

**Report By:**

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



**Report: TAB REPORT**  
**Function: Test, Adjust, & Balance**  
**Date: 10/25/2024**  
**Completed By: National TAB**

**PROJECT**  
**09-02-24 FIREBIRDS MORRISVILLE, NC**  
**(REVIVE)**

3200 VILLAGE MARKET PLACE

MORRISVILLE, NC 27560

**Client**

FIREBIRD RESTAURANTS  
8700 Red Oak Blvd, Unit J  
CHARLOTTE, NC 28217

# National TAB

Project: 09-02-24 FIREBIRDS MORRISVILLE, NC (REVIVE)

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## Issue List

- Clogged PSP
- KEF-1 serving hood 1 damaged casing
- MUA 3 MISSING FILTERED
- RTU-2 missing OA filter
- RTU-3 missing OA FILTER



**09-02-24 FIREBIRDS MORRISVILLE, NC (REVIVE)**

**Project Issue Information**

**Issue Name :** Clogged PSP  
**Description :** All PSPs are clogged preventing design airflow from MAUs.  
**Created By :** National TAB                      **Assigned To :** National TAB - Will Turnbough  
**Status :** Open  
**Priority :** Urgent                                      **Asset Tag :**  
**Originated Date :** 09/04/2024 - JOASH ALBIN - National TAB



**09-02-24 FIREBIRDS MORRISVILLE, NC (REVIVE)**

**Project Issue Information**

**Issue Name :** KEF-1 serving hood 1 damaged casing  
**Description :** Unit casing damaged and missing several screws to hold it in place. Shiv has cut into the metal and shiv is visible through the sheetmetal. This will cause the unit to run slower than it should and cause unneeded wear and tear on the belts  
**Created By :** National TAB                      **Assigned To :** National TAB - Will Turnbough  
**Status :** Open  
**Priority :** Urgent                                      **Asset Tag :**  
**Originated Date :** 09/04/2024 - JOASH ALBIN - National TAB



**09-02-24 FIREBIRDS MORRISVILLE, NC (REVIVE)**

**Project Issue Information**

**Issue Name :** MUA 3 MISSING FILTERED

**Description :** (1) filter missing on this unit allowing g dirt and debris to fly in and push into the PSP causing it to clog up preventing air to enter the space which is now causing negative BP

**Created By :** National TAB                      **Assigned To :** National TAB - Will Turnbough

**Status :** Open

**Priority :** Urgent                                      **Asset Tag :**

**Originated Date :** 09/04/2024 - JOASH ALBIN - National TAB



**09-02-24 FIREBIRDS MORRISVILLE, NC (REVIVE)**

**Project Issue Information**

**Issue Name :** RTU-2 missing OA filter

**Description :** OA is higher then design due to there being not filter for OA. This means the Unit is pulling 20% of its air from outside and the air it’s pulling will be dirt and bugs being dropped into the the mixed air compartment requiring filter changes and a dirtier evaporator coil.

**Created By :** National TAB                      **Assigned To :** National TAB - Will Turnbough

**Status :** Open

**Priority :** Urgent                                      **Asset Tag :**

**Originated Date :** 09/04/2024 - JOASH ALBIN - National TAB



**09-02-24 FIREBIRDS MORRISVILLE, NC (REVIVE)**

**Project Issue Information**

**Issue Name :** RTU-3 missing OA FILTER  
**Description :** RTU-3 missing OA FILTER- repeated issue see unit for filter sizes  
**Created By :** National TAB                      **Assigned To :** National TAB - Will Turnbough  
**Status :** Open  
**Priority :** Urgent                                      **Asset Tag :**  
**Originated Date :** 09/04/2024 - JOASH ALBIN - National TAB

## CheckList List

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



09-02-24 FIREBIRDS MORRISVILLE, NC (REVIVE)

CheckList Information

Name : TECH - SITE PICTURES Status : Not Completed

Assigned Organization : National TAB Asset :

Requesting Organization : National TAB

Created Date : 08/27/2024 - Brianna Biggs - National TAB

CheckList Item Details

RTU-1

Comment:

RTU-2

Comment:

RTU-3

Comment:

EF-1

Comment:

EF-2

Comment:

EF-4

Comment:

EF-6

**Comment:**

---

**EF-8**

**Comment:**

---

**TEF-1**

**Comment:**

---

**MUA-3**

**Comment:**

---

**MUA-5**

**Comment:**

---

**MUA-7**

**Comment:**

---

**HOOD-1**

**Comment:**

---

**HOOD-2**

**Comment:**

---

**HOOD-3**

**Comment:**

---

**HOOD-4**

**Comment:**

---

**HOOD-5**

**Comment:**

---



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### 09-02-24 FIREBIRDS MORRISVILLE, NC (REVIVE)

#### CheckList Information

**Name :** TECH - STEP 1: INITIAL READINGS      **Status :** Not Completed

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

**Requesting Organization :** National TAB

**Created Date :** 08/27/2024 - Brianna Biggs - National TAB

#### CheckList Item Details

##### INITIAL BUILDING REVIEW:

What is the initial building pressure before making any changes?

