

Report By:

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



Report: PRELIM REPORT
Function: Test, Adjust, & Balance
Date: 03/10/2024

PROJECT
03-11-24 CULVERS MISHAWAKA, IN

12571 Mckinkey Hwy

Mishawaka, IN 46545

Client

Captive-Aire Region #60

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Project: 03-11-24 CULVERS MISHAWAKA, IN

- [Open](#) BALANCE_SCHEDULE_LARGE_JOBS_27_.xlsx

CheckList List

- TECH 00- SITE PICTURES
- TECH 01 - INITIAL SITE WALKTHROUGH
- TECH 02 - UNIT DATA AND EVALUATION
- TECH 03 - TEST ADJUST AND BALANCE
- TECH 04 - FINAL TESTS



03-11-24 CULVERS MISHAWAKA, IN

CheckList Information

Name : TECH 00- SITE PICTURES **Status :** Not Completed
Assigned Organization : National TAB **Asset :**
Requesting Organization : National TAB
Created Date : 02/26/2024 - Ian Fuller - National TAB

CheckList Item Details

STORE FRONT

Comment:

RTU-1

Comment:

RTU-2

Comment:

PRV-1

Comment:

PRV-2

Comment:

PRV-3

Comment:

PRV-4

Comment:

EF-1A

Comment:

HOOD 1

Comment:

HOOD 2

Comment:

HOOD 3

Comment:

PRODIGY BOARD WIRING

Comment:



03-11-24 CULVERS MISHAWAKA, IN

CheckList Information

Name : TECH 01 - INITIAL SITE WALKTHROUGH **Status :** Not Completed
Assigned Organization : National TAB **Asset :**
Requesting Organization : National TAB
Created Date : 02/26/2024 - Ian Fuller - National TAB

CheckList Item Details

INITIAL SITE WALKTHROUGH

All diffusers and grilles are installed and match design?

Comment:

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

Comment:

All hood filters installed and accounted for?

Comment:

Hoods are wired and have power?

Comment:

Thermostats have power?

Comment:

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

Comment:



03-11-24 CULVERS MISHAWAKA, IN

CheckList Information

Name : TECH 02 - UNIT DATA AND EVALUATION **Status :** Not Completed
Assigned Organization : National TAB **Asset :**
Requesting Organization : National TAB
Created Date : 02/26/2024 - Ian Fuller - 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?

Comment:

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.)

Comment:

Motors are all operating below the FLA rating?

Comment:

Are belts tight?

Comment:

If direct drive unit is the speed controller working.

Comment:

Is gas piping installed and valves turned on?

Comment:

Unit free of noticeable noise and vibration

Comment:

EF's

Rotation is correct?

Comment:

Belts are tight?

Comment:

Grease cup installed on hood fan?

Comment:

Hinge kit installed installed on hood fan?

Comment:

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

Comment:

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

Comment:

There is no major leakage around base of fan?

Comment:

Is the motor operating below the motor FLA rating?

Comment:

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

Comment:

Unit free of noticeable noise and vibration?

Comment:

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

Comment:

HOODS

Kitchen equipment installed in proper places?

Comment:

Can kitchen equipment be turned on for final smoke test?

Comment:

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

Comment:

DOCUMENTATION

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

Comment:



03-11-24 CULVERS MISHAWAKA, IN

CheckList Information

Name : TECH 03 - TEST ADJUST AND BALANCE **Status :** Not Completed
Assigned Organization : National TAB **Asset :**
Requesting Organization : National TAB
Created Date : 02/26/2024 - Ian Fuller - National TAB

CheckList Item Details

TEST, ADJUST, AND BALANCE ALL EQUIPMENT:

DURING TESTING MAKE NOTE OF THE FOLLOWING:

Is space free of drafting?

Comment:

Is space comfortable in all areas?

Comment:

Is the space free of ventilation noise?

Comment:

If deviations from design were necessary to resolve 1-3 what were they? Otherwise put "NA".

Comment:

Comment:

Site super name / Firm

Comment:

Owner representative name / Firm (if Applicable)

Comment:

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

Comment:

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?

Comment:

PRODIGY SETTINGS FOR RTU'S

Parameter 65 set to 0

Comment:

Parameter 78 set to 0

Comment:

Parameter 105 set to 6

Comment:

Parameter 156 set to 70 (Dining unit only)

Comment:

Parameter 156 set to 65 (Kitchen Unit Only)

Comment:

Parameter 170 set to 75 (Dining Unit Only)

Comment:

Parameter 170 set to 70 (Kitchen Unit Only)

Comment:

Parameter 131 set to the same % as OA minimum position?

