

Report By:

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



Report: TAB REPORT
Function: Test, Adjust, & Balance
Date: 10/05/2023

PROJECT

10-02-23 ARBY'S 2010 - PURCELL, OK

2010 S Green Avenue

Purcell, OK 73080

Client

Flynn Restaurant Group
6200 Oak Tree Boulevard
Suite 250
Independence, OH 44131

National TAB

Project: 10-02-23 ARBY'S 2010 - PURCELL, OK

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10-02-23 ARBY'S 2010 - PURCELL, OK

CheckList Information

Name : TECH - SITE PICTURES **Status :** Completed

Assigned Organization : National TAB **Asset :**

Requesting Organization : National TAB

Created Date : 09/06/2023 - Brianna Biggs - National TAB

Completed Date : 10/03/2023 - Darius Payne - National TAB

CheckList Item Details

STORE FRONT Yes

Comment:

Arby's 2010 Purcell, OK.



74A3343D_FD9D_4710_82..
10/03/2023



DBFC1A5C_5B73_4E59_BF..
10/03/2023

RTU-1 Yes

Comment:

RTU-1 serving dining area.



0F129229_0690_4C9E_A6..
10/03/2023



3AB59B6B_8645_43ED_81..
10/03/2023

RTU-2

Yes

Comment:

RTU-2 serving Kitchen area.



E26F4D10_E18A_43BD_96..
10/03/2023



B9553456_1A2A_4DE3_B0..
10/03/2023



4B4A8FC2_243D_4582_83..
10/03/2023

EF-1

Yes

Comment:

EF-1 serving Hood.



63B2D344_7DF8_46A9_9F..
10/03/2023



1B48121A_836D_484F_8D..
10/03/2023

EF-2

Yes

Comment:

EF-2 serving Restrooms.



0559E6FA_6EE9_4E25_8F..
10/03/2023



2E1CDD5D_7252_407F_8C..
10/03/2023



FBA49361_AE78_46D1_B4..
10/03/2023

HD-1

Yes

Comment:

Hood-1



363E2360_DDC1_4DA5_82..
10/03/2023



28B38C40_0916_4685_97..
10/03/2023



73C51150_66CF_4774_A6..
10/03/2023



10-02-23 ARBY'S 2010 - PURCELL, OK

CheckList Information

Name : TECH - STEP 1: INITIAL WALKTHROUGH **Status :** Completed
Assigned Organization : National TAB **Asset :**
Requesting Organization : National TAB
Created Date : 09/06/2023 - Brianna Biggs - National TAB
Completed Date : 10/03/2023 - Darius Payne - National TAB

CheckList Item Details

INITIAL SITE WALKTHROUGH

All diffusers and grilles are installed and match design? Yes

Comment:

Yes, all diffuser & grilles installed matching design.

All hood filters installed and accounted for? Yes

Comment:

Yes, all 3 Baffle grilles installed & accounted for.

Hoods are wired and have power? Yes

Comment:

Yes, one hood present wired with power.

Hood is free of alarms? Yes

Comment:

Yes, hood is free of Alarm(s).

Thermostats have power? Yes

Comment:

Yes, two Honeywell thermostats present with power.

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

Comment:

Yes, issue(s) created inside of FaciliBuild with notice given to site contact Ross Tucker.



10-02-23 ARBY'S 2010 - PURCELL, OK

CheckList Information

Name : TECH - STEP 2: UNIT DATA AND EVAL **Status :** Completed
Assigned Organization : National TAB **Asset :**
Requesting Organization : National TAB
Created Date : 09/06/2023 - Brianna Biggs - National TAB
Completed Date : 10/03/2023 - Darius Payne - 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? Yes

Comment:

Yes, economizers are assembled & functional on RTU's.

DCV Max damper opening position is set to minimum? Yes

Comment:

Yes, Max damper set to 10%/ minimum.

Free cooling enthalpy set point set for lowest setting (Typically "D") N/A

Comment:

N/A

Motors are all operating below the FLA rating? Yes

Comment:

Yes, all motors operational within FLA rating(s).

Are belts tight?

Comment:

Units are Direct Driven.

If direct drive unit is the speed controller working.

Comment:

Yes, speed controllers functional on both units.

