Report By:

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

Report: TAB Report

Function: Test, Adjust, & Balance

Date: 03/09/2026

Completed By: National TAB

PROJECT

03-09-26 QT #0472 PEORIA, AZ

8293 W LAKE PLEASANT PKWY

PEORIA, AZ

Client

QUIKTRIP

4705 SOUTH 129TH EAST AVENUE

TULSA, OK 74134

National TAB

Project: 03-09-26 QT #0472 PEORIA, AZ

Table Of Contents

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

- DIRTY FINAL FILTERS
- EF1 BACKDRAFT DAMPER STUCK OPEN
- NO SUPPLY TO HUMID AREA
- RTU3 POSSIBLE ACTUATOR ISSUE
- SGRD3-5 DAMPER NONFUNCTIONAL

03-09-26 QT #0472 PEORIA, AZ

Project Issue Information

Issue Name : DIRTY FINAL FILTERS

Description : MSET states mechanical contractor should replace filters at project's culmination. Filters don't appear to have been changed and are extremely dirty.

Created By : National TAB

Assigned To : National TAB - Dan Hertenstein

Status : Open

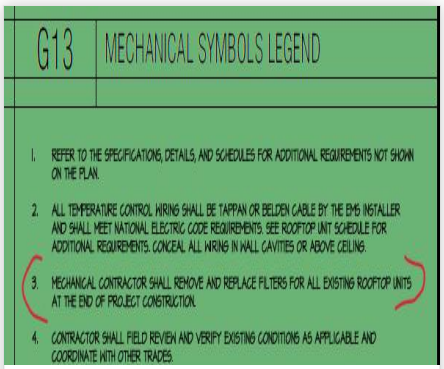
Priority : Low

Asset Tag :

Originated Date : 03/10/2026 - Christine Weale - National TAB

Project Issue File Details

03/10/2026



03/10/2026

03-09-26 QT #0472 PEORIA, AZ

Project Issue Information

Issue Name : EF1 BACKDRAFT DAMPER STUCK OPEN
Description : Backdraft damper does not close.

Created By :	National TAB	**Assigned To :**	National TAB - Dan Hertenstein
Status :	Open		
Priority :	Low	**Asset Tag :**	EF1
Originated Date :	03/10/2026 - Christine Weale - National TAB		

Project Issue File Details

03/10/2026

03-09-26 QT #0472 PEORIA, AZ

Project Issue Information

Issue Name : NO SUPPLY TO HUMID AREA

Description : The grille has been completely removed from the ceiling and the duct is laying atop it. This area has a lot of drainage and running machines, it should have constant air supply.

Created By :	National TAB	**Assigned To :**	National TAB - Dan Hertenstein
Status :	Open		
Priority :	Medium	**Asset Tag :**	SGRD10
Originated Date :	03/10/2026 - Christine Weale - National TAB		

Project Issue File Details

03/10/2026

03-09-26 QT #0472 PEORIA, AZ

Project Issue Information

Issue Name :	RTU3 POSSIBLE ACTUATOR ISSUE		
Description :	Econ damper didn't seem to be functioning properly or responding appropriately to settings. Even on 15.0 Emerson setting, damper wouldn't open as the others did. Had to set the Belimo actuator to 0.3". At first, it wouldn't fully open to 46.0 as the others did, either. Manually set to balance.		
Created By :	National TAB	**Assigned To :**	National TAB - Dan Hertenstein
Status :	Open		
Priority :	InfoOnly	**Asset Tag :**	RT-3
Originated Date :	03/10/2026 - Christine Weale - National TAB		

03-09-26 QT #0472 PEORIA, AZ

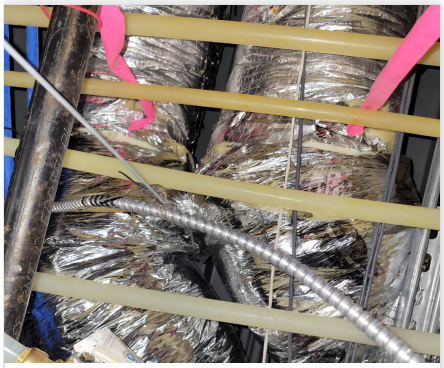
Project Issue Information

Issue Name : SGRD3-5 DAMPER NONFUNCTIONAL

Description : Most of the air flow is going to SGRD3-5 and moving the damper from side to side does nothing at all. Pulled as much air as possible by opening other dampers but staying in design for all others. Recommend checking air flow is almost nonexistent when set to close.