Comment:

Are thermostats programmed?

Comment:

Are building pressure relief working properly?

Comment:

##### INITIAL AIRFLOWS:

SUPPLY RTU-1

Comment:

OA RTU-1

Comment:

SUPPLY RTU-2

**Comment:**

---

**OA RTU-2**

**Comment:**

---

**SUPPLY RTU-3**

**Comment:**

---

**OA RTU-3**

**Comment:**

---

**EF-1**

**Comment:**

---

**EF-2**

**Comment:**

---

**EF-3**

**Comment:**

---

**EF-4**

**Comment:**

---

**MAU-1**

**Comment:**

---



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### 09-02-24 FIREBIRDS MORRISVILLE, NC (REVIVE)

#### CheckList Information

**Name :** TECH - STEP 2: INITIAL WALKTHROUGH      **Status :** Not Completed

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

**Requesting Organization :** National TAB

**Created Date :** 08/27/2024 - Brianna Biggs - National TAB

#### CheckList Item Details

##### INITIAL SITE WALKTHROUGH

All diffusers and grilles are installed and match design?

Comment:

All hood filters installed and accounted for?

Comment:

Hoods are wired and have power?

Comment:

Hood is free of alarms?

Comment:

Thermostats have power?

Comment:

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

Comment:





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### 09-02-24 FIREBIRDS MORRISVILLE, NC (REVIVE)

#### CheckList Information

**Name :** TECH - STEP 3: UNIT DATA AND EVAL **Status :** Not Completed

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

**Requesting Organization :** National TAB

**Created Date :** 08/27/2024 - Brianna Biggs - 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?

Comment:

DCV Max damper opening position is set to minimum?

Comment:

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

Comment:

Motors are all operating below the FLA rating?

Comment:

Are belts tight?

Comment:

If direct drive unit is the speed controller working.

**Comment:**

---

**Is gas piping installed and valves turned on?**

---

**Comment:**

---

**Unit free of noticeable noise and vibration**

---

**Comment:**

---

**EF's**

---

**Rotation is correct?**

---

**Comment:**

---

**Belts are tight?**

---

**Comment:**

---

**Grease cup installed on hood fan?**

---

**Comment:**

---

**Hinge kit installed installed on hood fan?**

---

**Comment:**

---

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

---

**Comment:**

---

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

---

**Comment:**

---

**There is no major leakage around base of fan?**

---

**Comment:**

---

**Is the motor operating below the motor FLA rating?**

---

**Comment:**

---

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

**Comment:**

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

**Comment:**

**MUA**

**Rotation is correct?**

**Comment:**

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

**Comment:**

**Heater tested and is functional?**

**Comment:**

**Internal motorized damper is fully opening?**

**Comment:**

**Motor is operating below the FLA rating?**

**Comment:**

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

**Comment:**

**HOODS**

**Kitchen equipment installed in proper places?**

**Comment:**

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

**Comment:**

**DOCUMENTATION**

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

Comment:



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### 09-02-24 FIREBIRDS MORRISVILLE, NC (REVIVE)

#### CheckList Information

**Name :** TECH - STEP 4: TEST, ADJUST AND BALANCE      **Status :** Not Completed

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

**Requesting Organization :** National TAB

**Created Date :** 08/27/2024 - Brianna Biggs - National TAB

#### CheckList Item Details

TEST, ADJUST, AND BALANCE ALL EQUIPMENT:

DURING TESTING MAKE NOTE OF THE FOLLOWING:

Is space free of drafting?

Comment:

Is space comfortable in all areas?

Comment:

Is the space free of ventilation noise?

Comment:

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

Comment:



TAB tech name / Firm

Comment:

Site super name / Firm

Comment:

Owner representative name / Firm (if Applicable)

Comment:

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

Comment:

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:

Thermostats are programmed?

