

Report By:

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

NATIONAL

TAB

Comfort. Under control.

**Report: TAB Report
Function: Test, Adjust, & Balance
Date: 04/05/2023**

PROJECT

Coconut Grove - Kings Island

6300 Kings Island Dr

Kings Mills, OH 45034

Client

F.G. SCHAEFER CO, INC

National TAB

Project: Coconut Grove - Kings Island

Table Of Contents

Section	Page #
Summary	3
Site Pictures	4
Checklist Data	8
FAN - Exhaust	9
Kitchen Hood Type I	11
Kitchen Hood Type II	13
SDV Report	14

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.

KEF 7



KEF 8



MAIN HOOD



MAIN HOOD



PIZZA HOOD



KEF 7



KEF 8



MAIN HOOD



MAIN HOOD



PIZZA HOOD





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Coconut Grove - Kings Island

CheckList Information

Name :	TECH 1 INITIAL SITE WALKTHROUGH	Status :	Submitted
Assigned Organization :	National TAB	Asset :	
Requesting Organization :	National TAB		

CheckList Item Details

INITIAL SITE WALKTHROUGH

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

Notes/Comments :



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Coconut Grove - Kings Island

CheckList Information

Name :	TECH 2 UNIT DATA AND EVALUATION	Status :	Submitted
Assigned Organization :	National TAB	Asset :	
Requesting Organization :	National TAB		

CheckList Item Details

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

EF's

Rotation is correct?	Yes
Belts are tight?	DIRECT DRIVE
Grease cup installed on hood fan?	No
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?	Yes
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?	Yes
Gas piping is installed and valves are in on position?	Yes
Heater tested and is functional?	Yes

Internal motorized damper is fully opening?	Yes
---	-----

Motor is operating below the FLA rating?	Yes
--	-----

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

HOODS

Kitchen equipment installed in proper places?	Yes
---	-----

Can kitchen equipment be turned on for final smoke test?	Yes
--	-----

DOCUMENTATION

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

Notes/Comments :



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Coconut Grove - Kings Island

CheckList Information

Name : TECH 3 TEST, ADJUST, AND BALANCE **Status :** Submitted

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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Coconut Grove - Kings Island

CheckList Information

Name : TECH 4 FINAL TESTS **Status :** Submitted
Assigned Organization : National TAB **Asset :**
Requesting Organization : National TAB

CheckList Item Details

FINAL TESTS

HOOD CAPTURE TEST

List equipment turned on for testing	NONE
List smoke candle type used	45 SEC SMOKE EMITTER
Smoke test capture - Perimeter of hood	100%
Smoke test capture - Top of cooking surface	100%

WITNESS

Date test was completed	03/29/2023
TAB tech name / Firm	AUSTIN MCFALL/NATIONAL TAB
Site super name / Firm	NA/NA
Owner representative name / Firm (if Applicable)	NA/NA
Building pressure at front & back doors (All Systems On)	-0.009"

ADDITIONAL

Do actual net building airflow, design net building airflow, and pressure coincide? If not why? (All three should either be positive or negative)	HAVC HAS NOT YET BEEN INSTALLED
Thermostats are programmed?	No

Notes/Comments :



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Coconut Grove - Kings Island

CheckList Information

Name :	TECH 5 FINAL DOCUMENTATION	Status :	Submitted
Assigned Organization :	National TAB	Asset :	
Requesting Organization :	National TAB		

CheckList Item Details

FINAL DOCUMENTATION

Marked Data capture complete for all assets?	Yes
Picture file sent to processing team or uploaded?	Yes
Balance schedule complete and uploaded?	Yes
Prelim report generated and reviewed?	Yes

Notes/Comments :

National TAB

Project: Coconut Grove - Kings Island

System/Unit: FAN - Exhaust



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Asset: EF2

AREA:

Unit Data		
	Design	Actual
MFG	Captive Aire	Captive Aire
Model Num	DU240HFA	DU240HFA
Serial Num	-	5804650
Type	-	VERTICAL
Configuration	-	UPBLAST

Test Data		
	Design	Actual
CFM	4300	4181
Fan RPM	844	820
Fan Rotation	-	CCW
Motor RPM	-	1150
System SetPt	-	40 HZ
RL Voltage	-	208
RL Amperage	-	11.2
Total ESP	-	1.09"
Fan Inlet SP	-	-1.09"
Fan Discharge SP	-	ATM

