

**Report By:**

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



**Report: TAB Report**  
**Function: Test, Adjust, & Balance**  
**Date: 12/13/2024**  
**Completed By: National TAB**

# PROJECT

## 12-09-2024 FREDDY'S - HUNTSVILLE, AL

7001 Cabela Drive

Huntsville, AL 35806

**Client**

HLI FOODS

# National TAB

Project: 12-09-2024 FREDDY'S - HUNTSVILLE, AL

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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.

### 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

- EF-1
- EF-1 & EF-2 Backdraft damper
- EF-2
- Gas Piping
- KEF-1 Grease Pan
- KEF-2 Bolts
- KEF-2 Grease Pan
- RTU-1 Final Filter
- RTU-1 Ventilation Noise



**12-09-2024 FREDDY'S - HUNTSVILLE, AL**

**Project Issue Information**

**Issue Name :** EF-1  
**Description :** EF-1 is not wired to power. Unable to balance unit until this is resolved.  
**Created By :** National TAB                      **Assigned To :** National TAB - Kristopher Passley  
**Status :** Closed  
**Priority :** Urgent                                      **Asset Tag :**  
**Originated Date :** 12/12/2024 - Kristopher Passley - National TAB

Project Issue File Details



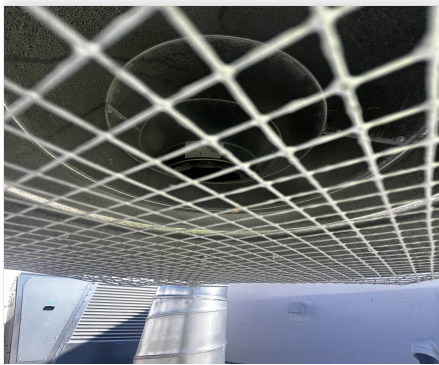


**12-09-2024 FREDDY'S - HUNTSVILLE, AL**

**Project Issue Information**

**Issue Name :** EF-1 & EF-2 Backdraft damper  
**Description :** Back draft damper is not installed. Recommend mechanical install as per plans. See plans MP0>14. Exhaust fans:> "B"  
**Created By :** National TAB                      **Assigned To :** National TAB - Kristopher Passley  
**Status :** Open  
**Priority :** High                                      **Asset Tag :**  
**Originated Date :** 12/12/2024 - Kristopher Passley - National TAB

Project Issue File Details



12/12/2024



12-09-2024 FREDDY'S - HUNTSVILLE, AL

Project Issue Information

**Issue Name :** EF-2  
**Description :** EF-2 is not wired to power. Unable to balance unit until this is resolved.  
**Created By :** National TAB                      **Assigned To :** National TAB - Kristopher Passley  
**Status :** Closed  
**Priority :** Urgent                                      **Asset Tag :**  
**Originated Date :** 12/12/2024 - Kristopher Passley - National TAB

Project Issue File Details



12/12/2024



**12-09-2024 FREDDY'S - HUNTSVILLE, AL**

**Project Issue Information**

**Issue Name :** Gas Piping  
**Description :** See Plans MP0> 7. PIPING> H. NATURAL GAS> 2) GAS PIPING PAINTING  
All black steel gas piping located exterior to the building shall be primed and painted to either match adjacent exterior where located on or near exterior wall and painted safety yellow where located on the roof.  
**Created By :** National TAB                      **Assigned To :** National TAB - Kristopher Passley  
**Status :** Open  
**Priority :** Medium                                      **Asset Tag :**  
**Originated Date :** 12/12/2024 - Kristopher Passley - National TAB

Project Issue File Details



12/12/2024



**12-09-2024 FREDDY'S - HUNTSVILLE, AL**

**Project Issue Information**

**Issue Name :** KEF-1 Grease Pan  
**Description :** Grease pan was not installed on KEF-1. Recommend having mechanical install.  
**Created By :** National TAB                      **Assigned To :** National TAB - Kristopher Passley  
**Status :** Open  
**Priority :** Medium                                      **Asset Tag :**  
**Originated Date :** 12/12/2024 - Kristopher Passley - National TAB