Comment:



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Project: 09-02-24 FIREBIRDS MORRISVILLE, NC (REVIVE)

System/Unit: AHU/RTU

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Asset: RTU1

AREA:DINING

Unit Data		
	Design	Actual
MFG	TRANE	TRANE
Serial Num	-	163210063
Model Num	YHC120	YHC120G3RHA040C1C1A0B
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	1
OA Filter Size 1	-	61x18
Num Final Filter 1	-	4/4
Final Filter Size 1	-	20x20x2/20x25x2
Num Final Filter 2	-	N/A
Final Filter Size 2	-	N/A

Motor Data		
	Design	Actual
Motor MFG	-	MARATHON
Frame	-	56HZ
Horsepower	3.8	3
Motor Rpm	-	1725
Phase	3	3
Rated Voltage	208	208
Rated Amperage	-	9.4

Drive Data	
	Actual
Motor Sheave Size	3.75"
Motor Bore Size	0.875"
Motor Sheave SetPt	2.5 open
Fan Sheave Size	10"
Fan Sheave Bore	1.375"
Belt CL Distance	21"
Num of Belts	1
Belt Size	BX68
Belt Alignment	Good

Test Data		
	Design	Actual
SF CFM	4000	3531
SF RPM	-	585/1730
RA CFM	3200	2582
OA CFM	800	949
RL Voltage	-	208/208/209
RL Amperage	-	5.8/6.2/6.4
SF Rotation	-	CCW
SF System SetPt	-	High
RA Damper Position	-	80%
Min OA Damper Position	-	20%
Min OA Damper Type	-	OBD
OA Enthalpy Setpt	-	E

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.29
Fan Suction SP	-	-0.49
Fan Discharge SP	-	0.30
Total ESP	1.0"	0.59
Fan Total SP	-	0.79

General	
	Actual
Fan Rotation Correct	Yes
Unit Filters Clean	No
Condensate Drain Installed	No

## General - PHOTO LOG



image\_766860641

Completed By: JOASH ALBIN on 09/04/2024

### Notes:

FRONT/BAR 2317 CFM  
12X6/.5 K FACTOR 4 LINERES NEEDED  
+1214 FOR 2 DIFFUSERS AND 5 LINIERS

Written By: JOASH ALBIN on 09/04/2024



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Project: 09-02-24 FIREBIRDS MORRISVILLE, NC (REVIVE)

System/Unit: AHU/RTU

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Asset: RTU2

AREA: DINING

Unit Data		
	Design	Actual
MFG	TRANE	TRANE
Serial Num	-	163210069D
Model Num	YHD150	YHD150G3RHA04F0C1C
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	1
OA Filter Size 1	-	60x118.5
Num Final Filter 1	-	4/4
Final Filter Size 1	-	20x20x2/20x24x2
Num Final Filter 2	-	N/A
Final Filter Size 2	-	N/A

Motor Data		
	Design	Actual
Motor MFG	-	MARATHON
Frame	-	56HZ
Horsepower	3	3
Motor Rpm	-	1725
Phase	3	3
Rated Voltage	208	208
Rated Amperage	-	9.4

Drive Data	
	Actual
Motor Sheave Size	3.5
Motor Bore Size	0.875
Motor Sheave SetPt	2 open
Fan Sheave Size	10
Fan Sheave Bore	1.375
Belt CL Distance	22
Num of Belts	1
Belt Size	BX68
Belt Alignment	Good

Test Data		
	Design	Actual
SF CFM	5000	4785
SF RPM	-	625
RA CFM	4000	3760
OA CFM	1000	1025
RL Voltage	-	208/208/209
RL Amperage	-	7.3/7.5/7.6
SF Rotation	-	CCW
SF System SetPt	-	HIGH
RA Damper Position	-	90%
Min OA Damper Position	-	10%
Min OA Damper Type	-	ODB
OA Enthalpy Setpt	-	E

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.53"
Fan Suction SP	-	-0.78"
Fan Discharge SP	-	0.12"
Total ESP	1.0"	0.65"
Fan Total SP	-	0.90

General	
	Actual
Fan Rotation Correct	Yes
Unit Filters Clean	No
Condensate Drain Installed	Yes

Completed By: JOASH ALBIN on 09/04/2024



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Project: 09-02-24 FIREBIRDS MORRISVILLE, NC (REVIVE)

## System/Unit: AHU/RTU

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Asset: RTU3

AREA:KITCHEN

Unit Data		
	Design	Actual
MFG	TRANE	TRANE
Serial Num	-	132512364L
Model Num	YHC120	YHC120E3RLA0KH700A1B
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	1
OA Filter Size 1	-	38x16
Num Final Filter 1	-	3/3
Final Filter Size 1	-	20x20x2/20x24x2
Num Final Filter 2	-	NL
Final Filter Size 2	-	NL

