412	441	98.0
RTU1-SGRD3	DINING	A	12"	450	1	563	377	423	94.0
RTU1-SGRD4	DINING	A	12"	450	1	578	352	414	92.0
RTU1-SGRD5	DINING	A	12"	450	1	596	369	417	92.7
RTU1-SGRD6	DINING	A	12"	100	1	75	83	92	92.0
RTU1-SGRD7	DINING	A	12"	425	1	278	382	391	92.0
RTU1-SGRD8	DINING	A	12"	425	1	144	344	385	90.6
RTU1-SGRD9	DINING	A	12"	400	1	56	352	362	90.5
RTU1-SGRD10	DINING	A	12"	400	1	411	345	365	91.3
RTU1-SGRD11	RESTROOM	F	8"	450	1	299	355	412	91.6
RTU1-SGRD12	RESTROOM	F	8"	150	1	127	138	142	94.7
RTU1-SGRD13	HALLWAY	E	8"	100	1	14	67	91	91.0
RTU1-SGRD14	VESTIBULE	G	8"	100	1	71	82	92	92.0
<b>Total</b>				<b>4800</b>		<b>3956</b>	<b>4047</b>	<b>4439</b>	<b>92.48%</b>

# National TAB

Project: 12-02-24 FREDDY'S SUMMERVILLE, SC

System/Unit: FAN - Exhaust



Asset: EF1

AREA:

Unit Data		
	Design	Actual
MFG	COOK	PANASONIC
Model Num	GC-184	RG-R811A
Serial Num	-	40327
Type	CEILING	CEILING MOUNTED
Configuration	VERTICAL	HORIZONTAL

Motor Data		
	Design	Actual
Motor MFG	-	PANASONIC
Frame	-	N/L
Horsepower	-	N/L
Motor Rpm	-	N/L
Phase	1	1
Voltage (rated)	120	120
Amperage (rated)	-	N/L
Service Factor	-	N/L

Test Data		
	Design	Actual
CFM	110	105
Fan RPM	-	DD
Fan Rotation	-	CCW
Motor RPM	-	DD
System SetPt	-	HIGH
RL Voltage	-	119
RL Amperage	-	0.5
Total ESP	1/4"	N/R
Fan Inlet SP	-	N/R
Fan Discharge SP	-	ATM

Completed By: Dale Wheeler on 12/06/2024

# National TAB

Project: 12-02-24 FREDDY'S SUMMERVILLE, SC

System/Unit: FAN - Exhaust



Asset: EF2

AREA:

Unit Data		
	Design	Actual
MFG	COOK	PANASONIC
Model Num	GC-184	RG-R811A
Serial Num	-	40430
Type	CEILING	CEILING MOUNTED
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	Actual
Motor MFG	-	PANASONIC
Frame	-	N/L
Horsepower	-	N/L
Motor Rpm	-	N/L
Phase	1	1
Voltage (rated)	120	120
Amperage (rated)	-	0.7
Service Factor	-	N/L

Test Data		
	Design	Actual
CFM	110	102
Fan RPM	-	DD
Fan Rotation	-	CCW
Motor RPM	-	DD
System SetPt	-	HIGH
RL Voltage	-	121
RL Amperage	-	0.5
Total ESP	1/4"	N/L
Fan Inlet SP	-	N/L
Fan Discharge SP	-	ATM

Completed By: Dale Wheeler on 12/06/2024

# National TAB

Project: 12-02-24 FREDDY'S SUMMERVILLE, SC

System/Unit: FAN - Exhaust



Asset: KEF1

AREA:HOOD 1 (GRIDDLE)

Unit Data		
	Design	Actual
MFG	COOK	CAPTIVEAIRE
Model Num	GC-184	CASRE18DD
Serial Num	-	6549154
Type	DOWNBLAST	UTILTIY
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	Actual
Motor MFG	-	NEMA
Frame	-	145T
Horsepower	1.000	1.0
Motor Rpm	-	1150
Phase	3	3
Voltage (rated)	208	230
Amperage (rated)	-	3.44
Service Factor	-	1.15

