Report By:

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

Report: TAB Report

Function: Test, Adjust, & Balance

Date: 10/23/2025

Completed By: National TAB

PROJECT

10-13-25 QT #0839 MABLETON, GA

695 VETERANS MEMORIAL HWY SW

MABLETON, GA

Client

QUIKTRIP

4705 SOUTH 129TH EAST AVENUE

TULSA, OK 74134

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Project: 10-13-25 QT #0839 MABLETON, 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) w/ Diffusers
Each of the RTU's were measured at their terminal devices or via traverse to establish a total flow for that unit. Each RTU was adjusted to within tolerance of the engineer's design flow. Each outlet was then adjusted for comfort and hood performance. Outside air was measured by reading the intake air opening with a velocity grid and multiplying by the free area. The outside air damper was adjusted until the airflow was within the design requirements. Any equipment that fell outside of that tolerance is noted throughout the report.

Kitchen Exhaust Hood & Associated Fans
Each 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. Any EF's that fell outside of this tolerance is noted throughout the report.

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

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CheckList Information

Name :	01: RTU’s/AHU’s	**Status :**	Not Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	10/06/2025 - Trinity Dodds - National TAB		

CheckList Item Details

RTU's/AHU's

Evaporator coils are clean?

Comment:

Condenser coils are clean?

Comment:

Gas piping is installed and valves are turned on?

Comment:

Unit free of noticeable noise and vibration

Comment:

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CheckList Information

Name :	02: Exhaust Fans	**Status :**	Not Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	10/06/2025 - Trinity Dodds - National TAB		

CheckList Item Details

EF's

Hinge kit installed installed on hood fan?

Comment:

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

Comment:

No major leakage around the fan base

Comment:

Unit is free of noise and vibration

Comment:

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CheckList Information

Name :	03: Hoods	**Status :**	Not Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	10/06/2025 - Trinity Dodds - National TAB		

CheckList Item Details

HOODS

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

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CheckList Information

Name :	04: Final Tests	**Status :**	Not Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	10/06/2025 - Trinity Dodds - National TAB		

CheckList Item Details

FINAL CHECKS

HOOD CAPTURE TEST

List kitchen equipment turned on for testing

Comment:

List smoke candle type used

Comment:

Smoke test capture % - Perimeter of hood

Comment:

Smoke test capture % - Top of cooking surface

Comment:

WITNESS

Date test was completed

Comment:

TAB tech name / Firm

Comment:

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Site super name / Firm

Comment:

Owner representative name / Firm (if Applicable)

Comment:

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)

Comment:

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Project: 10-13-25 QT #0839 MABLETON, GA

System/Unit: AHU/RTU

Asset: RT-1 AREA:SALES FLOOR

Unit Data		
	Design	**Actual**
MFG	NA	AAON
Serial Num	-	201808-ANEL17345
Model Num	NA	RN-013-8-0-EAOA-152
Num OA Filters 1	-	1
OA Filter Size 1	-	25X22.5
Num Final Filter 1	-	4
Final Filter Size 1	-	20X25X2
Num Final Filter 2	-	
Final Filter Size 2	-	

Motor Data		
	Design	**Actual**
Motor MFG	-	N/L
Frame	-	N/L
Horsepower	-	3.0
Motor Rpm	-	1760
Phase	-	3
Rated Voltage	-	208
Rated Amperage	-	10.6

Test Data		
	Design	**Actual**
SF CFM	4200	4135
SF RPM	-	1368
OA CFM (Hoods On)	800	821
OA CFM (Hoods Off)	350	377
RL Voltage	-	217 / 216 / 216
RL Amperage	-	9.1 - VFD
VFD Max SetPt	-	45.6
VFD Min SetPt	-	24 HZ
OA Damper Position (Hoods On)	-	46%
OA Damper Position (Hoods Off)	-	30%

Performance Data		
	Design	**Actual**
MA Plenum SP	-	-0.82”
Fan Suction SP	-	-1.05”
Fan Discharge SP	-	0.67”
Total ESP	-	1.49”
Fan Total SP	-	1.72”

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

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Unit Data - PHOTO LOG

10/16/2025

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Project: 10-13-25 QT #0839 MABLETON, GA

System/Unit: AHU/RTU

Asset: RT-2 AREA:SALES FLOOR

Unit Data		
	Design	**Actual**
MFG	NA	AAON
Serial Num	-	201807-ANEK17344
Model Num	NA	RN-013-8-0-EAOA-152
Num OA Filters 1	-	1
OA Filter Size 1	-	35X22.5
Num Final Filter 1	-	4
Final Filter Size 1	-	20X25X2
Num Final Filter 2	-	
Final Filter Size 2	-	

Motor Data		
	Design	**Actual**
Motor MFG	-	N/L
Frame	-	N/L
Horsepower	-	3.0
Motor Rpm	-	1760
Phase	-	3
Rated Voltage	-	208
Rated Amperage	-	10.6