Motor Data		
	Design	Actual
Motor MFG	-	ODP
Horsepower	-	5.0
Motor Rpm	-	1150
Phase	-	3
Voltage (rated)	-	230
Amperage (rated)	-	14.3
Service Factor	-	1.15

Completed By: Austin McFall

Notes:

National TAB

Project: Coconut Grove - Kings Island
System/Unit: FAN - Exhaust



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Asset: EF7

AREA: Pizza Hood

Unit Data		
	Design	Actual
MFG	Captive Aire	Captive Aire
Model Num	DU240HFA	DU180HFA
Serial Num	-	5804650
Type	-	VERTICAL
Configuration	-	UPBLAST

Motor Data		
	Design	Actual
Motor MFG	-	ODP
Horsepower	-	2.0
Motor Rpm	-	1150
Phase	-	3
Voltage (rated)	-	208
Amperage (rated)	-	8.3
Service Factor	-	1.15

Test Data		
	Design	Actual
CFM	3000	2175
Fan RPM	1119	811
Fan Rotation	-	CCW
Motor RPM	-	1150
System SetPt	-	35 HZ
RL Voltage	-	208
RL Amperage	-	6.1
Total ESP	-	0.75"
Fan Inlet SP	-	-0.75"
Fan Discharge SP	-	ATM

Completed By: Austin McFall

Notes:

National TAB

Project: Coconut Grove - Kings Island

System/Unit: Kitchen Hood Type I



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Asset: HD1

AREA:

Unit Data		
	Design	Actual
MFG	NA	NA
Model Num	NA	NA
Job / Serial Num	-	NA
Type	-	TYPE I CANOPY
Hood length	-	105"
Hood Width	-	51"
Supply Plenum Type	-	PSP
Supply Plenum Width	-	14"
Supply Plenum Length	-	105"

Test Data Exhaust		
	Design	Actual
Filter Type	BAFFLE	BAFFLE
Filter Size 1	-	20X20
Filter Qty 1	-	5
Filter AK factor size 1	-	2.68
Filter Total AK Area	-	13.4
Filter1 FPM	-	143
Filter2 FPM	-	151
Filter3 FPM	-	168
Filter4 FPM	-	155
Filter5 FPM	-	156
Filter Ave FPM(corr)	-	155
CFM	2150	2077

Cooking Equipment		
	Design	Actual
Item 1	-	OVEN
Item 2	-	FRYER
Item 3	-	FRYER
Item 4	-	
Item 5	-	

Test Data Supply		
	Design	Actual
Total AK Area	-	10.20
Kv factor (Vel)	-	0.87
Num of Readings	-	12
Reading1 FPM	-	161
Reading2 FPM	-	154
Reading3 FPM	-	111
Reading4 FPM	-	116
Reading5 FPM	-	118
Reading6 FPM	-	129
Reading7 FPM	-	145
Reading8 FPM	-	144
Reading9 FPM	-	111
Reading10 FPM	-	121
Reading11 FPM	-	144
Reading12 FPM	-	133
Reading13 FPM	-	
Reading14 FPM	-	
Ave FPM(corr)	-	132
CFM	1400	1174

Completed By: Austin McFall

Notes:

National TAB

Project: Coconut Grove - Kings Island

System/Unit: Kitchen Hood Type I



Comfort. Under control.

Asset: HD2

AREA:

Unit Data		
	Design	Actual
MFG	NA	NA
Model Num	NA	NA
Job / Serial Num	-	NA
Type	-	TYPE I CANOPY
Hood length	-	105"
Hood Width	-	51"
Supply Plenum Type	-	PSP
Supply Plenum Width	-	14"
Supply Plenum Length	-	105"

Test Data Supply		
	Design	Actual
Total AK Area	-	10.2
Kv factor (Vel)	-	0.87
Num of Readings	-	12
Reading1 FPM	-	155
Reading2 FPM	-	144
Reading3 FPM	-	120
Reading4 FPM	-	119
Reading5 FPM	-	133
Reading6 FPM	-	131
Reading7 FPM	-	145
Reading8 FPM	-	119
Reading9 FPM	-	121
Reading10 FPM	-	139
Reading11 FPM	-	134
Reading12 FPM	-	147
Reading13 FPM	-	
Reading14 FPM	-	
Ave FPM(corr)	-	134
CFM	1400	1189