Is gas piping installed and valves turned on?

Yes

Comment:

Yes, gas piping installed with valves in on position.

Unit free of noticeable noise and vibration

Yes

Comment:

Yes, units are free of noise/ vibration during inspection.

EF's

Rotation is correct?

Yes

Comment:

Yes, both EF are CCW rotational.

Belts are tight?

Comment:

N/A Direct Driven EF's.

Grease cup installed on hood fan?

Yes

Comment:

Yes, Grease Cup installed to Hood Fan.

Hinge kit installed installed on hood fan?

Yes

Comment:

Yes, hinge kit installed on hood fan.

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

Yes

Comment:

Yes, grease duct installation adequate to base of the fan.

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

Yes

Comment:

Yes, flex conduit is long enough for unit to be tilted back.

There is no major leakage around base of fan?

Yes

Comment:

Yes, no major leakage around fan base.

Is the motor operating below the motor FLA rating?

Yes

Comment:

Yes, EF's motors below FLA ratings.

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

No

Comment:

No, damper cannot fully open. EF-2 serving restroom(s) back draft damper is restricted. Opening 50% due to fan housing obscurity.

Unit free of noticeable noise and vibration?

Yes

Comment:

Yes, units free of noise and vibration(s).

MUA

Rotation is correct?

N/A

Comment:

N/A, MUA not present.

Gas piping is installed and valves are in on position?

N/A

Comment:

N/A, MUA not present.

Heater tested and is functional?

N/A

Comment:

N/A, MUA not present.

Internal motorized damper is fully opening?

N/A

Comment:

N/A, MUA not present.

Motor is operating below the FLA rating?

N/A

Comment:

N/A, MUA not present.

Unit free of noticeable noise and vibration?

Yes

Comment:

Yes, units free of noise & vibration.

HOODS

Kitchen equipment installed in proper places?

Yes

Comment:

Yes, kitchen equipment in proper placement.

Can kitchen equipment be turned on for final smoke test?

Yes

Comment:

Yes kitchen equipment functional for smoke testing.

DOCUMENTATION

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

Yes

Comment:

Yes, trades/GC notified of any issues to include FaciliBuild issue generation(s).

Notes/Comments :

Restroom back draft damper 50% open.

Date :10/03/2023



10-02-23 ARBY'S 2010 - PURCELL, OK

CheckList Information

Name : TECH - STEP 3: TEST, ADJUST AND BALANCE **Status :** Completed
Assigned Organization : National TAB **Asset :**
Requesting Organization : National TAB
Created Date : 09/06/2023 - Brianna Biggs - National TAB
Completed Date : 10/03/2023 - Darius Payne - 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:

Yes, space is free of drafting.

Is space comfortable in all areas? Yes

Comment:

Yes, space is comfortable in all areas. Verified with employees & management.

Is the space free of ventilation noise? Yes

Comment:

Yes, no ventilation noise present during inspection.

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

Comment:

N/A



10-02-23 ARBY'S 2010 - PURCELL, OK

CheckList Information

Name : TECH - STEP 4: FINAL TESTS **Status :** Completed
Assigned Organization : National TAB **Asset :**
Requesting Organization : National TAB
Created Date : 09/06/2023 - Brianna Biggs - National TAB
Completed Date : 10/03/2023 - Darius Payne - National TAB

CheckList Item Details

FINAL TESTS

HOOD CAPTURE TEST

List equipment turned on for testing

Comment:

Type I Canopy Hood.

List smoke candle type used

Comment:

N/A Hood operational during inspection.

Smoke test capture - Perimeter of hood

Comment:

Yes, smoke capture over hood perimeter.

Smoke test capture - Top of cooking surface

Comment:

Yes, smoke capture over top of cooking surface.

WITNESS

Date test was completed

10/03/2023

Comment:

10/03/2023

TAB tech name / Firm

Comment:

Darius Payne /NTi

Site super name / Firm

Comment:

Ross Tucker/ Morrison CCI

Owner representative name / Firm (if Applicable)

Comment:

N/A

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

Comment:

Front Door: .0003 / Back Door: .0001

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:

Yes, all three airflows coincide with a positive pressure.

Thermostats are programmed?

Yes

Comment:

Yes, 2 Honeywell Thermostats programmed located at Manager's Desk.

