

Report By:

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



Report: TAB Report
Function: Test, Adjust, & Balance
Date: 02/19/2026
Completed By: National TAB

PROJECT
01-05-26 QT #1726 ATHENS, GA

3668 ATLANTA HWY

ATHENS, GA

Client

QUIKTRIP
4705 SOUTH 129TH EAST AVENUE
TULSA, OK 74134

National TAB

Project: 01-05-26 QT #1726 ATHENS, GA

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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.

Issue List

- All RTUs: Dirty Filters



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Project Issue Information

Issue Name : All RTUs: Dirty Filters
Description : All RTUs have dirty filters. The date when all filters were last replaced was on 9/25/25. It is recommended they get replaced.
Created By : National TAB **Assigned To :** National TAB - Dan Hertenstein
Status : Open
Priority : Medium **Asset Tag :**
Originated Date : 02/19/2026 - Sagar Patel - National TAB

Project Issue File Details



02/19/2026



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AIR BALANCE SCHEDULE

UNIT	AREA SERVED	HOOD ON OA		HOOD OFF OA		HOOD ON EXHAUST		HOOD OFF EXHAUST	
		DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL
RTU 1	SALES	800	812	350	351				
RTU-2	SALES	800	798	350	357				
RTU-3	BOH/KITCHEN	800	791	350	344				
EF-1	RR/ JANITOR					750	720	750	720
EF-3	HOOD					1350	1297	0	0
TOTALS		2400	2401	1050	1052	2100	2017	750	720

HOODS ON

NET AIRFLOW CALCULATION

TOTALS	DESIGN	ACTUAL
TOTAL OA	2400	2401
TOTAL EXHAUST	2100	2017
NET AIRFLOW	300	384

DOOR TESTED	BUILDING PRESSURE MEASUREMENTS
FRONT	0.0236
SIDE	0.0145
REAR	0.0043
AVERAGE	0.0141

HOODS OFF

NET AIRFLOW CALCULATION

TOTALS	DESIGN	ACTUAL
TOTAL OA	1050	1052
TOTAL EXHAUST	750	720
NET AIRFLOW	300	332

DOOR TESTED	BUILDING PRESSURE MEASUREMENTS
FRONT	0.0148
SIDE	0.0098
REAR	0.0052
AVERAGE	0.0099

NOTES:

CheckList List

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



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CheckList Information

Name : 01: RTU's/AHU's **Status :** Completed
Assigned Organization : National TAB **Asset :**
Requesting Organization : National TAB
Created Date : 12/08/2025 - Trinity Dodds - National TAB
Completed Date : 02/19/2026 - 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:



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CheckList Information

Name : 02: Exhaust Fans **Status :** Completed
Assigned Organization : National TAB **Asset :**
Requesting Organization : National TAB
Created Date : 12/08/2025 - Trinity Dodds - National TAB
Completed Date : 01/09/2026 - Anthony Taylor - 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:



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CheckList Information

Name : 03: Hoods **Status :** Completed
Assigned Organization : National TAB **Asset :**
Requesting Organization : National TAB
Created Date : 12/08/2025 - Trinity Dodds - National TAB
Completed Date : 02/19/2026 - 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? N/A

Comment:



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CheckList Information

Name : 04: Final Tests **Status :** Completed

Assigned Organization : National TAB **Asset :**

Requesting Organization : National TAB

Created Date : 12/08/2025 - Trinity Dodds - National TAB

Completed Date : 02/19/2026 - Sagar Patel - National TAB

CheckList Item Details

FINAL CHECKS

HOOD CAPTURE TEST

List kitchen equipment turned on for testing

Comment:

Fryer and Oven

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

01/08/2026

Comment:

Video

TAB tech name / Firm

Comment:

Anthony Taylor / National TAB Intelligence

Site super name / Firm

Comment:

Not on Site

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: 01-05-26 QT #1726 ATHENS, GA

