

Report By:

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



Report: TAB Report
Function: Test, Adjust, & Balance
Date: 09/29/2025
Completed By: National TAB

PROJECT
09-22-25 QT #1116 ANDERSON, SC

1701 EAST GREENVILLE STREET

ANDERSON, SC

Client

QUIKTRIP
4705 SOUTH 129TH EAST AVENUE
TULSA, OK 74134

National TAB

Project: 09-22-25 QT #1116 ANDERSON, SC

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Issue List

- EF-2 no damper
- EF-2 speed controller not working
- RTU 3 economizer does not close far enough



09-22-25 QT #1116 ANDERSON, SC

Project Issue Information

Issue Name : EF-2 no damper
Description : There is no damper on the men's RR grille, the exhaust fan is over design and to get the combo oven exhaust grille to design would mean increasing the fan and men's RR by a lot.
Created By : National TAB **Assigned To :** National TAB - Dan Hertenstein
Status : Open
Priority : **Urgent** **Asset Tag :** EF2
Originated Date : 09/24/2025 - Christian Moller - National TAB

Project Issue File Details



09/24/2025



09-22-25 QT #1116 ANDERSON, SC

Project Issue Information

Issue Name : EF-2 speed controller not working
Description : The women's RR exhaust fan is high and the speed controller does not change the fans speed. It is stuck in high speed.
Created By : National TAB **Assigned To :** National TAB - Dan Hertenstein
Status : Open
Priority : Medium **Asset Tag :** EF1
Originated Date : 09/24/2025 - Christian Moller - National TAB

Project Issue File Details



09/24/2025



09/24/2025



09-22-25 QT #1116 ANDERSON, SC

Project Issue Information

Issue Name : RTU 3 economizer does not close far enough
Description : QT would like OA to be taken at 800 and 350 CFM, the economizer doesn't close the damper far enough to achieve 350 CFM.
Created By : National TAB **Assigned To :** National TAB - Dan Hertenstein
Status : Open
Priority : Low **Asset Tag :** RT-3
Originated Date : 09/24/2025 - Christian Moller - National TAB

Project Issue File Details



09/24/2025



09/24/2025

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 : 09/15/2025 - Trinity Dodds - National TAB
Completed Date : 09/24/2025 - Christian Moller - 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? Pass

Comment:

Unit free of noticeable noise and vibration Pass

Comment:



09-22-25 QT #1116 ANDERSON, SC

CheckList Information

Name : 02: Exhaust Fans **Status :** Completed
Assigned Organization : National TAB **Asset :**
Requesting Organization : National TAB
Created Date : 09/15/2025 - Trinity Dodds - National TAB
Completed Date : 09/24/2025 - Christian Moller - 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:



09-22-25 QT #1116 ANDERSON, SC

CheckList Information

Name : 03: Hoods **Status :** Completed
Assigned Organization : National TAB **Asset :**
Requesting Organization : National TAB
Created Date : 09/15/2025 - Trinity Dodds - National TAB
Completed Date : 09/25/2025 - Christian Moller - National TAB

CheckList Item Details

HOODS

Hood is free of alarms? N/A

Comment:

Hood is free of damage? Pass

Comment:

End panels are installed per prototype? Pass

Comment:



09-22-25 QT #1116 ANDERSON, SC

CheckList Information

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

Assigned Organization : National TAB **Asset :**

Requesting Organization : National TAB

Created Date : 09/15/2025 - Trinity Dodds - National TAB

Completed Date : 09/25/2025 - Christian Moller - National TAB

CheckList Item Details

FINAL CHECKS

HOOD CAPTURE TEST

List kitchen equipment turned on for testing

Comment:

NONE

List smoke candle type used

Comment:

S102 - 45 second candles

Smoke test capture % - Perimeter of hood

Comment:

100%

Smoke test capture % - Top of cooking surface

Comment:

100%

WITNESS

Date test was completed

09/25/2025

Comment:

TAB tech name / Firm

Comment:

Christian Moller / NTAB

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:

Before hood turned on: FRONT: +0.017" After hood was turned on: +0.0058"