OA maximum damper position in the Prodigy controller is set to the same as minimum for all RTU's?

Yes

Comment:

Yes, all Symbio Controllers set to same as minimum on all RTU's.

FAC (Fresh air cooling) is set to NO for all RTU's on the prodigy controller?

N/A

Comment:

N/A

Notes/Comments :

GC (Ross Tucker), stated EF-1 was self regulating without a VFD based upon temperature. Informed him cover was missing on conduit box & restroom damper opens at 50%. Restricting exit air flow.

Date :10/03/2023

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Project: 10-02-23 ARBY'S 2010 - PURCELL, OK

System/Unit: AHU/RTU



Asset: RTU1

AREA:DINING

Unit Data			Test Data		
	Design	Actual		Design	Actual
MFG	LENNOX	TRANE	SF CFM	3000	3029
Serial Num	-	232413237L	SF RPM	-	DD
Model Num	LGT092H4E-Y	YSJ090A3SAH02E000C1B100A100000000000B0	RA CFM	2150	2294
			OA CFM	850	771
Type	RTU	RTU	RL Voltage	-	210,212,212
Configuration	VERTICAL	VERTICAL	RL Amperage	-	6.1,5.3,5.6
Num OA Filters 1	-	1	SF Rotation	-	CW
OA Filter Size 1	-	36X16	RA Damper Position	-	90%
Num Final Filter 1	-	5	Min OA Damper Position	-	10%
Final Filter Size 1	-	16x24	Min OA Damper Type	-	MOTORIZED
			OA Enthalpy Setpt	-	ABSOLUTE

Motor Data		
	Design	Actual
Motor MFG	-	NR
Frame	-	NL
Horsepower	3.8	NR
Motor Rpm	-	NL
Phase	3	3
Rated Voltage	208	208
Rated Amperage	-	8.8

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.18
Fan Suction SP	-	-0.45
Fan Discharge SP	-	0.36
Total ESP	1.0"	0.54
Fan Total SP	-	0.81

Drive Data		
	Design	Actual
Motor Sheave Size	-	DD
Motor Bore Size	-	DD
Motor Sheave SetPt	-	DD
Fan Sheave Size	-	DD
Fan Sheave Bore	-	DD
Belt CL Distance	-	DD
Num of Belts	-	0
Belt Size	-	DD
Belt Alignment	-	DD

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

Notes:
TRANE VS. LENNOX EQUIPMENT INSTALLED ON SITE.

Written By: Darius Payne on 10/03/2023

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Project:10-02-23 ARBY'S 2010 - PURCELL, OK

AHU/RTU



Diffuser Supply (GRD)

RTU1/DINING

Asset									
Asset Name	Location	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
SGRD1	ENTRY VESTIBULE	D1	8"	175	1	221	217	181	103.4
SGRD2	RESTROOM	D1	8"	125	1	178	144	126	100.8
SGRD3	RESTROOM	D1	8"	125	1	254	208	119	95.2
SGRD4	DINING	D1	10"	300	4	333	314	311	103.7
SGRD5	DINING	D1	10"	300	4	318	322	306	102.0
SGRD6	DINING	D1	10"	300	4	324	311	297	99.0
SGRD7	DINING	D1	10"	300	4	309	294	288	96.0
SGRD8	DINING	D1	10"	300	4	268	288	309	103.0
SGRD9	DINING	D1	10"	300	4	304	300	297	99.0
SGRD10	DINING	D1	10"	300	4	368	329	306	102.0
SGRD11	DINING	D1	10"	300	4	344	322	312	104.0
SGRD12	VESTIBULE	D1	8"	175	1	221	203	177	101.1
Total				3000		3442	3252	3029	100.97%

Completed By: Darius Payne on 10/03/2023

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Project:10-02-23 ARBY'S 2010 - PURCELL, OK

AHU/RTU



Diffuser Supply (GRD)

