Report By:

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

Report: TAB Report

Function: Test, Adjust, & Balance

Date: 11/07/2024

Completed By: National TAB

PROJECT

11-04-24 FREDDY'S - LANCASTER, PA

2347 Lincoln Highway East

Lancaster, PA 17602

Client

FMC Foods

National TAB

Project: 11-04-24 FREDDY'S - LANCASTER, PA

Table Of Contents

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-2 high on flow
- RTU-1/RTU-2 missing OA filter
- RTU-2 Final Filters Dirty
- RTU-2/RTU-3 motor sheave seized
- RTU-3 economizer not functional

11-04-24 FREDDY'S - LANCASTER, PA

Project Issue Information

Issue Name : EF-1/EF-2 high on flow

Description : EF-1/EF-2 restroom exhaust fans are high on flow at 99/75 and 97/75CFM. NTi rewired the exhaust fans for lowest speed settings and this is the lowest possible CFM achieved. Could not reduce further.

Created By : National TAB

Assigned To : National TAB - Dylan Crisman

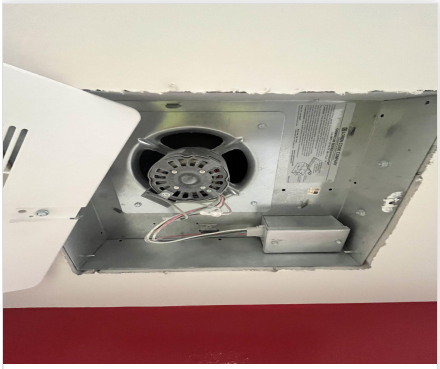
Status : Open

Priority : Medium

Asset Tag :

Originated Date : 11/06/2024 - Dylan Crisman - National TAB

Project Issue File Details



11/06/2024

11/06/2024

11-04-24 FREDDY'S - LANCASTER, PA

Project Issue Information

Issue Name : RTU-1/RTU-2 missing OA filter

Description : RTU-1/RTU-2 OA Mesh filters are missing. Recommend replacing with correct size Mesh filters.

Created By : National TAB

Assigned To : National TAB - Dylan Crisman

Status : Open

Priority : Low

Asset Tag :

Originated Date : 11/06/2024 - Dylan Crisman - National TAB

Project Issue File Details

11/06/2024

11-04-24 FREDDY'S - LANCASTER, PA

Project Issue Information

Issue Name : RTU-2 Final Filters Dirty

Description : RTU-2 final filters are dirty, recommend replacing with clean correct size (4 20x25x2) merv 8 rated pleated filters

Created By : National TAB

Assigned To : National TAB - Dylan Crisman

Status : Open

Priority : Low

Asset Tag :

Originated Date : 11/06/2024 - Dylan Crisman - National TAB

Project Issue File Details

11/06/2024

11/06/2024

11-04-24 FREDDY'S - LANCASTER, PA

Project Issue Information

Issue Name :	RTU-2/RTU-3 motor sheave seized		
Description :	RTU-2/RTU-3 motor sheaves are seized, unable to free to make speed adjustment on units. Unable to increase airflow. Recommend mechanical inspect and possibly replace motor sheaves.		
Created By :	National TAB	**Assigned To :**	National TAB - Dylan Crisman
Status :	Open		
Priority :	Medium	**Asset Tag :**	
Originated Date :	11/06/2024 - Dylan Crisman - National TAB		

11-04-24 FREDDY'S - LANCASTER, PA

Project Issue Information

Issue Name : RTU-3 economizer not functional

Description : RTU-3 economizer is not functional, when changing potentiometer setpoints on economizer box there is no change in damper position. Recommend mechanical troubleshoot and diagnose to correct this problem. Damper has been Manually set.