Test Data Exhaust		
	Design	Actual
Filter Type	-	BAFFLE
Filter Size 1	-	20X20
Filter Qty 1	-	5
Filter AK factor size 1	-	2.68
Filter Total AK Area	-	13.4
Filter1 FPM	-	152
Filter2 FPM	-	155
Filter3 FPM	-	169
Filter4 FPM	-	160
Filter5 FPM	-	149
Filter Ave FPM(corr)	-	167
CFM	2200	2104

Cooking Equipment		
	Design	Actual
Item 1	-	FRYER
Item 2	-	FRYER
Item 3	-	TILT SKILLET
Item 4	-	
Item 5	-	

Completed By: Austin McFall

Notes:

National TAB

Project: Coconut Grove - Kings Island

System/Unit: Kitchen Hood Type II



Comfort. Under control.

Asset: HD3

AREA:PIZZA

Unit Data		
	Design	Actual
MFG	NA	NA
Model Num	NA	NA
Serial Num	-	NA
Type	-	TYPE II CANOPY
Hood length	-	118"
Hood Width	-	68"

Test Data		
	Design	Actual
Exhaust CFM	3000	2175

Completed By: Austin McFall

Notes:

SDV Job #: 5413300 - KI-COCONUT GROVE (MASON)

Service Region: 361 - Cincinnati OH Service
Service Person: Dave King

Customer Number: 866644 **Customer Name:** NATIONAL TAB

Address: Kings Island Park
 6300 Kings Island Dr
 Coconut Grove Facility
 Kings Mills, OH 45034

Region Job #: 5227904
Region Job Name: KI-COCONUT GROVE (MASON)

Sales Region: 120 - Air Solutions
Sales Person: Joe Hertenstein

Created By: Dave King **Creation Date:** 3/17/2023 10:21 AM
Last Modified By: Dave King **Last Modified Date:** 3/27/2023 10:11 AM

Dining Room Pressure: 0 **Kitchen Pressure:** 0
Hours On Job: 0 **Extra Hours:** 0

Completed: Yes **Completed By:** Dave King
Completion Date: 3/27/2023 10:11 AM

UDS

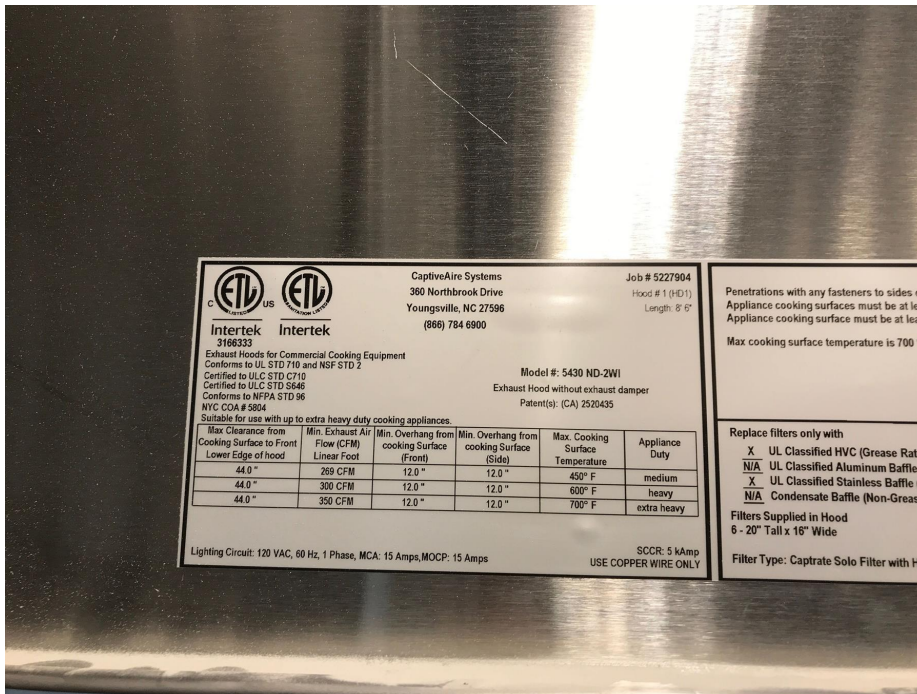
NONE

Hood Group 1

Exhaust CFM: Design = 2550 Initial = 2220 Final = 2220 (87.1% of design)
Supply CFM: Design = 4450 Initial = 2814 Final = 2814 (63.2% of design)

Other Notes:

N/A





Hood 1 (HD1) (HD1)