RTU2/

Asset									
Asset Name	Location	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
SGRD1	DRIVE THRU	TITUS	24X24	350	4	589	471	374	106.9
SGRD2	DELI	TITUS	24X24	350	4	507	423	343	98.0
SGRD3	HOOD	TITUS	24X24	300	4	435	404	327	109.0
SGRD4	RECIEVING	TITUS	24X24	400	4	767	509	424	106.0
SGRD5	BACK DOOR	TITUS	24X24	400	4	510	468	431	107.8
SGRD6	WRAP AREA	TITUS	24X24	400	4	141	291	437	109.3
SGRD7	MANAGERS AREA	TITUS	24X24	400	4	162	302	429	107.3
SGRD8	SUPPLY AREA	TITUS	24X24	400	4	158	301	438	109.5
Total				3000		3269	3169	3203	106.77%

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Project: 10-02-23 ARBY'S 2010 - PURCELL, OK

System/Unit: FAN - Exhaust



Asset: EF1

AREA:KH-1 EXHAUST

Unit Data		
	Design	Actual
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	DU50HFA	DU50HFA
Serial Num	-	5698725
Type	UPBLAST	UPBLAST
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	Actual
Motor MFG	-	TELCO GREEN
Frame	-	NL
Horsepower	1/2	1/2
Motor Rpm	-	1800
Phase	1	1
Voltage (rated)	115	115
Amperage (rated)	-	6.3
Service Factor	-	NL

Test Data		
	Design	Actual
CFM	1000	1568
Fan RPM	1370	NR
Fan Rotation	-	CCW
Motor RPM	-	NR
System SetPt	-	NR
RL Voltage	-	120
RL Amperage	-	6.0
Total ESP	0.75"	0.28
Fan Inlet SP	-	ATM
Fan Discharge SP	-	ATM

Completed By: Darius Payne on 10/03/2023

Notes:

EF-1 IS DIRECT DRIVEN WITHOUT VFD. EF-1 IS ALSO MISSING A ELECTRICAL CONDUIT COVER ON EF HOUSING.

Written By: Darius Payne on 10/03/2023

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Project: 10-02-23 ARBY'S 2010 - PURCELL, OK

System/Unit: FAN - Exhaust



Asset: EF2

AREA:

Unit Data		
	Design	Actual
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	DR12HFA	DR12HFA
Serial Num	-	5698725
Type	DOWNBLAST	DOWNBLAST
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	Actual
Motor MFG	-	TELCO GREEN
Frame	-	NL
Horsepower	1/4	1/4
Motor Rpm	-	1800
Phase	1	1
Voltage (rated)	115	115
Amperage (rated)	-	2.9
Service Factor	-	NL

Test Data		
	Design	Actual
CFM	300	174
Fan RPM	1003	1214
Fan Rotation	-	CCW
Motor RPM	-	1423
System SetPt	-	70P
RL Voltage	-	121
RL Amperage	-	1.9
Total ESP	0.25"	0.19
Fan Inlet SP	-	ATM
Fan Discharge SP	-	ATM

Completed By: Darius Payne on 10/03/2023

Notes:
Back draft damper opens 50% restricting exhaust air. Once/ if adjusted Unit should be rebalanced.

Written By: Darius Payne on 10/03/2023

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Project:10-02-23 ARBY'S 2010 - PURCELL, OK

FAN - Exhaust



Diffuser Ret/Exh (GRD)

EF2/

Asset									
Asset Name	Location	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
EGRD1	RESTROOM	G1	12"	150	1	26	54	95	63.3
EGRD2	RESTROOM	G1	12"	150	1	23	47	79	52.7
Total				300		49	101	174	58%

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Project: 10-02-23 ARBY'S 2010 - PURCELL, OK

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	-	5698725
Type	TYPE I CANOPY	TYPE I CANOPY
Hood length	60	60
Hood Width	54	54

Test Data Exhaust		
	Design	Actual
Filter Type	-	BAFFLE
Filter Size 1	-	16X16
Filter Qty 1	-	3
Filter AK factor size 1	-	1.78
Filter Total AK Area	-	5.33
Filter1 FPM	-	290
Filter2 FPM	-	298
Filter3 FPM	-	294
Filter Ave FPM(corr)	-	294
CFM	1000	1568

Cooking Equipment		
	Design	Actual
Item 1	-	FRYER

Completed By: Darius Payne on 10/03/2023

Notes:

No VFD on Hood for exhaust adjustment(s). Employees turn off/ on during operation.

Written By: Darius Payne on 10/03/2023