Report By:

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

Report: TAB Report

Function: Test, Adjust, & Balance

Date: 10/24/2025

Completed By: National TAB

PROJECT

11-03-25 QT #0830 BUFORD, GA

2495 GRAVEL SPRINGS RD

BUFORD, GA

Client

QUIKTRIP

4705 SOUTH 129TH EAST AVENUE

TULSA, OK 74134

National TAB

Project: 11-03-25 QT #0830 BUFORD, GA

Table Of Contents

Project Summary

Project Summary
The summary below provides a quick understanding of our scope of work and general testing procedures. Enclosed in the report are further details 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 was measured with a flow hood to establish total flow. The total flow was then adjusted via the VFD so that airflow fell within design tolerances. All diffusers on the kitchen RTU were balanced to the engineer's design flow. The diffusers on the sales floor were only adjusted when there were noticeable issues present like drafting or dampers that were found completely closed. The Hoods On outside air rate was set by first establishing the typical QT set point at the Emerson controller and then making manually adjustments on the roof. The hoods off airflow setpoint was found by adjusting the damper position at the Emerson controller until the design airflow was achieved. Outside air was measured by reading the intake air opening with a velocity grid and multiplying by the free area. After completion of TAB all overrides were released.

Kitchen Exhaust Hood & Associated Fans
The 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.

Restroom Exhaust Fans
The restroom exhaust fans were measured with a flow hood. The total flow was balanced for the fan with the exception of the new grille over the combi-oven, which was balanced to the listed design.

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 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.

CheckList List

- 01: RTU’s/AHU’s
- 02: Exhaust Fans
- 03: Hoods
- 04: Final Tests

11-03-25 QT #0830 BUFORD, GA

CheckList Information

Name :	01: RTU’s/AHU’s	**Status :**	Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	10/24/2025 - Trinity Dodds - National TAB		
Completed Date :	11/04/2025 - Sagar Patel - National TAB		

CheckList Item Details

RTU's/AHU's

Evaporator coils are clean?	Pass
Comment:	
Condenser coils are clean?	Pass
Comment:	
Gas piping is installed and valves are turned on?	N/A
Comment:	
Unit free of noticeable noise and vibration	Pass
Comment:	

11-03-25 QT #0830 BUFORD, GA

CheckList Information

Name :	02: Exhaust Fans	**Status :**	Not Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	10/24/2025 - Trinity Dodds - National TAB		

CheckList Item Details

EF's

Hinge kit installed installed on hood fan?	Pass
Comment:	
Flex conduit is long enough so that fan can be completely tilted back?	Pass
Comment:	
No major leakage around the fan base	Pass
Comment:	
Unit is free of noise and vibration	Pass
Comment:	

11-03-25 QT #0830 BUFORD, GA

CheckList Information

Name :	03: Hoods	**Status :**	Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	10/24/2025 - Trinity Dodds - National TAB		
Completed Date :	11/07/2025 - Sagar Patel - National TAB		

CheckList Item Details

HOODS

Hood is free of alarms?	Pass
Comment:	
Hood is free of damage?	Pass
Comment:	
End panels are installed per prototype?	Pass
Comment:	

11-03-25 QT #0830 BUFORD, GA

CheckList Information

Name : 04: Final Tests **Status :** Not Completed

Assigned Organization : National TAB **Asset :**

Requesting Organization : National TAB

Created Date : 10/24/2025 - Trinity Dodds - National TAB

CheckList Item Details

FINAL CHECKS

HOOD CAPTURE TEST

List kitchen equipment turned on for testing

Comment:

N/A

List smoke candle type used

Comment:

45 SECOND SMOKE EMITTER

Smoke test capture % - Perimeter of hood

Comment:

100%

Smoke test capture % - Top of cooking surface

Comment:

100%

WITNESS

Date test was completed 11/07/2025

Comment:

TAB tech name / Firm

Comment:

SAGAR PATEL / NATIONAL TAB INTELLIGENCE

Site super name / Firm

Comment:

KYLE DAMRON / ASCENT CONSTRUCTION

Owner representative name / Firm (if Applicable)

Comment:

N/A

BUILDING PRESSURE

Do actual net building airflow, design net building airflow, and pressure coincide? If not why? (All three should either be positive or negative)	Pass

Comment:

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Project: 11-03-25 QT #0830 BUFORD, GA

System/Unit: AHU/RTU

Asset: RT-1 AREA:SALES FLOOR

Unit Data	
	Actual
MFG	AAON
Serial Num	202105-ANEK22258
Model Num	RN-013-8-0-EA0A-152
Num OA Filters 1	1
OA Filter Size 1	45X22
Num Final Filter 1	4
Final Filter Size 1	20X25X2