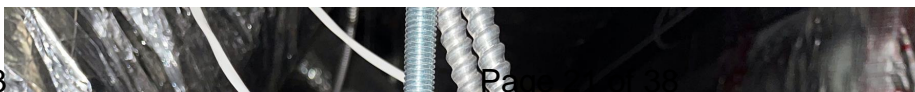
Model: 5430ND-2WI-PSP-SS **Length:** 8' 6.00"
Exhaust CFM: Design = 2550 Initial = 2220 Final = 2220 (87.1% of design)
Other Notes:

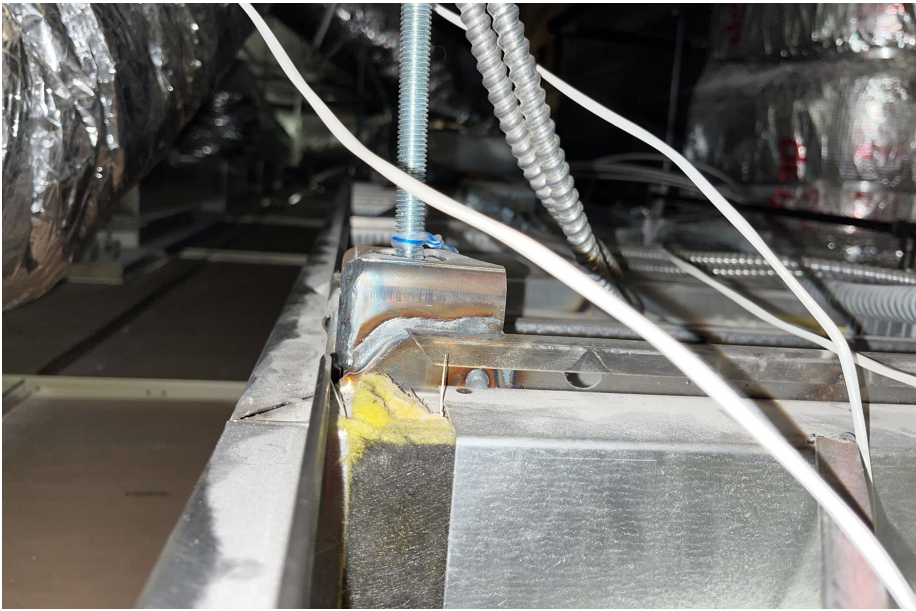
Talked with sales office about low air flow. Told CAS Service too leave as is.
 See attachment(s): [20230317132247.mp4]

Installation

Hung Using appropriate material to safely secure hood. Design: **Yes** Actual: **No**

Other Notes:
double nut not properly used. PSP missing rear hanging rods





COOKING EQUIPMENT ON AND OPERATING	Design: Yes	Actual: No
COOKING EQUIPMENT INSTALLED AS CLOSE TO BACK WALL AS POSSIBLE	Design: Yes	Actual: No
Was a smoke test performed on Hood System?	Design: Yes	Actual: Yes

Filters

Type: Captrate Solo

Filter 1 Fan: #1 - CASRE18DD (EF1)	Size: 20x16	Initial Velocity: 180 fpm	Final Velocity: 180 fpm	Initial CFM: 374	Final CFM: 374
Filter 2 Fan: #1 - CASRE18DD (EF1)	Size: 20x16	Initial Velocity: 182 fpm	Final Velocity: 182 fpm	Initial CFM: 378	Final CFM: 378
Filter 3 Fan: #1 - CASRE18DD (EF1)	Size: 20x16	Initial Velocity: 186 fpm	Final Velocity: 186 fpm	Initial CFM: 386	Final CFM: 386
Filter 4 Fan: #1 - CASRE18DD (EF1)	Size: 20x16	Initial Velocity: 181 fpm	Final Velocity: 181 fpm	Initial CFM: 376	Final CFM: 376
Filter 5 Fan: #1 - CASRE18DD (EF1)	Size: 20x16	Initial Velocity: 182 fpm	Final Velocity: 182 fpm	Initial CFM: 378	Final CFM: 378
Filter 6 Fan: #1 - CASRE18DD (EF1)	Size: 20x16	Initial Velocity: 158 fpm	Final Velocity: 158 fpm	Initial CFM: 328	Final CFM: 328

Supply

Supply CFM: Design = 1650 Initial = 1199 Actual = 1199 (72.7% of design)
Fan: #2 - A2-20D-MPU (SF-MPU1)