Project Issue File Details



12/12/2024



12-09-2024 FREDDY'S - HUNTSVILLE, AL

**Project Issue Information**

**Issue Name :** KEF-2 Bolts  
**Description :** KEF-3 is currently not bolted to the curb.  
**Created By :** National TAB                      **Assigned To :** National TAB - Kristopher Passley  
**Status :** Open  
**Priority :** Medium                                      **Asset Tag :**  
**Originated Date :** 12/12/2024 - Kristopher Passley - National TAB

Project Issue File Details



12/12/2024



12/12/2024



12/12/2024



**12-09-2024 FREDDY'S - HUNTSVILLE, AL**

**Project Issue Information**

**Issue Name :** KEF-2 Grease Pan  
**Description :** Grease pan was not installed on KEF-2. Recommend having mechanical install.  
**Created By :** National TAB                      **Assigned To :** National TAB - Kristopher Passley  
**Status :** Open  
**Priority :** Medium                                      **Asset Tag :**  
**Originated Date :** 12/12/2024 - Kristopher Passley - National TAB

Project Issue File Details



12/12/2024



**12-09-2024 FREDDY'S - HUNTSVILLE, AL**

**Project Issue Information**

**Issue Name :** RTU-1 Final Filter  
**Description :** Factory final filters are currently installed in RTU-1. Recommend installed MERV 8 or better filters in unit. 4 count 20"X20"X2"  
**Created By :** National TAB                      **Assigned To :** National TAB - Kristopher Passley  
**Status :** Open  
**Priority :** High                                      **Asset Tag :**  
**Originated Date :** 12/12/2024 - Kristopher Passley - National TAB

Project Issue File Details



12/12/2024



**12-09-2024 FREDDY'S - HUNTSVILLE, AL**

**Project Issue Information**

**Issue Name :** RTU-1 Ventilation Noise  
**Description :** Unit is loud inside the dining area.  
**Created By :** National TAB                      **Assigned To :** National TAB - Kristopher Passley  
**Status :** Open  
**Priority :** InfoOnly                                      **Asset Tag :**  
**Originated Date :** 12/12/2024 - Kristopher Passley - National TAB

**AIR BALANCE SCHEDULE**

UNIT	AREA	HVAC SUPPLY		HVAC RETURN		HVAC OUTDOOR		OA %		HOOD MAKE-UP		HOOD EXHAUST		GENERAL EXH.	
	SERVED	DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL
RTU-1	DINING	5000	4689	4100	3787	900	902	18.0%	19.2%						
DOAS	KITCHEN	2650	2705	0	0	2650	2705	100.0%	100.0%						
KEF-1	HD 1											1600	1579		
KEF-2	HD 2											775	772		
KEF-3	HD 3											525	527		
EF-1	WOMEN'S RR													150	157
EF-2	MEN'S RR													150	141
<b>TOTALS</b>		7650	7394	4100	3787	3550	3607			0	0	2900	2878	300	298

**NET BUILDING AIRFLOW CALCULATION**

TOTALS	DESIGN	ACTUAL
TOTAL OA	3550	3607
TOTAL EXHAUST	3200	3176
<b>NET AIRFLOW</b>	350	431

DOOR TESTED	BUILDING PRESSURE MEASUREMENTS (IN. H <sub>2</sub> O)
FRONT	0.002
SIDE	0.001
REAR	0.001
<b>AVERAGE</b>	<b>0.0013</b>

**FINAL CHECKS**

- ACTUAL NET AIRFLOW COINCIDES WITH DESIGN: ✓
- MEASURED PRESSURES COINCIDES WITH ACTUAL NET AIRFLOW: ✓
- PRESSURE FALLS WITHIN IMC TOLERANCE OF +/-0.02" W.C. ✓

NOTES:

## 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



12-09-2024 FREDDY'S - HUNTSVILLE, AL

CheckList Information

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

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

**Requesting Organization :** National TAB

**Created Date :** 12/10/2024 - Brian Turnbough - National TAB

**Completed Date :** 12/13/2024 - Kristopher Passley - 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?      Yes

Comment:

Thermostats have power?      Yes

Comment:

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

Comment:

Yes



12-09-2024 FREDDY'S - HUNTSVILLE, AL

CheckList Information

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

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

**Requesting Organization :** National TAB

**Created Date :** 12/10/2024 - Brian Turnbough - National TAB

**Completed Date :** 12/13/2024 - Kristopher Passley - 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:

N/A

If direct drive unit is the speed controller working.

