Report By:

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

Report: TAB Report

Function: Test, Adjust, & Balance

Date: 02/25/2026

Completed By: National TAB

PROJECT

02-09-26 QT #1145 GREENVILLE, SC

1509 GROVE RD

GREENVILLE, SC

Client

QUIKTRIP

4705 SOUTH 129TH EAST AVENUE

TULSA, OK 74134

National TAB

Project: 02-09-26 QT #1145 GREENVILLE, SC

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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

- EF-3 at 81% of design
- Improper diffusers in kitchen
- Kitchen dampers inaccessible

02-09-26 QT #1145 GREENVILLE, SC

Project Issue Information

Issue Name : EF-3 at 81% of design

Description : EF-2 is currently at 81% of design. The motor is at max on dail.

Created By :	National TAB	**Assigned To :**	National TAB - Dan Hertenstein
Status :	Open		
Priority :	InfoOnly	**Asset Tag :**	EF2
Originated Date :	02/18/2026 - Jearod Ferrette - National TAB		

Project Issue File Details

02/18/2026

02-09-26 QT #1145 GREENVILLE, SC

Project Issue Information

Issue Name : Improper diffusers in kitchen
Description : Improper kitchen diffusers not installed

Created By :	National TAB	**Assigned To :**	National TAB - Dan Hertenstein
Status :	Open		
Priority :	Medium	**Asset Tag :**	RT-3
Originated Date :	02/18/2026 - Jearod Ferrette - National TAB		

Project Issue File Details

02/18/2026

02-09-26 QT #1145 GREENVILLE, SC

Project Issue Information

Issue Name : Kitchen dampers inaccessible

Description : First 4 dampers in the kitchen are inaccessible. The electric wire for the light was cut short, which prevents the ceiling tiles to be moved enough so that you're able to reach to dampers.

Created By :	National TAB	**Assigned To :**	National TAB - Dan Hertenstein
Status :	Open		
Priority :	Medium	**Asset Tag :**	RT-3
Originated Date :	02/18/2026 - Jearod Ferrette - National TAB		

Project Issue File Details

02/18/2026

NATIONAL TAB

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	883	350	361				
RTU-2	SALES	800	876	350	368				
RTU-3	BOH/KITCHEN	800	876	350	382				
EF-1	WOMEN'S RR					225	223	225	223
EF-2	MEN'S RR					525	430	525	430
EF-3	HOOD					1350	1360	0	0
TOTALS		2400	2635	1050	1111	2100	2013	750	653

HOODS ON

NET AIRFLOW CALCULATION

TOTALS	DESIGN	ACTUAL
TOTAL OA	2400	2635
TOTAL EXHAUST	2100	2013
NET AIRFLOW	300	622

DOOR TESTED	BUILDING PRESSURE MEASUREMENTS
FRONT	0.01
SIDE	0.007
REAR	0.007
AVERAGE	**0.008**

HOODS OFF

NET AIRFLOW CALCULATION

TOTALS	DESIGN	ACTUAL
TOTAL OA	1050	1111
TOTAL EXHAUST	750	653
NET AIRFLOW	300	458

DOOR TESTED	BUILDING PRESSURE MEASUREMENTS
FRONT	0.008
SIDE	0.006
REAR	0.006
AVERAGE	**0.0067**

NOTES:

CheckList List

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

02-09-26 QT #1145 GREENVILLE, SC

CheckList Information

Name :	01: RTU’s/AHU’s	**Status :**	Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	02/04/2026 - Trinity Dodds - National TAB		
Completed Date :	02/18/2026 - Jearod Ferrette - 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:	

02-09-26 QT #1145 GREENVILLE, SC

CheckList Information

Name :	02: Exhaust Fans	**Status :**	Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	02/04/2026 - Trinity Dodds - National TAB		
Completed Date :	02/18/2026 - Jearod Ferrette - 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:	

02-09-26 QT #1145 GREENVILLE, SC

CheckList Information

Name :	03: Hoods	**Status :**	Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	02/04/2026 - Trinity Dodds - National TAB		
Completed Date :	02/18/2026 - Jearod Ferrette - 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:	

02-09-26 QT #1145 GREENVILLE, SC

CheckList Information

Name :	04: Final Tests	**Status :**	Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	02/04/2026 - Trinity Dodds - National TAB		
Completed Date :	02/18/2026 - Jearod Ferrette - National TAB		

CheckList Item Details

FINAL CHECKS

HOOD CAPTURE TEST

List kitchen equipment turned on for testing

Comment:

FRYER, PIZZA OVEN

List smoke candle type used

Comment:

STAFF IS TRAINING IN THE KITCHEN, HOOD CAPTURE 100%

Smoke test capture % - Perimeter of hood

Comment:

100%

Smoke test capture % - Top of cooking surface

Comment:

100%

WITNESS

Date test was completed	02/18/2026

Comment:

TAB tech name / Firm

Comment:

JEAROD FERRETTE/ NTAB

Site super name / Firm

Comment:

NA

Owner representative name / Firm (if Applicable)

Comment:

NA

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:

FRONT 0.01, SIDE 0.007, REAR 0.007

National TAB

Project: 02-09-26 QT #1145 GREENVILLE, SC

System/Unit: AHU/RTU

Asset: RT-1 AREA:SALES FLOOR

Unit Data	
	Actual
MFG	AAON
Serial Num	201211-ANEK07653
Model Num	RN-013-8-0-EA0A-152
Num OA Filters 1	1
OA Filter Size 1	22.5X44.5

Motor Data	
	Actual
Phase	3
Rated Voltage	208

Test Data		
	Design	**Actual**
SF CFM	4200	4167
SF RPM	-	DD/33 HZ
OA CFM (Hoods On)	800	883
OA CFM (Hoods Off)	350	361
RL Voltage	-	77 VFD
RL Amperage	-	7.5 VFD
VFD Max SetPt	-	33HZ
OA Damper Position (Hoods On)	-	46%
OA Damper Position (Hoods Off)	-	26%

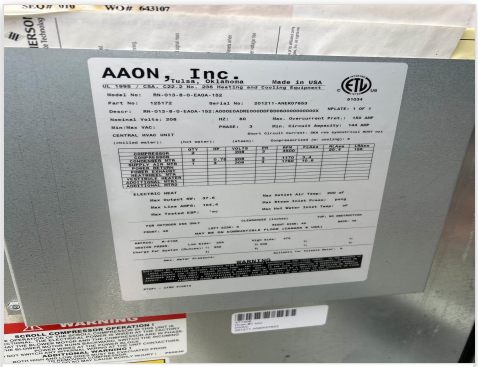
Performance Data	
	Actual
MA Plenum SP	-0.36"
Fan Suction SP	-0.49"
Fan Discharge SP	0.48"
Total ESP	0.84"
Fan Total SP	0.97"

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

Completed By: Jearod Ferrette on 02/18/2026

Unit Data - PHOTO LOG

02/18/2026



02/18/2026

National TAB

Project: 02-09-26 QT #1145 GREENVILLE, SC

System/Unit: AHU/RTU

Asset: RT-2 AREA:SALES FLOOR

Unit Data	
	Actual
MFG	AAON
Serial Num	201211-ANEK07655
Model Num	RN-013-8-0-EA0A-152
Num OA Filters 1	1
OA Filter Size 1	22.5X44.5

Motor Data	
	Actual
Phase	3
Rated Voltage	208

Test Data		
	Design	**Actual**
SF CFM	4200	4140
SF RPM	-	DD/ 33 HZ
OA CFM (Hoods On)	800	876
OA CFM (Hoods Off)	350	368
RL Voltage	-	79 VFD
RL Amperage	-	7.1 VFD
VFD Max SetPt	-	33HZ
OA Damper Position (Hoods On)	-	46%
OA Damper Position (Hoods Off)	-	26%

Performance Data	
	Actual
MA Plenum SP	-0.36"
Fan Suction SP	-0.48"
Fan Discharge SP	0.45"
Total ESP	0.81"
Fan Total SP	0.93"

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

Completed By: Jearod Ferrette on 02/18/2026

Unit Data - PHOTO LOG

02/18/2026

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National TAB

Project: 02-09-26 QT #1145 GREENVILLE, SC

System/Unit: AHU/RTU

Asset: RT-3 AREA:BOH/KITCHEN

Unit Data	
	Actual
MFG	AAON
Serial Num	201211-ANEK07654
Model Num	RN-013-8-0-EA0A-152
Num OA Filters 1	1
OA Filter Size 1	22.5X44.5

Motor Data	
	Actual
Phase	3
Rated Voltage	208

Test Data		
	Design	**Actual**
SF CFM	4200	4213
SF RPM	-	DD/43 HZ
OA CFM (Hoods On)	800	876
OA CFM (Hoods Off)	350	382
RL Voltage	-	143 VFD
RL Amperage	-	9.5 VFD
VFD Max SetPt	-	43 HZ
OA Damper Position (Hoods On)	-	46%
OA Damper Position (Hoods Off)	-	26%

Performance Data	
	Actual
MA Plenum SP	-0.73"
Fan Suction SP	-0.91"
Fan Discharge SP	0.88"
Total ESP	1.61"
Fan Total SP	1.79"

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

Completed By: Jearod Ferrette on 02/18/2026

Notes:
First 4 dampers in the kitchen are inaccessible.