Created By : National TAB

Assigned To : National TAB - Dylan Crisman

Status : Open

Priority : High

Asset Tag :

Originated Date : 11/06/2024 - Dylan Crisman - National TAB

Project Issue File Details

11/06/2024

11/06/2024

National TAB

Project: 11-04-24 FREDDY'S - LANCASTER, PA

- Open BALANCE_SCHEDULE_LARGE_JOBS_FREDDYS_LANCASTER_PA.xlsx

CheckList List

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

11-04-24 FREDDY'S - LANCASTER, PA

CheckList Information

Name :	TECH - STEP 1l INITIAL SITE WALKTHROUGH	**Status :**	Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	11/06/2024 - Brian Turnbough - National TAB		
Completed Date :	11/06/2024 - Dylan Crisman - 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: Issue Created.	
Thermostats have power?	Yes
Comment:	
Have trades/general contractor been notified about any issues and are they created on FaciliBuild?	

Comment:

Yes

11-04-24 FREDDY'S - LANCASTER, PA

CheckList Information

Name :	TECH - STEP 2: UNIT DATA AND EVAL	**Status :**	Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	11/06/2024 - Brian Turnbough - National TAB		
Completed Date :	11/06/2024 - Dylan Crisman - 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?	No
Comment:	
RTU-1/RTU-2 Economizers work. RTU-3 economizer not functional, issue created.	
DCV Max damper opening position is set to minimum?	Yes
Comment:	
Free cooling enthalpy set point set for lowest setting (Typically "D")	Yes
Comment:	
Motors are all operating below the FLA rating?	Yes
Comment:	
Are belts tight?	

Comment:

YES

If direct drive unit is the speed controller working.

Comment:

YES

Is gas piping installed and valves turned on?

Comment:

YES

Unit free of noticeable noise and vibration

Comment:

YES

EF's

Rotation is correct?

Comment:

YES

Belts are tight?

Comment:

NA/DD

Grease cup installed on hood fan? Yes

Comment:

Hinge kit installed installed on hood fan? Yes

Comment:

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

Comment:

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

Comment:

There is no major leakage around base of fan?	Yes
Comment:	
Is the motor operating below the motor FLA rating?	Yes
Comment:	
For restroom fan(s) is the back draft damper installed and can it fully open?	Yes
Comment:	
Unit free of noticeable noise and vibration?	Yes
Comment:	
MUA	
Rotation is correct?	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?	Yes

Comment:	
Can kitchen equipment be turned on for final smoke test?	No
Comment:	
DOCUMENTATION	
Have trades/general contractor been notified about any issues and are they created on FaciliBuild?	Yes
Comment:	

11-04-24 FREDDY'S - LANCASTER, PA

CheckList Information

Name :	TECH - STEP 3: TEST ADJUST AND BALANCE	**Status :**	Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	11/06/2024 - Brian Turnbough - National TAB		
Completed Date :	11/06/2024 - Dylan Crisman - 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:

NA

11-04-24 FREDDY'S - LANCASTER, PA

CheckList Information

Name :	TECH - STEP 4: FINAL TESTS	**Status :**	Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	11/06/2024 - Brian Turnbough - National TAB		
Completed Date :	11/08/2024 - Dylan Crisman - National TAB		

CheckList Item Details

FINAL TESTS

HOOD CAPTURE TEST

List equipment turned on for testing

Comment:

NONE

List smoke candle type used

Comment:

CE0163 45 SEC 150CF

Smoke test capture - Perimeter of hood

Comment:

100%

Smoke test capture - Top of cooking surface

Comment:

100%

WITNESS

Date test was completed	11/07/2024
Comment:	

TAB tech name / Firm

Comment:

Dylan Crisman / NTi

Site super name / Firm

Comment:

Owner representative name / Firm (if Applicable)

Comment:

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

Comment:

-0.0051”

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?	Yes
Comment:	

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Project: 11-04-24 FREDDY'S - LANCASTER, PA

