Report By:

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

Report: TAB Report

Function: Test, Adjust, & Balance

Date: 03/25/2026

Completed By: National TAB

PROJECT

03-23-26 QT #1736 MACON, GA

519 NORTH AVE

MACON, GA

Client

QUIKTRIP

4705 SOUTH 129TH EAST AVENUE

TULSA, OK 74134

National TAB

Project: 03-23-26 QT #1736 MACON, 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

- EF-1: Not Secured to Curb

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Project Issue Information

Issue Name : EF-1: Not Secured to Curb

Description : The unit is not secured to the curb of the roof. It can be secured with some screws on opposite sides of each other to keep it held down and prevent it from moving.

Created By : National TAB

Assigned To : National TAB - Dan Hertenstein

Status : Open

Priority : Low

Asset Tag :

Originated Date : 03/25/2026 - Sagar Patel - National TAB

Project Issue File Details

03/25/2026

03/25/2026

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	867	350	364				
RTU-2	SALES	800	784	350	371				
RTU-3	BOH/KITCHEN	800	832	350	378				
EF-1	RR/JANITOR					750	763	750	763
EF-3	HOOD					1350	1335	0	0
TOTALS		2400	2483	1050	1113	2100	2098	750	763

HOODS ON

NET AIRFLOW CALCULATION

TOTALS	DESIGN	ACTUAL
TOTAL OA	2400	2483
TOTAL EXHAUST	2100	2098
NET AIRFLOW	300	385

DOOR TESTED	BUILDING PRESSURE MEASUREMENTS
FRONT	0.0084
SIDE	0.0091
REAR	0.0114
AVERAGE	**0.0096**

HOODS OFF

NET AIRFLOW CALCULATION

TOTALS	DESIGN	ACTUAL
TOTAL OA	1050	1113
TOTAL EXHAUST	750	763
NET AIRFLOW	300	350

DOOR TESTED	BUILDING PRESSURE MEASUREMENTS
FRONT	0.0061
SIDE	0.0087
REAR	0.0104
AVERAGE	**0.0084**

NOTES:

CheckList List

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

03-23-26 QT #1736 MACON, GA

CheckList Information

Name :	01: RTU’s/AHU’s	**Status :**	Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	02/11/2026 - Trinity Dodds - National TAB		
Completed Date :	03/25/2026 - 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:	

03-23-26 QT #1736 MACON, GA

CheckList Information

Name :	02: Exhaust Fans	**Status :**	Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	02/11/2026 - Trinity Dodds - National TAB		
Completed Date :	03/25/2026 - Sagar Patel - 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:	

03-23-26 QT #1736 MACON, GA

CheckList Information

Name :	03: Hoods	**Status :**	Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	02/11/2026 - Trinity Dodds - National TAB		
Completed Date :	03/25/2026 - 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:	

03-23-26 QT #1736 MACON, GA

CheckList Information

Name :	04: Final Tests	**Status :**	Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	02/11/2026 - Trinity Dodds - National TAB		
Completed Date :	03/25/2026 - Sagar Patel - National TAB		

CheckList Item Details

FINAL CHECKS

HOOD CAPTURE TEST

List kitchen equipment turned on for testing

Comment:

Fryer

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	03/25/2026

Comment:

Video

TAB tech name / Firm

Comment:

Sagar Patel / 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:

National TAB

Project: 03-23-26 QT #1736 MACON, GA

System/Unit: AHU/RTU

Asset: RT-1 AREA:SALES

Unit Data	
	Actual
MFG	AAON
Serial Num	202407-ANEK31590
Model Num	RN-013-8-0-HA0A-152
Num OA Filters 1	1
OA Filter Size 1	22X45
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	4180
SF RPM	-	1267
OA CFM (Hoods On)	800	867
OA CFM (Hoods Off)	350	364
RL Voltage	-	141 VFD
RL Amperage	-	7.59 VFD
VFD Max SetPt	-	43.2 Hz
VFD Min SetPt	-	24 Hz
OA Damper Position (Hoods On)	-	46%
OA Damper Position (Hoods Off)	-	26%

Performance Data	
	Actual
MA Plenum SP	-0.56”
Fan Suction SP	-0.78”
Fan Discharge SP	0.62”
Total ESP	1.18"
Fan Total SP	1.40"

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

Completed By: Sagar Patel on 03/25/2026

Unit Data - PHOTO LOG

03/25/2026

03/25/2026

National TAB

Project: 03-23-26 QT #1736 MACON, GA

System/Unit: AHU/RTU

Asset: RT-2 AREA:SALES

Unit Data	
	Actual
MFG	AAON
Serial Num	202407-ANEK31592
Model Num	RN-013-8-0-HA0A-152
Num OA Filters 1	1
OA Filter Size 1	22X45
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	4209
SF RPM	-	1267
OA CFM (Hoods On)	800	784
OA CFM (Hoods Off)	350	371
RL Voltage	-	140 VFD
RL Amperage	-	6.98 VFD
VFD Max SetPt	-	43.2 Hz
VFD Min SetPt	-	24 Hz
OA Damper Position (Hoods On)	-	46%
OA Damper Position (Hoods Off)	-	26%

