

**Report By:**

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

**NATIONAL**



Comfort. Under control.

**Report: Test, Adjust, & Balance**

**Date: 5/19/2022**

**PROJECT**

**05-16 CULVERS - SHELBYVILLE, IN**

1930 NORTH MORRISTOWN RD

SHELBYVILLE, IN

**Client**

# National TAB

Project: 05-16 CULVERS - SHELBYVILLE, IN

## Table Of Contents

<b>Section</b>	<b>Page #</b>
Checklist Data	3
AHU/RTU	10
FAN - Exhaust	19
Kitchen Hood Type I	24



Comfort. Under control.

### 05-16 CULVERS - SHELBYVILLE, IN

**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
Perforated diffusers are installed on the cook line? (4-ways will disrupt hood capture)	Yes
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, Mop sink fan is not installed, Resolved by MC and Electrician
On the cookline diffusers neck is there 18" (12" minimum) straight rigid duct run attached?	Yes

**Notes/Comments :**



Comfort. Under control.

## 05-16 CULVERS - SHELBYVILLE, IN

### CheckList Information

**Name :** TECH - STEP 2: UNIT DATA AND EVAL **Status :** NotSubmitted

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

**Requesting Organization :** 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
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.)	Yes
Motors are all operating below the FLA rating?	Yes
Are belts tight?	n/a
If direct drive unit is the speed controller working.	n/a
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?	n/a
Grease cup installed on hood fan?	No
Hinge kit installed installed on hood fan?	Yes
Lean grease rated fans 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
The hood exhaust fans are installed in correct positions and are not switched?	Yes

**HOODS**

Kitchen equipment installed in proper places?	Yes
Can kitchen equipment be turned on for final smoke test?	Yes
Second stage Grease Grabber filters are installed on the griddle hood?	No

**DOCUMENTATION**

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

**Notes/Comments :**

DOAS-2 Economizer not functional, CAS has a new control board ordered. NTAB to Manually adjust and mark damper position.



Comfort. Under control.

### 05-16 CULVERS - SHELBYVILLE, IN

#### 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 :**



Comfort. Under control.

## 05-16 CULVERS - SHELBYVILLE, IN

### 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	Griddle and Fryers were on
List smoke candle type used	45 sec smokes
Smoke test capture - Perimeter of hood	HOOD1 100%, HOOD 2 100%
Smoke test capture - Top of cooking surface	HOOD1 -100%, HOOD-2 90%. Hood 2 has some smoke loss out of the left side. NTAB increased exhaust rate to 110% of design and verified that diffusers were not causing a draft creating the smoke loss. The only solution was to hold up a mock end-panel that brought smoke capture to 100%.

#### WITNESS

Date test was completed	05/19/2022
TAB tech name / Firm	Tyler/NTAB
Site super name / Firm	Troy/Mccon
Owner representative name / Firm (if Applicable)	n/a
Building pressure at front & back doors (All Systems On)	YES, 0.0029" AVG

#### 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?	No

**PRODIGY SETTINGS FOR RTU'S**

Parameter 65 set to 0	No
Parameter 78 set to 0	No
Parameter 105 set to 6	No
Parameter 156 set to 70 (Dining unit only)	No
Parameter 156 set to 65 (Kitchen Unit Only)	No
Parameter 170 set to 75 (Dining Unit Only)	No
Parameter 170 set to 70 (Kitchen Unit Only)	No
Parameter 131 set to the same % as OA minimum position?	No
Parameter 117 set to the same % as OA minimum position?	No

**Notes/Comments :**

CAS WILL INPUT THERMOSTAT SCHEDULES ON THEIR RETURN TRIP



Comfort. Under control.

### 05-16 CULVERS - SHELBYVILLE, IN

#### CheckList Information

**Name :** TECH STEP 5: FINAL DOCUMENTATION **Status :** NotSubmitted

**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: 05-16 CULVERS - SHELBYVILLE, IN

System/Unit: AHU/RTU



Comfort. Under control.