Created By :	National TAB	**Assigned To :**	National TAB - Dan Hertenstein
Status :	Open		
Priority :	High	**Asset Tag :**	SGRD5
Originated Date :	03/09/2026 - Christine Weale - National TAB		

Project Issue File Details



03/10/2026

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	873	350	378				
RTU-2	SALES	800	853	350	378				
RTU-3	BOH/KITCHEN	800	880	350	344				
EF-1	WOMEN'S RR					225	225	225	225
EF-2	MEN'S RR					525	517	525	517
EF-3	HOOD					1350	1381	0	0
TOTALS		2400	2606	1050	1100	2100	2123	750	742

HOOD ON

NET AIRFLOW CALCULATION

TOTALS	DESIGN	ACTUAL
TOTAL OA	2400	2606
TOTAL EXHAUST	2100	2123
NET AIRFLOW	300	483

DOOR TESTED	BUILDING PRESSURE MEASUREMENTS
FRONT	0.003
SIDE	0.003
REAR	
AVERAGE	**0.003**

HOOD OFF

NET AIRFLOW CALCULATION

TOTALS	DESIGN	ACTUAL
TOTAL OA	1050	1100
TOTAL EXHAUST	750	742
NET AIRFLOW	300	358

DOOR TESTED	BUILDING PRESSURE MEASUREMENTS
FRONT	0.002
SIDE	0.004
REAR	
AVERAGE	**0.003**

NOTES:

OA left on the higher side to make BP positive. Rear door air curtain wouldn't shut off.

CheckList List

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

03-09-26 QT #0472 PEORIA, AZ

CheckList Information

Name :	01: RTU’s/AHU’s	**Status :**	Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	03/03/2026 - Trinity Dodds - National TAB		
Completed Date :	03/10/2026 - Christine Weale - 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:	

03-09-26 QT #0472 PEORIA, AZ

CheckList Information

Name :	02: Exhaust Fans	**Status :**	Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	03/03/2026 - Trinity Dodds - National TAB		
Completed Date :	03/10/2026 - Christine Weale - 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:	

03-09-26 QT #0472 PEORIA, AZ

CheckList Information

Name :	03: Hoods	**Status :**	Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	03/03/2026 - Trinity Dodds - National TAB		
Completed Date :	03/10/2026 - Christine Weale - 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:	

03-09-26 QT #0472 PEORIA, AZ

CheckList Information

Name :	04: Final Tests	**Status :**	Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	03/03/2026 - Trinity Dodds - National TAB		
Completed Date :	03/10/2026 - Christine Weale - 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:

45s, S102

Smoke test capture % - Perimeter of hood

Comment:

75% - Fail in middle, vid in 'Files'.

Smoke test capture % - Top of cooking surface

Comment:

100

WITNESS

Date test was completed	03/09/2026

Comment:

TAB tech name / Firm

Comment:

Christine Weale, NTI

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)	Pass

Comment:

National TAB

Project: 03-09-26 QT #0472 PEORIA, AZ

System/Unit: AHU/RTU

Asset: RT-1 AREA:SALES FLOOR

Unit Data	
	Actual
MFG	AAON
Serial Num	201510-ANEL13123
Model Num	RN-015-8-0-EA0A-152
Num OA Filters 1	1
OA Filter Size 1	45X22
Num Final Filter 1	2
Final Filter Size 1	46X19.5X2

Motor Data	
	Actual
Motor MFG	NL
Frame	NL
Horsepower	5.0
Motor Rpm	1760
Phase	3
Rated Voltage	208
Rated Amperage	16.7

Test Data		
	Design	**Actual**
SF CFM	4200	4057
SF RPM	-	30 HZ
OA CFM (Hoods On)	800	873
OA CFM (Hoods Off)	350	378
RL Voltage	-	55.0
RL Amperage	-	7.8
VFD Max SetPt	-	50.0
VFD Min SetPt	-	24.0
OA Damper Position (Hoods On)	-	46.0
OA Damper Position (Hoods Off)	-	15.0 + 0.1"

Performance Data		
	Design	**Actual**
MA Plenum SP	-	-0.27"
Fan Suction SP	-	-0.44"
Fan Discharge SP	-	0.47"
Total ESP	-	0.74"
Fan Total SP	-	0.91"

