

**Report By:**

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

**NATIONAL**

**TAB**

Comfort. Under control.

**Report: FINAL TAB REPORT  
Function: Test, Adjust, & Balance  
Date: 10/11/2022**

# **PROJECT**

## **10-03 FREDDY'S HAMPTON, VA**

1123 WEST MERCURY BLVD

HAMPTON, VA 23666

**Client**

HCI Hospitality

520 McCall Road

Manhattan, KS 66502

# National TAB

Project: 10-03 FREDDY'S HAMPTON, VA

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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.

### DOAS w/ Diffusers

Each of the DOAS were measured at their terminal devices or via traverse to establish a total flow for that unit. Each DOAS 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.



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## 10-03 FREDDY'S HAMPTON, VA

### Project Issue Information

**Issue Name :** HIGH PRIORITY - RTU-1 Economizer not functional

**Description :** Unable to set RTU-1 damper position despite the economizer receiving power. Tried moving damper to closed position the damper did not move.

**Created By :** National TAB

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

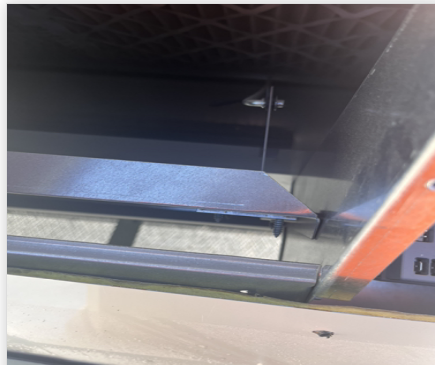
**Status :** Open

**Originated Date :** 10/06/2022 - David Annan - National TAB

#### Project Issue File Details



FuseIT6dd6c2ee4c6c4c....



FuseITf9c0be1be39541....

#### Project Issue Response Details

- **10/11/2022 National TAB - Will Turnbough**
  - Airflow is 1671 CFM out of 900 CFM. Mechanical contractor unable to adjust damper either. Recommend mechanical contractor contact the manufacturer to troubleshoot and resolve.



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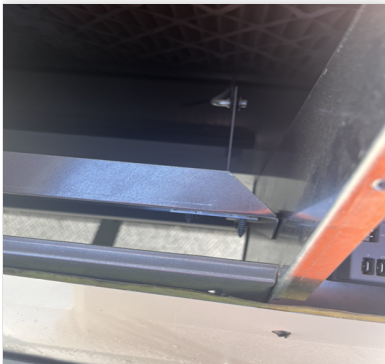
## 10-03 FREDDY'S HAMPTON, VA

### Project Issue Information

**Issue Name :** HIGH PRIORITY - RTU-1 Low flow  
**Description :** RTU-1 total flow is about 80% of design. Motor sheave is already at 1 turn out (B belt).  
**Created By :** National TAB **Assigned To :** National TAB - Will Turnbough  
**Status :** Open  
**Originated Date :** 10/05/2022 - David Annan - National TAB

#### Project Issue Response Details

- **10/11/2022 National TAB - Will Turnbough**
  - There is enough amperage on the motor to change pulleys and increase airflow closer to design. But further evaluation of the supply and return ductwork is required first.
- **10/11/2022 National TAB - Will Turnbough**
  - Discharge pressure on the supply side is high indicating restriction. To achieve design airflow requires 1.4" of discharge pressure which is very high. Ductwork is shown on plans as (2) 18" runs which is a 3.5 free area. Requires a velocity of 1430 FPM which is slightly high. Further investigation of the supply ductwork and connection to unit is required.
- **10/06/2022 National TAB - David Annan**
  - Return damper looks slightly restrictive. More investigation needed.



FuselTa54a4243fe7046.jpeg



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## 10-03 FREDDY'S HAMPTON, VA

### Project Issue Information

**Issue Name :** LOW PRIORITY - Inaccessible dampers

**Description :** RTU-1 , supply damper to the restrooms and the damper for the hall diffuser are inaccessible due to dampers being present above the hard ceiling.

