

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: 01/31/2023**

# PROJECT

## 01-30-23 CULVERS - BATAVIA, IL

470 N RANDALL RD

BATAVIA, IL 60510

Client

Accurex

PO Box 410

Schofield, WI 54476

# National TAB

Project: 01-30-23 CULVERS - BATAVIA, IL

## Table Of Contents

<b>Section</b>	<b>Page #</b>
Summary	3
Balance Schedule	4
Site Pictures	5
Checklist Data	10
AHU/RTU	12
FAN - Exhaust	16
Kitchen Hood Type I	22
Kitchen Hood Type II	24
GRD Layout	25

## 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)

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.

### General Exhaust Fans

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.

### 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	6150	6261	4200	4209	1950	2052	31.7%	32.8%						
RTU-2	KITCHEN	6150	5989	4250	3991	1900	1998	30.9%	33.4%						
PRV-1	RESTROOMS													375	393
PRV-2	HD1 GRIDDLE											1500	1554		
PRV-3	HD2 FRYER											1500	1622		
PRV-4	HD3 DISH											350	328		
EF-1	MOP ROOM													75	78
<b>TOTALS</b>		12300	12250	8450	8200	3850	4050			0	0	3350	3504	450	471

#### NET BUILDING AIRFLOW CALCULATION

TOTALS	DESIGN	ACTUAL
TOTAL OA	3850	4050
TOTAL EXHAUST	3800	3975
<b>NET AIRFLOW</b>	<b>50</b>	<b>75</b>

DOOR TESTED	BUILDING PRESSURE MEASUREMENTS (IN. H2O)
FRONT	0.006
SIDE	0.006
REAR	0.005
<b>AVERAGE</b>	<b>0.0057</b>

#### FINAL CHECKS

ACTUAL NET AIRFLOW COINCIDES WITH DESIGN: ✓

MEASURED PRESSURES COINCIDES WITH ACTUAL NET AIRFLOW: ✓

PRESSURE FALLS WITHIN IMC TOLERANCE OF +/-0.02" W.C. ✓

NOTES:



Comfort. Under control.

## 01-30-23 CULVERS - BATAVIA, IL

### CheckList Information

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

### CheckList Item Details

STORE FRONT



Batavia\_IL.jpg

RTU-1



RTU\_1.jpg

RTU-2



RTU\_2..jpg

PRV-1



PRV\_1.jpg

PRV-2



PRV\_2..jpg

PRV-3



**PRV\_3..jpg**

---

PRV-4



**PRV\_4..jpg**

---

EF-1A



**EF\_1A.jpg**

---

HOOD 1



**HD\_1\_GRIDDLE.jpg**

---

HOOD 2



**HD\_2\_FRYER.jpg**

---

HOOD 3



**HD\_3.jpg**

---

PRODIGY BOARD WIRING

---



prodigy2.jpg



prodigy2.jpg

Notes/Comments :



Comfort. Under control.

### 01-30-23 CULVERS - BATAVIA, IL

#### CheckList Information

<b>Name :</b>	TECH - STEP 1: INITIAL WALKTHROUGH	<b>Status :</b>	NotSubmitted
<b>Assigned Organization :</b>	National TAB	<b>Asset :</b>	
<b>Requesting Organization :</b>	National TAB		

#### CheckList Item Details

##### INITIAL SITE WALKTHROUGH

All diffusers and grilles are installed and match design? Yes

Perforated diffusers are installed on the cook line? (4-ways will disrupt hood capture) Yes



Perforated.jpg

All hood filters installed and accounted for? Yes

Hoods are wired and have power? Yes

Thermostats have power? Yes

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

Notes/Comments :





Comfort. Under control.

### 01-30-23 CULVERS - BATAVIA, IL

#### 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?

Thermostat wire run from OCP on the RTU to the Ec terminal at the thermostat? If no, jumper can be installed from R to OCP temporarily. (The economizers will not open without OCP being energized.)