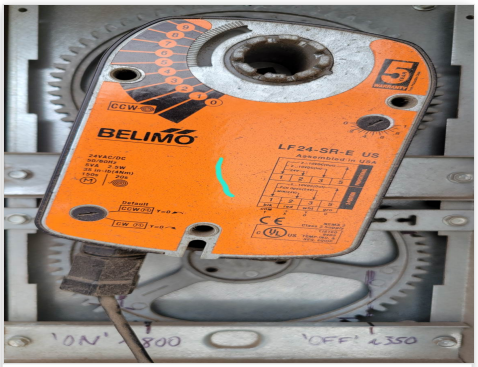
General	
	Actual
Fan Rotation Correct	YES
Unit Filters Clean	NO
Condensate Drain Installed	YES

Completed By: Christine Weale on 03/09/2026

Notes:
ELECTRICAL RM GRILLE INACCESSIBLE, CLOSED DAMPER FOR MEASURE, THEN REOPENED.

Written By: Christine Weale on 03/09/2026

Unit Data - PHOTO LOG



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National TAB

Project: 03-09-26 QT #0472 PEORIA, AZ

System/Unit: AHU/RTU

Asset: RT-2 AREA:SALES FLOOR

Unit Data	
	Actual
MFG	AAON
Serial Num	201510-ANEL13124
Model Num	RN-015-8-0-EA0A-152
Num OA Filters 1	1
OA Filter Size 1	45X22
Num Final Filter 1	2
Final Filter Size 1	46X19.5X2

Motor Data	
	Actual
Motor MFG	NL
Frame	NL
Horsepower	5.0
Motor Rpm	1760
Phase	3
Rated Voltage	208
Rated Amperage	16.7

Test Data		
	Design	**Actual**
SF CFM	4200	4079
SF RPM	-	30 HZ
OA CFM (Hoods On)	800	853
OA CFM (Hoods Off)	350	378
RL Voltage	-	54.7
RL Amperage	-	7.6
VFD Max SetPt	-	50.0
VFD Min SetPt	-	24.0
OA Damper Position (Hoods On)	-	46.0
OA Damper Position (Hoods Off)	-	15.0 + 0.1"

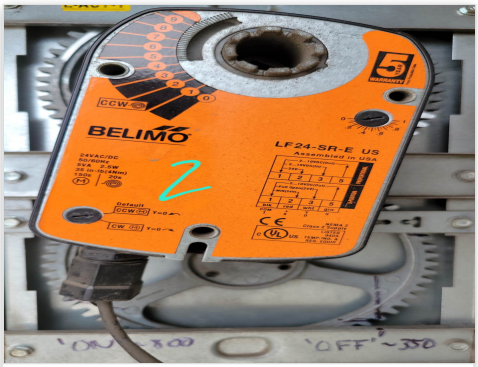
Performance Data		
	Design	**Actual**
MA Plenum SP	-	-0.27"
Fan Suction SP	-	-0.39"
Fan Discharge SP	-	0.41"
Total ESP	-	0.68"
Fan Total SP	-	0.80"

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

Completed By: Christine Weale on 03/09/2026

Unit Data - PHOTO LOG

03/09/2026



03/09/2026

National TAB

Project: 03-09-26 QT #0472 PEORIA, AZ

System/Unit: AHU/RTU

Asset: RT-3 AREA:BOH/KITCHEN

Unit Data	
	Actual
MFG	AAON
Serial Num	210510-ANEK13125
Model Num	RN-013-8-0-EA0A-152
Num OA Filters 1	1
OA Filter Size 1	45X22
Num Final Filter 1	2
Final Filter Size 1	46X19.5X2

Motor Data	
	Actual
Motor MFG	NL
Frame	NL
Horsepower	3.0
Motor Rpm	1760
Phase	3
Rated Voltage	208
Rated Amperage	10.6

Test Data		
	Design	**Actual**
SF CFM	4200	4479
SF RPM	-	39 HZ
OA CFM (Hoods On)	800	880
OA CFM (Hoods Off)	350	344
RL Voltage	-	117.0
RL Amperage	-	8.5
VFD Max SetPt	-	65.0
VFD Min SetPt	-	24.0
OA Damper Position (Hoods On)	-	46.0
OA Damper Position (Hoods Off)	-	15.0 + (0.3")

Performance Data		
	Design	**Actual**
MA Plenum SP	-	-0.52"
Fan Suction SP	-	-0.75"
Fan Discharge SP	-	0.40"
Total ESP	-	0.92"
Fan Total SP	-	1.15"