National TAB

Project: 09-22-25 QT #1116 ANDERSON, SC

System/Unit: AHU/RTU



Asset: RT-1

AREA:SALES FLOOR

Unit Data		
	Design	Actual
MFG	NA	AAON
Serial Num	-	201110-ANEK05551
Model Num	NA	RN - 013-8-0-EAOA-152
Type	-	RTU
Num OA Filters 1	-	1
OA Filter Size 1	-	45x25

Motor Data		
	Design	Actual
Motor MFG	-	AAON
Frame	-	NL
Horsepower	-	3
Motor Rpm	-	1760
Phase	-	3
Rated Voltage	-	208
Rated Amperage	-	10.6

Drive Data	
	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	DD
Belt Size	DD
Belt Alignment	DD

Test Data		
	Design	Actual
SF CFM	4200	4387
RA CFM	3400	3616
OA CFM	800	771
RL Voltage	-	209/209/209
RL Amperage	-	3.6/3.2/2.9
SF Rotation	-	CCW
SF System SetPt	-	VFD/38.6Hz
RA Damper Position	-	3.5"
Min OA Damper Position	-	0.75"
Min OA Damper Type	-	ECON

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.37"
Fan Suction SP	-	-0.59"
Fan Discharge SP	-	0.62"
Total ESP	-	0.96"
Fan Total SP	-	1.21"

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

Completed By: Christian Moller on 09/24/2025

Notes:

RTU balanced for total flow and diffusers balanced for comfort
 For 350 OA: OA blades at 0.25", RA blades at 4" - 380 CFM.

Written By: Christian Moller on 09/24/2025

Unit Data - PHOTO LOG



09/24/2025

National TAB

Project:09-22-25 QT #1116 ANDERSON, SC

AHU/RTU



Diffuser Supply (GRD)

RT-1/SALES FLOOR

Asset									
Asset Name	Location	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
SGRD1	ENTRANCE	ES	8"	250					-
SGRD2	SALES	ES	8"	250					-
SGRD3	SALES	ES	8"	250					-
SGRD4	SALES	ES	6"	250					-
SGRD5	SALES	ES	6"	250					-
SGRD6	SALES	ES	6"	250					-
SGRD7	SALES	ES	6"	250					-
SGRD8	SALES	ES	8"	200					-
SGRD9	SALES	ES	14"	725					-
SGRD10	SALES	ES	14"	725					-
SGRD11	WOMENS RR	ES	8"	200					-
SGRD12	SIDE ENTRANCE	ES	12"	400					-
SGRD13	ELECTRICAL	ES	8"	200					-
Total				4200		0	0	0	0%

National TAB

Project: 09-22-25 QT #1116 ANDERSON, SC

System/Unit: AHU/RTU



Asset: RT-2

AREA: SALES FLOOR

Unit Data		
	Design	Actual
MFG	NA	AAON
Serial Num	-	201110-ANEK05552
Model Num	NA	RN-013-8-0-EA0A- 152
Type	-	RTU
Num OA Filters 1	-	1
OA Filter Size 1	-	45x25

Motor Data		
	Design	Actual
Motor MFG	-	AAON
Frame	-	NL
Horsepower	-	3
Motor Rpm	-	1760
Phase	-	3
Rated Voltage	-	208
Rated Amperage	-	10.6

Drive Data	
	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	DD
Belt Size	DD
Belt Alignment	DD

Test Data		
	Design	Actual
SF CFM	4200	4255
RA CFM	3400	3393
OA CFM	800	862
RL Voltage	-	207/207/206
RL Amperage	-	3.4/3.1/2.9
SF Rotation	-	CCW
SF System SetPt	-	VFD/31.9Hz
RA Damper Position	-	3.5"
Min OA Damper Position	-	1"
Min OA Damper Type	-	ECON

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.36"
Fan Suction SP	-	-0.56"
Fan Discharge SP	-	0.68"
Total ESP	-	0.92"
Fan Total SP	-	1.24"

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

Completed By: Christian Moller on 09/24/2025

Notes:

RTU balanced for total flow and diffusers balanced for comfort
For 350 OA - OA blades at 0.20" RA at 4"

Written By: Christian Moller on 09/24/2025

Unit Data - PHOTO LOG



09/24/2025

National TAB

Project:09-22-25 QT #1116 ANDERSON, SC

AHU/RTU



Diffuser Supply (GRD)