Motors are all operating below the FLA rating?

Are belts tight?

If direct drive unit is the speed controller working.

Is gas piping installed and valves turned on?

Unit free of noticeable noise and vibration

##### EF's

Rotation is correct?

Belts are tight?

Grease cup installed on hood fan?

Hinge kit installed installed on hood fan?

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

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

There is no major leakage around base of fan?

Is the motor operating below the motor FLA rating?

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

Unit free of noticeable noise and vibration?

The hood exhaust fans are installed in correct positions and are not switched?

**HOODS**

Kitchen equipment installed in proper places?

Can kitchen equipment be turned on for final smoke test?

Second stage Grease Grabber filters are installed on the griddle hood?

**DOCUMENTATION**

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

**Notes/Comments :**



Comfort. Under control.

### 01-30-23 CULVERS - BATAVIA, IL

#### 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".	N/A

**Notes/Comments :**



Comfort. Under control.

### 01-30-23 CULVERS - BATAVIA, IL

#### CheckList Information

<b>Name :</b>	TECH - STEP 4: FINAL TESTS	<b>Status :</b>	NotSubmitted
<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	Fryer, Griddle
List smoke candle type used	45 second smoke emitter
Smoke test capture - Perimeter of hood	100%
Smoke test capture - Top of cooking surface	100%

##### WITNESS

Date test was completed	01/31/2023
TAB tech name / Firm	Michael McDonnell / National TAB
Site super name / Firm	Dean Janke / Campbell Construction
Owner representative name / Firm (if Applicable)	NA
Building pressure at front & back doors (All Systems On)	0.006"

##### 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
Thermostats are programmed?	Yes

##### PRODIGY SETTINGS FOR RTU'S

Parameter 65 set to 0	Yes
-----------------------	-----

Parameter 78 set to 0	Yes
Parameter 105 set to 6	Yes
Parameter 156 set to 70 (Dining unit only)	Yes
Parameter 156 set to 65 (Kitchen Unit Only)	Yes
Parameter 170 set to 75 (Dining Unit Only)	Yes
Parameter 170 set to 70 (Kitchen Unit Only)	Yes
Parameter 131 set to the same % as OA minimum position?	Yes
Parameter 117 set to the same % as OA minimum position?	Yes

**Notes/Comments :**

---

---

# National TAB

Project: 01-30-23 CULVERS - BATAVIA, IL

System/Unit: AHU/RTU



Comfort. Under control.

Asset: RTU1

AREA: DINING

Unit Data		
	Design	Actual
MFG	LENNOX	LENNOX
Serial Num	-	5622F07419
Model Num	LGH210H4B	LGH210H4B
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	3
OA Filter Size 1	-	14.25X23
Num Final Filter 1	-	6
Final Filter Size 1	-	24X24X2

Motor Data		
	Design	Actual
Motor MFG	-	INTERLINK
Frame	-	56HZ
Horsepower	-	3.0
Motor Rpm	-	1750
Phase	3	3
Rated Voltage	208/230	208-230
Rated Amperage	-	8.0-7.8

Drive Data		
	Design	Actual
Motor Sheave Size	-	1VL40
Motor Bore Size	-	7/8"
Motor Sheave SetPt	-	3 TURNS OPEN
Fan Sheave Size	-	AK72
Fan Sheave Bore	-	1-3/16"
Belt CL Distance	-	20.75"
Num of Belts	-	1
Belt Size	-	BX55
Belt Alignment	-	VERIFIED

Test Data		
	Design	Actual
SF CFM	6150	6261
SF RPM	-	793
RA CFM	4200	4209
OA CFM	1950	2052
RL Voltage	-	210/211/211
RL Amperage	-	8.0/7.5/7.3
SF Rotation	-	CCW, CORRECT
RA Damper Position	-	60%
Min OA Damper Position	-	40%
Min OA Damper Type	-	ECONOMIZER

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.56"
Fan Suction SP	-	-0.88"
Fan Discharge SP	-	0.29"
Total ESP	-	0.85"
Fan Total SP	-	1.17"

General		
	Design	Actual
Fan Rotation Correct	-	YES
Unit Filters Clean	-	SLIGHTLY DIRTY [1]
Condensate Drain Installed	-	YES

Completed By: Michael McDonnell

Notes:

# National TAB

Project:01-30-23 CULVERS - BATAVIA, IL

## AHU/RTU



Comfort. Under control.