**Created By :** National TAB

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

**Status :** Open

**Originated Date :** 10/05/2022 - David Annan - National TAB

#### Project Issue Response Details

- **10/11/2022 National TAB - Will Turnbough**
  - Airflow to these diffusers is high. Recommend installing face accessible OBDs as specified on SD-5 type diffusers to reduce the airflow.



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## 10-03 FREDDY'S HAMPTON, VA

### Project Issue Information

**Issue Name :** LOW PRIORITY - RTU-1 Condensate is not installed-W.I.P

**Description :** RTU-1 condensate line is not installed .

**Created By :** National TAB

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

**Status :** Open

**Originated Date :** 10/05/2022 - David Annan - National TAB

#### Project Issue File Details



FuselT0f2747f6efb646....



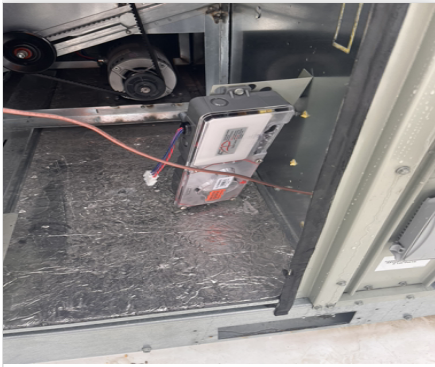
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## 10-03 FREDDY'S HAMPTON, VA

### Project Issue Information

**Issue Name :** LOW PRIORITY - RTU-1 Smoke detector not installed  
**Description :** RTU-1 smoke detector is not installed.  
**Created By :** National TAB                      **Assigned To :** National TAB - Will Turnbough  
**Status :** Open  
**Originated Date :** 10/05/2022 - David Annan - National TAB

#### Project Issue File Details



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### 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
RTU-1	DINING	5000	3670	4100	229	900	1671	18.0%	45.5%						
DOAS-1	KITCHEN	2200	2284	0	0	2200	2284	100.0%	100.0%						
KEF-1	GRIDDLE											1600	1725		
KEF-2	FRYER											775	845		
EF-1	RESTROOM													75	82
EF-2	RESTROOM													150	148
<b>TOTALS</b>		7200	5954	4100	229	3100	3955			0	0	2375	2570	225	230

#### NET BUILDING AIRFLOW CALCULATION

TOTALS	DESIGN	ACTUAL
TOTAL OA	3100	3955
TOTAL EXHAUST	2600	2800
<b>NET AIRFLOW</b>	500	1155

DOOR TESTED	BUILDING PRESSURE MEASUREMENTS (IN. H2O)
FRONT	0.0455
SIDE	0.0535
REAR	0.
<b>AVERAGE</b>	<b>0.033</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:



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## 10-03 FREDDY'S HAMPTON, VA

### CheckList Information

**Name :** TECH - SITE PICTURES **Status :** NotSubmitted  
**Assigned Organization :** National TAB **Asset :**  
**Requesting Organization :** National TAB

### CheckList Item Details

STORE FRONT



FuseIT8a26ed0c770e4f...

RTU-1



FuseIT1d12f75e1c7e44....

DOAS-1



FuseITd2bcc746047747....

EF-1



FuseIT60725fd61d7844....

EF-2



FuseITc139a8432bac4f....

KEF-1

KEF-2



FuseIT4a30c791b0484c....

HOOD-1



FuseITcc258ac9b5dc48....

HOOD-2



FuseITabb68068102547....

