Report By:

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

Report: TAB Report

Function: Test, Adjust, & Balance

Date: 03/10/2026

Completed By: National TAB

PROJECT

03-09-26 QT #0743 MARIETTA, GA

825 SANDY PLAINS RD

MARIETTA, GA

Client

QUIKTRIP

4705 SOUTH 129TH EAST AVENUE

TULSA, OK 74134

National TAB

Project: 03-09-26 QT #0743 MARIETTA, 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.

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	846	350	364				
RTU-2	SALES	800	812	350	344				
RTU-3	BOH/KITCHEN	800	805	350	337				
EF-1	WOMEN'S RR					225	231	225	231
EF-2	MEN'S RR					525	547	525	547
EF-3	HOOD					1350	1373	0	0
TOTALS		2400	2463	1050	1045	2100	2151	750	778

HOODS ON

NET AIRFLOW CALCULATION

TOTALS	DESIGN	ACTUAL
TOTAL OA	2400	2463
TOTAL EXHAUST	2100	2151
NET AIRFLOW	300	312

DOOR TESTED	BUILDING PRESSURE MEASUREMENTS
FRONT	0.0011
SIDE	0.0046
REAR	0.0086
AVERAGE	**0.0048**

HOODS OFF

NET AIRFLOW CALCULATION

TOTALS	DESIGN	ACTUAL
TOTAL OA	1050	1045
TOTAL EXHAUST	750	778
NET AIRFLOW	300	267

DOOR TESTED	BUILDING PRESSURE MEASUREMENTS
FRONT	0.0014
SIDE	0.0037
REAR	0.0083
AVERAGE	**0.0045**

NOTES:

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 :	01/22/2026 - Trinity Dodds - National TAB		
Completed Date :	03/10/2026 - 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:	

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CheckList Information

Name :	02: Exhaust Fans	**Status :**	Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	01/22/2026 - Trinity Dodds - National TAB		
Completed Date :	03/10/2026 - 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:	

03-09-26 QT #0743 MARIETTA, GA

CheckList Information

Name :	03: Hoods	**Status :**	Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	01/22/2026 - Trinity Dodds - National TAB		
Completed Date :	03/10/2026 - 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:	

03-09-26 QT #0743 MARIETTA, GA

CheckList Information

Name :	04: Final Tests	**Status :**	Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	01/22/2026 - Trinity Dodds - National TAB		
Completed Date :	03/10/2026 - Sagar Patel - National TAB		

CheckList Item Details

FINAL CHECKS

HOOD CAPTURE TEST

List kitchen equipment turned on for testing

Comment:

Fryer and Oven

List smoke candle type used

Comment:

45 Second Smoke Emitter

Smoke test capture % - Perimeter of hood

Comment:

95%

Smoke test capture % - Top of cooking surface

Comment:

100%

WITNESS

Date test was completed	03/10/2026

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: 03-09-26 QT #0743 MARIETTA, GA

System/Unit: AHU/RTU

Asset: RT-1 AREA:SALES FLOOR

Unit Data	
	Actual
MFG	AAON
Serial Num	201511-ANEK13272
Model Num	RN-013-8-0-EA0A-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	10.3

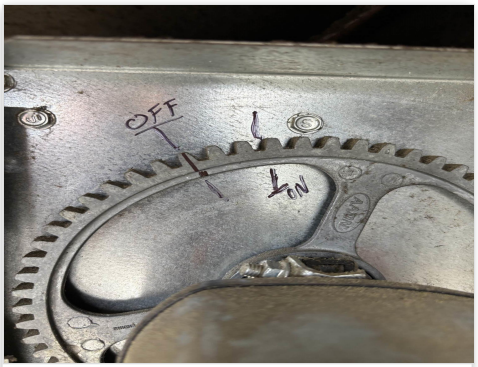
Test Data		
	Design	**Actual**
SF CFM	4200	4146
SF RPM	-	1109
OA CFM (Hoods On)	800	846
OA CFM (Hoods Off)	350	364
RL Voltage	-	110 VFD
RL Amperage	-	7.63 VFD
VFD Max SetPt	-	37.8 Hz
VFD Min SetPt	-	24 Hz
OA Damper Position (Hoods On)	-	46%
OA Damper Position (Hoods Off)	-	26%

Performance Data	
	Actual
MA Plenum SP	-0.52”
Fan Suction SP	-0.73”
Fan Discharge SP	0.41”
Total ESP	0.93"
Fan Total SP	1.14"