Asset: RTU1

AREA:DINING

Unit Data		
	Design	Actual
MFG	LENNOX	CAPTIVE AIRE
Serial Num	-	5146053
Model Num	LGH-180-H4B	CASRTU3-I.400-24-20T
Type	-	DOAS
Configuration	-	VERTICAL
Num OA Filters 1	-	4
OA Filter Size 1	-	16X25X2
Num Final Filter 1	-	8
Final Filter Size 1	-	20X25X2
Num Final Filter 2	-	
Final Filter Size 2	-	

Test Data		
	Design	Actual
SF CFM	6150	6177
SF RPM	-	1638
RA CFM	4400	4356
OA CFM	1750	1821
RL Voltage	-	210 AVG
RL Amperage	-	20.8 AVG
SF Rotation	-	CCW
RA Damper Position	-	MECHANICAL LINKAGE
Min OA Damper Position	-	3.5V
Min OA Damper Type	-	ECONOMIZER
OA Enthalpy Setpt	-	
Brake Horse Power	-	

Motor Data		
	Design	Actual
Motor MFG	-	TECO
Frame	-	215T
Horsepower	-	10
Motor Rpm	-	1755
Phase	3	3
Rated Voltage	208/230	230
Rated Amperage	-	24.3

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.83"
Fan Suction SP	-	-2.58"
Fan Discharge SP	-	0.60"
Total ESP	-	1.43"
Fan Total SP	-	3.18"

Drive Data		
	Design	Actual
Motor Sheave Size	-	
Motor Bore Size	-	
Motor Sheave SetPt	-	
Fan Sheave Size	-	
Fan Sheave Bore	-	
Belt CL Distance	-	
Num of Belts	-	
Belt Size	-	
Belt Alignment	-	

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

Completed By: Tyler Youells

Notes:INCREASED OA BY +50CFM. TO OBTAIN POSITIVE BUILDING PRESSURE.

# National TAB

Project:05-16 CULVERS - SHELBYVILLE, IN

## AHU/RTU



Comfort. Under control.

Diffuser Supply (GRD)

RTU1/DINING

Asset							
	Location	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)
SGRD1	ENTRY VESTIBULE	SD3	8"	150	1	240	180
	<b>FINAL CFM</b>	<b>% to design</b>					
	154	102.7					
SGRD2	Location	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)
	MENS RR	SD4	8"	150	1	252	143
	<b>FINAL CFM</b>	<b>% to design</b>					
	140	93.3					
SGRD3	Location	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)
	WOMENS RR	SD4	8"	150	1	179	146
	<b>FINAL CFM</b>	<b>% to design</b>					
	158	105.3					
SGRD4	Location	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)
	HALL	SD1	12"	450	1	230	456
	<b>FINAL CFM</b>	<b>% to design</b>					
	477	106.0					
SGRD5	Location	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)
	DINING	SD1	8"	150	1	75	144
	<b>FINAL CFM</b>	<b>% to design</b>					
	155	103.3					
SGRD6	Location	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)
	DINING	SD1	8"	150	1	89	160
	<b>FINAL CFM</b>	<b>% to design</b>					
	164	109.3					
SGRD7	Location	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)
	DINING	SD1	8"	150	1	49	121
	<b>FINAL CFM</b>	<b>% to design</b>					
	136	90.7					
SGRD8	Location	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)
	DINING	SD1	8"	150	1	52	146
	<b>FINAL CFM</b>	<b>% to design</b>					
	144	96.0					
SGRD9	Location	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)
	DINING	SD1	8"	150	1	29	125
	<b>FINAL CFM</b>	<b>% to design</b>					
	135	90.0					
SGRD10	Location	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)
	DINING	SD1	8"	150	1	80	130
	<b>FINAL CFM</b>	<b>% to design</b>					
	135	90.0					
SGRD11	Location	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)
	DINING	SD1	8"	150	1	72	129
	<b>FINAL CFM</b>	<b>% to design</b>					
	138	92.0					
SGRD12	Location	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)
	DINING	SD1	8"	150	1	220	106
	<b>FINAL CFM</b>	<b>% to design</b>					
	135	90.0					
SGRD13	Location	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)
	DINING	SD1	8"	150	1	213	138
	<b>FINAL CFM</b>	<b>% to design</b>					
	149	99.3					
SGRD14	Location	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)
	DINING	SD1	8"	150	1	180	174