Written By: Jearod Ferrette on 02/18/2026

Unit Data - PHOTO LOG

02/18/2026

02/18/2026

National TAB

Project:02-09-26 QT #1145 GREENVILLE, 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	950	950	950	118.8
SGRD2	SUPPORT SERVICE	SI	12"	800	1	595	595	595	74.4
SGRD3	SUPPORT SERVICE	SI	12"	800	1	512	512	512	64.0
SGRD4	SUPPORT SERVICE	SI	12"	800	1	1136	1136	1136	142.0
SGRD5	DOCK	ES	12"	750	1	861	861	861	114.8
SGRD6	WORKROOM	ES	8"	250	1	159	159	159	63.6
Total				4200		4213	4213	4213	100.31%

National TAB

Project: 02-09-26 QT #1145 GREENVILLE, SC

System/Unit: FAN - Exhaust

Asset: EF1 AREA:WOMEN'S RR

Unit Data	
	Actual
MFG	NA
Model Num	NA
Serial Num	050SE48946
Type	UPBLAST
Configuration	VERTICAL

Motor Data	
	Actual
Motor MFG	FASCO
Horsepower	1/8
Motor Rpm	1600
Phase	1
Voltage (rated)	115
Amperage (rated)	1.7
Service Factor	1

Test Data		
	Design	**Actual**
CFM	225	223
Fan RPM	-	DD
Fan Rotation	-	CCW
Motor RPM	-	DD
System SetPt	-	80%
Total ESP	-	0.15"
Fan Inlet SP	-	-0.15"
Fan Discharge SP	-	ATMO

Completed By: Jearod Ferrette on 02/18/2026

Unit Data - PHOTO LOG

02/18/2026

National TAB

Project: 02-09-26 QT #1145 GREENVILLE, SC

System/Unit: FAN - Exhaust

Asset: EF2 AREA:MEN'S RR/COMBI

Unit Data	
	Actual
MFG	NA
Model Num	NA
Serial Num	044SE53450
Type	UPBLAST
Configuration	VERTICAL

Motor Data	
	Actual
Motor MFG	FASCO
Horsepower	1/4
Motor Rpm	1550
Phase	1
Voltage (rated)	115
Amperage (rated)	3.2
Service Factor	1

Test Data		
	Design	**Actual**
CFM	525	430
Fan RPM	-	DD
Fan Rotation	-	CCW
Motor RPM	-	DD
System SetPt	-	MAX ON DAIL
Total ESP	-	0.17"
Fan Inlet SP	-	-0.17"
Fan Discharge SP	-	ATMO

Completed By: Jearod Ferrette on 02/18/2026

Unit Data - PHOTO LOG

02/18/2026

Diffuser Ret/Exh (GRD)

EF2/MEN'S RR/COMBI

Asset									
Asset Name	Location	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
EGRD1	SUPPORT SERVICE	RI	8"	150	1	146	155	155	103.3
Total				150		146	155	155	103.33%

National TAB

Project: 02-09-26 QT #1145 GREENVILLE, SC

System/Unit: FAN - Exhaust

Asset: EF3 AREA:KITCHEN HD

Unit Data	
	Actual
MFG	CAPTIVEAIRE
Model Num	DU50HFA
Serial Num	8262120
Type	UPBLAST
Configuration	VERTICAL

Motor Data		
	Design	**Actual**
Motor MFG	-	TELCO GREEN
Horsepower	1/2	1/2
Motor Rpm	-	1800
Voltage (rated)	-	208
Service Factor	-	1

Test Data		
	Design	**Actual**
CFM	1350	1360
Fan RPM	-	1230
Fan Rotation	-	CCW
Motor RPM	-	1230
System SetPt	-	54.8HZ
Total ESP	-	0.27"
Fan Inlet SP	-	-0.27"
Fan Discharge SP	-	ATMO

Completed By: Jearod Ferrette on 02/18/2026

Unit Data - PHOTO LOG

02/18/2026

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National TAB

Project: 02-09-26 QT #1145 GREENVILLE, SC

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	-	8262120
Type	TYPE I CANOPY	TYPE I CANOPY
Hood length	108"	108"
Hood Width	60"	60"