Comment:

Parameter 117 set to the same % as OA minimum position?

Comment:

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Project: 03-11-24 CULVERS MISHAWAKA, IN

System/Unit: AHU/RTU



Asset: RTU1

AREA:

Unit Data		
	Design	Actual
MFG	LENNOX	LENNOX
Serial Num	-	
Model Num	ENLIGHT LGT	N/A
Type	RTU	
Configuration	VERTICAL	
Num OA Filters 1	-	
OA Filter Size 1	-	
Num Final Filter 1	-	
Final Filter Size 1	-	
Num Final Filter 2	-	
Final Filter Size 2	-	

Test Data		
	Design	Actual
SF CFM	6150	
SF RPM	-	
RA CFM	4400	
OA CFM	1750	
RL Voltage	-	
RL Amperage	-	
SF Rotation	-	
RA Damper Position	-	
Min OA Damper Position	-	
Min OA Damper Type	-	
OA Enthalpy Setpt	-	

Motor Data		
	Design	Actual
Motor MFG	-	
Frame	-	
Horsepower	-	
Motor Rpm	-	
Phase	3	
Rated Voltage	208	
Rated Amperage	-	

Performance Data		
	Design	Actual
MA Plenum SP	-	
Fan Suction SP	-	
Fan Discharge SP	-	
Total ESP	0.75"	
Fan Total SP	-	

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	-	
Unit Filters Clean	-	
Condensate Drain Installed	-	

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Project:03-11-24 CULVERS MISHAWAKA, IN

AHU/RTU



Diffuser Supply (GRD)

RTU1/

Asset									
Asset Name	Location	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
RTU1-SGRD1	WOMEN'S RR	SD-4	8"	150					-
RTU1-SGRD2	MEN'S RR	SD-4	8"	150					-
RTU1-SGRD3	ENTRY	SD-4	8"	150					-
RTU1-SGRD4	DINING	SD-1	12"	450					-
RTU1-SGRD5	DINING	SD-1	8"	150					-
RTU1-SGRD6	DINING	SD-1	8"	150					-
RTU1-SGRD7	DINING	SD-1	8"	150					-
RTU1-SGRD8	DINING	SD-1	8"	150					-
RTU1-SGRD9	DINING	SD-1	8"	150					-
RTU1-SGRD10	DINING	SD-1	8"	150					-
RTU1-SGRD11	DINING	SD-1	8"	150					-
RTU1-SGRD12	DINING	SD-1	8"	150					-
RTU1-SGRD13	DINING	SD-1	8"	150					-
RTU1-SGRD14	DINING	SD-1	8"	150					-
RTU1-SGRD15	DINING	SD-1	8"	150					-
RTU1-SGRD16	DINING	SD-1	8"	150					-
RTU1-SGRD17	DINING	SD-1	8"	150					-
RTU1-SGRD18	DINING	SD-1	10"	300					-
RTU1-SGRD19	DINING	SD-1	8"	150					-
RTU1-SGRD20	DINING	SD-1	12"	450					-
RTU1-SGRD21	DINING	SD-1	8"	150					-
RTU1-SGRD22	SERVING	SD-1	10"	350					-
RTU1-SGRD23	SERVING	SD-1	10"	350					-
RTU1-SGRD24	SERVING	SD-1	10"	350					-
RTU1-SGRD25	SERVING	SD-1	10"	350					-
RTU1-SGRD26	DRIVE-THRU	SD-1	12"	500					-
RTU1-SGRD27	OFFICE	SD-1	8"	200					-
RTU1-SGRD28	DINING	SD-1	8"	150					-
Total				6150		0	0	0	0%

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Project: 03-11-24 CULVERS MISHAWAKA, IN

System/Unit: AHU/RTU



Asset: RTU2

AREA:

Unit Data		
	Design	Actual
MFG	LENNOX	LENNOX
Serial Num	-	
Model Num	ENLIGHT LGT	N/A
Type	RTU	
Configuration	VERTICAL	
Num OA Filters 1	-	
OA Filter Size 1	-	
Num Final Filter 1	-	
Final Filter Size 1	-	
Num Final Filter 2	-	
Final Filter Size 2	-	