PSP 1

Orientation: Left **Length:** 4' 6.00" **Width:** 16.00" **Banks:** 1
Blanks: 1
CFM: Design = 825 Initial = 615 Final = 615 (74.5% of design)
Velocity: Design = 165 Initial = 123 Final = 123 (74.5% of design)

Readings:

1: Initial: 115 fpm, Final: 115 fpm 2: Initial: 119 fpm, Final: 119 fpm 3: Initial: 101 fpm, Final: 101 fpm
4: Initial: 133 fpm, Final: 133 fpm 5: Initial: 135 fpm, Final: 135 fpm 6: Initial: 135 fpm, Final: 135 fpm

PSP 2

Orientation: Right **Length:** 4' 6.00" **Width:** 16.00" **Banks:** 1
Blanks: 1
CFM: Design = 825 Initial = 584 Final = 584 (70.8% of design)
Velocity: Design = 165 Initial = 116 Final = 116 (70.3% of design)

Readings:

1: Initial: 104 fpm, Final: 104 fpm 2: Initial: 110 fpm, Final: 110 fpm 3: Initial: 104 fpm, Final: 104 fpm
4: Initial: 131 fpm, Final: 131 fpm 5: Initial: 125 fpm, Final: 125 fpm 6: Initial: 127 fpm, Final: 127 fpm

Hood 2 (PSP-EXHD) (PSP-EXHD)

Model: 146MISC-PSP **Length:** 17' 6.00"
Exhaust CFM: Design = 0 Initial = 0 Final = 0 (0% of design)

Installation Notes:

Talked with sales office about low air flow. Told CAS Service too leave as is.

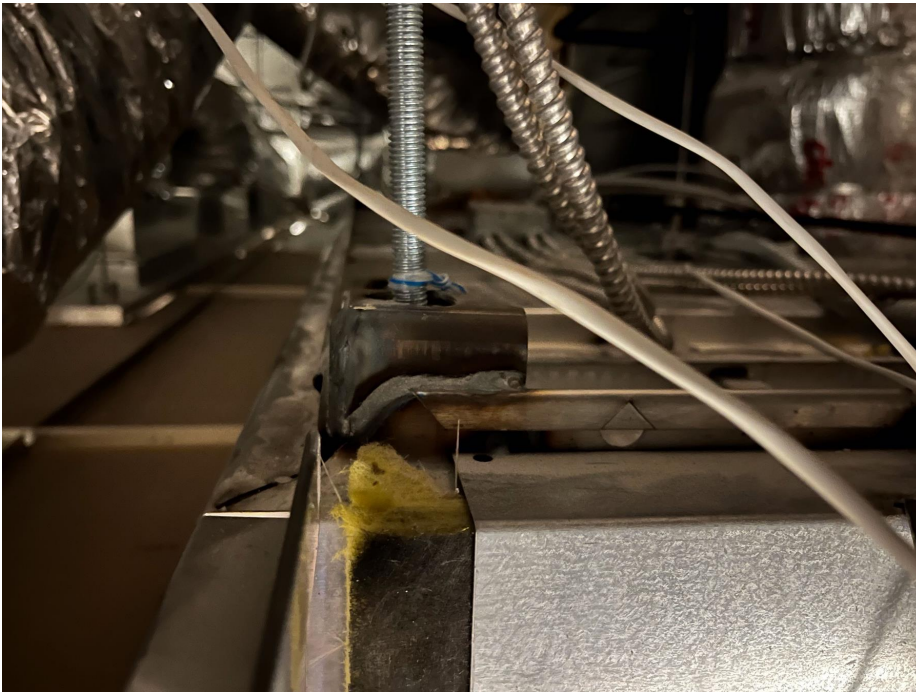
Hung Using appropriate material to safely secure hood.

Design: **Yes**

Actual: **No**

Other Notes:

N/A



COOKING EQUIPMENT ON AND OPERATING

Design: **Yes**

Actual: **No**

COOKING EQUIPMENT INSTALLED AS CLOSE TO BACK WALL AS POSSIBLE

Design: **Yes**

Actual: **No**

Was a smoke test performed on Hood System?