Motor Data	
	Actual
Motor MFG	N/L
Frame	N/L
Horsepower	3
Motor Rpm	1760
Phase	3
Rated Voltage	208
Rated Amperage	10.6

Test Data		
	Design	**Actual**
SF CFM	4200	4149
SF RPM	-	1496
OA CFM (Hoods On)	800	832
OA CFM (Hoods Off)	350	378
RL Voltage	-	189 VFD
RL Amperage	-	8.62 VFD
VFD Max SetPt	-	51 HZ
VFD Min SetPt	-	24 HZ
OA Damper Position (Hoods On)	-	46%
OA Damper Position (Hoods Off)	-	26%

Performance Data		
	Design	**Actual**
MA Plenum SP	-	-0.73"
Fan Suction SP	-	-1.12"
Fan Discharge SP	-	0.32"
Total ESP	-	1.05"
Fan Total SP	-	1.44"

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

Completed By: Sagar Patel on 11/04/2025

Unit Data - PHOTO LOG

11/07/2025

11/04/2025

National TAB

Project: 11-03-25 QT #0830 BUFORD, GA

System/Unit: AHU/RTU

Asset: RT-2 AREA:SALES FLOOR

Unit Data	
	Actual
MFG	AAON
Serial Num	202105-ANEK22259
Model Num	RN-013-8-0-EA0A-152
Num OA Filters 1	1
OA Filter Size 1	45X22
Num Final Filter 1	4
Final Filter Size 1	20X25X2

Motor Data	
	Actual
Motor MFG	N/L
Frame	N/L
Horsepower	3
Motor Rpm	1760
Phase	3
Rated Voltage	208
Rated Amperage	10.6

Test Data		
	Design	**Actual**
SF CFM	4200	4332
SF RPM	-	1408
OA CFM (Hoods On)	800	853
OA CFM (Hoods Off)	350	344
RL Voltage	-	170 VFD
RL Amperage	-	8.31 VFD
VFD Max SetPt	-	48 HZ
VFD Min SetPt	-	24 HZ
OA Damper Position (Hoods On)	-	46%
OA Damper Position (Hoods Off)	-	26%

Performance Data		
	Design	**Actual**
MA Plenum SP	-	-0.69"
Fan Suction SP	-	-0.96"
Fan Discharge SP	-	0.33"
Total ESP	-	1.02"
Fan Total SP	-	1.29"

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

Completed By: Sagar Patel on 11/04/2025

Unit Data - PHOTO LOG

11/04/2025

11/07/2025

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Project: 11-03-25 QT #0830 BUFORD, GA

System/Unit: AHU/RTU

Asset: RT-3 AREA:BOH/KITCHEN

Unit Data	
	Actual
MFG	AAON
Serial Num	202105-ANEK22260
Model Num	RN-013-8-0-EA0A-152
Num OA Filters 1	1
OA Filter Size 1	45X22
Num Final Filter 1	4
Final Filter Size 1	20X25X2

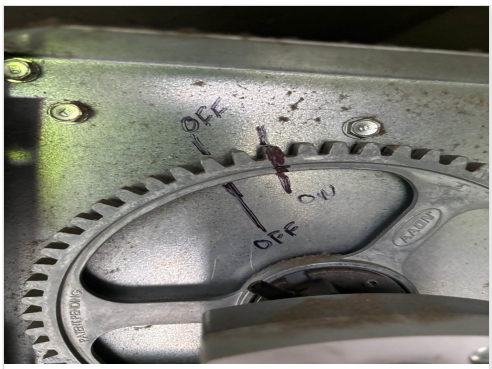
Motor Data	
	Actual
Motor MFG	N/L
Frame	N/L
Horsepower	3
Motor Rpm	1760
Phase	3
Rated Voltage	208
Rated Amperage	10.6

Test Data		
	Design	**Actual**
SF CFM	4200	3997
SF RPM	-	1496
OA CFM (Hoods On)	800	798
OA CFM (Hoods Off)	350	351
RL Voltage	-	190 VFD
RL Amperage	-	9.16 VFD
VFD Max SetPt	-	51 HZ
VFD Min SetPt	-	24 HZ
OA Damper Position (Hoods On)	-	46%
OA Damper Position (Hoods Off)	-	26%

Performance Data		
	Design	**Actual**
MA Plenum SP	-	-0.64"
Fan Suction SP	-	-0.90"
Fan Discharge SP	-	0.96"
Total ESP	-	1.60"
Fan Total SP	-	1.86"

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

Unit Data - PHOTO LOG



11/07/2025

11/04/2025

National TAB

Project:11-03-25 QT #0830 BUFORD, GA

AHU/RTU

Diffuser Supply (GRD)