	<b>FINAL CFM</b>	<b>% to design</b>					
	154	102.7					
SGRD15	<b>Location</b>	<b>Type</b>	<b>Size</b>	<b>DESIGN CFM</b>	<b>AK</b>	<b>CFM(1)</b>	<b>CFM(2)</b>
	DINING	SD1	8"	150	1	270	165
	<b>FINAL CFM</b>	<b>% to design</b>					
	137	91.3					
SGRD16	<b>Location</b>	<b>Type</b>	<b>Size</b>	<b>DESIGN CFM</b>	<b>AK</b>	<b>CFM(1)</b>	<b>CFM(2)</b>
	DINING	SD1	8"	150	1	220	177
	<b>FINAL CFM</b>	<b>% to design</b>					
	153	102.0					
SGRD17	<b>Location</b>	<b>Type</b>	<b>Size</b>	<b>DESIGN CFM</b>	<b>AK</b>	<b>CFM(1)</b>	<b>CFM(2)</b>
	DINING	SD1	8"	150	1	190	159
	<b>FINAL CFM</b>	<b>% to design</b>					
	165	110.0					
SGRD18	<b>Location</b>	<b>Type</b>	<b>Size</b>	<b>DESIGN CFM</b>	<b>AK</b>	<b>CFM(1)</b>	<b>CFM(2)</b>
	DINING	SD1	8"	150	1	188	155
	<b>FINAL CFM</b>	<b>% to design</b>					
	142	94.7					
SGRD19	<b>Location</b>	<b>Type</b>	<b>Size</b>	<b>DESIGN CFM</b>	<b>AK</b>	<b>CFM(1)</b>	<b>CFM(2)</b>
	DINING	SD1	8"	150	1	230	167
	<b>FINAL CFM</b>	<b>% to design</b>					
	143	95.3					
SGRD20	<b>Location</b>	<b>Type</b>	<b>Size</b>	<b>DESIGN CFM</b>	<b>AK</b>	<b>CFM(1)</b>	<b>CFM(2)</b>
	DRINKS & CONDITM ENTS	SD1	10"	300	1	445	313
	<b>FINAL CFM</b>	<b>% to design</b>					
	313	104.3					
SGRD21	<b>Location</b>	<b>Type</b>	<b>Size</b>	<b>DESIGN CFM</b>	<b>AK</b>	<b>CFM(1)</b>	<b>CFM(2)</b>
	ENTRY	SD1	8"	150	1	71	145
	<b>FINAL CFM</b>	<b>% to design</b>					
	154	102.7					
SGRD22	<b>Location</b>	<b>Type</b>	<b>Size</b>	<b>DESIGN CFM</b>	<b>AK</b>	<b>CFM(1)</b>	<b>CFM(2)</b>
	CUSTOMER ORDER AREA	SD1	12"	450	1	220	480
	<b>FINAL CFM</b>	<b>% to design</b>					
	486	108.0					
SGRD23	<b>Location</b>	<b>Type</b>	<b>Size</b>	<b>DESIGN CFM</b>	<b>AK</b>	<b>CFM(1)</b>	<b>CFM(2)</b>
	CUSTOMER SERVIC E	SD1	10"	350	1	251	343
	<b>FINAL CFM</b>	<b>% to design</b>					
	323	92.3					
SGRD24	<b>Location</b>	<b>Type</b>	<b>Size</b>	<b>DESIGN CFM</b>	<b>AK</b>	<b>CFM(1)</b>	<b>CFM(2)</b>
	CUSTOMER SERVIC E	SD1	10"	350	1	261	373
	<b>FINAL CFM</b>	<b>% to design</b>					
	376	107.4					
SGRD25	<b>Location</b>	<b>Type</b>	<b>Size</b>	<b>DESIGN CFM</b>	<b>AK</b>	<b>CFM(1)</b>	<b>CFM(2)</b>
	CUSTOMER SERVIC E	SD1	10"	350	1	220	331
	<b>FINAL CFM</b>	<b>% to design</b>					
	330	94.3					
SGRD26	<b>Location</b>	<b>Type</b>	<b>Size</b>	<b>DESIGN CFM</b>	<b>AK</b>	<b>CFM(1)</b>	<b>CFM(2)</b>
	CUSTOMER SERVIC E	SD1	10"	350	1	264	342
	<b>FINAL CFM</b>	<b>% to design</b>					
	353	100.9					
SGRD27	<b>Location</b>	<b>Type</b>	<b>Size</b>	<b>DESIGN CFM</b>	<b>AK</b>	<b>CFM(1)</b>	<b>CFM(2)</b>
	DRIVE THRU	SD1	12"	500	1	612	507
	<b>FINAL CFM</b>	<b>% to design</b>					
	520	104.0					