Test Data		
	Design	Actual
CFM	1600	1506
Fan RPM	-	DD / 1150
Fan Rotation	-	CCW
Motor RPM	-	DD / 1150
System SetPt	-	46.7 HZ
RL Voltage	-	208/208/209
RL Amperage	-	2.4 AVG.
Total ESP	1.500"	N/R
Fan Inlet SP	-	N/R
Fan Discharge SP	-	ATM

Completed By: Dale Wheeler on 12/06/2024

# National TAB

Project: 12-02-24 FREDDY'S SUMMERVILLE, SC

System/Unit: FAN - Exhaust



Asset: KEF2

AREA:HOOD 2 (FRYER)

Unit Data		
	Design	Actual
MFG	COOK	CAPTIVEAIRE
Model Num	GC-184	DU50HFA
Serial Num	-	6549154
Type	-	UPBLAST
Configuration	-	VERTICAL

Motor Data		
	Design	Actual
Motor MFG	-	TELCO
Frame	-	N/L
Horsepower	-	0.50
Motor Rpm	-	1800
Phase	-	1
Voltage (rated)	-	115
Amperage (rated)	-	6.3
Service Factor	-	1.0

Test Data		
	Design	Actual
CFM	775	738
Fan RPM	-	DD / 1800
Fan Rotation	-	CCW
Motor RPM	-	DD / 1800
System SetPt	-	70%
RL Voltage	-	121
RL Amperage	-	4.4
Total ESP	-	0.684"
Fan Inlet SP	-	-0.684"
Fan Discharge SP	-	ATM

Completed By: Dale Wheeler on 12/06/2024

# National TAB

Project: 12-02-24 FREDDY'S SUMMERVILLE, SC

System/Unit: Kitchen Hood Type I



Asset: HD1

AREA:GRIDDLE

Unit Data		
	Design	Actual
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	5424 ND-2	5424 ND-2
Job / Serial Num	-	6549154
Type	TYPE I CANOPY	TYPE I CANOPY
Hood length	96"	96"
Hood Width	54"	54"

Test Data Exhaust		
	Design	Actual
Filter Type	CAPTRATE SOLO FILTER	CAPTRATE SOLO
Filter Size 1	16X16	16X16
Filter Qty 1	5	5
Filter AK factor size 1	1.62	1.62
Filter Total AK Area	8.1	8.1
Filter1 FPM	-	166
Filter2 FPM	-	194
Filter3 FPM	-	222
Filter4 FPM	-	180
Filter5 FPM	-	165
Filter Ave FPM(corr)	-	186
CFM	1600	1506

Cooking Equipment	
	Actual
Item 1	GRIDDLE
Item 2	GRIDDLE

Completed By: Dale Wheeler on 12/05/2024

# National TAB

Project: 12-02-24 FREDDY'S SUMMERVILLE, SC

System/Unit: Kitchen Hood Type I



Asset: HD2

AREA:FRYER

Unit Data		
	Design	Actual
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	5424 ND-2	5424ND-2
Job / Serial Num	-	6549154
Type	TYPE I CANOPY	TYPE I CANOPY
Hood length	81"	60"
Hood Width	54"	54"

Test Data Exhaust		
	Design	Actual
Filter Type	CAPTRATE SOLO FILTER	CAPTRATE SOLO
Filter Size 1	16X16	16X16
Filter Qty 1	5	3
Filter AK factor size 1	1.62	1.62
Filter Total AK Area	8.1	4.86
Filter1 FPM	-	145
Filter2 FPM	-	163
Filter3 FPM	-	147
Filter Ave FPM(corr)	-	152
CFM	775	738

Cooking Equipment	
	Actual
Item 1	FRYER
Item 2	FRYER

Completed By: Dale Wheeler on 12/05/2024