### Diffuser Supply (GRD)

#### RTU1/DINING

Asset									
Asset Name	Location	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
SGRD1	ENTRY 106	SD3	8"	150	1.0	146	151	149	99.3
SGRD2	MENS RR	SD4	8"	150	1.0	140	144	141	94.0
SGRD3	WOMENS RR	SD4	8"	150	1.0	136	140	159	106.0
SGRD4	HALL	SD1	12"	450	1.0	569	587	479	106.4
SGRD5	DINING	SD1	8"	150	1.0	201	207	150	100.0
SGRD6	DINING	SD1	8"	150	1.0	122	126	154	102.7
SGRD7	DINING	SD1	8"	150	1.0	144	148	162	108.0
SGRD8	DINING	SD1	8"	150	1.0	178	184	161	107.3
SGRD9	DINING	SD1	8"	150	1.0	201	207	156	104.0
SGRD10	DINING	SD1	8"	150	1.0	196	202	147	98.0
SGRD11	DINING	SD1	8"	150	1.0	173	178	159	106.0
SGRD12	DINING	SD1	8"	150	1.0	220	227	160	106.7
SGRD13	DINING	SD1	8"	150	1.0	149	154	164	109.3
SGRD14	DINING	SD1	8"	150	1.0	191	197	150	100.0
SGRD15	DINING	SD1	8"	150	1.0	235	242	156	104.0
SGRD16	DINING	SD1	8"	150	1.0	189	195	140	93.3
SGRD17	DINING	SD1	8"	150	1.0	164	169	164	109.3
SGRD18	DINING	SD1	8"	150	1.0	178	184	161	107.3
SGRD19	DINING	SD1	8"	150	1.0	159	164	135	90.0
SGRD20	DRINKS & CONDIMENT S	SD1	10"	300	1.0	419	432	325	108.3
SGRD21	ENTRY 103	SD3	8"	150	1.0	107	110	164	109.3
SGRD22	ENTRY	SD1	8"	150	1.0	144	148	136	90.7
SGRD23	ORDER AREA	SD1	12"	450	1.0	387	399	424	94.2
SGRD24	CUSTOMER SERVICE	SD1	10"	350	1.0	309	319	328	93.7
SGRD25	CUSTOMER SERVICE	SD1	10"	350	1.0	257	265	333	95.1
SGRD26	CUSTOMER SERVICE	SD1	10"	350	1.0	306	316	318	90.9
SGRD27	CUSTOMER SERVICE	SD1	10"	350	1.0	258	266	324	92.6
SGRD28	DRIVE THRU	SD1	12"	500	1.0	220	227	480	96.0
SGRD29	OFFICE	SD1	10"	200	1.0	287	296	182	91.0

Completed By: Michael McDonnell on

# National TAB

Project: 01-30-23 CULVERS - BATAVIA, IL

System/Unit: AHU/RTU



Comfort. Under control.