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

Completed By: Sagar Patel on 03/10/2026

Unit Data - PHOTO LOG



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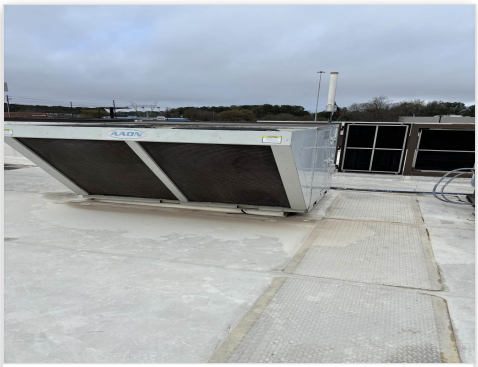

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National TAB

Project: 03-09-26 QT #0743 MARIETTA, GA

System/Unit: AHU/RTU

Asset: RT-2 AREA:SALES FLOOR

Unit Data	
	Actual
MFG	AAON
Serial Num	201511-ANEK13271
Model Num	RN-013-8-0-EA0A-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

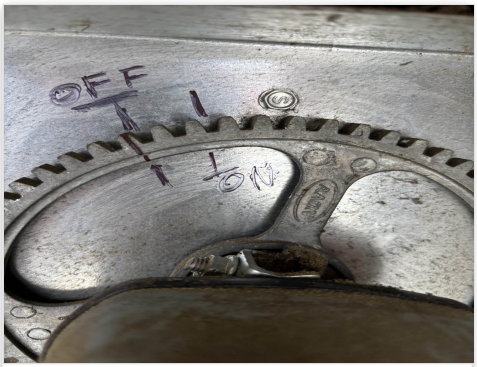
Test Data		
	Design	**Actual**
SF CFM	4200	4172
SF RPM	-	1156
OA CFM (Hoods On)	800	812
OA CFM (Hoods Off)	350	344
RL Voltage	-	114 VFD
RL Amperage	-	7.58 Hz
VFD Max SetPt	-	39.4 Hz
VFD Min SetPt	-	24 Hz
OA Damper Position (Hoods On)	-	46%
OA Damper Position (Hoods Off)	-	26%

Performance Data	
	Actual
MA Plenum SP	-0.47”
Fan Suction SP	-0.68”
Fan Discharge SP	0.66”
Total ESP	1.13"
Fan Total SP	1.34"

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

Completed By: Sagar Patel on 03/10/2026

Unit Data - PHOTO LOG



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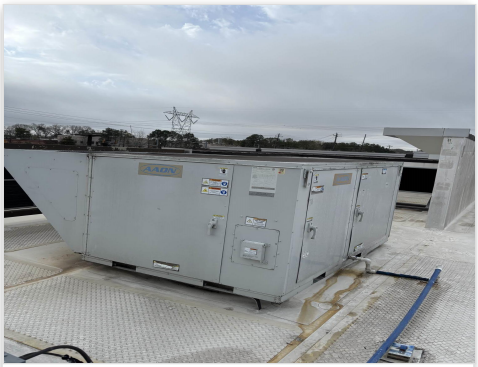

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Project: 03-09-26 QT #0743 MARIETTA, GA

System/Unit: AHU/RTU

Asset: RT-3 AREA:BOH/KITCHEN

Unit Data	
	Actual
MFG	AAON
Serial Num	201511-ANEK13270
Model Num	RN-013-8-0-EA0A-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

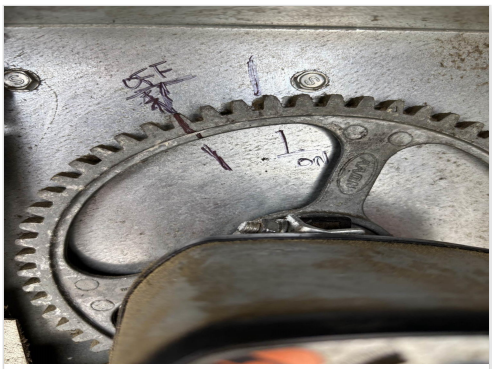
Test Data		
	Design	**Actual**
SF CFM	4200	4256
SF RPM	-	1214
OA CFM (Hoods On)	800	805
OA CFM (Hoods Off)	350	337
RL Voltage	-	109 VFD
RL Amperage	-	6.89 VFD
VFD Max SetPt	-	41.4 Hz
VFD Min SetPt	-	24 Hz
OA Damper Position (Hoods On)	-	46%
OA Damper Position (Hoods Off)	-	26%