Test Data		
	Design	Actual
SF CFM	6225	
SF RPM	-	
RA CFM	4525	
OA CFM	1700	
RL Voltage	-	
RL Amperage	-	
SF Rotation	-	
RA Damper Position	-	
Min OA Damper Position	-	
Min OA Damper Type	-	
OA Enthalpy Setpt	-	

Motor Data		
	Design	Actual
Motor MFG	-	
Frame	-	
Horsepower	-	
Motor Rpm	-	
Phase	-	
Rated Voltage	-	
Rated Amperage	-	

Performance Data		
	Design	Actual
MA Plenum SP	-	
Fan Suction SP	-	
Fan Discharge SP	-	
Total ESP	0.75"	
Fan Total SP	-	

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	-	
Unit Filters Clean	-	
Condensate Drain Installed	-	

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Project:03-11-24 CULVERS MISHAWAKA, IN

AHU/RTU



Diffuser Supply (GRD)

RTU2/

Asset									
Asset Name	Location	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
RTU2-SGRD1	DRIVE-THRU	SD-1	12"	600					-
RTU2-SGRD2	DRIVE-THRU	SD-1	12"	600					-
RTU2-SGRD3	DINING	SD-5	10"	275					-
RTU2-SGRD4	DINING	SD-5	10"	250					-
RTU2-SGRD5	DINING	SD-5	12"	400					-
RTU2-SGRD6	DINING	SD-5	12"	400					-
RTU2-SGRD7	DINING	SD-5	12"	375					-
RTU2-SGRD8	DINING	SD-5	10"	200					-
RTU2-SGRD9	DINING	SD-5	12"	350					-
RTU2-SGRD10	DINING	SD-5	12"	350					-
RTU2-SGRD11	DINING	SD-5	12"	350					-
RTU2-SGRD12	DRY GOODS	SD-1	12"	600					-
RTU2-SGRD13	DRY GOODS	SD-1	10"	200					-
RTU2-SGRD14	RESTROOM	SD-4	6"	75					-
RTU2-SGRD15	DRY GOODS	SD-1	12"	600					-
RTU2-SGRD16	UTILITY ROOM	SD-1	12"	600					-
Total				6225		0	0	0	0%

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Project: 03-11-24 CULVERS MISHAWAKA, IN

System/Unit: FAN - Exhaust



Asset: EFA1

AREA:

Unit Data		
	Design	Actual
MFG	ACCUREX	ACCUREX
Model Num	XCR-B80	XCR-B80
Serial Num	-	
Type	CEILING	
Configuration	VERTICAL	

Motor Data		
	Design	Actual
Motor MFG	-	
Frame	-	
Horsepower	0.01	
Motor Rpm	900	
Phase	1	
Voltage (rated)	115	
Amperage (rated)	-	
Service Factor	-	

Test Data		
	Design	Actual
CFM	75	
Fan RPM	885	
Fan Rotation	-	
Motor RPM	-	
System SetPt	-	
RL Voltage	-	
RL Amperage	-	
Total ESP	0.125"	
Fan Inlet SP	-	
Fan Discharge SP	-	

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Project: 03-11-24 CULVERS MISHAWAKA, IN

System/Unit: FAN - Exhaust



Asset: EFB1

AREA:

Unit Data		
	Design	Actual
MFG	ACCUREX	ACCUREX
Model Num	XCR-B80	XCR-B80
Serial Num	-	
Type	CEILING	
Configuration	VERTICAL	

Motor Data		
	Design	Actual
Motor MFG	-	
Frame	-	
Horsepower	0.01	
Motor Rpm	900	
Phase	1	
Voltage (rated)	115	
Amperage (rated)	-	
Service Factor	-	

Test Data		
	Design	Actual
CFM	75	
Fan RPM	885	
Fan Rotation	-	
Motor RPM	-	
System SetPt	-	
RL Voltage	-	
RL Amperage	-	
Total ESP	0.125"	
Fan Inlet SP	-	
Fan Discharge SP	-	

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Project: 03-11-24 CULVERS MISHAWAKA, IN

System/Unit: FAN - Exhaust



Asset: PRV1

AREA:

Unit Data		
	Design	Actual
MFG	ACCUREX	ACCUREX
Model Num	XRED-090-VG	XRED-090-VG
Serial Num	-	
Type	DOWNBLAST	
Configuration	VERTICAL	