Asset: RTU2

AREA: KITCHEN

Unit Data		
	Design	Actual
MFG	LENNOX	LENNOX
Serial Num	-	5622F07395
Model Num	LGH240H4B	LGH240H4B
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	3
OA Filter Size 1	-	14.25X23
Num Final Filter 1	-	6
Final Filter Size 1	-	24X24X2

Motor Data		
	Design	Actual
Motor MFG	-	NIDEC
Frame	-	184TZ
Horsepower	-	5.0
Motor Rpm	-	1765
Phase	3	3
Rated Voltage	208/230	208-230
Rated Amperage	-	13.80-13.0

Drive Data		
	Design	Actual
Motor Sheave Size	-	VP60BB
Motor Bore Size	-	1-1/8"
Motor Sheave SetPt	-	1.5 TURNS OPEN
Fan Sheave Size	-	MB98(BK100)
Fan Sheave Bore	-	1-3/16"
Belt CL Distance	-	21"
Num of Belts	-	1
Belt Size	-	BX61
Belt Alignment	-	VERIFIED

Test Data		
	Design	Actual
SF CFM	6150	5989
SF RPM	-	858
RA CFM	4250	3991
OA CFM	1900	1998
RL Voltage	-	210/210/211
RL Amperage	-	9.7/9.3/9.2
SF Rotation	-	CCW, CORRECT
RA Damper Position	-	57%
Min OA Damper Position	-	43%
Min OA Damper Type	-	ECONOMIZER

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.42"
Fan Suction SP	-	-0.75"
Fan Discharge SP	-	0.50"
Total ESP	-	0.92"
Fan Total SP	-	1.25"

General		
	Design	Actual
Fan Rotation Correct	-	YES
Unit Filters Clean	-	SLIGHTLY DIRTY [1]
Condensate Drain Installed	-	YES

Completed By: Michael McDonnell

Notes:

# National TAB

Project:01-30-23 CULVERS - BATAVIA, IL

## AHU/RTU



Comfort. Under control.

### Diffuser Supply (GRD)

#### RTU2/KITCHEN

Asset									
Asset Name	Location	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
SGRD1	SUNDAE SERVICE	SD1	12"	600	1.0	413	427	599	99.8
SGRD2	SUNDAE SERVICE	SD1	12"	600	1.0	376	398	546	91.0
SGRD3	FRYERS	SD5	10"	200	1.0	154	144	193	96.5
SGRD4	FRYERS	SD5	12"	375	1.0	402	386	381	101.6
SGRD5	KITCHEN	SD5	12"	350	1.0	615	694	346	98.9
SGRD6	KITCHEN	SD5	12"	400	1.0	167	189	392	98.0
SGRD7	KITCHEN	SD5	12"	350	1.0	470	497	333	95.1
SGRD8	KITCHEN	SD5	12"	400	1.0	491	517	388	97.0
SGRD9	KITCHEN	SD5	12"	350	1.0	629	668	354	101.1
SGRD10	GRIDDLE	SD5	10"	250	1.0	349	388	256	102.4
SGRD11	GRIDDLE	SD5	10"	275	1.0	336	319	277	100.7
SGRD12	ALCOVE	SD5	8"	125	1.0	117	125	128	102.4
SGRD13	TOILET	SD1	6"	75	1.0	191	189	70	93.3
SGRD14	DRY GOODS	SD1	12"	600	1.0	422	489	609	101.5
SGRD15	DRY GOODS	SD1	12"	600	1.0	412	412	562	93.7
SGRD16	UTILITY ROOM	SD1	12"	600	1.0	418	422	555	92.5

Completed By: Michael McDonnell on

# National TAB

Project: 01-30-23 CULVERS - BATAVIA, IL  
System/Unit: FAN - Exhaust



Comfort. Under control.

Asset: EF1

AREA:MOP ROOM

Unit Data		
	Design	Actual
<b>MFG</b>	ACCUREX	ACCUREX
<b>Model Num</b>	XCR-B80	XCR-B80
<b>Serial Num</b>	-	21019362
<b>Type</b>	CEILING	CEILING
<b>Configuration</b>	VERTICAL	HORIZONTAL

Motor Data		
	Design	Actual
<b>Motor MFG</b>	-	GREENHECK
<b>Frame</b>	-	NL
<b>Horsepower</b>	-	NL
<b>Motor Rpm</b>	900	900
<b>Phase</b>	1	1
<b>Voltage (rated)</b>	115	115
<b>Amperage (rated)</b>	-	0.16