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

Completed By: Christine Weale on 03/09/2026

Unit Data - PHOTO LOG

03/09/2026

03/09/2026

National TAB

Project:03-09-26 QT #0472 PEORIA, AZ

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	316	789	789	98.6
SGRD2	SUPPORT SERVICE	SI	12"	800	1	744	826	826	103.3
SGRD3	SUPPORT SERVICE	SI	12"	800	1	885	855	855	106.9
SGRD4	SUPPORT SERVICE	SI	12"	800	1	968	796	796	99.5
SGRD5	DOCK	ES	12"	750	1	1130	943	943	125.7
SGRD6	WORKROOM	ES	8"	250	1	310	270	270	108.0
Total				4200		4353	4479	4479	106.64%

Asset	Notes	Date	Written By
SGRD5	DAMPER NONFUNCTIONAL, SEE 'REMARKS'.	03/09/2026	Christine Weale

National TAB

Project: 03-09-26 QT #0472 PEORIA, AZ

System/Unit: FAN - Exhaust

Asset: EF1 AREA:WOMEN'S RR

Unit Data		
	Design	**Actual**
MFG	NA	COOK
Model Num	NA	90ACEH-90C15DH
Serial Num	-	346SG73688
Type	-	DOWNBLAST
Configuration	-	VERTICAL

Motor Data		
	Design	**Actual**
Motor MFG	-	US MOTORS
Frame	-	48Y
Horsepower	-	0.125
Motor Rpm	-	1600
Phase	-	1
Voltage (rated)	-	115
Amperage (rated)	-	1.7
Service Factor	-	NL

Test Data		
	Design	**Actual**
CFM	225	225
Fan RPM	-	N/A
Fan Rotation	-	CCW
Motor RPM	-	N/A
System SetPt	-	LOW
RL Voltage	-	N/A
RL Amperage	-	0.61
Total ESP	-	0.04"
Fan Inlet SP	-	-0.04"
Fan Discharge SP	-	ATMS

Completed By: Christine Weale on 03/09/2026

Unit Data - PHOTO LOG

03/09/2026

03/09/2026

National TAB

Project: 03-09-26 QT #0472 PEORIA, AZ

System/Unit: FAN - Exhaust

Asset: EF2 AREA:MEN'S RR/COMBI

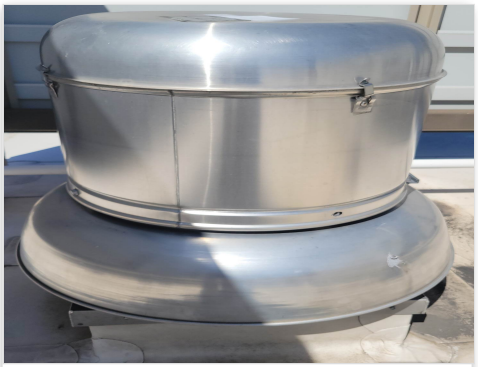
Unit Data		
	Design	**Actual**
MFG	NA	COOK
Model Num	NA	120ACE-120C13D
Serial Num	-	346SG73688
Type	-	DOWNBLAST
Configuration	-	VERTICAL

Motor Data		
	Design	**Actual**
Motor MFG	-	QUEACE
Frame	-	48Y
Horsepower	-	0.25
Motor Rpm	-	1800
Phase	-	1
Voltage (rated)	-	115
Amperage (rated)	-	3.3
Service Factor	-	NL

Test Data		
	Design	**Actual**
CFM	525	517
Fan RPM	-	N/A
Fan Rotation	-	CCW
Motor RPM	-	N/A
System SetPt	-	MED
RL Voltage	-	N/A
RL Amperage	-	1.27
Total ESP	-	0.16"
Fan Inlet SP	-	-0.16"
Fan Discharge SP	-	ATMS

Completed By: Christine Weale on 03/09/2026

Unit Data - PHOTO LOG



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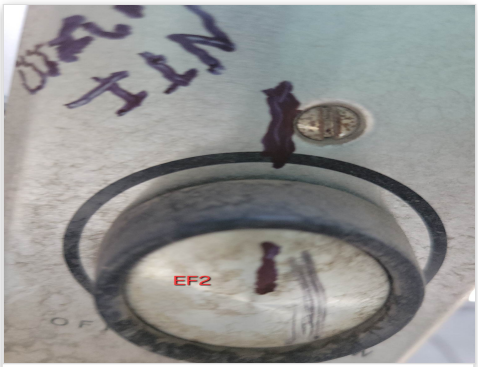