Notes/Comments :



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### 10-03 FREDDY'S HAMPTON, VA

#### CheckList Information

**Name :** TECH - STEP 1: INITIAL WALKTHROUGH **Status :** NotSubmitted  
**Assigned Organization :** National TAB **Asset :**  
**Requesting Organization :** National TAB

#### CheckList Item Details

##### INITIAL SITE WALKTHROUGH

All diffusers and grilles are installed and match design?	Yes
All hood filters installed and accounted for?	Yes
Hoods are wired and have power?	Yes
Hood is free of alarms?	Yes
Thermostats have power?	Yes
Have trades/general contractor been notified about any issues and are they created on FaciliBuild?	Yes

**Notes/Comments :**



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## 10-03 FREDDY'S HAMPTON, VA

### CheckList Information

<b>Name :</b>	TECH - STEP 2: UNIT DATA AND EVAL	<b>Status :</b>	NotSubmitted
<b>Assigned Organization :</b>	National TAB	<b>Asset :</b>	
<b>Requesting Organization :</b>	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?	RTU-1 Economizer is not functional does not respond to various damper commands.
DCV Max damper opening position is set to minimum?	N/A
Free cooling enthalpy set point set for lowest setting (Typically "D")	Yes
Motors are all operating below the FLA rating?	Yes
Are belts tight?	Yes
If direct drive unit is the speed controller working.	Yes
Is gas piping installed and valves turned on?	Yes
Unit free of noticeable noise and vibration	Yes

**EF's**

Rotation is correct?	Yes
Belts are tight?	Units are DD
Grease cup installed on hood fan?	Yes
Hinge kit installed installed on hood fan?	Yes
Lean fan back. Is grease duct installation adequate and is duct ran all the way to the base of the fan?	Yes

Flex conduit is long enough so that fan can be completely tilted back?	Yes
There is no major leakage around base of fan?	No leakage.
Is the motor operating below the motor FLA rating?	Yes
For restroom fan(s) is the back draft damper installed and can it fully open?	Yes.
Unit free of noticeable noise and vibration?	Yes

**MUA**

Rotation is correct?	NA
Gas piping is installed and valves are in on position?	NA
Heater tested and is functional?	Yes
Internal motorized damper is fully opening?	NA
Motor is operating below the FLA rating?	NA
Unit free of noticeable noise and vibration?	NA

**HOODS**

Kitchen equipment installed in proper places?	Yes
Can kitchen equipment be turned on for final smoke test?	No
Griddle is completely centered underneath hood?	Yes

**DOCUMENTATION**

Have trades/general contractor been notified about any issues and are they created on FaciliBuild?	Yes
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**PICTURES TAKEN OF:**

All Issues	Yes
Each Piece of equipment	Yes
Each Hood	Yes
Front of Store	Yes

<p><b>Notes/Comments :</b></p> <hr/> <hr/> <hr/>
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### 10-03 FREDDY'S HAMPTON, VA

#### CheckList Information

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

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

**Requesting Organization :** National TAB

#### CheckList Item Details

**TEST, ADJUST, AND BALANCE ALL EQUIPMENT:**

**DURING TESTING MAKE NOTE OF THE FOLLOWING:**

Is space free of drafting?	Yes
Is space comfortable in all areas?	Yes
Is the space free of ventilation noise?	Yes
If deviations from design were necessary to resolve 1-3 what were they? Otherwise put "NA".	NA

**Notes/Comments :**



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### 10-03 FREDDY'S HAMPTON, VA

#### CheckList Information

<b>Name :</b>	TECH - STEP 4: FINAL TESTS	<b>Status :</b>	Submitted
<b>Assigned Organization :</b>	National TAB	<b>Asset :</b>	
<b>Requesting Organization :</b>	National TAB		

#### CheckList Item Details

##### FINAL TESTS

##### HOOD CAPTURE TEST

List equipment turned on for testing	None
List smoke candle type used	S102 45 sec emitter
Smoke test capture - Perimeter of hood	100%
Smoke test capture - Top of cooking surface	100%

##### WITNESS

Date test was completed	10/06/2022
TAB tech name / Firm	David Annan/ National TAB
Site super name / Firm	Mechanical contractors
Owner representative name / Firm (if Applicable)	NA
Building pressure at front & back doors (All Systems On)	Front: 0.0455" Rear: 0.0535"