SGRD28	<b>Location</b>	<b>Type</b>	<b>Size</b>	<b>DESIGN CFM</b>	<b>AK</b>	<b>CFM(1)</b>	<b>CFM(2)</b>
	OFFICE	SD1	10"	200	1	280	211
	<b>FINAL CFM</b>	<b>% to design</b>					
	205	102.5					

Completed By: Brianna Biggs on

Asset	Notes
-------	-------

# National TAB

Project: 05-16 CULVERS - SHELBYVILLE, IN

## System/Unit: AHU/RTU



Comfort. Under control.

Asset: RTU2

AREA:KITCHEN

Unit Data		
	Design	Actual
MFG	LENNOX	CAPTIVE AIRE
Serial Num	-	5146053
Model Num	LGH-210-H4B	CASRTU3-I.400-24-20T
Type	-	DOAS
Configuration	-	VERTICAL
Num OA Filters 1	-	4
OA Filter Size 1	-	16X25X2
Num Final Filter 1	-	8
Final Filter Size 1	-	20X25X2
Num Final Filter 2	-	
Final Filter Size 2	-	

Motor Data		
	Design	Actual
Motor MFG	-	TECO
Frame	-	215T
Horsepower	-	10
Motor Rpm	-	1755
Phase	3	3
Rated Voltage	208/230	230
Rated Amperage	-	24.3

Drive Data		
	Design	Actual
Motor Sheave Size	-	
Motor Bore Size	-	
Motor Sheave SetPt	-	
Fan Sheave Size	-	
Fan Sheave Bore	-	
Belt CL Distance	-	
Num of Belts	-	
Belt Size	-	
Belt Alignment	-	

Test Data		
	Design	Actual
SF CFM	6150	6216
SF RPM	-	1638
RA CFM	4450	4378
OA CFM	1700	1838
RL Voltage	-	209 AVG
RL Amperage	-	20.9 AVG
SF Rotation	-	CCW
RA Damper Position	-	MECHANICAL LINKAGE
Min OA Damper Position	-	MARKED
Min OA Damper Type	-	ECONOMIZER
OA Enthalpy Setpt	-	
Brake Horse Power	-	

Performance Data		
	Design	Actual
MA Plenum SP	-	-1.02
Fan Suction SP	-	-2.67"
Fan Discharge SP	-	0.58"
Total ESP	-	1.60"
Fan Total SP	-	3.25"

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

Completed By: Tyler Youells

Notes:

# National TAB

Project:05-16 CULVERS - SHELBYVILLE, IN

## AHU/RTU



Comfort. Under control.

Diffuser Supply (GRD)