Performance Data	
	Actual
MA Plenum SP	-0.39”
Fan Suction SP	-0.56”
Fan Discharge SP	0.63”
Total ESP	1.02"
Fan Total SP	1.19"

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

Completed By: Sagar Patel on 03/10/2026

Unit Data - PHOTO LOG



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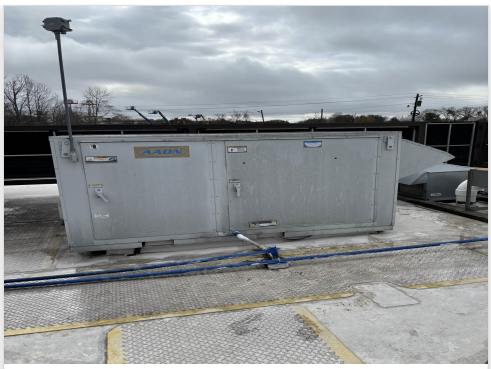

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Project:03-09-26 QT #0743 MARIETTA, GA

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	773	841	834	104.3
SGRD2	SUPPORT SERVICE	SI	12"	800	1	752	826	829	103.6
SGRD3	SUPPORT SERVICE	SI	12"	800	1	831	863	824	103.0
SGRD4	SUPPORT SERVICE	SI	12"	800	1	655	731	764	95.5
SGRD5	DOCK	ES	12"	750	1	1066	759	758	101.1
SGRD6	WORKROOM	ES	8"	250	1	219	241	247	98.8
Total				4200		4296	4261	4256	101.33%

Completed By: Sagar Patel on 03/10/2026

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Project: 03-09-26 QT #0743 MARIETTA, GA

System/Unit: FAN - Exhaust

Asset: EF1 AREA:WOMEN'S RR

Unit Data	
	Actual
MFG	COOK COMPANY
Model Num	90 ACEH 90C15DH
Serial Num	050SC16048-00
Type	DOWNBLAST
Configuration	VERTICAL

Motor Data	
	Actual
Motor MFG	QUEACE
Frame	48Y
Horsepower	0.125
Motor Rpm	1600
Phase	1
Voltage (rated)	115
Amperage (rated)	1.7
Service Factor	N/L

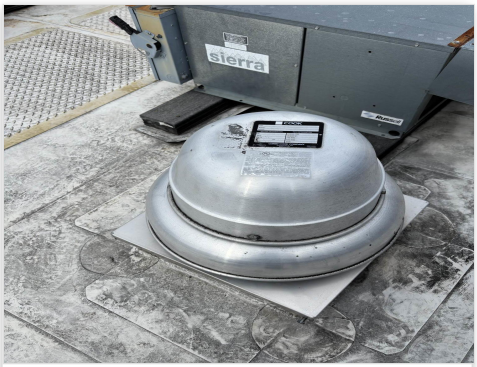
Test Data		
	Design	**Actual**
CFM	225	231
Fan Rotation	-	CCW
System SetPt	-	MEDIUM LOW
RL Voltage	-	[1]
RL Amperage	-	[1]
Total ESP	-	0.24"
Fan Inlet SP	-	-0.24”
Fan Discharge SP	-	ATM

Completed By: Sagar Patel on 03/10/2026

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

Written By: Sagar Patel on 03/10/2026

Unit Data - PHOTO LOG



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Project: 03-09-26 QT #0743 MARIETTA, GA

System/Unit: FAN - Exhaust

Asset: EF2 AREA:MEN'S RR/COMBI

Unit Data	
	Actual
MFG	COOK COMPANY
Model Num	120 ACE 120C13D 33
Serial Num	050SG16048-00
Type	DOWNBLAST
Configuration	VERTICAL

Motor Data	
	Actual
Motor MFG	QUEACE
Frame	48Y
Horsepower	0.25
Motor Rpm	1550
Phase	1
Voltage (rated)	115
Amperage (rated)	3.3
Service Factor	N/L