Test Data		
	Design	Actual
<b>CFM</b>	75	78
<b>Fan RPM</b>	885	900
<b>Fan Rotation</b>	-	CW
<b>Motor RPM</b>	-	900
<b>System SetPt</b>	-	MAX
<b>RL Voltage</b>	-	119
<b>RL Amperage</b>	-	0.14
<b>Total ESP</b>	0.125"	0.101"
<b>Fan Inlet SP</b>	-	ATM
<b>Fan Discharge SP</b>	-	0.101"

Completed By: Michael McDonnell

Notes:

# National TAB

Project: 01-30-23 CULVERS - BATAVIA, IL  
System/Unit: FAN - Exhaust



Comfort. Under control.

Asset: PRV-1

AREA:RESTROOMS

Unit Data		
	Design	Actual
<b>MFG</b>	ACCUREX	ACCUREX
<b>Model Num</b>	XRED-090-VG	XRED-090-VG-1-17-X
<b>Serial Num</b>	-	21020843 22J
<b>Type</b>	DOWNBLAST	DOWNBLAST
<b>Configuration</b>	VERTICAL	VERTICAL

Motor Data		
	Design	Actual
<b>Motor MFG</b>	-	VARI-GREEN
<b>Frame</b>	-	NL
<b>Horsepower</b>	0.1	1/10
<b>Motor Rpm</b>	1725	300-1750
<b>Phase</b>	1	1
<b>Voltage (rated)</b>	115	115
<b>Amperage (rated)</b>	-	1.38
<b>Service Factor</b>	-	NL

Test Data		
	Design	Actual
<b>CFM</b>	375	393
<b>Fan RPM</b>	1465	DD
<b>Fan Rotation</b>	-	CW, CORRECT
<b>Motor RPM</b>	-	DD
<b>System SetPt</b>	-	7 ON SPEED CONTROLLER
<b>RL Voltage</b>	-	120
<b>RL Amperage</b>	-	1.1
<b>Total ESP</b>	0.5"	0.38"
<b>Fan Inlet SP</b>	-	-0.38"
<b>Fan Discharge SP</b>	-	ATM

Completed By: Michael McDonnell

Notes:

# National TAB

Project:01-30-23 CULVERS - BATAVIA, IL

## FAN - Exhaust



Comfort. Under control.

**Diffuser Ret/Exh (GRD)**

**PRV-1/RESTROOMS**

Asset									
Asset Name	Location	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
EGRD1	MENS RR	EG1	8X8	150	1.0	204	156	156	104.0
EGRD2	WOMENS RR	EG1	8X8	150	1.0	206	163	163	108.7
EGRD3	TOILET	EG1	8X8	75	1.0	98	74	74	98.7

Completed By: Michael McDonnell on

# National TAB

Project: 01-30-23 CULVERS - BATAVIA, IL  
System/Unit: FAN - Exhaust



Comfort. Under control.

Asset: PRV-2

AREA:HD2 GRIDDLE

Unit Data		
	Design	Actual
<b>MFG</b>	ACCUREX	ACCUREX
<b>Model Num</b>	XRUB-160XP-15	XCUE-140-10-VG-1-26-G
<b>Serial Num</b>	-	21021034
<b>Type</b>	UPBLAST	UPBLAST
<b>Configuration</b>	VERTICAL	VERTICAL

Test Data		
	Design	Actual
<b>CFM</b>	1500	1554
<b>Fan RPM</b>	2411	1295
<b>Fan Rotation</b>	-	CW
<b>Motor RPM</b>	-	1295
<b>RL Voltage</b>	-	121
<b>RL Amperage</b>	-	5.4
<b>Suction ESP</b>	-	-1.04"
<b>Discharge ESP</b>	-	ATM
<b>Total ESP</b>	2.337"	1.04"