##### ADDITIONAL

Do actual net building airflow, design net building airflow, and pressure coincide? If not why? (All three should either be positive or negative)	Yes, OA for RTU-1 is above design due to economizer not being functional.
Thermostats are programmed?	Yes

**Thermostats Schedules: Program all thermostats to following settings:**

All three thermostats have correct time/date? (if not set correctly)	Yes
Occupied Time: 8am-11:55pm	Yes
Occupied Fan ON	Yes
Occupied cooling 74	Yes
Occupied heating 68	Yes
Unoccupied Time 11:55pm-8am	Yes
Unoccupied Fan Auto	Yes
Unoccupied cooling 79	Yes
Unoccupied heating 63	Yes
Set a Partial Screen Lock for Thermostats (i.e., make sure temperature is adjustable but not schedule)	No lock as the manager will set it.
Password is set to 999 for Partial Screen Lock?	NA

**RTU Economizers**

**Note: These instructions are for Lennox units. There are similar settings for other OEMs. Call office for assistance if needed.**

Enthalpy is set to "D" for all three units	TRANE unit set to "E"
"DCV Set" dials turned all the way to the left (counter clockwise)	Yes
"DCV Max" dials turned all the way to the left (counter clockwise)	Yes

**Notes/Comments :**

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Project: 10-03 FREDDY'S HAMPTON, VA  
System/Unit: AHU/RTU



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Asset: DOAS1

AREA:

Unit Data		
	Design	Actual
MFG	CAPTIVE AIRE	CAPTIVE AIRE
Serial Num	-	5064772
Model Num	CASRTU3-I.250-18-20T-DOAS	CASRTU3-I.250-18-20T-DOAS
Type	DOAS	DOAS
Configuration	VERTICAL	Vertical
Num OA Filters 1	-	4
OA Filter Size 1	-	16X25X2
Num Final Filter 1	-	8
Final Filter Size 1	-	20X25X2

Motor Data		
	Design	Actual
Motor MFG	-	Westinghouse
Frame	-	145T
Horsepower	2	2
Motor Rpm	-	1740
Phase	3	3
Rated Voltage	208	230
Rated Amperage	-	5.48

Drive Data		
	Design	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	2200	2284
SF RPM	-	1653
RA CFM	0	0
OA CFM	2200	2284
RL Voltage	-	206
RL Amperage	-	5.4
SF Rotation	-	CW
RA Damper Position	-	0%
Min OA Damper Position	-	100%
Min OA Damper Type	-	SBD
OA Enthalpy Setpt	-	NA

Performance Data		
	Design	Actual
Total ESP	0.50"	-

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

Completed By: David Annan

Notes:

# National TAB

Project:10-03 FREDDY'S HAMPTON, VA

## AHU/RTU



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### Diffuser Supply (GRD)

#### DOAS1/

Asset									
Asset Name	Location	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
DOAS1-SGRD1	COUNTER	SD-3	10"	250	1	210	240	240	96.0
DOAS1-SGRD2	COUNTER	SD-2	10"	205	1	222	202	202	98.5
DOAS1-SGRD3	SUNDAE	SD-3	10"	200	1	222	213	213	106.5
DOAS1-SGRD4	DRIVE THRU	SD-3	10"	205	1	273	210	210	102.4
DOAS1-SGRD5	DISHSINK	SD-2	10"	205	1	232	215	215	104.9
DOAS1-SGRD6	FRY HOOD	SD-3	10"	205	1	259	203	203	99.0
DOAS1-SGRD7	DRY GOODS	SD-3	10"	205	1	225	220	220	107.3
DOAS1-SGRD8	GRIDDLE HOOD	SD-3	10"	205	1	218	208	208	101.5
DOAS1-SGRD9	OFFICE	SD-4	8"	155	1	186	164	164	105.8
DOAS1-SGRD10	MECHANICAL	SD-3	10"	205	1	216	206	206	100.5
DOAS1-SGRD11	FOOD PREP	SD3	10"	205	1	131	203	203	99.0