**Comment:**

YES

---

**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:**

N/A

---

**Grease cup installed on hood fan?**

No

---

**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:**

---

<b>For restroom fan(s) is the back draft damper installed and can it fully open?</b>	No
--	----

**Comment:**

---

<b>Unit free of noticeable noise and vibration?</b>	Yes
---	-----

**Comment:**

---

**MUA**

---

<b>Rotation is correct?</b>	N/A
-----------------------------	-----

**Comment:**

---

<b>Gas piping is installed and valves are in on position?</b>	N/A
---	-----

**Comment:**

---

<b>Heater tested and is functional?</b>	N/A
---	-----

**Comment:**

---

<b>Internal motorized damper is fully opening?</b>	N/A
--	-----

**Comment:**

---

<b>Motor is operating below the FLA rating?</b>	N/A
---	-----

**Comment:**

---

<b>Unit free of noticeable noise and vibration?</b>	N/A
---	-----

**Comment:**

---

**HOODS**

---

<b>Kitchen equipment installed in proper places?</b>	Yes
--	-----

**Comment:**

---

<b>Can kitchen equipment be turned on for final smoke test?</b>	No
---	----

**Comment:**

**DOCUMENTATION**

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

Yes

**Comment:**



12-09-2024 FREDDY'S - HUNTSVILLE, AL

**CheckList Information**

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

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

**Requesting Organization :** National TAB

**Created Date :** 12/10/2024 - Brian Turnbough - National TAB

**Completed Date :** 12/13/2024 - Kristopher Passley - 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? No

Comment:

RTU-1 is very loud when on, area under unit on roof may need to be seal or insulated to reduce noise.

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

Comment:

N/A



12-09-2024 FREDDY'S - HUNTSVILLE, AL

CheckList Information

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

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

**Requesting Organization :** National TAB

**Created Date :** 12/10/2024 - Brian Turnbough - National TAB

**Completed Date :** 12/13/2024 - Kristopher Passley - National TAB

CheckList Item Details

**FINAL TESTS**

**HOOD CAPTURE TEST**

**List equipment turned on for testing**

**Comment:**

N/A

**List smoke candle type used**

**Comment:**

INSPECTUSA S102 45 SECOND CANDLE.

**Smoke test capture - Perimeter of hood**

**Comment:**

100% CAPTURE

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

**Comment:**

100% CAPTURE

**WITNESS**

**Date test was completed**

12/12/2024

**Comment:**

---

**TAB tech name / Firm**

**Comment:**

Kristopher Passley/ National TAB

---

**Site super name / Firm**

**Comment:**

N/A

---

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

**Comment:**

N/A

---

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

**Comment:**

FRONT DOOR: 0.002" BACK DOOR: 0.001" DRIVE-THRU WINDOW: 0.001"

---

**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

---

**Thermostats are programmed?**

Yes

**Comment:**

---

# National TAB

Project: 12-09-2024 FREDDY'S - HUNTSVILLE, AL

System/Unit: AHU/RTU



Asset: DOAS1

AREA:KITCHEN

Unit Data		
	Design	Actual
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Serial Num	-	5537600
Model Num	CASRTU3-I.400-18-15T	CAS-HVAC3-I.250-15-20T
Type	DOAS	DOAS
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	4
OA Filter Size 1	-	16"X25"X2'
Num Final Filter 1	-	8
Final Filter Size 1	-	20"X25"X2"

Motor Data		
	Design	Actual
Motor MFG	-	TECO WESTINGHOUSE
Frame	-	145T
Horsepower	2.00	2
Motor Rpm	-	1745
Phase	3	3
Rated Voltage	208	230
Rated Amperage	-	5.64

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	2650	2705
RA CFM	0	0
OA CFM	2650	2705
RL Voltage	-	212/212/212
RL Amperage	-	5.02/5.1/5.01
SF Rotation	-	CORRECT
SF System SetPt	-	57 HZ
RA Damper Position	-	0%
Min OA Damper Position	-	100%
Min OA Damper Type	-	ECONOMIZER

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.404"
Fan Suction SP	-	-0.978"
Fan Discharge SP	-	0.337
Total ESP	0.500"	0.741"
Fan Total SP	-	1.315"