Performance Data	
	Actual
MA Plenum SP	-0.48”
Fan Suction SP	-0.69”
Fan Discharge SP	0.56”
Total ESP	1.04"
Fan Total SP	1.25"

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

Completed By: Sagar Patel on 03/25/2026

Unit Data - PHOTO LOG

03/25/2026

03/25/2026

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Project: 03-23-26 QT #1736 MACON, GA

System/Unit: AHU/RTU

Asset: RT-3 AREA:BOH//KITCHEN

Unit Data	
	Actual
MFG	AAON
Serial Num	202407-ANEK31591
Model Num	RN-013-8-0-HA0A-152
Num OA Filters 1	1
OA Filter Size 1	22X45
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	3905
SF RPM	-	1320
OA CFM (Hoods On)	800	832
OA CFM (Hoods Off)	350	378
RL Voltage	-	152 VFD
RL Amperage	-	7.91 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	
	Actual
MA Plenum SP	-0.57”
Fan Suction SP	-0.79”
Fan Discharge SP	0.64”
Total ESP	1.21"
Fan Total SP	1.43"

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

Completed By: Sagar Patel on 03/25/2026

Unit Data - PHOTO LOG

03/25/2026

03/25/2026

National TAB

Project:03-23-26 QT #1736 MACON, 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	906	904	723	90.4
SGRD2	SUPPORT SERVICE	SI	12"	800	1	462	679	734	91.8
SGRD3	SUPPORT SERVICE	SI	12"	800	1	693	811	759	94.9
SGRD4	SUPPORT SERVICE	SI	12"	800	1	462	562	741	92.6
SGRD5	DOCK	ES	10"	400	1	499	371	368	92.0
SGRD6	WORKROOM	ES	8"	400	1	613	364	362	90.5
SGRD7	WORKROOM	ES	8"	200	1	241	217	218	109.0
Total				4200		3876	3908	3905	92.98%

Completed By: Sagar Patel on 03/25/2026

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Project: 03-23-26 QT #1736 MACON, GA

System/Unit: FAN - Exhaust

Asset: EF-1 AREA:RESTROOMS/JANITOR

Unit Data	
	Actual
MFG	CAPTIVEAIRE
Model Num	DR50HFA
Serial Num	6901582
Type	DOWNBLAST
Configuration	VERTICAL

Motor Data	
	Actual
Motor MFG	TELECO GREEN
Frame	N/L
Horsepower	0.50
Motor Rpm	1800
Phase	1
Voltage (rated)	115
Amperage (rated)	8.4
Service Factor	N/L

Test Data		
	Design	**Actual**
CFM	750	763
Fan RPM	-	798
Fan Rotation	-	CCW
Motor RPM	-	798
System SetPt	-	42P
RL Voltage	-	[1]
RL Amperage	-	[1]
Total ESP	-	0.22”
Fan Inlet SP	-	-0.22”
Fan Discharge SP	-	ATM

Completed By: Sagar Patel on 03/25/2026

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

Written By: Sagar Patel on 03/25/2026

Unit Data - PHOTO LOG

03/25/2026

National TAB

Project:03-23-26 QT #1736 MACON, GA

Diffuser Ret/Exh (GRD)

EF-1/RESTROOMS/JANITOR

Asset									
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
EGRD4	SUPPORT SERVICE	EE	8"	150	1	184	164	164	109.3
Total				150		184	164	164	109.33%

Completed By: Sagar Patel on 03/25/2026

National TAB

Project: 03-23-26 QT #1736 MACON, GA

System/Unit: FAN - Exhaust

Asset: EF-3 AREA:KITCHEN HOOD

Unit Data		
	Design	**Actual**
MFG	NA	CAPTIVEAIRE
Model Num	NA	DU50HFA
Serial Num	-	8366432
Type	UPBLAST	UPBLAST
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	**Actual**
Motor MFG	-	TELECO GREEN
Frame	-	N/L
Horsepower	0.5	0.50
Motor Rpm	-	1800
Phase	1	1
Voltage (rated)	208	208
Amperage (rated)	-	3.8
Service Factor	-	N/L

Test Data		
	Design	**Actual**
CFM	1350	1335
Fan RPM	-	1195
Fan Rotation	-	CCW
Motor RPM	-	1195
System SetPt	-	52.8 Hz (66% on MSC)
RL Voltage	-	210
RL Amperage	-	1.8
Total ESP	0.75"	0.26”
Fan Inlet SP	-	-0.26”
Fan Discharge SP	-	ATM