System/Unit: AHU/RTU

Asset: RT-1

AREA:SALES FLOOR

Unit Data	
	Actual
MFG	AAON
Serial Num	202303-ANEK26066
Model Num	RN-013-8-0-HA0-152
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	AAON
Frame	N/L
Horsepower	3
Motor Rpm	1760
Phase	3
Rated Voltage	208
Rated Amperage	10.6

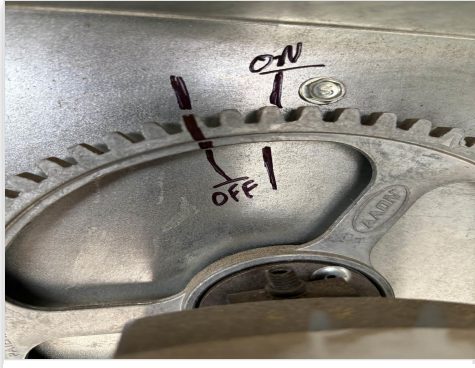
Test Data		
	Design	Actual
SF CFM	4200	4271
SF RPM	-	1302
OA CFM (Hoods On)	800	812
OA CFM (Hoods Off)	350	351
RL Voltage	-	147 VFD
RL Amperage	-	7.12 VFD
VFD Max SetPt	-	44.4 Hz
VFD Min SetPt	-	24 Hz
OA Damper Position (Hoods On)	-	46%
OA Damper Position (Hoods Off)	-	26%

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.43"
Fan Suction SP	-	-0.74"
Fan Discharge SP	-	0.38"
Total ESP	-	0.81"
Fan Total SP	-	1.12"

General	
	Actual
Fan Rotation Correct	YES
Unit Filters Clean	NO
Condensate Drain Installed	YES

Completed By: Sagar Patel on 02/19/2026

Unit Data - PHOTO LOG



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Project: 01-05-26 QT #1726 ATHENS, GA

System/Unit: AHU/RTU

Asset: RT-2

AREA:SALES FLOOR

Unit Data	
	Actual
MFG	AAON
Serial Num	202303-ANEK26067
Model Num	RN-013-8-0-HA0-152
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	AAON
Frame	N/L
Horsepower	3
Motor Rpm	1760
Phase	3
Rated Voltage	208
Rated Amperage	10.6

Test Data		
	Design	Actual
SF CFM	4200	4214
SF RPM	-	1320
OA CFM (Hoods On)	800	798
OA CFM (Hoods Off)	350	357
RL Voltage	-	151 VFD
RL Amperage	-	7.33 VFD
VFD Max SetPt	-	45 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	-	-0.44"
Fan Suction SP	-	-0.79"
Fan Discharge SP	-	0.34"
Total ESP	-	0.78"
Fan Total SP	-	1.13"

General	
	Actual
Fan Rotation Correct	YES
Unit Filters Clean	NO
Condensate Drain Installed	YES

Completed By: Sagar Patel on 02/19/2026

Unit Data - PHOTO LOG



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Project: 01-05-26 QT #1726 ATHENS, GA

System/Unit: AHU/RTU

Asset: RT-3

AREA:BOH/KITCHEN

Unit Data	
	Actual
MFG	AAON
Serial Num	202303-ANEK26068
Model Num	RN-013-8-0-HA0-152
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	AAON
Frame	N/L
Horsepower	3
Motor Rpm	1760
Phase	3
Rated Voltage	208
Rated Amperage	10.6

Test Data		
	Design	Actual
SF CFM	4200	4004
SF RPM	-	1291
OA CFM (Hoods On)	800	791
OA CFM (Hoods Off)	350	344
RL Voltage	-	145 VFD
RL Amperage	-	7.36 VFD
VFD Max SetPt	-	44 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	-	-0.45"
Fan Suction SP	-	-0.81"
Fan Discharge SP	-	0.31"
Total ESP	-	0.76"
Fan Total SP	-	1.12"

General	
	Actual
Fan Rotation Correct	YES
Unit Filters Clean	NO
Condensate Drain Installed	YES