System/Unit: AHU/RTU

Asset: RTU1 AREA:KITCHEN I

Unit Data		
	Design	**Actual**
MFG	CAPTIVEAIRE	TRANE
Serial Num	-	172612640L
Model Num	CASRTU3-I.400-18-15T	YSC060G3RHA0100
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	1
OA Filter Size 1	-	NA
Num Final Filter 1	-	2
Final Filter Size 1	-	20X35X2

Motor Data		
	Design	**Actual**
Motor MFG	-	US-MOTORS
Frame	-	NL
Horsepower	-	1.0
Motor Rpm	-	NL
Phase	3	3
Rated Voltage	208	208
Rated Amperage	-	6.9

Test Data		
	Design	**Actual**
SF CFM	2000	1869
RA CFM	1500	1357
OA CFM	500	512
RL Voltage	-	216/213/215
RL Amperage	-	4.8/4.8/4.7
SF Rotation	-	CW
SF System SetPt	-	
RA Damper Position	-	80%
Min OA Damper Position	-	20%
Min OA Damper Type	-	ECONOMIZER
OA Enthalpy Setpt	-	E

Performance Data		
	Design	**Actual**
MA Plenum SP	-	-0.17”
Fan Suction SP	-	-0.35”
Fan Discharge SP	-	0.45”
Total ESP	0.8"	0.62”
Fan Total SP	-	0.8”

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

Unit Data - PHOTO LOG

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Notes:
NO DAMPERS AT FACE OF DIFFUSER OR TAKEOFFS.

Diffuser Supply (GRD)

RTU1/KITCHEN I

Asset									
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
RTU1-SGRD1	ENTRANCE	SD-4	10"	350	1.0	338	326	326	93.1
RTU1-SGRD2	DINING	SD-4	8"	150	1.0	190	143	143	95.3
RTU1-SGRD3	DINING	SD-4	10"	350	1.0	298	329	329	94.0
RTU1-SGRD4	DINING	SD-2	10"	350	1.0	324	320	320	91.4
RTU1-SGRD5	DINING	SD-3	14"	800	1.0	763	751	751	93.9
Total				2000		1913	1869	1869	93.45%

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Project: 11-04-24 FREDDY'S - LANCASTER, PA

System/Unit: AHU/RTU

Asset: RTU2 AREA:Kitchen

Unit Data		
	Design	**Actual**
MFG	CAPTIVEAIRE	TRANE
Serial Num	-	142410340L
Model Num	CASRTU3-I.400-18-15T	YSC092F3RHA09B0C
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	1
Num Final Filter 1	-	4
Final Filter Size 1	-	20X25X2

Motor Data		
	Design	**Actual**
Motor MFG	-	MARATHON
Frame	-	56
Horsepower	-	1.0
Motor Rpm	-	1725
Phase	3	3
Rated Voltage	208	208
Rated Amperage	-	3.6

Drive Data	
	Actual
Motor Sheave Size	3"
Motor Bore Size	5/8"
Motor Sheave SetPt	3 TURNS OPEN
Fan Sheave Size	AK59X1
Fan Sheave Bore	1"
Belt CL Distance	12"
Num of Belts	1
Belt Size	A35
Belt Alignment	VERIFIED

Test Data		
	Design	**Actual**
SF CFM	3000	2928
SF RPM	-	713
RA CFM	1950	1853
OA CFM	1050	1075
RL Voltage	-	215/216/217
RL Amperage	-	2.7/2.7/2.6
SF Rotation	-	CW
SF System SetPt	-	
RA Damper Position	-	NA
Min OA Damper Position	-	1.25" OPEN
Min OA Damper Type	-	ECONOMIZER
OA Enthalpy Setpt	-	E

Performance Data		
	Design	**Actual**
MA Plenum SP	-	-0.17"
Fan Suction SP	-	-0.39"
Fan Discharge SP	-	0.35"
Total ESP	0.8"	0.52"
Fan Total SP	-	0.74"

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

Test Data - PHOTO LOG

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Diffuser Supply (GRD)