N/A

Supply

Supply CFM: Design = 2800
Fan: #2 - A2-20D-MPU (SF-MPU1)

Initial = 1615

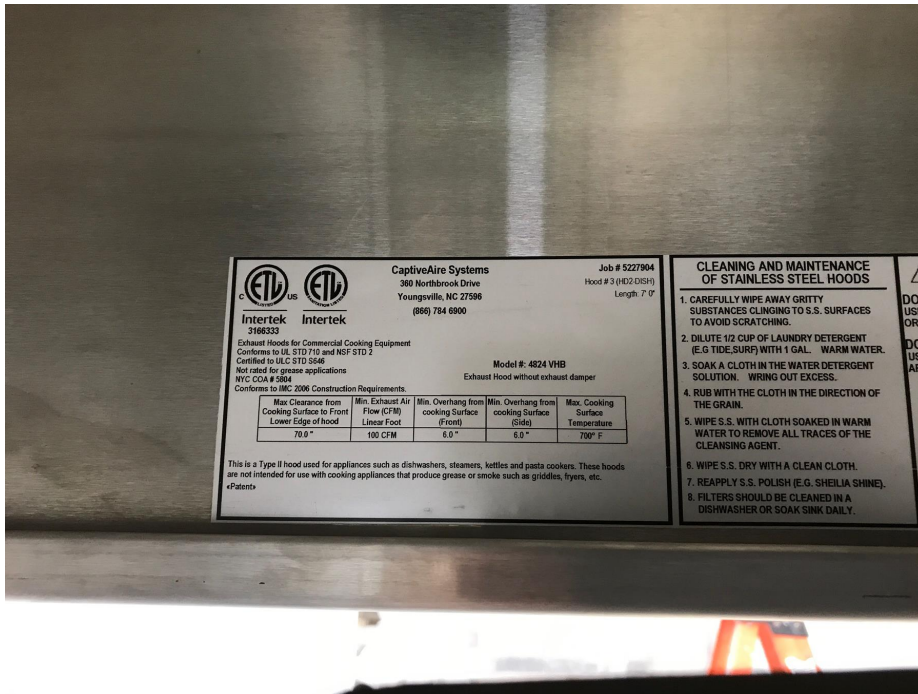
Actual = 1615

(57.7% of design)

Other Notes:

N/A

See attachment(s): [20230317124148.mp4]



Installation

Hung Using appropriate material to safely secure hood.

Design: **Yes**

Actual: **No**

Other Notes:

Hood hung with 3/8 rod. Double nut not properly used



COOKING EQUIPMENT ON AND OPERATING

Design: **Yes**

Actual: **No**

COOKING EQUIPMENT INSTALLED AS CLOSE TO BACK WALL AS POSSIBLE

Design: **Yes**

Actual: **No**

Was a smoke test performed on Hood System?

Design: **Yes**

Actual: **Yes**

Fans

Fan 1 - CASRE18DD (EF1) (EF1)

Model: CASRE18DD

Installation Notes:

Talked with sales office about low air flow. Told CAS Service too leave as is.



Exhaust

Exhaust CFM: Design = 2550 Actual = 2220 (87.1% of design)

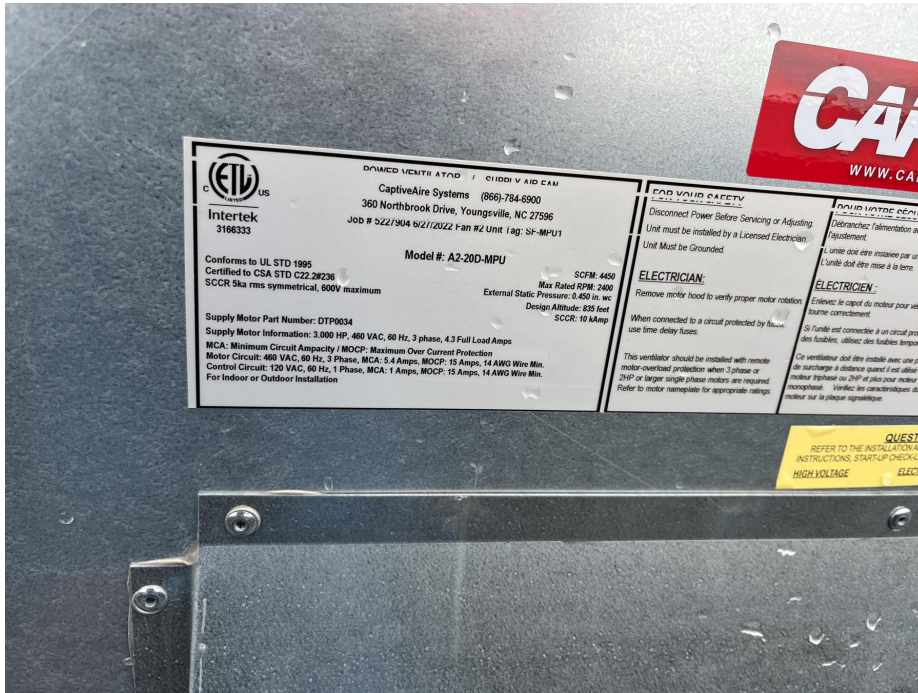
Record the VFD HZ		Actual: 45
VOLTS	Design: 460	Actual: 480
HP	Design: 2	Actual: 2
HUB SET SCREW TIGHT	Design: Yes	Actual: Yes
FAN LEVEL	Design: Yes	Actual: Yes
ROTATION	Design: Correct	Actual: Correct
FAN VIBRATION	Design: Good	Actual: Good
RPM - DESIGN	Design: 1333	Actual: 1275
RPM - MAX	Design: 1900	Actual: N/A
RPM - MAX RECOMMENDED	Design: 1700	Actual: N/A
FLA	Design: 2.6	Actual: 2.5
OVERLOAD SET POINT	N/A	
PHASE	Design: 3	Actual: 3
FAN WITHIN 5 MILES OF COAST		Actual: No
INSPECT ALL EXTERIOR SIDES OF UNIT. ANY VISIBLE DAMAGE	Design: No	Actual: No