Completed By: Sagar Patel on 02/19/2026

Unit Data - PHOTO LOG



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Project:01-05-26 QT #1726 ATHENS, 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	405	846	746	93.3
SGRD2	SUPPORT SERVICE	SI	12"	800	1	487	648	748	93.5
SGRD3	SUPPORT SERVICE	SI	12"	800	1	262	633	731	91.4
SGRD4	SUPPORT SERVICE	SI	12"	800	1	689	928	748	93.5
SGRD5	DOCK	ES	10"	500	1	422	432	523	104.6
SGRD6	WORKROOM	ES	10"	250	1	447	308	268	107.2
SGRD7	WORKROOM 2	ES	8"	250	1	243	231	240	96.0
Total				4200		2955	4026	4004	95.33%

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Project: 01-05-26 QT #1726 ATHENS, GA

System/Unit: FAN - Exhaust

Asset: EF1

AREA:RR/JANITOR

Unit Data		
	Design	Actual
MFG	NA	CAPTIVEAIRE
Model Num	NA	DR50HFA
Serial Num	-	6027837
Type	-	DOWNBLAST
Configuration	-	VERTICAL

Motor Data		
	Design	Actual
Motor MFG	-	HSSA
Horsepower	-	0.5
Motor Rpm	-	2000
Phase	-	1
Voltage (rated)	-	115
Amperage (rated)	-	8.4 A

Test Data		
	Design	Actual
CFM	750	720
Fan RPM	-	DIAL
Fan Rotation	-	CCW
Motor RPM	-	DIAL
System SetPt	-	DIAL
Total ESP	-	0.38"
Fan Inlet SP	-	-0.38"
Fan Discharge SP	-	ATM

Completed By: Sagar Patel on 02/19/2026

Unit Data - PHOTO LOG



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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	RI	8"	150	1	130	130	137	91.3
Total				150		130	130	137	91.33%

Completed By: Sagar Patel on 02/19/2026



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Project: 01-05-26 QT #1726 ATHENS, GA

System/Unit: FAN - Exhaust

Asset: EF3

AREA:KITCHEN HD

Unit Data		
	Design	Actual
MFG	NA	CAPTIVEAIRE
Model Num	NA	DU50HFA
Serial Num	-	7657546
Type	UPBLAST	UPBLAST
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	Actual
Motor MFG	-	HSSA
Horsepower	1/2	0.50
Motor Rpm	-	1800
Phase	-	1
Voltage (rated)	-	208
Amperage (rated)	-	3.6

Test Data		
	Design	Actual
CFM	1350	1297
Fan RPM	-	1154
Fan Rotation	-	CCW
Motor RPM	-	1154
System SetPt	-	51.8 hz /63% SPEED - VFD
RL Voltage	-	210
RL Amperage	-	1.8
Total ESP	-	0.19"
Fan Inlet SP	-	-0.19"
Fan Discharge SP	-	ATM

Completed By: Sagar Patel on 02/19/2026

Unit Data - PHOTO LOG



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Project: 01-05-26 QT #1726 ATHENS, 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	-	7657546
Type	-	TYPE 1 CANOPY
Hood length	-	108"
Hood Width	-	60"

Test Data Exhaust

	Design	Actual
Filter Type	-	CAPTIVEAIRE
Filter Size 1	-	16X20
Filter Qty 1	-	6
Filter AK factor size 1	-	2.08
Filter Total AK Area	-	12.48
Filter1 FPM	-	110
Filter2 FPM	-	104
Filter3 FPM	-	100
Filter4 FPM	-	107
Filter5 FPM	-	105
Filter6 FPM	-	110
Filter Ave FPM(corr)	-	104
CFM	1350	1297

Cooking Equipment

	Actual
Item 1	FRYER
Item 2	OVEN

Completed By: Anthony Taylor on 01/09/2026

Unit Data - PHOTO LOG



01/09/2026