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

Completed By: Kristopher Passley on 12/13/2024



# National TAB

Project: 12-09-2024 FREDDY'S - HUNTSVILLE, AL

## AHU/RTU



**Diffuser Supply (GRD)**

**DOAS1/KITCHEN**

Asset									
Asset Name	Location	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
DOAS1-SGRD1	KITCHEN	SD-3	12"	300	1	366	315	326	108.7
DOAS1-SGRD2	OFFICE	SD-4	8"	154	1	132	171	169	109.7
DOAS1-SGRD3	KITCHEN	SD-3	12"	246	1	317	251	260	105.7
DOAS1-SGRD4	KITCHEN	SD-3	12"	300	1	82	145	285	95.0
DOAS1-SGRD5	KITCHEN	SD-3	12"	300	1	307	290	295	98.3
DOAS1-SGRD6	KITCHEN	SD-3	12"	300	1	89	256	294	98.0
DOAS1-SGRD7	KITCHEN	SD-3	12"	250	1	304	303	258	103.2
DOAS1-SGRD8	KITCHEN	SD-3	12"	250	1	308	245	249	99.6
DOAS1-SGRD9	FOOD SERVICE	SD-2	12"	250	1	319	270	269	107.6
DOAS1-SGRD10	FOOD SERVICE	SD-2	12"	300	1	363	333	300	100.0
Total				2650		2587	2579	2705	102.08%

Completed By: Kristopher Passley on 12/13/2024

# National TAB

Project: 12-09-2024 FREDDY'S - HUNTSVILLE, AL

## System/Unit: AHU/RTU



Asset: RTU1

AREA:DINING

Unit Data		
	Design	Actual
MFG	CAPTIVEAIRE	CARRIER
Serial Num	-	4023P72927
Model Num	CASRTU3-1.400-18-15T	48FCDN14K3M5A3U3CO
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	1
OA Filter Size 1	-	19"X35"
Num Final Filter 1	-	4
Final Filter Size 1	-	20"X20"x2"

Motor Data		
	Design	Actual
Motor MFG	-	NL
Frame	-	NL
Horsepower	-	NL
Motor Rpm	-	NL
Phase	3	3
Rated Voltage	208	208
Rated Amperage	-	12.6

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	5000	4689
RA CFM	4100	3787
OA CFM	900	902
RL Voltage	-	210/211/212
RL Amperage	-	12.65/11.71/11.65
SF Rotation	-	CORRECT
SF System SetPt	-	
RA Damper Position	-	60%
Min OA Damper Position	-	40%
Min OA Damper Type	-	ECONOMIZER
OA Enthalpy Setpt	-	28 BTU/LB

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.803"
Fan Suction SP	-	-1.44"
Fan Discharge SP	-	0.789"
Total ESP	0.8"	1.592"
Fan Total SP	-	2.229"

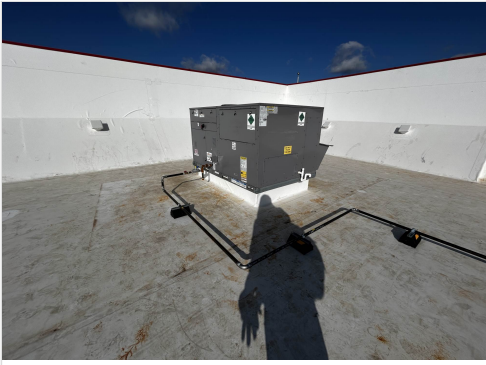
General	
	Actual
Fan Rotation Correct	YES
Unit Filters Clean	YES
Condensate Drain Installed	YES

Completed By: Kristopher Passley on 12/13/2024

Notes:  
NO DAMPERS AT FACE OF DIFFUSER OR TAKEOFFS.

Written By: on

## Unit Data - PHOTO LOG



12/13/2024

# National TAB

Project:12-09-2024 FREDDY'S - HUNTSVILLE, AL

## 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	SD-1	12"	475	1	445	447	469	98.7
RTU1-SGRD2	DINING	SD-1	12"	475	1	440	422	443	93.3
RTU1-SGRD3	DINING	SD-1	12"	475	1	505	430	452	95.2
RTU1-SGRD4	DINING	SD-1	12"	475	1	415	422	443	93.3
RTU1-SGRD5	DINING	SD-1	12"	475	1	321	405	428	90.1
RTU1-SGRD6	DINING	SD-1	12"	475	1	238	406	429	90.3
RTU1-SGRD7	DINING	SD-1	12"	475	1	309	418	439	92.4
RTU1-SGRD8	DINING	SD-1	12"	475	1	335	436	458	96.4
RTU1-SGRD9	DINING	SD-1	12"	475	1	373	421	442	93.1
RTU1-SGRD10	DINING	SD-1	12"	475	1	353	421	443	93.3
RTU1-SGRD11	HALLWAY	SD-5	6"	50	1	63	47	49	98.0
RTU1-SGRD12	MENS RR	SD-5	6"	100	1	95	91	96	96.0
RTU1-SGRD13	WOMENS RR	SD-5	6"	100	1	109	93	98	98.0
Total				5000		4001	4459	4689	93.78%