03/09/2026

National TAB

Project:03-09-26 QT #0472 PEORIA, AZ

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	163	163	163	108.7
Total				150		163	163	163	108.67%

National TAB

Project: 03-09-26 QT #0472 PEORIA, AZ

System/Unit: FAN - Exhaust

Asset: EF3 AREA:KITCHEN HD

Unit Data		
	Design	**Actual**
MFG	NA	CAPTIVEAIRE
Model Num	NA	DU50HFA
Serial Num	-	8384992
Type	UPBLAST	UPBLAST
Configuration	VERTICAL	VERTICAL

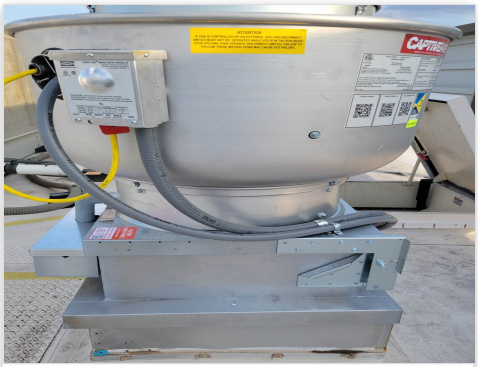
Motor Data		
	Design	**Actual**
Motor MFG	-	NEMA (TELCO)
Frame	-	48Y
Horsepower	0.50	0.5
Motor Rpm	-	1800
Phase	1	1
Voltage (rated)	208	208
Amperage (rated)	-	3.8
Service Factor	-	NL

Test Data		
	Design	**Actual**
CFM	1350	1381
Fan RPM	-	1273
Fan Rotation	-	CCW
Motor RPM	-	1273
System SetPt	-	53.8 HZ
RL Voltage	-	210.6
RL Amperage	-	1.61
Total ESP	0.75"	0.78"
Fan Inlet SP	-	-0.78"
Fan Discharge SP	-	ATMS

Completed By: Christine Weale on 03/09/2026

Unit Data - PHOTO LOG

03/09/2026



03/09/2026

National TAB

Project: 03-09-26 QT #0472 PEORIA, AZ

System/Unit: Kitchen Hood Type I

Asset: HD1 AREA:KITCHEN

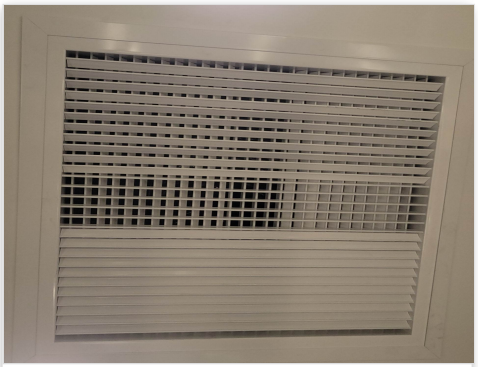
Unit Data		
	Design	**Actual**
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	6030ND-2-F	6030ND-2-F
Job / Serial Num	-	8384992
Type	TYPE I CANOPY	TYPE I CANOPY
Hood length	108"	108"
Hood Width	60"	60"

Test Data Exhaust		
	Design	**Actual**
Filter Type	CAPTRATE SOLO FILTER	CAPTRATE SOLO
Filter Size 1	20X16	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	-	107
Filter3 FPM	-	115
Filter4 FPM	-	114
Filter5 FPM	-	113
Filter6 FPM	-	108
Filter Ave FPM(corr)	-	110.67
CFM	1350	1381