Fan 2 - A2-20D-MPU (SF-MPU1) (SF-MPU1)

Model: A2-20D-MPU

Installation Notes:

Talked with sales office about low air flow. Said he'd have mechanical contractor look into airflow restrictions. Told CAS Service too leave as is.



Supply

Supply CFM: Design = 4450 Actual = 2814 (63.2% of design)

VOLTS	Design: 460	Actual: 480
HP	Design: 3	Actual: 3
HUB SET SCREW TIGHT	Design: Yes	Actual: Yes
FAN LEVEL	Design: Yes	Actual: Yes
ROTATION	Design: Correct	Actual: Correct
FAN VIBRATION	Design: Good	Actual: Good
RPM - DESIGN	Design: 1597	Actual: 1053
RPM - MAX	Design: 2400	Actual: N/A
RPM - MAX RECOMMENDED	Design: 2000	Actual: N/A
FLA	Design: 4.3	Actual: 4.2

OVERLOAD SET POINT N/A

PHASE	Design: 3	Actual: 3
DAMPER INSTALLED	Design: Yes	Actual: Yes

Other Notes:

Yes

FAN WITHIN 5 MILES OF COAST		Actual: No
INSPECT ALL EXTERIOR SIDES OF UNIT. ANY VISIBLE DAMAGE		Actual: No
Record the VFD HZ		Actual: 36
Is Supply Fan bolted/secured to curb? If no, secure fan properly according to manual.	Design: Yes	Actual: Yes

Cooling

TEMP DROP	Design: 14	Actual: N/A
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Other Notes:

To cold to run cooling outside

MPU

CONTROL MODE		Actual: Auto
THERMOSTAT SET POINT	Design: 85	Actual: N/A
EACH CONDENSER HAS IT'S OWN BREAKER	Design: Yes	Actual: Yes
CONDENSER-1 VOLTAGE	Design: 460	Actual: N/A
CONDENSER-2 VOLTAGE	Design: 460	Actual: N/A

Fan 3 - SIF11DD (EF2) (EF2)

Model: SIF11DD

Other Notes:

N/A



Exhaust

Exhaust CFM: Design = 900 Actual = 894 (99.3% of design)

Record the ECM Speed		Actual: 90
VOLTS	Design: 115	Actual: 119
HP	Design: 0.5	Actual: 0.5
HUB SET SCREW TIGHT	Design: Yes	Actual: Yes
FAN LEVEL	Design: Yes	Actual: Yes
ROTATION	Design: Correct	Actual: Correct
FAN VIBRATION	Design: Good	Actual: Good
RPM - DESIGN	Design: 1483	Actual: 1620
RPM - MAX	Design: 2400	Actual: N/A
RPM - MAX RECOMMENDED	Design: 2000	Actual: N/A
FLA	Design: 6.3	Actual: 4.8
PHASE	Design: 1	Actual: N/A
FAN WITHIN 5 MILES OF COAST		Actual: No
INSPECT ALL EXTERIOR SIDES OF UNIT. ANY VISIBLE DAMAGE	Design: No	Actual: No
SPEED CONTROL VOLTAGE	Design: 65	Actual: N/A