Motor Data		
	Design	Actual
<b>Motor MFG</b>	-	VARI-GREEN
<b>Frame</b>	-	NL
<b>Horsepower</b>	1.5	1.0
<b>Motor Rpm</b>	1725	300-1750
<b>Phase</b>	3	1
<b>Voltage (rated)</b>	208	115/208-230
<b>Amperage (rated)</b>	-	11.5/7.0
<b>Service Factor</b>	-	NL

Drive Data		
	Design	Actual
<b>Motor Sheave Size</b>	-	DD
<b>Motor Bore Size</b>	-	DD
<b>Motor Sheave SetPt</b>	-	7.4 V
<b>Fan Sheave Size</b>	-	DD
<b>Fan Sheave Bore</b>	-	DD
<b>Belt CL Distance</b>	-	DD
<b>Num of Belts</b>	-	DD
<b>Belt Size</b>	-	DD

Completed By: Michael McDonnell

Notes:

# National TAB

Project: 01-30-23 CULVERS - BATAVIA, IL  
System/Unit: FAN - Exhaust



Comfort. Under control.

Asset: PRV-3

AREA:HD3 FRYERS

Unit Data		
	Design	Actual
<b>MFG</b>	ACCUREX	ACCUREX
<b>Model Num</b>	XRUB-140-7	XCUE-140-10-VG-1-26-G
<b>Serial Num</b>	-	21020963 22J
<b>Type</b>	UPBLAST	UPBLAST
<b>Configuration</b>	VERTICAL	VERTICAL

Test Data		
	Design	Actual
<b>CFM</b>	1500	1622
<b>Fan RPM</b>	1377	1015
<b>Fan Rotation</b>	-	CW
<b>Motor RPM</b>	-	1015
<b>RL Voltage</b>	-	120
<b>RL Amperage</b>	-	2.7
<b>Suction ESP</b>	-	-0.47"
<b>Discharge ESP</b>	-	ATM
<b>Total ESP</b>	1.0"	0.47"

Motor Data		
	Design	Actual
<b>Motor MFG</b>	-	VAR-GREEN
<b>Frame</b>	-	NL
<b>Horsepower</b>	0.75	1.0
<b>Motor Rpm</b>	1725	300-1750
<b>Phase</b>	3	1
<b>Voltage (rated)</b>	208	115/208-230
<b>Amperage (rated)</b>	-	11.5/7.0
<b>Service Factor</b>	-	NL

Drive Data		
	Design	Actual
<b>Motor Sheave Size</b>	-	DD
<b>Motor Bore Size</b>	-	DD
<b>Motor Sheave SetPt</b>	-	6.0 V
<b>Fan Sheave Size</b>	-	DD
<b>Fan Sheave Bore</b>	-	DD
<b>Belt CL Distance</b>	-	DD
<b>Num of Belts</b>	-	DD
<b>Belt Size</b>	-	DD

Completed By: Michael McDonnell

Notes:

# National TAB

Project: 01-30-23 CULVERS - BATAVIA, IL  
System/Unit: FAN - Exhaust



Comfort. Under control.

Asset: PRV-4

AREA:HD3 DISH

Unit Data		
	Design	Actual
<b>MFG</b>	ACCUREX	ACCUREX
<b>Model Num</b>	XRED-095-VG	XRED-095-VG-1-17-X
<b>Serial Num</b>	-	21021232
<b>Type</b>	DOWNBLAST	DOWNBLAST
<b>Configuration</b>	HORIZONTAL	VERTICAL

Motor Data		
	Design	Actual
<b>Motor MFG</b>	-	VARI-GREEN
<b>Frame</b>	-	NL
<b>Horsepower</b>	0.167	0.167
<b>Motor Rpm</b>	1725	300-1750
<b>Phase</b>	1	1
<b>Voltage (rated)</b>	115	115
<b>Amperage (rated)</b>	-	2.2
<b>Service Factor</b>	-	NL