RTU2/KITCHEN

Asset							
	Location	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)
SGRD1	SUNDAE SERVICE	SD1	12"	600	1	267	
	<b>FINAL CFM</b>	<b>% to design</b>					
	542	90.3					
SGRD2	SUNDAER SERVICE	SD1	12"	600	1	303	
	<b>FINAL CFM</b>	<b>% to design</b>					
	584	97.3					
SGRD3	COOKLINE	SD5	10"	200	1	235	
	<b>FINAL CFM</b>	<b>% to design</b>					
	201	100.5					
SGRD4	COOKLINE	SD5	10"	375	1	336	
	<b>FINAL CFM</b>	<b>% to design</b>					
	373	99.5					
SGRD5	FOOD PREP	SD5	12"	400	1	119	
	<b>FINAL CFM</b>	<b>% to design</b>					
	405	101.3					
SGRD6	FOOD PREP	SD5	12"	400	1	587	
	<b>FINAL CFM</b>	<b>% to design</b>					
	414	103.5					
SGRD7	COOKLINE	SD5	10"	250	1	347	
	<b>FINAL CFM</b>	<b>% to design</b>					
	246	98.4					
SGRD8	COOKLINE	SD5	10"	275	1	475	
	<b>FINAL CFM</b>	<b>% to design</b>					
	289	105.1					
SGRD9	TOILET	SD1	6"	75	1	113	
	<b>FINAL CFM</b>	<b>% to design</b>					
	71	94.7					
SGRD10	ALCOVE	SD5	8"	125	1	306	
	<b>FINAL CFM</b>	<b>% to design</b>					
	133	106.4					
SGRD11	FOOD PREP	SD5	12"	350	1	635	
	<b>FINAL CFM</b>	<b>% to design</b>					
	379	108.3					
SGRD12	DISHWASHING	SD5	12"	350	1	646	
	<b>FINAL CFM</b>	<b>% to design</b>					
	382	109.1					
SGRD13	DISHWASHING	SD5	12"	350	1	239	
	<b>FINAL CFM</b>	<b>% to design</b>					
	375	107.1					
SGRD14	UTILITY	SD1	12"	600	1	365	

	<b>FINAL CFM</b>	<b>% to design</b>					
	584	97.3					
SGRD15	<b>Location</b>	<b>Type</b>	<b>Size</b>	<b>DESIGN CFM</b>	<b>AK</b>	<b>CFM(1)</b>	<b>CFM(2)</b>
	DRY GOODS	SD1	12"	600	1	343	
	<b>FINAL CFM</b>	<b>% to design</b>					
	639	106.5					
SGRD16	<b>Location</b>	<b>Type</b>	<b>Size</b>	<b>DESIGN CFM</b>	<b>AK</b>	<b>CFM(1)</b>	<b>CFM(2)</b>
	DRY GOODS	S1D	12"	600	1	486	
	<b>FINAL CFM</b>	<b>% to design</b>					
	599	99.8					

Completed By: Brianna Biggs on

Asset	Notes
-------	-------

# National TAB

Project: 05-16 CULVERS - SHELBYVILLE, IN

System/Unit: FAN - Exhaust



Comfort. Under control.

Asset: EF-A1

AREA:MOP ROOM

Unit Data		
	Design	Actual
<b>MFG</b>	ACCUREX	CAPTIVE AIRE
<b>Model Num</b>	XCR-B80	CFA 100CA
<b>Serial Num</b>	-	5414570
<b>Type</b>	CEILING	CEILING
<b>Configuration</b>	VERTICAL	HORIZONTAL

Test Data		
	Design	Actual
<b>CFM</b>	75	81
<b>Fan RPM</b>	885	NA
<b>Fan Rotation</b>	-	CORRECT
<b>Motor RPM</b>	-	NA
<b>System SetPt</b>	-	FULL SPEED
<b>RL Voltage</b>	-	120.1
<b>RL Amperage</b>	-	0.40
<b>Total ESP</b>	0.125"	
<b>Fan Inlet SP</b>	-	
<b>Fan Discharge SP</b>	-	

Motor Data		
	Design	Actual
<b>Motor MFG</b>	-	BROAN
<b>Frame</b>	-	NL
<b>Horsepower</b>	-	87W
<b>Motor Rpm</b>	900	NA
<b>Phase</b>	1	1
<b>Voltage (rated)</b>	115	115
<b>Amperage (rated)</b>	-	1.1
<b>Service Factor</b>	-	1

Completed By: Tyler Youells

Notes:

Asset	Notes
-------	-------

# National TAB

Project: 05-16 CULVERS - SHELBYVILLE, IN

System/Unit: FAN - Exhaust



Comfort. Under control.