Completed By: Kristopher Passley on 12/13/2024

# National TAB

Project: 12-09-2024 FREDDY'S - HUNTSVILLE, AL

## System/Unit: FAN - Exhaust



Asset: EF1

AREA:FEMALE RESTROOM

Unit Data		
	Design	Actual
MFG	COOK	LOREN COOK
Model Num	GC-184	GEMINI 160
Serial Num	-	
Type	CEILING	CEILING
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	Actual
Motor MFG	-	QUEACE
Frame	-	NL
Horsepower	-	16 W
Motor Rpm	-	1100
Phase	1	1
Voltage (rated)	120	115
Amperage (rated)	-	0.51
Service Factor	-	NL

Test Data		
	Design	Actual
CFM	150	157
Fan RPM	-	895
Fan Rotation	-	CORRECT
Motor RPM	-	895
System SetPt	-	MAX
RL Voltage	-	120
RL Amperage	-	0.43
Total ESP	1/4"	0.215"
Fan Inlet SP	-	-0.215"
Fan Discharge SP	-	ATM

Completed By: Kristopher Passley on 12/13/2024

### Unit Data - PHOTO LOG



12/13/2024

# National TAB

Project: 12-09-2024 FREDDY'S - HUNTSVILLE, AL

System/Unit: FAN - Exhaust



Asset: EF2

AREA:MALE RESTROOM

Unit Data		
	Design	Actual
MFG	COOK	LOREN COOK
Model Num	GC-184	GEMINI 160
Type	CEILING	CEILING
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	Actual
Motor MFG	-	QUEACE
Frame	-	NL
Horsepower	-	16 W
Motor Rpm	-	1100
Phase	-	1
Voltage (rated)	-	115
Amperage (rated)	-	0.51
Service Factor	-	NL

Test Data		
	Design	Actual
CFM	-	141
Fan RPM	-	875
Fan Rotation	-	CORRECT
Motor RPM	-	875
System SetPt	-	MAX
RL Voltage	-	119
RL Amperage	-	0.42
Total ESP	-	0.241"
Fan Inlet SP	-	-0.242"
Fan Discharge SP	-	ATM

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## Unit Data - PHOTO LOG



12/13/2024

# National TAB

Project: 12-09-2024 FREDDY'S - HUNTSVILLE, AL

System/Unit: FAN - Exhaust



Asset: KEF1

AREA:GRIDDLE

Unit Data		
	Design	Actual
MFG	COOK	CAPTIVEAIRE
Model Num	GC-184	CASRE18DD
Serial Num	-	5537600
Type	DOWNBLAST	UPBLAST
Configuration	VERTICAL	VERTICAL

Test Data		
	Design	Actual
CFM	1600	1579
Fan Rotation	-	CORRECT
System SetPt	-	53.7 HZ
RL Voltage	-	211/212/212
RL Amperage	-	2.79/2.78/2.81
Total ESP	1.500"	0.712"
Fan Inlet SP	-	-0.712"
Fan Discharge SP	-	ATM

Motor Data		
	Design	Actual
Motor MFG	-	TECO WEDSTINGHOUSE
Frame	-	145T
Horsepower	1.000	1
Motor Rpm	-	1150
Phase	3	3
Voltage (rated)	208	230
Amperage (rated)	-	3.44
Service Factor	-	1.15

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## Unit Data - PHOTO LOG



12/13/2024

# National TAB

Project: 12-09-2024 FREDDY'S - HUNTSVILLE, AL

## System/Unit: FAN - Exhaust



Asset: KEF2

AREA:FRYER

Unit Data		
	Design	Actual
MFG	COOK	CAPTIVEAIRE
Model Num	GC-184	DU50HFA
Serial Num	-	5537600
Type	UPBLAST	UPBLAST
Configuration	VERTICAL	VERTICAL