RTU2/Kitchen

Asset									
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
RTU2-SGRD1	KITCHEN	SD-3	14"	900	1.0	736	842	842	93.6
RTU2-SGRD2	KITCHEN	SD-3	14"	790	1.0	641	776	776	98.2
RTU2-SGRD3	KITCHEN	SD-2	12"	580	1.0	658	569	569	98.1
RTU2-SGRD4	KITCHEN	SD-2	12"	580	1.0	681	590	590	101.7
RTU2-SGRD5	KITCHEN	SD-3	6"	50	1.0	93	54	54	108.0
RTU2-SGRD6	KITCHEN	SD-5	6"	50	1.0	76	49	49	98.0
RTU2-SGRD7	KITCHEN	SD-5	6"	50	1.0	90	48	48	96.0
Total				3000		2975	2928	2928	97.6%

Completed By: Dylan Crisman on 11/07/2024

National TAB

Project: 11-04-24 FREDDY'S - LANCASTER, PA

System/Unit: AHU/RTU

Asset: RTU3 AREA:KITCHEN

Unit Data		
	Design	**Actual**
MFG	CAPTIVEAIRE	TRANE
Serial Num	-	1431120771
Model Num	CASRTU3-I.400-18-15T	YSC092F3RHA09B0C
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	1
Num Final Filter 1	-	4
Final Filter Size 1	-	20X25X2

Motor Data		
	Design	**Actual**
Motor MFG	-	MARATHON
Frame	-	56
Horsepower	2.00	1.0
Motor Rpm	-	1725
Phase	3	3
Rated Voltage	208	208
Rated Amperage	-	3.6

Drive Data	
	Actual
Motor Sheave Size	3"
Motor Bore Size	5/8"
Motor Sheave SetPt	3 TURNS OPEN
Fan Sheave Size	AK59X1
Fan Sheave Bore	1"
Belt CL Distance	12"
Num of Belts	1
Belt Size	A35
Belt Alignment	VERIFIED

Test Data		
	Design	**Actual**
SF CFM	3000	2877
SF RPM	-	712
RA CFM	1950	1785
OA CFM	1050	1092
RL Voltage	-	215/216/215
RL Amperage	-	3.1/3.2/3.2
SF Rotation	-	CW
SF System SetPt	-	3 TURNS OPEN
RA Damper Position	-	NA
Min OA Damper Position	-	1.5” OPEN
Min OA Damper Type	-	ECONOMIZER
OA Enthalpy Setpt	-	E

Performance Data		
	Design	**Actual**
MA Plenum SP	-	-0.23”
Fan Suction SP	-	-0.49”
Fan Discharge SP	-	0.34”
Total ESP	0.500"	0.57”
Fan Total SP	-	0.84”

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

Unit Data - PHOTO LOG

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Diffuser Supply (GRD)

RTU3/KITCHEN

Asset									
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
DOAS1-SGRD1	DINING	SD-1	10"	350	1.0	348	348	348	99.4
DOAS1-SGRD2	DINING	SD-1	10"	300	1.0	256	279	279	93.0
DOAS1-SGRD3	DINING	SD-1	10"	370	1.0	421	342	342	92.4
DOAS1-SGRD4	DINING	SD-1	10"	370	1.0	263	355	355	95.9
DOAS1-SGRD5	DINING	SD-1	10"	370	1.0	277	348	348	94.1
DOAS1-SGRD6	DINING	SD-1	10"	370	1.0	410	353	353	95.4
RTU3-SGRD7	DINING	SD-1	10"	350	1.0	325	341	341	97.4
RTU3-SGRD8	DINING	SD-1	10"	370	1.0	387	367	367	99.2
RTU3-SGRD9	ENTRANCE	SD-5	8"	150	1.0	248	144	144	96.0
Total				3000		2935	2877	2877	95.9%

Completed By: Dylan Crisman on 11/07/2024

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Project: 11-04-24 FREDDY'S - LANCASTER, PA