RT-2/SALES FLOOR

Asset									
Asset Name	Location	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
SGRD1	ENTRANCE	ES	8"	250					-
SGRD2	SALES	ES	8"	250					-
SGRD3	SALES	ES	8"	250					-
SGRD4	SALES	ES	6"	250					-
SGRD5	SALES	ES	8"	250					-
SGRD6	SALES	ES	8"	250					-
SGRD7	SALES	ES	8"	250					-
SGRD8	SALES	ES	14"	825					-
SGRD9	SALES	ES	14"	825					-
SGRD10	FOUNTAIN AREA	ES	8"	200					-
SGRD11	SIDE ENTRANCE	ES	12"	400					-
SGRD12	MENS RR	ES	8"	200					-
Total				4200		0	0	0	0%

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Project: 09-22-25 QT #1116 ANDERSON, SC

System/Unit: AHU/RTU



Asset: RT-3

AREA:BOH/KITCHEN

Unit Data		
	Design	Actual
MFG	NA	AAON
Serial Num	-	201110-ANEK05550
Model Num	NA	RN-013-8-0-EAOA- 152
Type	-	RTU
Num OA Filters 1	-	1
OA Filter Size 1	-	45x25

Motor Data		
	Design	Actual
Motor MFG	-	AAON
Frame	-	NL
Horsepower	-	3
Motor Rpm	-	1760
Phase	-	3
Rated Voltage	-	208
Rated Amperage	-	10.6

Drive Data	
	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	DD
Belt Size	DD
Belt Alignment	DD

Test Data		
	Design	Actual
SF CFM	4200	4394
RA CFM	3400	3525
OA CFM	800	869
RL Voltage	-	206/205/206
RL Amperage	-	5.7/6.7/6.8
SF Rotation	-	CCW
SF System SetPt	-	VFD/35Hz
RA Damper Position	-	4"
Min OA Damper Position	-	1"
Min OA Damper Type	-	ECON

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.51"
Fan Suction SP	-	-0.71"
Fan Discharge SP	-	0.52"
Total ESP	-	1.22"
Fan Total SP	-	1.23"

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

Completed By: Christian Moller on 09/24/2025

Notes:
ECONOMIZER will not close far enough for 350 CFM.

Written By: Christian Moller on 09/24/2025

Unit Data - PHOTO LOG



09/24/2025

National TAB
 Project:09-22-25 QT #1116 ANDERSON, SC
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	497	721	867	108.4
SGRD2	SUPPORT SERVICE	SI	12"	800	1	267	387	732	91.5
SGRD3	SUPPORT SERVICE	SI	12"	800	1	417	605	834	104.3
SGRD4	SUPPORT SERVICE	SI	12"	800	1	525	762	878	109.8
SGRD5	WORKROOM	ES	12"	750	1	263	382	823	109.7
SGRD6	WORKROOM	ES	8"	250	1	43	63	260	104.0
Total				4200		2012	2920	4394	104.62%

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Project: 09-22-25 QT #1116 ANDERSON, SC

System/Unit: FAN - Exhaust



Asset: EF1

AREA:WOMENS RESTROOM

Unit Data		
	Design	Actual
MFG	NA	COOK
Model Num	NA	90 ACEH 90C15DH
Serial Num	-	418SD80814- 00/0000701
Type	-	UPBLAST
Configuration	-	VERTICAL

Motor Data		
	Design	Actual
Motor MFG	-	COOK
Frame	-	15DH
Horsepower	-	0.125
Motor Rpm	-	1550
Phase	-	1
Voltage (rated)	-	115
Amperage (rated)	-	1.7
Service Factor	-	NL

Test Data		
	Design	Actual
CFM	225	289
Fan RPM	-	
Fan Rotation	-	CCW
Motor RPM	-	
System SetPt	-	SPEED CONTROLLER / HIGH SPEED
RL Voltage	-	111
RL Amperage	-	1.22
Total ESP	-	0.23"
Fan Inlet SP	-	-0.23"
Fan Discharge SP	-	ATM

Completed By: Christian Moller on 09/24/2025

Notes:
Speed controller stuck at high speed.