Cooking Equipment	
	Actual
Item 1	FRYER
Item 2	DUAL-OVEN

Completed By: Christine Weale on 03/09/2026

Unit Data - PHOTO LOG



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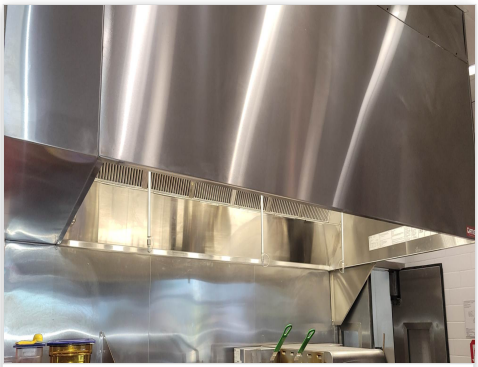
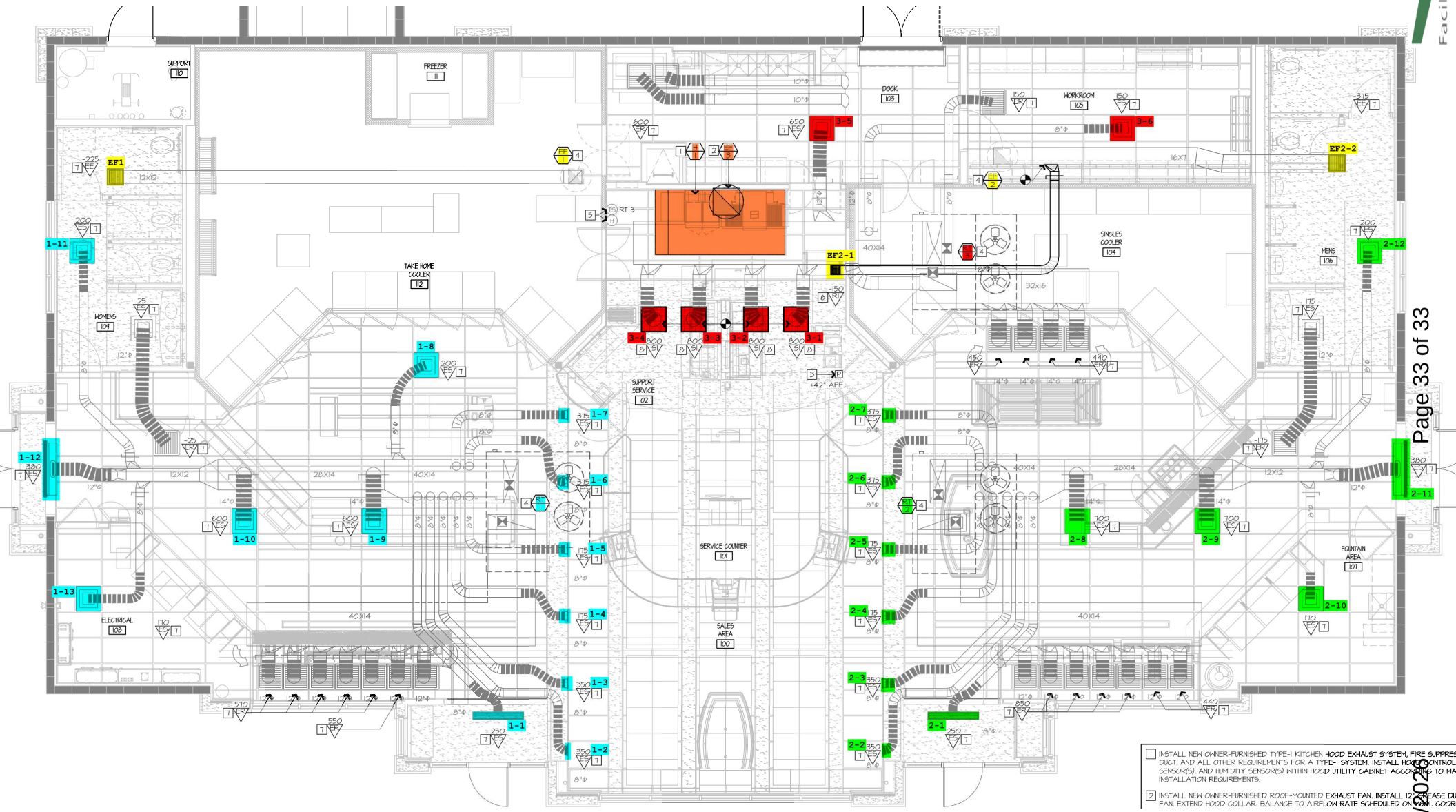


03/09/2026



[1] INSTALL NEW OWNER-FURNISHED TYPE-I KITCHEN HOOD EXHAUST SYSTEM, FIRE SUPPRES
DUCT, AND ALL OTHER REQUIREMENTS FOR A TYPE-I SYSTEM. INSTALL HOOD CONTROL
SENSOR(S), AND HUMIDITY SENSOR(S) WITHIN HOOD UTILITY CABINET ACCORDING TO MA
INSTALLATION REQUIREMENTS.

[2] INSTALL NEW OWNER-FURNISHED ROOF-MOUNTED EXHAUST FAN. INSTALL 12" RELEASE DU
FAN. EXTEND HOOD COLLAR. BALANCE TO AIRFLOW RATE SCHEDULED ON PLAN. COOR

Date: 3/10/2026