ECPs

ECP 1 - DCV-2111 (EP1) (EP1)

Package #: DCV-2111

Other Notes:

N/A



Smart Control

ROOM TEMPERATURE OFFSET	Design: 21	Actual: 21
HOW MANY FAN ZONES ARE THERE	Design: 1	Actual: 1
HYSTERESIS TEMPERATURE		Actual: 2
Room Sensor Type		Actual: Preset
What is Preset temperature set to?		Actual: 75

ALL TEMP SENSORS ARE WIRED IN	Design: Yes	Actual: Yes
Do any of the light circuits exceed 1400W?	Design: No	Actual: No
ALL LIGHTS WORK	Design: Yes	Actual: Yes
ALL FAULTS CLEARED	Design: Yes	Actual: Yes
ECPM03 HARDWARE REVISION	Design: 04	Actual: 04
ECPM03 PROGRAM VERSION	Design: 2.15.04	Actual: 2.15.04
CASHMI HARDWARE REVISION	Design: 03	Actual: 03
CASHMI PROGRAM VERSION	Design: 2.15.04	Actual: 2.15.04
ECPM03 DATE AND TIME ACCURATE	Design: Yes	Actual: Yes
Smoke Test Performed on all Hoods? Upload Video	Design: Yes	Actual: Yes

Other Notes:

N/A

See attachment(s): [20230317132904.mp4]

DCV

120V Line Ran from SF1 for MUA(s)	Design: Yes	Actual: Yes
Damper interlock wiring ran to MAU?	Design: Yes	Actual: No

BMS & Monitoring

Installation Notes:

Scada not installed at time of sdv



BMS TYPE	Design: CASLink	Actual: CASLink
CASLINK COMMUNICATION TYPE	Design: Cellular	Actual: Cellular
Cellular status is Active Online?	Design: Yes	Actual: No
CASLink Registration Wizard was completed?	Design: Yes	Actual: No
CASLink Module has a current heartbeat?	Design: Yes	Actual: No
All devices connected to the SCADA are reporting live data?	Design: Yes	Actual: No
Devices were assigned to an area and named appropriately?	Design: Yes	Actual: No

Sensors

T2

SENSOR TYPE	Design: Duct Stat	Actual: Duct Stat
SENSOR LOCATION	Design: H1CV1	Actual: h1cv1
FAN NUMBER	Design: 1	Actual: 1

T3

SENSOR TYPE	Design: Duct Stat	Actual: Duct Stat
SENSOR LOCATION	Design: N/A	Actual: h2r1
FAN NUMBER	Design: 4	Actual: 4

T4

SENSOR TYPE	Design: PSP	Actual: Duct Stat
SENSOR LOCATION	Design: Hood 1	Actual: h3r1
FAN NUMBER	Design: 0	Actual: 0

VFDs

VFD 1

DESIGN CFM	Design: 2550	Actual: 2220
FAN DIRECTION	Design: Forward	Actual: Forward
TEMP SENSOR #s ASSIGNED	Design: T2	Actual: t2

DCV VFD

MODULATION RANGE	Design: 45	Actual: 45
OVERLOAD = P108	Design: 74	Actual: 74
MIN HZ	Design: 37.6	Actual: 35.6
MAX HZ	Design: 47	Actual: 45
ALL FAULTS CLEARED = P197 P508	Design: Yes	Actual: Yes
LOAD IN SEPARATE CONDUIT.	Design: Yes	Actual: Yes

VFD 2 - NOT AVAILABLE!

DESIGN CFM	N/A
FAN DIRECTION	N/A
TEMP SENSOR #s ASSIGNED	N/A

DCV VFD

MODULATION RANGE	N/A
OVERLOAD = P108	N/A
MIN HZ	N/A
MAX HZ	N/A
ALL FAULTS CLEARED = P197 P508	N/A
LOAD IN SEPARATE CONDUIT.	N/A

VFD 3

DESIGN CFM	Design: 4450	Actual: 2814
FAN DIRECTION	Design: Forward	Actual: Forward

DCV VFD

SUPPLY FAN # ASSIGNED	Design: 2	Actual: 2
OVERLOAD = P108	Design: 89	Actual: 89
MAX HZ	Design: 54.6	Actual: 36.6
ALL FAULTS CLEARED = P197	Design: Yes	Actual: Yes
P508		Actual: 4.1
LOAD IN SEPARATE CONDUIT.	Design: Yes	Actual: Yes

CORE

NONE