Test Data		
	Design	Actual
<b>CFM</b>	350	328
<b>Fan RPM</b>	1486	DD
<b>Fan Rotation</b>	-	CW
<b>Motor RPM</b>	-	DD
<b>System SetPt</b>	-	8 ON SPEED CONTROLLER
<b>RL Voltage</b>	-	120
<b>RL Amperage</b>	-	2.1
<b>Total ESP</b>	0.6"	0.92"
<b>Fan Inlet SP</b>	-	-0.92"
<b>Fan Discharge SP</b>	-	ATM

Completed By: Michael McDonnell

Notes:

# National TAB

Project: 01-30-23 CULVERS - BATAVIA, IL

## System/Unit: Kitchen Hood Type I



Comfort. Under control.

Asset: HD1

AREA:GRIDDLE

Unit Data		
	Design	Actual
MFG	ACCUREX	ACCUREX
Model Num	XGEP-64-S	XGEP-64-S
Job / Serial Num	-	21036265 2080
Type	TYPE I LOW PROXIMITY	TYPE I LOW PROXIMITY
Hood length	64	64
Hood Width	23	23

Test Data Exhaust		
	Design	Actual
Filter Type	GREASE GRABBER	GREASE GRABBER
Filter Size 1	16X16	16X16
Filter Qty 1	4	4
Filter AK factor size 1	1.53	1.53
Filter Total AK Area	6.12	6.12
Filter1 FPM	-	269
Filter2 FPM	-	242
Filter3 FPM	-	239
Filter4 FPM	-	268
Filter Ave FPM(corr)	-	254
CFM	1500	1554

Cooking Equipment		
	Design	Actual
Item 1	-	GRIDDLE

Completed By: Michael McDonnell

Notes:

# National TAB

Project: 01-30-23 CULVERS - BATAVIA, IL

## System/Unit: Kitchen Hood Type I



Comfort. Under control.

Asset: HD2

AREA:FRYERS

### Unit Data

	Design	Actual
MFG	ACCUREX	ACCUREX
Model Num	XXEP-83-S	XXEP-83-S
Job / Serial Num	-	21036264 2080
Type	TYPE I LOW PROXIMITY	TYPE I LOW PROXIMITY
Hood length	83	83"
Hood Width	23	23"

### Test Data Exhaust

	Design	Actual
Filter Type	XTRACTOR	XTRACTOR
Filter Size 1	16X16	16X16
Filter Qty 1	5	5
Filter AK factor size 1	1.53	1.53
Filter Total AK Area	7.65	7.65
Filter1 FPM	-	239
Filter2 FPM	-	210
Filter3 FPM	-	197
Filter4 FPM	-	205
Filter5 FPM	-	211
Filter Ave FPM(corr)	-	212
CFM	1500	1622

### Cooking Equipment

	Design	Actual
Item 1	-	FRYER

Completed By: Michael McDonnell

Notes:

# National TAB

Project: 01-30-23 CULVERS - BATAVIA, IL

## System/Unit: Kitchen Hood Type II



Comfort. Under control.