Motor Data		
	Design	Actual
Motor MFG	-	NO ACCESS
Frame	-	NO ACCESS
Horsepower	3.8	3.8
Motor Rpm	-	DD
Phase	3	3
Rated Voltage	208	208
Rated Amperage	-	8.5

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	4000	3616
SF RPM	-	HIGH
RA CFM	3400	2698
OA CFM	600	918
RL Voltage	-	208/208/209
RL Amperage	-	6.7/6.8/6.9
SF Rotation	-	CCW
SF System SetPt	-	HIGH
RA Damper Position	-	90%
Min OA Damper Position	-	10%
Min OA Damper Type	-	ODB
OA Enthalpy Setpt	-	E

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.45
Fan Suction SP	-	-0.57
Fan Discharge SP	-	0.31"
Total ESP	1.0"	0.76"
Fan Total SP	-	0.88"

General	
	Actual
Fan Rotation Correct	Yes
Unit Filters Clean	No
Condensate Drain Installed	Yes

Completed By: JOASH ALBIN on 09/04/2024

Notes:  
MAJORITY OF ACPSP FOR THIS UNIT IS CLOGGED. DIFFUSERS HIGH AS RESULT

NO OA filter

Written By: JOASH ALBIN on 09/04/2024



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Project: 09-02-24 FIREBIRDS MORRISVILLE, NC (REVIVE)

## System/Unit: FAN - Exhaust



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Asset: EF1

AREA:

Unit Data		
	Design	Actual
MFG	NA	CAPTIVE AIRE)
Model Num	NA	(HOOD 1) (CASRE18BD
Serial Num	-	1658859
Type	-	TYPE I CENTRIGUAL
Configuration	-	UTILITY

Test Data		
	Design	Actual
CFM	2897	4656
Fan RPM	-	1525
Fan Rotation	-	CCW
Motor RPM	-	1710
RL Voltage	-	208/208/209
RL Amperage	-	6.5/6.2/6.1
Suction ESP	-	-1.23"
Discharge ESP	-	ATM
Total ESP	-	1.23"

Motor Data		
	Design	Actual
Motor MFG	-	WISE WIRE
Frame	-	E56
Horsepower	-	2
Motor Rpm	-	1710
Phase	-	3
Voltage (rated)	-	208
Amperage (rated)	-	6.1
Service Factor	-	1

Drive Data	
	Actual
Motor Sheave Size	4"
Motor Bore Size	0.875"
Motor Sheave SetPt	4
Fan Sheave Size	5"
Fan Sheave Bore	0.875
Belt CL Distance	26
Num of Belts	2
Belt Size	BX63

Completed By: JOASH ALBIN on 09/05/2024

Notes:

WOOD STOVE/GRILL(HOOD 1)  
4X20X20 MESH BAFFLE CAPTIVE AIRE FILTERS (12.9 KFACTOR  
361 AVG/TOTAL 4656

Written By: JOASH ALBIN on 09/04/2024



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Project: 09-02-24 FIREBIRDS MORRISVILLE, NC (REVIVE)

## System/Unit: FAN - Exhaust

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Asset: EF2

AREA:

Unit Data		
	Design	Actual
MFG	NA	CAPTVE AIRE)
Model Num	NA	(HOOD 2 LONG)(NCA16F
Serial Num	-	1658859
Type	-	TYPE I CENTRIFIGUL
Configuration	-	UPBLAST

Test Data		
	Design	Actual
CFM	3094	4538
Fan RPM	-	1147
Fan Rotation	-	CCW
Motor RPM	-	1729
RL Voltage	-	208/209/208
RL Amperage	-	3.8/3.9/4.1
Suction ESP	-	0.95"
Discharge ESP	-	ATM
Total ESP	-	0.95"

Motor Data		
	Design	Actual
Motor MFG	-	WISE WIRE
Frame	-	D56
Horsepower	-	1.5
Motor Rpm	-	1720
Phase	-	3
Voltage (rated)	-	208
Amperage (rated)	-	4.7
Service Factor	-	1.15

Drive Data	
	Actual
Motor Sheave Size	3"
Motor Bore Size	0.625
Motor Sheave SetPt	4 open
Fan Sheave Size	5
Fan Sheave Bore	0.875
Belt CL Distance	7.5
Num of Belts	1
Belt Size	AX26

Completed By: JOASH ALBIN on 09/05/2024

Notes:  
24.4 KFACTOR 6)20X20/ 4)16X20-(186 AVG READING)  
4538 INITIAL CFM

Written By: JOASH ALBIN on 09/04/2024



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## System/Unit: FAN - Exhaust

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Asset: EF4

AREA:

Unit Data		
	Design	Actual
MFG	NA	CAPTIVE AIRE)
Model Num	NA	(HOOD2 SHORT) (NCA16FA
Serial Num	-	1658859
Type	-	TYPE I CENTRIFIGUAL
Configuration	-	UPBLAST

Motor Data		
	Design	Actual
Motor MFG	-	WEG
Frame	-	D56
Horsepower	-	1.5
Motor Rpm	-	1720
Phase	-	3
Voltage (rated)	-	208
Amperage (rated)	-	4.7
Service Factor	-	1.15

Drive Data	
	Actual
Motor Sheave Size	3.75"
Motor Bore Size	0.625
Motor Sheave SetPt	4 open
Fan Sheave Size	5.25"
Fan Sheave Bore	0.875"
Belt CL Distance	7.25
Num of Belts	1
Belt Size	AX26

Test Data		
	Design	Actual
CFM	2720	4039
Fan RPM	-	1123
Fan Rotation	-	CCW
Motor RPM	-	1729
RL Voltage	-	208/208/209
RL Amperage	-	4.1/4.1/4.2
Suction ESP	-	-0.97"
Discharge ESP	-	ATM
Total ESP	-	0.97"

Completed By: JOASH ALBIN on 09/05/2024



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Project: 09-02-24 FIREBIRDS MORRISVILLE, NC (REVIVE)

## System/Unit: FAN - Exhaust

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Asset: EF6

AREA:

Unit Data		
	Design	Actual
MFG	NA	CAPTIVE AIRE)
Model Num	NA	HOOD 3 BACK) (NCA16FA
Serial Num	-	1658859
Type	-	TYPE I CENTRIFIGUAL
Configuration	-	UPBLAST

Motor Data		
	Design	Actual
Motor MFG	-	WEG
Frame	-	D56
Horsepower	-	1.5
Motor Rpm	-	1720
Phase	-	3
Voltage (rated)	-	208
Amperage (rated)	-	4.7
Service Factor	-	1.15

Drive Data	
	Actual
Motor Sheave Size	3.75"
Motor Bore Size	0.625
Motor Sheave SetPt	4.
Fan Sheave Size	5.25
Fan Sheave Bore	0.875
Belt CL Distance	7.5
Num of Belts	1
Belt Size	AX26

Test Data		
	Design	Actual
CFM	2812	3932
Fan RPM	-	1135
Fan Rotation	-	CCW
Motor RPM	-	1731
RL Voltage	-	208/208/209
RL Amperage	-	4.2/4.2/4.1
Suction ESP	-	0.99"
Discharge ESP	-	ATM
Total ESP	-	0.99"

Completed By: JOASH ALBIN on 09/05/2024



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Project: 09-02-24 FIREBIRDS MORRISVILLE, NC (REVIVE)

## System/Unit: FAN - Exhaust

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Asset: EF8

AREA:

Unit Data		
	Design	Actual
MFG	NA	CAPTIVE-AIRE
Model Num	NA	DISH
Serial Num	-	DU85HFA
Type	-	DISHWASHER TYPE II
Configuration	-	UPBLAST

Motor Data		
	Design	Actual
Motor MFG	-	US MOTORS
Frame	-	NL
Horsepower	-	0.75
Motor Rpm	-	1300-1700
Phase	-	1
Voltage (rated)	-	120
Amperage (rated)	-	8.8
Service Factor	-	1

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

Test Data		
	Design	Actual
CFM	1050	1067
Fan RPM	-	1550
Fan Rotation	-	CCW
Motor RPM	-	DD
RL Voltage	-	122
RL Amperage	-	5.3
Suction ESP	-	-0.50
Discharge ESP	-	NA
Total ESP	-	0.50

Notes:

Dropped 400 CFM from original testing

Written By: JOASH ALBIN on 09/05/2024



# National TAB

Project: 09-02-24 FIREBIRDS MORRISVILLE, NC (REVIVE)

System/Unit: FAN - Exhaust



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Asset: TEF1

AREA:RESTROOMS

Unit Data		
	Design	Actual
MFG	GREENHECK	GREENHECK
Model Num	G-090-VG	G-090-VG
Serial Num	-	
Type	DOWNBLAST	
Configuration	VERTICAL	

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

Test Data		
	Design	Actual
CFM	500	418
Fan RPM	-	
Fan Rotation	-	
Motor RPM	-	
System SetPt	-	
RL Voltage	-	
RL Amperage	-	
Total ESP	0.500"	
Fan Inlet SP	-	
Fan Discharge SP	-	

Completed By: JOASH ALBIN on 09/05/2024

Notes:

Spent more time on hoods than the restroom units which were close to design.