Completed By: Sagar Patel on 03/25/2026

Unit Data - PHOTO LOG

03/25/2026

National TAB

Project: 03-23-26 QT #1736 MACON, GA

System/Unit: Kitchen Hood Type I

Asset: HD-1 AREA:GRIDDLE

Unit Data		
	Design	**Actual**
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	6030ND-2-F	6030ND-2-F
Job / Serial Num	-	8366432
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	-	116
Filter3 FPM	-	109
Filter4 FPM	-	107
Filter5 FPM	-	106
Filter6 FPM	-	98
Filter Ave FPM(corr)	-	107
CFM	1350	1335

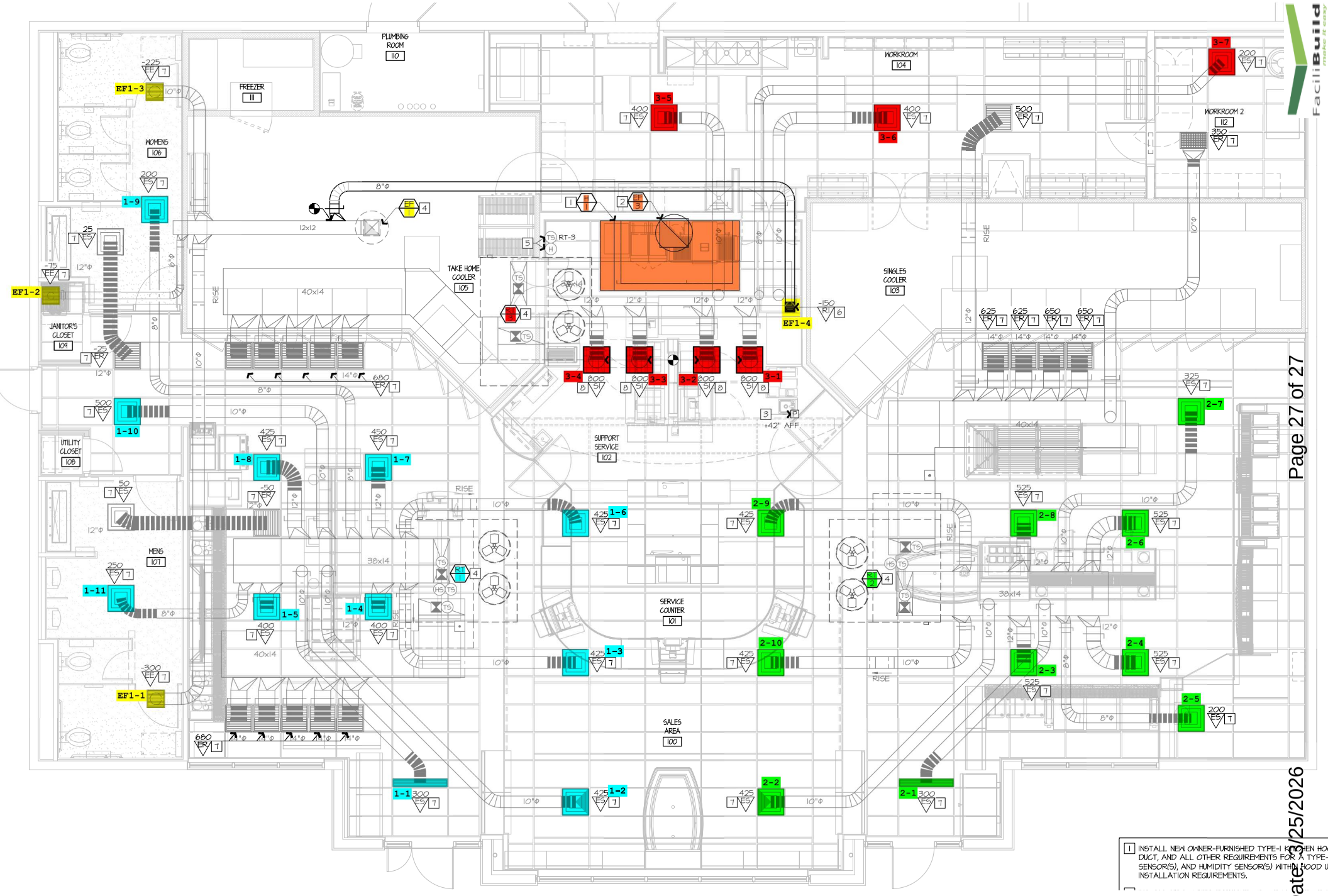
Cooking Equipment	
	Actual
Item 1	FRYER
Item 2	OVEN

Completed By: Sagar Patel on 03/25/2026

Unit Data - PHOTO LOG

03/25/2026

03/25/2026



1 INSTALL NEW OWNER-FURNISHED TYPE-I KITCHEN HO
DUCT, AND ALL OTHER REQUIREMENTS FOR A TYPE-
SENSOR(S), AND HUMIDITY SENSOR(S) WITHIN HOOD U
INSTALLATION REQUIREMENTS.

Date: 3/25/2026