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Project: 10-03 FREDDY'S HAMPTON, VA  
System/Unit: AHU/RTU



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Asset: RTU1

AREA: DINING

Unit Data		
	Design	Actual
MFG	LENNOX	Trane
Serial Num	-	221010391D
Model Num	LGH150H4M	YHD150G3RHD18D0C1A2A0B0AA
Type	RTU	RTU
Configuration	VERTICAL	Vertical
Num OA Filters 1	-	2
OA Filter Size 1	-	
Num Final Filter 1	-	4
Final Filter Size 1	-	20X20X2
Num Final Filter 2	-	4
Final Filter Size 2	-	20X25X2

Test Data		
	Design	Actual
SF CFM	5000	3970
SF RPM	-	644
RA CFM	4100	229
OA CFM	900	1671
RL Voltage	-	206/207/208
RL Amperage	-	6.4/6.2/6.0
SF Rotation	-	CW
RA Damper Position	-	NA
Min OA Damper Position	-	"Marked"
Min OA Damper Type	-	SBD
OA Enthalpy Setpt	-	E

Motor Data		
	Design	Actual
Motor MFG	-	Marathon
Frame	-	56 HZ
Horsepower	5	3
Motor Rpm	-	1725
Phase	3	3
Rated Voltage	208	208
Rated Amperage	-	9.4

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.24"
Fan Suction SP	-	-0.36"
Fan Discharge SP	-	0.73"
Total ESP	1.00"	0.97"
Fan Total SP	-	1.09"

Drive Data		
	Design	Actual
Motor Sheave Size	-	4 3/4"
Motor Bore Size	-	7/8"
Motor Sheave SetPt	-	1 Turns out (Max)
Fan Sheave Size	-	10 3/4"
Fan Sheave Bore	-	1"
Belt CL Distance	-	19.5 "
Num of Belts	-	1
Belt Size	-	BX66
Belt Alignment	-	Good

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

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Notes:

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Project:10-03 FREDDY'S HAMPTON, VA

## AHU/RTU



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### 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	1.12	244	181	341	71.8
RTU1-SGRD2	DINING	SD-1	12"	470	1.12	81	187	320	68.1
RTU1-SGRD3	DINING	SD-1	12"	470	1.12	255	171	316	67.2
RTU1-SGRD4	DINING	SD-1	12"	475	1.12	90	134	326	68.6
RTU1-SGRD5	DINING	SD-1	12"	475	1.12	248	288	362	76.2
RTU1-SGRD6	DINING	SD-1	12"	480	1.12	236	230	330	68.8
RTU1-SGRD7	DINING	SD-1	12"	470	1.12	364	299	336	71.5
RTU1-SGRD8	DINING	SD-1	12"	475	1.12	470	457	359	75.6
RTU1-SGRD9	DINING	SD-1	12"	470	1.12	497	599	370	78.7
RTU1-SGRD10	DINING	SD-1	12"	475	1.12	539	645	366	77.1
RTU1-SGRD11	HALLWAY	SD-5	6"	50	1	139	173	174	348.0
RTU1-SGRD12	RESTROOM	SD-5	6"	75	1	156	175	173	230.7
RTU1-SGRD13	RESTROOM	SD-5	6"	50	1	173	186	197	394.0

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Project: 10-03 FREDDY'S HAMPTON, VA  
System/Unit: FAN - Exhaust



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Asset: EF1

AREA:RESTROOM

Unit Data		
	Design	Actual
<b>MFG</b>	COOK	COOK
<b>Model Num</b>	GC-146	GC-146
<b>Serial Num</b>	-	N/L
<b>Type</b>	CEILING	Ceiling
<b>Configuration</b>	VERTICAL	Vertical