RT-3/BOH/KITCHEN

Asset									
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
SGRD1	SUPPORT SERVICE	SI	12"	800	1				-
SGRD2	SUPPORT SERVICE	SI	12"	800	1				-
SGRD3	SUPPORT SERVICE	SI	12"	800	1				-
SGRD4	SUPPORT SERVICE	SI	12"	800	1				-
SGRD5	WORKROOM	ES	10"	500	1				-
SGRD6	WORKROOM	ES	8"	250	1				-
SGRD7	WORKROOM	ES	8"	250	1				-
Total				4200		0	0	0	0%

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Project: 11-03-25 QT #0830 BUFORD, GA

System/Unit: FAN - Exhaust

Asset: EF1 AREA:RR/JANITOR

Unit Data		
	Design	**Actual**
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	NA	DR50HFA
Serial Num	-	4942353
Type	DOWNBLAST	DOWNBLAST
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	**Actual**
Motor MFG	-	HSSA
Frame	-	N/L
Horsepower	0.333	0.50
Motor Rpm	-	1380
Phase	1	1
Voltage (rated)	115	115
Amperage (rated)	-	5.6
Service Factor	-	1.0

Test Data		
	Design	**Actual**
CFM	750	
Fan Rotation	-	CCW
System SetPt	-	LOW
RL Voltage	-	[1]
RL Amperage	-	[1]
Total ESP	0.50"	0.
Fan Inlet SP	-	-0.
Fan Discharge SP	-	1 ATM

Notes:
[1] UNABLE TO READ VOLTS AND AMPS SAFELY

Written By: Sagar Patel on 11/04/2025

Unit Data - PHOTO LOG

11/04/2025

National TAB

Project:11-03-25 QT #0830 BUFORD, GA

Diffuser Ret/Exh (GRD)

EF1/RR/JANITOR

Asset									
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
EGRD4	COMBI-OVEN	RI	8"	150	1	0		0	0.0
Total				150		0	0	0	0%

Completed By: Sagar Patel on 11/07/2025

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Project: 11-03-25 QT #0830 BUFORD, GA

System/Unit: FAN - Exhaust

Asset: EF3 AREA:KITCHEN HD

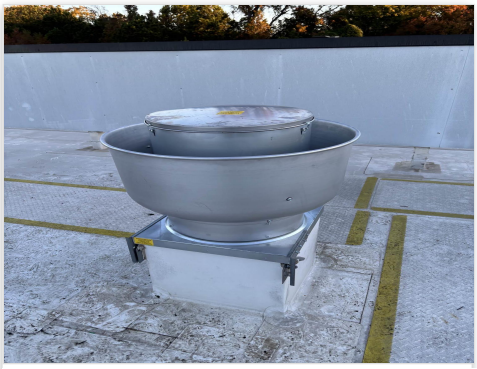
Unit Data		
	Design	**Actual**
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	NA	DU50HFA
Serial Num	-	7657526
Type	UPBLAST	UPBLAST
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	**Actual**
Motor MFG	-	HSSA
Frame	-	48
Horsepower	0.50	0.50
Motor Rpm	-	1800
Phase	1	1
Voltage (rated)	208	208
Amperage (rated)	-	3.6
Service Factor	-	N/L

Test Data		
	Design	**Actual**
CFM	1350	1323
Fan RPM	-	1174
Fan Rotation	-	CCW
Motor RPM	-	1174
System SetPt	-	51.8 HZ
RL Voltage	-	211
RL Amperage	-	1.6
Total ESP	0.750"	0.33”
Fan Inlet SP	-	-0.33”
Fan Discharge SP	-	1 ATM

Completed By: Sagar Patel on 11/07/2025

Unit Data - PHOTO LOG



11/04/2025

National TAB

Project: 11-03-25 QT #0830 BUFORD, GA

System/Unit: Kitchen Hood Type I

Asset: HD1 AREA:GRIDDLE

Unit Data		
	Design	**Actual**
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	6030ND-2-F	6030ND-2-F
Job / Serial Num	-	7657526
Type	TYPE I CANOPY	TYPE I CANOPY
Hood length	108"	108"
Hood Width	60"	60"

Test Data Exhaust		
	Design	**Actual**
Filter Type	CAPTRATE SOLO FILTER	CAPTRATE SOLO FILTER
Filter Size 1	20X16	20X16
Filter Qty 1	6	6
Filter AK factor size 1	2.08	2.08
Filter Total AK Area	12.48	12.48
Filter1 FPM	-	107
Filter2 FPM	-	106
Filter3 FPM	-	116
Filter4 FPM	-	107
Filter5 FPM	-	108
Filter6 FPM	-	96
Filter Ave FPM(corr)	-	106
CFM	1350	1323

Cooking Equipment	
	Actual
Item 1	OVEN
Item 2	FRYER

Completed By: Sagar Patel on 11/07/2025

Unit Data - PHOTO LOG

11/07/2025