Written By: JOASH ALBIN on 09/05/2024



# National TAB

Project: 09-02-24 FIREBIRDS MORRISVILLE, NC (REVIVE)

## System/Unit: FAN - Supply



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Asset: MUA3

AREA:

Unit Data		
	Design	Actual
MFG	NA	CAPTIVE AIRE
Model Num	NA	A2 D.250 G15
Serial Num	-	1658859
Type	-	MUA
Configuration	-	VERTICAL

Motor Data		
	Design	Actual
Motor MFG	-	WEG/NL
Frame	-	E56
Horsepower	-	3
Motor Rpm	-	1745
Phase	-	3
Voltage (rated)	-	208
Amperage (rated)	-	8.7
Service Factor	-	1

Drive Data	
	Actual
Motor Sheave Size	4"
Motor Bore Size	0.875
Fan Sheave Size	6.5
Fan Sheave Bore	1"
Belt CL Distance	18"
Num of Belts	2
Belt Size	BX50
Belt Alignment Verified	Good

Gas Heat		
	Design	Actual
Heater Operates (y/n)	-	Yes
Flame Status (pass/fail)	-	Pass
Inlet Air Temp SetPt	-	55
Discharge Air Temp SetPt	-	66
Air Flow Switch SP Actual	-	-0.40"

Test Data		
	Design	Actual
CFM	3842	1691
SF RPM	-	1121
Motor RPM	-	1749
SF System SetPt	-	High
RL Voltage	-	208/208/209
RL Amperage	-	6.0/6.1/6.2
Total ESP	-	N/A
Fan Discharge SP	-	N/A

General	
	Actual
Fan Rotation Correct	

Completed By: JOASH ALBIN on 09/05/2024

Notes:  
CLOGGED PSP DATA TAKEN ON THE ROOF

Written By: JOASH ALBIN on 09/04/2024



# National TAB

Project: 09-02-24 FIREBIRDS MORRISVILLE, NC (REVIVE)

## System/Unit: FAN - Supply



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Asset: MUA5

AREA:

Unit Data		
	Design	Actual
MFG	NA	CAPTIVE AIRE
Model Num	NA	A1 D.250-G10
Serial Num	-	1658859
Type	-	MUA
Configuration	-	VERTICAL

Motor Data		
	Design	Actual
Motor MFG	-	WEG/NL
Frame	-	E56
Horsepower	-	3
Motor Rpm	-	1745
Phase	-	3
Voltage (rated)	-	208/207/209
Amperage (rated)	-	3.38
Service Factor	-	1.15

Drive Data	
	Actual
Motor Sheave Size	3"
Motor Bore Size	0.625
Fan Sheave Size	5"
Fan Sheave Bore	0.875"
Belt CL Distance	14.5
Num of Belts	1
Belt Size	AX40
Belt Alignment Verified	Good

Gas Heat		
	Design	Actual
Heater Operates (y/n)	-	Yes
Flame Status (pass/fail)	-	Pass
Inlet Air Temp SetPt	-	55
Discharge Air Temp SetPt	-	60
Air Flow Switch SP Actual	-	0.31

Test Data		
	Design	Actual
CFM	1940	1112
SF RPM	-	1010
Motor RPM	-	1741
SF System SetPt	-	HIGH
RL Voltage	-	208/208/209
RL Amperage	-	2.8/2.6/2.6
Total ESP	-	N/A
Fan Discharge SP	-	N/A

General	
	Actual
Fan Rotation Correct	Yes

Completed By: JOASH ALBIN on 09/05/2024

Notes:  
CLOGGED PSP, DATA TAKEN ON THE ROOF

Written By: JOASH ALBIN on 09/04/2024



# National TAB

Project: 09-02-24 FIREBIRDS MORRISVILLE, NC (REVIVE)

## System/Unit: FAN - Supply

NATIONAL TAB

INTELLIGENCE



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Asset: MUA7

AREA:

Unit Data		
	Design	Actual
MFG	NA	CAPTIVE AIRE
Model Num	NA	AS-D.500-G18
Serial Num	-	1658859
Type	-	COOLING
Configuration	-	VERTICAL

Motor Data		
	Design	Actual
Motor MFG	-	WEG
Frame	-	184T
Horsepower	-	5
Motor Rpm	-	1755
Phase	-	3
Voltage (rated)	-	208
Amperage (rated)	-	14.2
Service Factor	-	1.15