Motor Data		
	Design	Actual
<b>Motor MFG</b>	-	QUEACE
<b>Frame</b>	-	N/L
<b>Horsepower</b>	30.3W	15 W
<b>Motor Rpm</b>	-	1550
<b>Phase</b>	1	1
<b>Voltage (rated)</b>	120	115
<b>Amperage (rated)</b>	-	4.0/2.2
<b>Service Factor</b>	-	N/L

Test Data		
	Design	Actual
<b>CFM</b>	75	82
<b>Fan RPM</b>	900	NA
<b>Fan Rotation</b>	-	CCW
<b>Motor RPM</b>	-	NA
<b>System SetPt</b>	-	Low Speed
<b>RL Voltage</b>	-	115
<b>RL Amperage</b>	-	0.2
<b>Total ESP</b>	0.25"	0.13"
<b>Fan Inlet SP</b>	-	-0.13"
<b>Fan Discharge SP</b>	-	ATM

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Project: 10-03 FREDDY'S HAMPTON, VA  
System/Unit: FAN - Exhaust



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Asset: EF2

AREA:RESTROOM

Unit Data		
	Design	Actual
<b>MFG</b>	COOK	COOK
<b>Model Num</b>	GC-168	GC-168
<b>Serial Num</b>	-	N/L
<b>Type</b>	CEILING	Ceiling
<b>Configuration</b>	VERTICAL	Vertical

Motor Data		
	Design	Actual
<b>Motor MFG</b>	-	QUEACE
<b>Frame</b>	-	N/L
<b>Horsepower</b>	50.4 W	16 W
<b>Motor Rpm</b>	-	1100
<b>Phase</b>	1	1
<b>Voltage (rated)</b>	120	120
<b>Amperage (rated)</b>	-	0.51/0.44
<b>Service Factor</b>	-	N/L

Test Data		
	Design	Actual
<b>CFM</b>	150	148
<b>Fan RPM</b>	-	1100
<b>Fan Rotation</b>	-	CCW
<b>Motor RPM</b>	-	1100
<b>System SetPt</b>	-	MAX
<b>RL Voltage</b>	-	115
<b>RL Amperage</b>	-	0.51
<b>Total ESP</b>	0.25"	0.19"
<b>Fan Inlet SP</b>	-	-0.19"
<b>Fan Discharge SP</b>	-	ATM

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Notes:

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Project: 10-03 FREDDY'S HAMPTON, VA  
System/Unit: FAN - Exhaust



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Asset: KEF1

AREA:HD1

Unit Data		
	Design	Actual
<b>MFG</b>	CAPTIVE AIRE	CAPTIVE AIRE
<b>Model Num</b>	CASRE18DD	CASRE18DD
<b>Serial Num</b>	-	5064772
<b>Type</b>	UPBLAST	Upblast
<b>Configuration</b>	VERTICAL	Vertical

Motor Data		
	Design	Actual
<b>Motor MFG</b>	-	Westinghouse
<b>Frame</b>	-	145T
<b>Horsepower</b>	1	1
<b>Motor Rpm</b>	-	1150
<b>Phase</b>	3	3
<b>Voltage (rated)</b>	208	230
<b>Amperage (rated)</b>	-	3.41
<b>Service Factor</b>	-	1.15

Test Data		
	Design	Actual
<b>CFM</b>	1600	1725
<b>Fan RPM</b>	-	1182
<b>Fan Rotation</b>	-	CCW
<b>Motor RPM</b>	-	1182
<b>System SetPt</b>	-	61.7 HZ
<b>RL Voltage</b>	-	167.8/167.8/167.8
<b>RL Amperage</b>	-	3.3 "VFD"
<b>Total ESP</b>	1.40"	0.91"
<b>Fan Inlet SP</b>	-	-0.91"
<b>Fan Discharge SP</b>	-	ATM

Completed By: David Annan

Notes:

# National TAB

Project: 10-03 FREDDY'S HAMPTON, VA  
System/Unit: FAN - Exhaust



Comfort. Under control.