System/Unit: FAN - Exhaust

Asset: EF1 AREA:

Unit Data		
	Design	**Actual**
MFG	CAPTIVE-AIRE	COOK
Model Num	CASRE18DD	GEMENI 140 Series
Serial Num	-	NL
Type	CEILING	CEILING
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	**Actual**
Motor MFG	-	QUEACE
Frame	-	NL
Horsepower	-	NL
Motor Rpm	-	1550
Phase	1	1
Voltage (rated)	120	115
Amperage (rated)	-	0.4
Service Factor	-	NL

Test Data		
	Design	**Actual**
CFM	75	99
Fan RPM	-	NA
Fan Rotation	-	CCW
Motor RPM	-	NA
System SetPt	-	LOW SPEED
RL Voltage	-	113
RL Amperage	-	0.3
Total ESP	1/4"	NA
Fan Inlet SP	-	NA
Fan Discharge SP	-	ATM

Unit Data - PHOTO LOG

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Project: 11-04-24 FREDDY'S - LANCASTER, PA

System/Unit: FAN - Exhaust

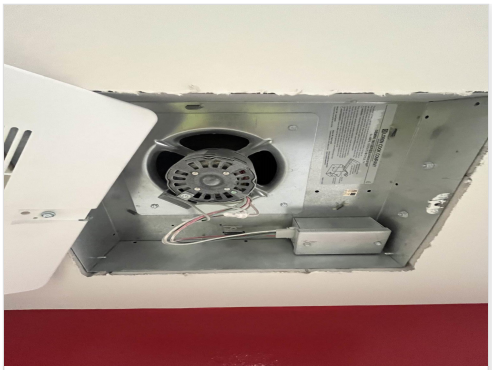
Asset: EF2 AREA:

Unit Data		
	Design	**Actual**
MFG	CAPTIVE-AIRE	COOK
Model Num	CASRE18DD	GEMINI 140 SERIES
Serial Num	-	NL
Type	CEILING	CEILING
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	**Actual**
Motor MFG	-	QUEACE
Frame	-	NL
Horsepower	-	NL
Motor Rpm	-	1550
Phase	1	1
Voltage (rated)	120	115
Amperage (rated)	-	0.4
Service Factor	-	NL

Test Data		
	Design	**Actual**
CFM	75	97
Fan RPM	-	NA
Fan Rotation	-	CCW
Motor RPM	-	NA
System SetPt	-	LOW SPEED
RL Voltage	-	114
RL Amperage	-	0.3
Total ESP	1/4"	NA
Fan Inlet SP	-	NA
Fan Discharge SP	-	ATM

Unit Data - PHOTO LOG



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National TAB

Project: 11-04-24 FREDDY'S - LANCASTER, PA

System/Unit: FAN - Exhaust

Asset: KEF1 AREA:GRIDDLE

Unit Data		
	Design	**Actual**
MFG	CAPTIVE-AIRE	CAPTIVEAIRE
Model Num	CASRE18DD	CASRE18DD
Serial Num	-	6353783
Type	UTILITY	UTILITY
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	**Actual**
Motor MFG	-	TECO-WESTINGHOUSE
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	1612
Fan RPM	-	883
Fan Rotation	-	CCW
Motor RPM	-	883
System SetPt	-	46.1Hz
RL Voltage	-	101V@VFD
RL Amperage	-	2.4@VFD
Total ESP	1.500"	NA
Fan Inlet SP	-	NA
Fan Discharge SP	-	ATM

Unit Data - PHOTO LOG

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National TAB

Project: 11-04-24 FREDDY'S - LANCASTER, PA

System/Unit: FAN - Exhaust

Asset: KEF2 AREA:FRYER

Unit Data		
	Design	**Actual**
MFG	CAPTIVE-AIRE	CAPTIVEAIRE
Model Num	CASRE18DD	DU85HFA
Serial Num	-	6353783
Type	UPBLAST	UPBLAST
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	**Actual**
Motor MFG	-	TELCO-GREEN
Frame	-	NL
Horsepower	-	0.500
Motor Rpm	-	1800
Phase	-	1
Voltage (rated)	-	115
Amperage (rated)	-	6.3
Service Factor	-	1.15