Drive Data	
	Actual
Motor Sheave Size	3.75
Motor Bore Size	1.125
Fan Sheave Size	7.
Fan Sheave Bore	1.125
Belt CL Distance	20
Num of Belts	2
Belt Size	BX55
Belt Alignment Verified	Good

Gas Heat		
	Design	Actual
Heater Operates (y/n)	-	Yes
Flame Status (pass/fail)	-	Pass
Inlet Air Temp SetPt	-	55
Discharge Air Temp SetPt	-	60
Air Flow Switch SP Actual	-	-0.35"

Test Data		
	Design	Actual
CFM	5050	3187
SF RPM	-	911
Motor RPM	-	1740
SF System SetPt	-	High
RL Voltage	-	208/208/209
RL Amperage	-	11.4/12.3/12.1
Total ESP	-	NA
Fan Discharge SP	-	NA

General	
	Actual
Fan Rotation Correct	Yes

Completed By: JOASH ALBIN on 09/05/2024

Notes:  
CLOGGED PSP, DATA TAKEN ON THE ROOF

Written By: JOASH ALBIN on 09/04/2024



# National TAB

Project: 09-02-24 FIREBIRDS MORRISVILLE, NC (REVIVE)

## System/Unit: Kitchen Hood Type I



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Asset: HD1

AREA:

Unit Data		
	Design	Actual
MFG	NA	CAPTIVE AIRE
Model Num	NA	HOOD 1 WOOD FIRE GRILL
Job / Serial Num	-	1658859
Type	-	TYPE I
Hood length	-	108"
Hood Width	-	54"
Supply Plenum Type	-	ACPSPS(WRAP)
Supply Plenum Width	-	9"
Supply Plenum Length	-	108/2X54"

Test Data Exhaust		
	Design	Actual
Filter Type	-	BAFFLE/MESH
Filter Size 1	-	20X20
Filter Size 2	-	16X2
Filter Qty 1	-	4
Filter Qty 2	-	1
Filter AK factor size 1	-	2.7
Filters AK factor size 2	-	2.1
Filter Total AK Area	-	12.9
Filter1 FPM	-	357
Filter2 FPM	-	403
Filter3 FPM	-	379
Filter4 FPM	-	378
Filter5 FPM	-	288
Filter Ave FPM(corr)	-	361
CFM	-	4656

Cooking Equipment	
	Actual
Item 1	WOOD FIRE GRILL
Item 2	OVEN
Item 3	STOVE TOP
Item 4	
Item 5	

Test Data Supply		
	Design	Actual
Total AK Area	-	9
Kv factor (Vel)	-	0.81
Num of Readings	-	14
Reading1 FPM	-	125
Reading2 FPM	-	45
Reading3 FPM	-	35
Reading4 FPM	-	22
Reading5 FPM	-	0
Reading6 FPM	-	57
Reading7 FPM	-	176
Reading8 FPM	-	62
Reading9 FPM	-	28
Reading10 FPM	-	67
Reading11 FPM	-	30
Reading12 FPM	-	185
Reading13 FPM	-	45
Reading14 FPM	-	81
Ave FPM(corr)	-	55
CFM	-	499

Completed By: JOASH ALBIN on 09/04/2024



# National TAB

Project: 09-02-24 FIREBIRDS MORRISVILLE, NC (REVIVE)

## System/Unit: Kitchen Hood Type I

NATIONAL TAB

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Asset: HD2

AREA:

Unit Data		
	Design	Actual
MFG	NA	CAPTIVE-AIRE
Model Num	NA	NL.HOOD 2 LONG
Job / Serial Num	-	1658859
Type	-	TYPE I
Hood length	-	165
Hood Width	-	48
Supply Plenum Type	-	ACPSP
Supply Plenum Width	-	12
Supply Plenum Length	-	177

Test Data Exhaust		
	Design	Actual
Filter Type	-	BAFFLE
Filter Size 1	-	18X18
Filter Size 2	-	14X18
Filter Qty 1	-	6
Filter Qty 2	-	4
Filter AK factor size 1	-	2.7
Filters AK factor size 2	-	2.1
Filter Total AK Area	-	24.6
Filter1 FPM	-	185
Filter2 FPM	-	199
Filter3 FPM	-	181
Filter4 FPM	-	200
Filter5 FPM	-	222
Filter6 FPM	-	128
Filter7 FPM	-	156
Filter8 FPM	-	197
Filter9 FPM	-	208
Filter10 FPM	-	184
Filter Ave FPM(corr)	-	186
CFM	-	4538

Cooking Equipment	
	Actual
Item 1	GRIDDLE
Item 2	OVEN
Item 3	OVEN
Item 4	RANGE
Item 5	