Asset: KEF2

AREA:HD2

Unit Data		
	Design	Actual
<b>MFG</b>	CAPTIVE AIRE	CAPTIVE AIRE
<b>Model Num</b>	DU50HFA	DU50HFA
<b>Serial Num</b>	-	5064772
<b>Type</b>	UPBLAST	Upblast
<b>Configuration</b>	VERTICAL	Vertical

Motor Data		
	Design	Actual
<b>Motor MFG</b>	-	Telco Green
<b>Frame</b>	-	N/L
<b>Horsepower</b>	0.5	0.5
<b>Motor Rpm</b>	-	1800
<b>Phase</b>	1	1
<b>Voltage (rated)</b>	115	115
<b>Amperage (rated)</b>	-	6.3
<b>Service Factor</b>	-	N/L

Test Data		
	Design	Actual
<b>CFM</b>	775	845
<b>Fan RPM</b>	-	1062
<b>Fan Rotation</b>	-	CCW
<b>Motor RPM</b>	-	1062
<b>System SetPt</b>	-	59%
<b>RL Voltage</b>	-	120
<b>RL Amperage</b>	-	1.3
<b>Total ESP</b>	1.25"	0.60"
<b>Fan Inlet SP</b>	-	-0.60"
<b>Fan Discharge SP</b>	-	ATM

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Notes:

# National TAB

Project: 10-03 FREDDY'S HAMPTON, VA

## System/Unit: Kitchen Hood Type I



Comfort. Under control.

Asset: KEH1

AREA:GRIDDLE

Unit Data		
	Design	Actual
<b>MFG</b>	CAPTIVE AIRE	CAPTIVE AIRE
<b>Model Num</b>	5424 ND-2	5424 ND-2
<b>Job / Serial Num</b>	-	5064772
<b>Type</b>	TYPE I CANOPY	Type I Canopy
<b>Hood length</b>	96"	96"
<b>Hood Width</b>	54"	54"

Test Data Exhaust		
	Design	Actual
<b>Filter Type</b>	BAFFLE	CAPTRATE SOLO
<b>Filter Size 1</b>	16X16	16X16
<b>Filter Qty 1</b>	5	5
<b>Filter AK factor size 1</b>	1.62	1.62
<b>Filter Total AK Area</b>	8.1	8.1
<b>Filter1 FPM</b>	-	-210
<b>Filter2 FPM</b>	-	-216
<b>Filter3 FPM</b>	-	-228
<b>Filter4 FPM</b>	-	-213
<b>Filter5 FPM</b>	-	-199
<b>Filter Ave FPM(corr)</b>	-	-213
<b>CFM</b>	1600	1725

Cooking Equipment		
	Design	Actual
<b>Item 1</b>	-	Grill
<b>Item 2</b>	-	Grill

Completed By: David Annan

Notes:

# National TAB

Project: 10-03 FREDDY'S HAMPTON, VA

## System/Unit: Kitchen Hood Type I



Comfort. Under control.

Asset: KEH2

AREA:FRYER

Unit Data		
	Design	Actual
MFG	CAPTIVE AIRE	CAPTIVE AIRE
Model Num	5424 ND-2	5424 ND-2
Job / Serial Num	-	5064772
Type	TYPE I CANOPY	Type I Cannopy
Hood length	60"	60"
Hood Width	54"	54"

Test Data Exhaust		
	Design	Actual
Filter Type	BAFFLE	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	-	-176
Filter2 FPM	-	-176
Filter3 FPM	-	-173
Filter Ave FPM(corr)	-	-175
CFM	775	845

Cooking Equipment		
	Design	Actual
Item 1	-	Fryer
Item 2	-	Fryer

Completed By: David Annan

Notes:

DN)  
DAMPERS  
LIGHTING TRACK  
MOUNT DUCT AS HIGH AS TRUSS  
OR LIGHTING TRACK WILL ALLOW