Asset: PRV1

AREA:RESTROOMS

Unit Data		
	Design	Actual
MFG	ACCUREX	CAPTIVE AIRE
Model Num	XRED - 095-D	DR12HFA
Serial Num	-	5146053
Type	DOWNBLAST	DOWNBLAST
Configuration	HORIZONTAL	VERTICAL

Motor Data		
	Design	Actual
Motor MFG	-	TELCO GREEN
Frame	-	NL
Horsepower	0.0667	0.25
Motor Rpm	1550	1800
Phase	1	1
Voltage (rated)	115	115
Amperage (rated)	-	2.9
Service Factor	-	1

Test Data		
	Design	Actual
CFM	375	378
Fan RPM	1479	864
Fan Rotation	-	CCW
Motor RPM	-	864
System SetPt	-	48%
RL Voltage	-	120.2
RL Amperage	-	0.63
Total ESP	0.5"	0.10"
Fan Inlet SP	-	-0.10"
Fan Discharge SP	-	ATM

Completed By: Tyler Youells

Notes:

# National TAB

Project:05-16 CULVERS - SHELBYVILLE, IN

## FAN - Exhaust



Comfort. Under control.

### Diffuser Ret/Exh (GRD)

#### PRV1/RESTROOMS

Asset	Location	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)
EGRD1	MENS RR	EG1	8X8	150	1	215	
	<b>FINAL CFM</b>	<b>% to design</b>					
	150	100.0					
EGRD2	WOMENS RR	EG1	8X8	150	1	225	
	<b>FINAL CFM</b>	<b>% to design</b>					
	154	102.7					
EGRD3	TOILET	EG1	8X8	75	1	232	
	<b>FINAL CFM</b>	<b>% to design</b>					
	74	98.7					

Completed By:Brianna Biggs on

Asset	Notes
-------	-------

# National TAB

Project: 05-16 CULVERS - SHELBYVILLE, IN

System/Unit: FAN - Exhaust



Comfort. Under control.

Asset: PRV2

AREA:HD1 GRIDDLE

Unit Data		
	Design	Actual
MFG	ACCUREX	CAPTIVE AIRE
Model Num	XRUB-160XP-15	DU85HFA
Serial Num	-	5146053
Type	UPBLAST	UPBLAST
Configuration	VERTICAL	VERTICAL

Test Data		
	Design	Actual
CFM	1500	1497
Fan RPM	2411	1093
Fan Rotation	-	CCW
Motor RPM	-	1093
RL Voltage	-	102.2/102.7/102.4
RL Amperage	-	1.9 AVG
Suction ESP	-	-0.70"
Discharge ESP	-	ATM
Total ESP	2.337"	0.70"

Motor Data		
	Design	Actual
Motor MFG	-	HSSA
Frame	-	NL
Horsepower	1.5	0.75
Motor Rpm	1725	1725
Phase	3	3
Voltage (rated)	208	208
Amperage (rated)	-	2.6
Service Factor	-	1.15

Drive Data		
	Design	Actual
Motor Sheave Size	-	
Motor Bore Size	-	
Motor Sheave SetPt	-	
Fan Sheave Size	-	
Fan Sheave Bore	-	
Belt CL Distance	-	
Num of Belts	-	
Belt Size	-	

Completed By: Tyler Youells

Notes:FAN SPEED SETPOINT: 38HZ

Asset	Notes

# National TAB

Project: 05-16 CULVERS - SHELBYVILLE, IN

System/Unit: FAN - Exhaust



Comfort. Under control.

Asset: PRV3

AREA:HD2 FRYER

### Unit Data

	Design	Actual
MFG	ACCUREX	CAPTIVE AIRE
Model Num	XRUB-140-7	DU85HFA
Serial Num	-	5146053
Type	-	UPBLAST
Configuration	-	VERTICAL

### Motor Data

	Design	Actual
Motor MFG	-	HSSA
Frame	-	NL
Horsepower	-	0.75
Motor Rpm	-	1725
Phase	-	34
Voltage (rated)	-	208
Amperage (rated)	-	2.6
Service Factor	-	1.15

### Drive Data

	Design	Actual
Motor Sheave Size	-	
Motor Bore Size	-	
Motor Sheave SetPt	-	
Fan Sheave Size	-	
Fan Sheave Bore	-	
Belt CL Distance	-	
Num of Belts	-	
Belt Size	-	

### Test Data

	Design	Actual
CFM	-	1628
Fan RPM	-	1147
Fan Rotation	-	CCW
Motor RPM	-	1147
RL Voltage	-	104.2/104.5/104.3
RL Amperage	-	2.1 AVG
Suction ESP	-	-0.72"
Discharge ESP	-	ATM
Total ESP	-	0.72"

Completed By: Tyler Youells

Notes:FAN SPEED SETPOINT: 39.9HZ

Asset	Notes
-------	-------

# National TAB

Project: 05-16 CULVERS - SHELBYVILLE, IN

System/Unit: Kitchen Hood Type I



Comfort. Under control.