Written By: Christian Moller on 09/24/2025

Unit Data - PHOTO LOG



09/24/2025

National TAB

Project: 09-22-25 QT #1116 ANDERSON, SC
System/Unit: FAN - Exhaust



Asset: EF2

AREA:MENS RESTROOM

Unit Data		
	Design	Actual
MFG	NA	COOK
Model Num	NA	120 ACE 120013D
Serial Num	-	418SD80814- 00/00001901
Type	-	UPBLAST
Configuration	-	VERTICAL

Test Data		
	Design	Actual
CFM	525	549
Fan RPM	-	-
Fan Rotation	-	CCW
Motor RPM	-	-
System SetPt	-	Speed Controller / High speed
RL Voltage	-	110
RL Amperage	-	2.4
Total ESP	-	0.46"
Fan Inlet SP	-	-0.46"
Fan Discharge SP	-	ATM

Motor Data		
	Design	Actual
Motor MFG	-	COOK
Frame	-	48Y
Horsepower	-	.25
Motor Rpm	-	1300
Phase	-	1
Voltage (rated)	-	115
Amperage (rated)	-	3.3
Service Factor	-	NL

Completed By: Christian Moller on 09/24/2025

Notes:
Men's RR diffuser does not have a damper, exhaust cannot be shifted to the combi oven.

Written By: Christian Moller on 09/24/2025

Unit Data - PHOTO LOG



09/24/2025

National TAB

Project:09-22-25 QT #1116 ANDERSON, SC

FAN - Exhaust



Diffuser Ret/Exh (GRD)

EF2/MENS RESTROOM

Asset									
Asset Name	Location	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
EGRD1	SUPPORT SERVICE	RI	8"	150	1	92	92	92	61.3
EGRD2	MENS RR	EE	16X7	375	1	457	457	457	121.9
Total				525		549	549	549	104.57%

National TAB

Project: 09-22-25 QT #1116 ANDERSON, SC

System/Unit: FAN - Exhaust



Asset: EF3

AREA:KITCHEN HOOD

Unit Data		
	Design	Actual
MFG	NA	CAPTIVEAIRE
Model Num	NA	DU50HFA
Serial Num	-	7657320
Type	UPBLAST	UPBLAST
Configuration	VERTICAL	VERTICAL

Test Data		
	Design	Actual
CFM	1350	1310
Fan Rotation	-	CCW
System SetPt	-	HMI / 54.8Hz
RL Voltage	-	207
RL Amperage	-	2.6
Total ESP	-	NR
Fan Inlet SP	-	NR
Fan Discharge SP	-	ATM

Motor Data		
	Design	Actual
Motor MFG	-	CAPTIVEAIRE
Frame	-	NL
Horsepower	1/2	0.5
Motor Rpm	-	1800
Phase	-	1
Voltage (rated)	-	208
Amperage (rated)	-	3.8
Service Factor	-	NL

Completed By: Christian Moller on 09/26/2025

Unit Data - PHOTO LOG



09/24/2025

National TAB

Project: 09-22-25 QT #1116 ANDERSON, SC

System/Unit: Kitchen Hood Type I



Asset: HD1

AREA:GRIDDLE

Unit Data		
	Design	Actual
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	6030 ND-2-F	6030 ND-2
Job / Serial Num	-	7657320
Type	TYPE I CANOPY	TYPE I CANOPY
Hood length	-	122"
Hood Width	-	60"

Test Data Exhaust		
	Design	Actual
Filter Type	-	BAFFLE FILTERS
Filter Size 1	-	16x20
Filter Qty 1	-	6
Filter AK factor size 1	-	2.08
Filter Total AK Area	-	12.48
Filter1 FPM	-	102
Filter2 FPM	-	112
Filter3 FPM	-	108
Filter4 FPM	-	109
Filter5 FPM	-	105
Filter6 FPM	-	99
Filter Ave FPM(corr)	-	105
CFM	1350	1310

Cooking Equipment	
	Actual
Item 1	FRYER
Item 2	PIZZA OVEN

Completed By: Christian Moller on 09/26/2025

Unit Data - PHOTO LOG



09/26/2025