Test Data		
	Design	**Actual**
CFM	-	782
Fan RPM	-	1008
Fan Rotation	-	CCW
Motor RPM	-	1008
System SetPt	-	56%
RL Voltage	-	124.5
RL Amperage	-	2.7
Total ESP	-	0.78”
Fan Inlet SP	-	-0.78”
Fan Discharge SP	-	ATM

Unit Data - PHOTO LOG

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Completed By: Dylan Crisman on 11/06/2024

National TAB

Project: 11-04-24 FREDDY'S - LANCASTER, PA

System/Unit: Kitchen Hood Type I

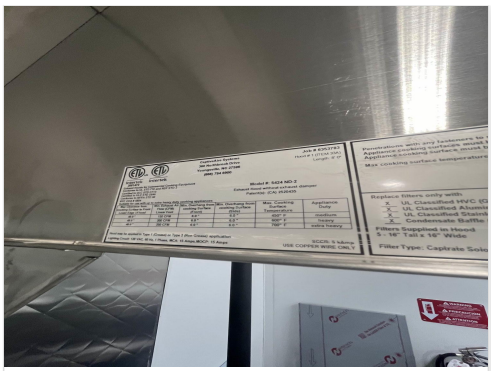
Asset: HD1 AREA:

Unit Data		
	Design	**Actual**
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	5424 ND-2	5424 ND-2
Job / Serial Num	-	6353783
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	-	193
Filter2 FPM	-	220
Filter3 FPM	-	200
Filter4 FPM	-	196
Filter5 FPM	-	187
Filter6 FPM	-	
Filter7 FPM	-	
Filter8 FPM	-	
Filter9 FPM	-	
Filter10 FPM	-	
Filter11 FPM	-	
Filter12 FPM	-	
Filter Ave FPM(corr)	-	199
CFM	1600	1612

Cooking Equipment	
	Actual
Item 1	GRIDDLE
Item 2	BURGER PRESS

Unit Data - PHOTO LOG



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Completed By: Dylan Crisman on 11/06/2024

National TAB

Project: 11-04-24 FREDDY'S - LANCASTER, PA

System/Unit: Kitchen Hood Type I

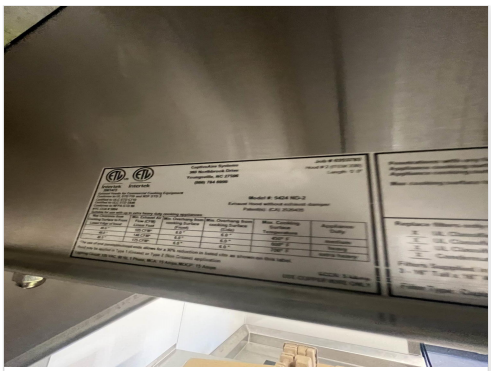
Asset: HD2 AREA:

Unit Data		
	Design	**Actual**
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	5424 ND-2	5424 ND-2
Job / Serial Num	-	6353783
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	-	163
Filter2 FPM	-	165
Filter3 FPM	-	155
Filter4 FPM	-	
Filter5 FPM	-	
Filter6 FPM	-	
Filter7 FPM	-	
Filter8 FPM	-	
Filter9 FPM	-	
Filter10 FPM	-	
Filter11 FPM	-	
Filter12 FPM	-	
Filter Ave FPM(corr)	-	161
CFM	775	782

Cooking Equipment	
	Actual
Item 1	FRYER
Item 2	FRYER

Unit Data - PHOTO LOG



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Completed By: Dylan Crisman on 11/06/2024

Date: 11/8/2024