Test Data		
	Design	**Actual**
SF CFM	4200	4097
SF RPM	-	1368
OA CFM (Hoods On)	800	782
OA CFM (Hoods Off)	350	361
RL Voltage	-	215 / 216 / 216
RL Amperage	-	9.5 - VFD
VFD Max SetPt	-	45.6 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	-	-0.96”
Fan Suction SP	-	-1.22”
Fan Discharge SP	-	0.52”
Total ESP	-	1.48”
Fan Total SP	-	1.74”

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

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Unit Data - PHOTO LOG

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Project: 10-13-25 QT #0839 MABLETON, GA

System/Unit: AHU/RTU

Asset: RT-3 AREA:BOH/KITCHEN

Unit Data		
	Design	**Actual**
MFG	NA	AAON
Serial Num	-	201808-ANEK17346
Model Num	NA	RN-013-8-0-EAOA-152
Num OA Filters 1	-	1
OA Filter Size 1	-	35X22.5
Num Final Filter 1	-	4
Final Filter Size 1	-	20X25X2
Num Final Filter 2	-	
Final Filter Size 2	-	

Motor Data		
	Design	**Actual**
Motor MFG	-	N/L
Frame	-	N/L
Horsepower	-	3.0
Motor Rpm	-	1760
Phase	-	3
Rated Voltage	-	208
Rated Amperage	-	10.6

Test Data		
	Design	**Actual**
SF CFM	4200	
SF RPM	-	
OA CFM (Hoods On)	800	
OA CFM (Hoods Off)	350	
RL Voltage	-	
RL Amperage	-	
VFD Max SetPt	-	
VFD Min SetPt	-	
OA Damper Position (Hoods On)	-	
OA Damper Position (Hoods Off)	-	

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

General	
	Actual
Fan Rotation Correct	
Unit Filters Clean	
Condensate Drain Installed	

Unit Data - PHOTO LOG

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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	10"	500	1				-
Total				4200		0	0	0	0%

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Project: 10-13-25 QT #0839 MABLETON, GA

System/Unit: FAN - Exhaust

Asset: EF1 AREA:RR/JANITOR

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

Motor Data		
	Design	**Actual**
Motor MFG	-	
Frame	-	
Horsepower	-	
Motor Rpm	-	
Phase	-	
Voltage (rated)	-	
Amperage (rated)	-	
Service Factor	-	

Test Data		
	Design	**Actual**
CFM	750	
Fan RPM	-	
Fan Rotation	-	
Motor RPM	-	
System SetPt	-	
RL Voltage	-	
RL Amperage	-	
Total ESP	-	
Fan Inlet SP	-	
Fan Discharge SP	-	

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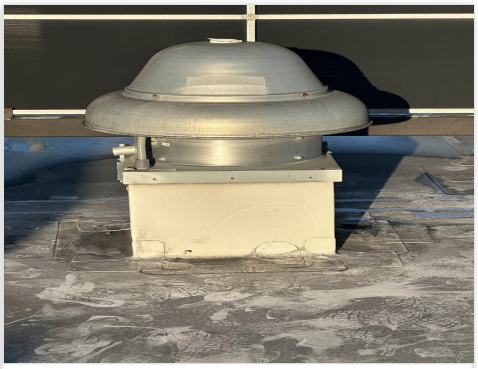
Unit Data - PHOTO LOG



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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	SUPPORT SERVICE	RI	8"	150					-
Total				150		0	0	0	0%

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Project: 10-13-25 QT #0839 MABLETON, GA

System/Unit: FAN - Exhaust

Asset: EF3 AREA:KITCHEN HD

Unit Data		
	Design	**Actual**
MFG	NA	CAPTIVEAIRE
Model Num	NA	DU50HFA
Serial Num	-	7644850
Type	UPBLAST	UPBLAST
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	**Actual**
Motor MFG	-	HSSA
Frame	-	48
Horsepower	1/2	0.5
Motor Rpm	-	1800
Phase	-	1
Voltage (rated)	-	208
Amperage (rated)	-	3.6
Service Factor	-	N/L

Test Data		
	Design	**Actual**
CFM	1350	
Fan RPM	-	
Fan Rotation	-	
Motor RPM	-	
System SetPt	-	
RL Voltage	-	
RL Amperage	-	
Total ESP	-	
Fan Inlet SP	-	
Fan Discharge SP	-	ATM

Notes:
FAN IS RUNNING BACKWARDS

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Unit Data - PHOTO LOG

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Project: 10-13-25 QT #0839 MABLETON, 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	-	7644850
Type	-	TYPE I - CANOPY
Hood length	-	108”
Hood Width	-	60”

Test Data Exhaust		
	Design	**Actual**
Filter Type	-	BAFFLE
Filter Size 1	-	16X20
Filter Qty 1	-	6
Filter AK factor size 1	-	2.08
Filter Total AK Area	-	12.48
Filter1 FPM	-	
Filter2 FPM	-	
Filter3 FPM	-	
Filter4 FPM	-	
Filter5 FPM	-	
Filter6 FPM	-	
Filter Ave FPM(corr)	-	
CFM	1350	108

Cooking Equipment	
	Actual
Item 1	OPEN FRYER
Item 2	TOASTER OVEN

Notes:
HOOD NOT IN EMERSON CONTROLLER.

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Unit Data - PHOTO LOG

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