Asset: HD3

AREA:DISH

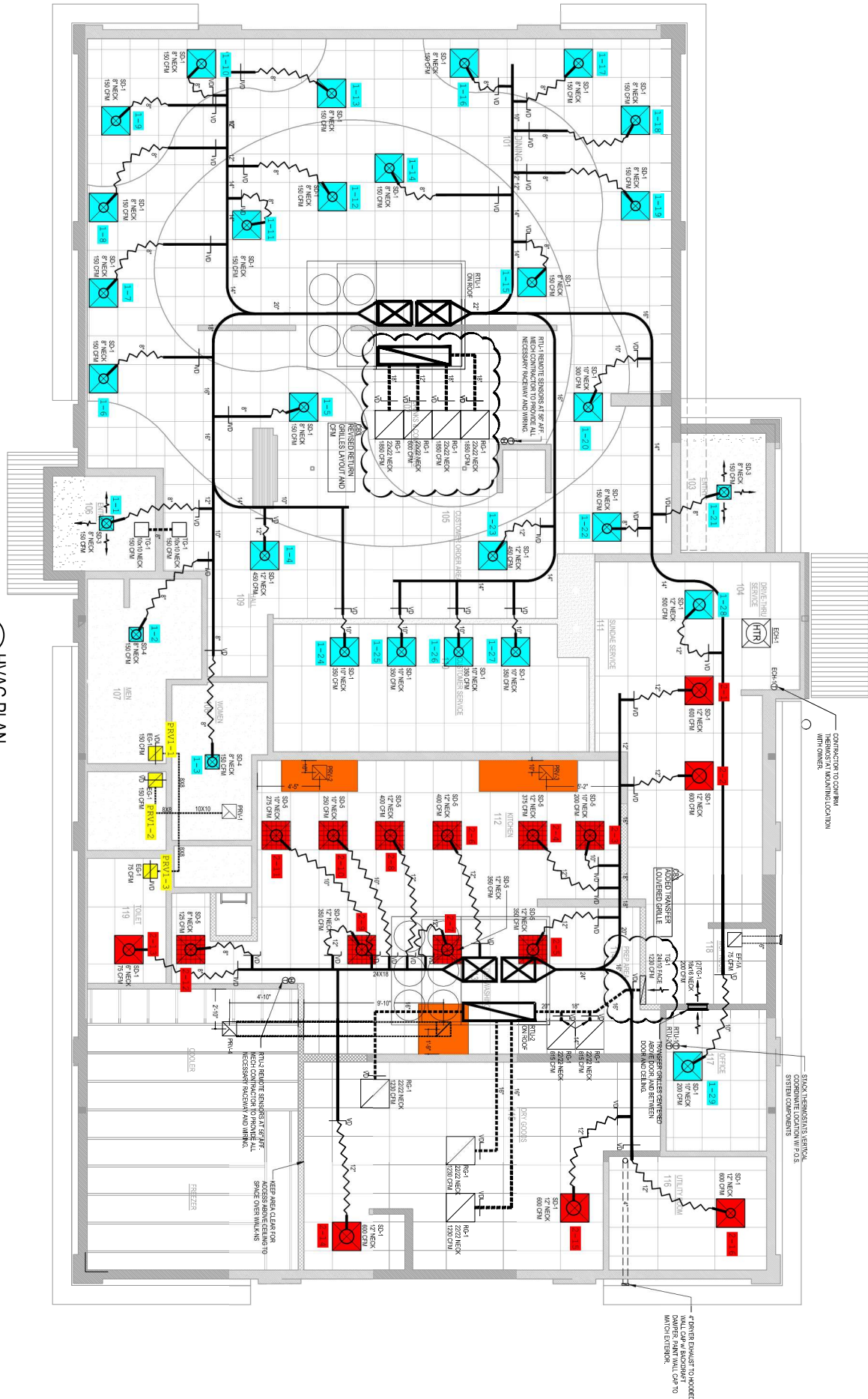
Unit Data		
	Design	Actual
<b>MFG</b>	ACCUREX	ACCUREX
<b>Model Num</b>	XD3-42-S	XD3-42.00-S
<b>Serial Num</b>	-	21036266
<b>Type</b>	TYPE II CANOPY	TYPE II CANOPY
<b>Hood length</b>	42	42
<b>Hood Width</b>	42	42

Test Data		
	Design	Actual
<b>Exhaust CFM</b>	350	328

Completed By: Michael McDonnell

Notes:

**E5** HVAC PLAN  
SCALE: 1/4" = 1'-0"



NOTE: ALL WORK IS TO BE LOCATED IN THOSE SPACES WHERE POSSIBLE.  
 SEE PLAN E-1 FOR ROOM SCHEDULES.  
 MAKE SURE TO RECONSTRUCT BY COORDINATE OPERATIONAL GUIDELINES.  
 1. DINING HEATING TO BE 2000 WATTERS.  
 2. KITCHEN HEATING TO BE 2000 WATTERS.