Test Data Supply		
	Design	Actual
Total AK Area	-	14.75
Kv factor (Vel)	-	0.81
Num of Readings	-	14
Reading1 FPM	-	77
Reading2 FPM	-	72
Reading3 FPM	-	34
Reading4 FPM	-	65
Reading5 FPM	-	45
Reading6 FPM	-	37
Reading7 FPM	-	125
Reading8 FPM	-	122
Reading9 FPM	-	32
Reading10 FPM	-	35
Reading11 FPM	-	0
Reading12 FPM	-	0
Reading13 FPM	-	67
Reading14 FPM	-	0
Ave FPM(corr)	-	41
CFM	-	586

Completed By: JOASH ALBIN on 09/04/2024



# National TAB

Project: 09-02-24 FIREBIRDS MORRISVILLE, NC (REVIVE)

## System/Unit: Kitchen Hood Type I

NATIONAL TAB

INTELLIGENCE



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Asset: HD3

AREA:

Unit Data		
	Design	Actual
MFG	NA	CAPTIVE AIRE
Model Num	NA	NL.HOOD 2 SHORT
Job / Serial Num	-	1658859
Type	-	TYPE I
Hood length	-	158
Hood Width	-	48
Supply Plenum Type	-	ACPSP
Supply Plenum Width	-	12
Supply Plenum Length	-	154

Test Data Exhaust		
	Design	Actual
Filter Type	-	BAFFLE
Filter Size 1	-	18X18
Filter Size 2	-	NA
Filter Qty 1	-	8
Filter Qty 2	-	NA
Filter AK factor size 1	-	2.7
Filters AK factor size 2	-	NA
Filter Total AK Area	-	21.6
Filter1 FPM	-	193
Filter2 FPM	-	200
Filter3 FPM	-	178
Filter4 FPM	-	177
Filter5 FPM	-	192
Filter6 FPM	-	166
Filter7 FPM	-	184
Filter8 FPM	-	208
Filter Ave FPM(corr)	-	187
CFM	-	4039

Cooking Equipment	
	Actual
Item 1	STACKED ELECTRIC OVEN
Item 2	COOLER
Item 3	
Item 4	
Item 5	

Test Data Supply		
	Design	Actual
Total AK Area	-	13.16
Kv factor (Vel)	-	.81
Num of Readings	-	9
Reading1 FPM	-	152
Reading2 FPM	-	166
Reading3 FPM	-	34
Reading4 FPM	-	48
Reading5 FPM	-	57
Reading6 FPM	-	35
Reading7 FPM	-	41
Reading8 FPM	-	49
Reading9 FPM	-	120
Ave FPM(corr)	-	63.18
CFM	-	831

Completed By: JOASH ALBIN on 09/04/2024



# National TAB

Project: 09-02-24 FIREBIRDS MORRISVILLE, NC (REVIVE)

## System/Unit: Kitchen Hood Type I



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Asset: HD4

AREA:

Unit Data		
	Design	Actual
MFG	NA	CAPTIVE-AIRE
Model Num	NA	NL. HOOD 3/ BACK
Job / Serial Num	-	1658859
Type	-	TYPE I
Hood length	-	162
Hood Width	-	54
Supply Plenum Type	-	PSP
Supply Plenum Width	-	16"
Supply Plenum Length	-	162

Test Data Supply		
	Design	Actual
Total AK Area	-	18
Kv factor (Vel)	-	0.81
Num of Readings	-	8
Reading1 FPM	-	25
Reading2 FPM	-	45
Reading3 FPM	-	37
Reading4 FPM	-	39
Reading5 FPM	-	118
Reading6 FPM	-	160
Reading7 FPM	-	42
Reading8 FPM	-	63
Ave FPM(corr)	-	53
CFM	-	954

Test Data Exhaust		
	Design	Actual
Filter Type	-	BAFFLE
Filter Size 1	-	20X20
Filter Size 2	-	16X20
Filter Qty 1	-	6
Filter Qty 2	-	2
Filter AK factor size 1	-	2.7
Filters AK factor size 2	-	2.1
Filter Total AK Area	-	20.4
Filter1 FPM	-	202
Filter2 FPM	-	210
Filter3 FPM	-	185
Filter4 FPM	-	194
Filter5 FPM	-	181
Filter6 FPM	-	189
Filter7 FPM	-	210
Filter8 FPM	-	204
Filter Ave FPM(corr)	-	197
CFM	-	4018

Cooking Equipment	
	Actual
Item 1	FRYER
Item 2	FREYER
Item 3	GRIDDLE
Item 4	
Item 5	

Completed By: JOASH ALBIN on 09/04/2024