Motor Data		
	Design	Actual
Motor MFG	-	
Frame	-	
Horsepower	0.060	
Motor Rpm	1725	
Phase	1	
Voltage (rated)	115	
Amperage (rated)	-	
Service Factor	-	

Test Data		
	Design	Actual
CFM	300	
Fan RPM	1465	
Fan Rotation	-	
Motor RPM	-	
System SetPt	-	
RL Voltage	-	
RL Amperage	-	
Total ESP	0.50"	
Fan Inlet SP	-	
Fan Discharge SP	-	

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Project:03-11-24 CULVERS MISHAWAKA, IN

FAN - Exhaust



Diffuser Ret/Exh (GRD)

PRV1/

Asset									
Asset Name	Location	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
PRV1-EGRD1									
PRV1-EGRD2									
Total				0		0	0	0	0%

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Project: 03-11-24 CULVERS MISHAWAKA, IN

System/Unit: FAN - Exhaust



Asset: PRV2

AREA:

Unit Data		
	Design	Actual
MFG	ACCUREX	ACCUREX
Model Num	XCUE-140-VG	XCUE-140-VG
Serial Num	-	
Type	UPBLAST	
Configuration	VERTICAL	

Motor Data		
	Design	Actual
Motor MFG	-	
Frame	-	
Horsepower	1.0	
Motor Rpm	1725	
Phase	1	
Voltage (rated)	115	
Amperage (rated)	-	
Service Factor	-	

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	1500	
Fan RPM	1702	
Fan Rotation	-	
Motor RPM	-	
RL Voltage	-	
RL Amperage	-	
Suction ESP	-	
Discharge ESP	-	
Total ESP	1.8"	

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Project: 03-11-24 CULVERS MISHAWAKA, IN

System/Unit: FAN - Exhaust



Asset: PRV3

AREA:

Unit Data		
	Design	Actual
MFG	ACCUREX	ACCUREX
Model Num	XCUE-140-VG	XCUE-140-VG
Serial Num	-	
Type	UPBLAST	
Configuration	VERTICAL	

Motor Data		
	Design	Actual
Motor MFG	-	
Frame	-	
Horsepower	1.0	
Motor Rpm	1725	
Phase	1	
Voltage (rated)	115	
Amperage (rated)	-	
Service Factor	-	

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	1500	
Fan RPM	1349	
Fan Rotation	-	
Motor RPM	-	
RL Voltage	-	
RL Amperage	-	
Suction ESP	-	
Discharge ESP	-	
Total ESP	1.0"	

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Project: 03-11-24 CULVERS MISHAWAKA, IN

System/Unit: Kitchen Hood Type I



Asset: HD1

AREA:

Unit Data		
	Design	Actual
MFG	ACCUREX	ACCUREX
Model Num	XGEP-64-S	XXEP-83-S
Job / Serial Num	-	
Type	TYPE 1 LOW PROXIMITY	
Hood length	83"	
Hood Width	23"	

Test Data Exhaust		
	Design	Actual
Filter Type	X-TRACTOR	
Filter Size 1	16X16	
Filter Qty 1	5	
Filter AK factor size 1	1.53	
Filter Total AK Area	7.65	
Filter1 FPM	-	
Filter2 FPM	-	
Filter3 FPM	-	
Filter4 FPM	-	
Filter5 FPM	-	
Filter Ave FPM(corr)	-	
CFM	1500	

Cooking Equipment		
	Design	Actual
Item 1	-	
Item 2	-	

National TAB

Project: 03-11-24 CULVERS MISHAWAKA, IN

System/Unit: Kitchen Hood Type I



Asset: HD2

AREA:

Unit Data

	Design	Actual
MFG	ACCUREX	ACCUREX
Model Num	XGEP-64-S	XGEP-64-S
Job / Serial Num	-	
Type	TYPE 1 LOW PROXIMITY	
Hood length	64"	
Hood Width	23"	

Test Data Exhaust

	Design	Actual
Filter Type	GREASE GRABBER	
Filter Size 1	16X16	
Filter Qty 1	4	
Filter AK factor size 1	1.53	
Filter Total AK Area	6.12	
Filter1 FPM	-	
Filter2 FPM	-	
Filter3 FPM	-	
Filter4 FPM	-	
Filter Ave FPM(corr)	-	
CFM	1500	

Cooking Equipment

	Design	Actual
Item 1	-	
Item 2	-	