Asset: HD1

AREA:GRIDDLE

Unit Data		
	Design	Actual
MFG	ACCUREX	CAPTIVE AIRE
Model Num	XGEP-64-S	3347 BD-2
Job / Serial Num	-	5146053
Type	TYPE I LOW PROXIMITY	TYPE I LOW PROXIMITY
Hood length	64"	66"
Hood Width	23"	32"

Performance Data		
	Design	Actual
Smoke Generation Type	-	45 SEC SMOKE
Hood Capture %	-	100%
End Panels Installed (Y/N)	-	45 DEG PANELS

Test Data Exhaust		
	Design	Actual
Filter Type	GREASE GRABBER	CAPTRATE SOLO
Filter Size 1	16X16	16X16
Filter Size 2	-	
Filter Qty 1	4	4
Filter Qty 2	-	
Filter AK factor size 1	1.53	1.62
Filters AK factor size 2	-	
Filter Total AK Area	6.12	6.48
Filter1 FPM	-	223
Filter2 FPM	-	239
Filter3 FPM	-	228
Filter4 FPM	-	236
Filter5 FPM	-	
Filter6 FPM	-	
Filter7 FPM	-	
Filter8 FPM	-	
Filter9 FPM	-	
Filter10 FPM	-	
Filter11 FPM	-	
Filter12 FPM	-	
Filter Ave FPM(corr)	-	231
CFM	-	1497

General		
	Design	Actual
Third Party Witness	-	TROY
Third Party Company	-	MCCON
Tech Witness	-	TYLER/NTAB

Cooking Equipment		
	Design	Actual
Item 1	-	GRIDDLE
Item 2	-	

Completed By: Tyler Youells

Notes:

Asset	Notes

# National TAB

Project: 05-16 CULVERS - SHELBYVILLE, IN

## System/Unit: Kitchen Hood Type I



Comfort. Under control.

Asset: HD2

AREA:FRYER

Unit Data		
	Design	Actual
MFG	ACCUREX	CAPTIVE AIRE
Model Num	XXEP-83-S	3347 BD-2
Job / Serial Num	-	5146053
Type	TYPE I LOW PROXIMITY	TYPE I LOW PROXIMITY
Hood length	83"	84"
Hood Width	23"	33"

Performance Data		
	Design	Actual
Smoke Generation Type	-	45 SEC SMOKE
Hood Capture %	-	90%
End Panels Installed (Y/N)	-	CORNER PANELS

Test Data Exhaust		
	Design	Actual
Filter Type	XTRACTOR	CAPTRATE SOLO
Filter Size 1	16X16	16X16
Filter Size 2	-	
Filter Qty 1	5	5
Filter Qty 2	-	
Filter AK factor size 1	1.53	1.62
Filters AK factor size 2	-	
Filter Total AK Area	7.65	8.1
Filter1 FPM	-	204
Filter2 FPM	-	199
Filter3 FPM	-	213
Filter4 FPM	-	197
Filter5 FPM	-	194
Filter6 FPM	-	
Filter7 FPM	-	
Filter8 FPM	-	
Filter9 FPM	-	
Filter10 FPM	-	
Filter11 FPM	-	
Filter12 FPM	-	
Filter Ave FPM(corr)	-	201
CFM	-	1628

General		
	Design	Actual
Third Party Witness	-	TROY
Third Party Company	-	MCCON
Tech Witness	-	TYLER/NTAB

Cooking Equipment		
	Design	Actual
Item 1	-	4 BAT FRYERS
Item 2	-	

Completed By: Tyler Youells

Notes: THERE IS SMOKE ESCAPING TO THE LEFT SIDE, NTAB VERIFIED ALL DIFFUSERS WERE CORRECT FLOW, ALL EQUIPMENT IS IN PLACE AND ON. INCREASED FAN TO 110% OF DESIGN. PUTTING A MOCK END PANEL INCREASED HOOD CAPTURE TO 100%.

Asset	Notes