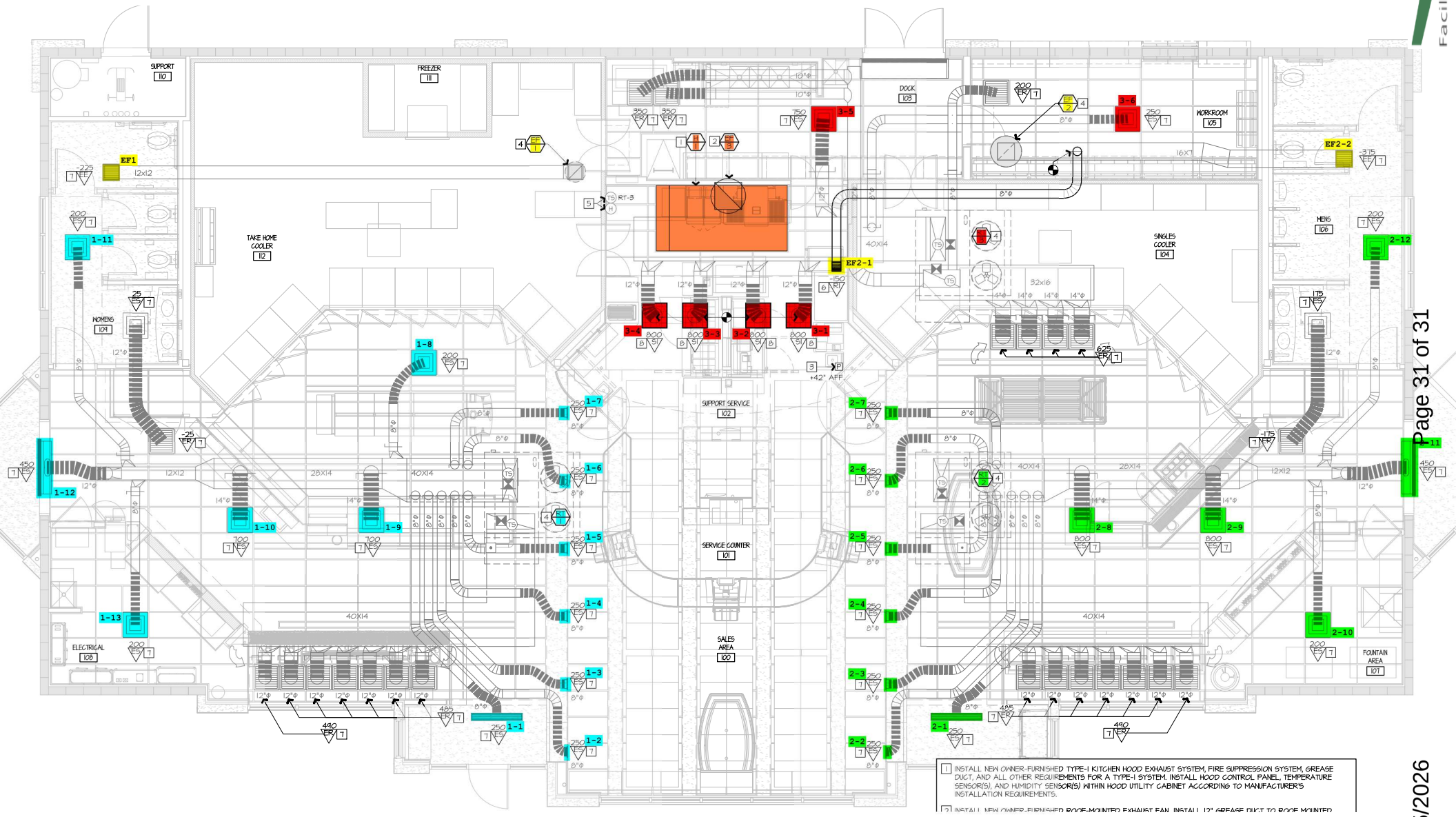
Test Data Exhaust		
	Design	**Actual**
Filter Type	CAPTRATE SOLO FILTER	CAPTRATE SOLO FILTER
Filter Size 1	16X20	16X20
Filter Qty 1	6	6
Filter AK factor size 1	2.08	2.08
Filter Total AK Area	12.48	12.48
Filter1 FPM	-	107
Filter2 FPM	-	115
Filter3 FPM	-	127
Filter4 FPM	-	111
Filter5 FPM	-	96
Filter6 FPM	-	103
Filter Ave FPM(corr)	-	109
CFM	1350	1360

Cooking Equipment	
	Actual
Item 1	FRYER
Item 2	PIZZA OVEN

Completed By: Jearod Ferrette on 02/18/2026

Unit Data - PHOTO LOG

02/18/2026



Date: 2/25/2026