Test Data		
	Design	Actual
CFM	-	772
Fan Rotation	-	CORRECT
System SetPt	-	56%
RL Voltage	-	122
RL Amperage	-	2.3
Total ESP	-	0.550"
Fan Inlet SP	-	-0.550"
Fan Discharge SP	-	ATM

Motor Data		
	Design	Actual
Motor MFG	-	TELCO GREEN
Frame	-	NL
Horsepower	-	.5
Motor Rpm	-	2000
Phase	-	1
Voltage (rated)	-	115
Amperage (rated)	-	6.3
Service Factor	-	NL

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### Unit Data - PHOTO LOG



12/13/2024

# National TAB

Project: 12-09-2024 FREDDY'S - HUNTSVILLE, AL

System/Unit: FAN - Exhaust



Asset: KEF3

AREA:DISHWASHER

Unit Data		
	Design	Actual
MFG	COOK	CAPTIVEAIRE
Model Num	GC-184	DU33HFA
Serial Num	-	5537600
Type	UPBLAST	UPBLAST
Configuration	VERTICAL	VERTICAL

Test Data		
	Design	Actual
CFM	525	527
Fan RPM	-	948
Fan Rotation	-	CORRECT
Motor RPM	-	948
System SetPt	-	48%
RL Voltage	-	122
RL Amperage	-	.9
Total ESP	1/4"	0.130"
Fan Inlet SP	-	-0.130"
Fan Discharge SP	-	ATM

Motor Data		
	Design	Actual
Motor MFG	-	TELCO GREN
Frame	-	NL
Horsepower	-	1/3
Motor Rpm	-	2000
Phase	1	1
Voltage (rated)	120	115
Amperage (rated)	-	4.3
Service Factor	-	NL

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## Unit Data - PHOTO LOG



12/13/2024

# National TAB

Project: 12-09-2024 FREDDY'S - HUNTSVILLE, AL

System/Unit: Kitchen Hood Type I



Asset: HD1

AREA:KITCHEN

Unit Data		
	Design	Actual
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	5424 ND-2	5424 ND-2
Job / Serial Num	-	5537600
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 FILTERS
Filter Size 1	16X16	16"X16"
Filter Qty 1	5	5
Filter AK factor size 1	1.62	1.62
Filter Total AK Area	8.1	8.1
Filter1 FPM	-	179
Filter2 FPM	-	205
Filter3 FPM	-	206
Filter4 FPM	-	206
Filter5 FPM	-	179
Filter Ave FPM(corr)	-	195
CFM	1600	1579

Cooking Equipment	
	Actual
Item 1	GRILL
Item 2	GRILL

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## Unit Data - PHOTO LOG



12/13/2024

# National TAB

Project: 12-09-2024 FREDDY'S - HUNTSVILLE, AL

System/Unit: Kitchen Hood Type I



Asset: HD2

AREA:KITCHEN

Unit Data		
	Design	Actual
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	5424 ND-2	5424 ND-2
Job / Serial Num	-	5537600
Type	TYPE I CANOPY	TYPE I CANOPY
Hood length	60"	60"
Hood Width	54"	54"

Test Data Exhaust		
	Design	Actual
Filter Type	CAPTRATE SOLO FILTER	CAPTRATE SOLO FILTER
Filter Size 1	16X16	16"X16"
Filter Qty 1	3	3
Filter AK factor size 1	1.62	1.62
Filter Total AK Area	4.86	4.86
Filter1 FPM	-	161
Filter2 FPM	-	169
Filter3 FPM	-	147
Filter Ave FPM(corr)	-	159
CFM	775	772

Cooking Equipment	
	Actual
Item 1	GREASE FRYER
Item 2	GREASE FRYER

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## Unit Data - PHOTO LOG



12/13/2024

# National TAB

Project: 12-09-2024 FREDDY'S - HUNTSVILLE, AL

System/Unit: Kitchen Hood Type II



Asset: HD3

AREA:KITCHEN

Unit Data		
	Design	Actual
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	4224VHB	4224VHB
Serial Num	-	5537600
Type	TYPE II	TYPE II
Hood length	42"	42"
Hood Width	42"	42"

Test Data		
	Design	Actual
Exhaust CFM	525	527

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## Unit Data - PHOTO LOG



12/13/2024