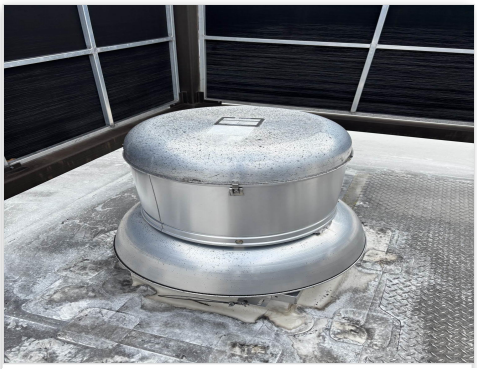
Test Data		
	Design	**Actual**
CFM	525	547
Fan Rotation	-	CCW
System SetPt	-	MEDIUM HIGH
RL Voltage	-	[1]
RL Amperage	-	[1]
Total ESP	-	0.18"
Fan Inlet SP	-	-0.18”
Fan Discharge SP	-	0.18"

Completed By: Sagar Patel on 03/10/2026

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

Written By: Sagar Patel on 03/10/2026

Unit Data - PHOTO LOG



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Project:03-09-26 QT #0743 MARIETTA, GA

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	63	159	159	106.0
Total				150		63	159	159	106%

Completed By: Sagar Patel on 03/10/2026

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Project: 03-09-26 QT #0743 MARIETTA, GA

System/Unit: FAN - Exhaust

Asset: EF3 AREA:KITCHEN HD

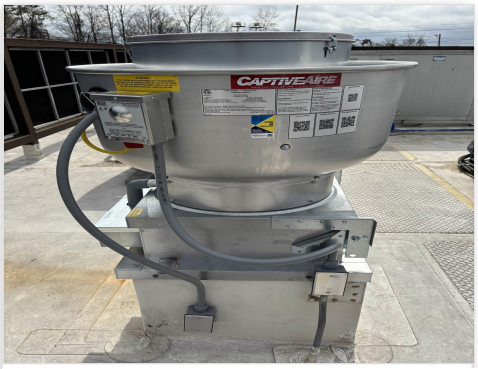
Unit Data	
	Actual
MFG	CAPTIVEAIRE
Model Num	DU50HFA
Serial Num	8317100
Type	UPBLAST
Configuration	VERTICAL

Motor Data		
	Design	**Actual**
Motor MFG	-	TELECO GREEN
Frame	-	N/L
Horsepower	1/2	0.5
Motor Rpm	-	1800
Phase	1	1
Voltage (rated)	208	208
Amperage (rated)	-	3.8
Service Factor	-	N/L

Test Data		
	Design	**Actual**
CFM	1350	1373
Fan RPM	-	1177
Fan Rotation	-	CCW
Motor RPM	-	177
System SetPt	-	52.6 Hz (65% on MSC))
RL Voltage	-	210
RL Amperage	-	1.8
Total ESP	0.75"	0.24"
Fan Inlet SP	-	-0.24”
Fan Discharge SP	-	ATM

Completed By: Sagar Patel on 03/10/2026

Unit Data - PHOTO LOG



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Project: 03-09-26 QT #0743 MARIETTA, GA

System/Unit: Kitchen Hood Type I

Asset: HD1 AREA:GRIDDLE

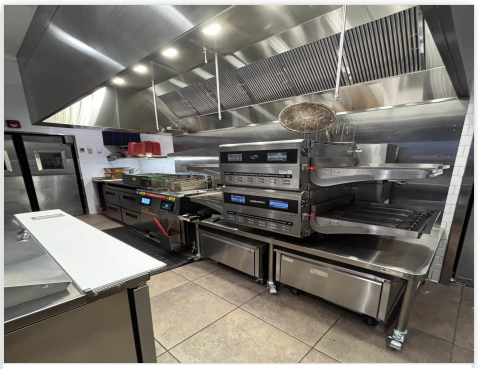
Unit Data		
	Design	**Actual**
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	6030ND-2-F	6030ND-2-F
Job / Serial Num	-	8317100
Type	TYPE I CANOPY	TYPE I CANOPY
Hood length	108"	108"
Hood Width	60"	60"

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	-	106
Filter2 FPM	-	114
Filter3 FPM	-	112
Filter4 FPM	-	113
Filter5 FPM	-	111
Filter6 FPM	-	105
Filter Ave FPM(corr)	-	110
CFM	1350	1373

Cooking Equipment	
	Actual
Item 1	FRYER
Item 2	OVEN

Completed By: Sagar Patel on 03/10/2026

Unit Data - PHOTO LOG



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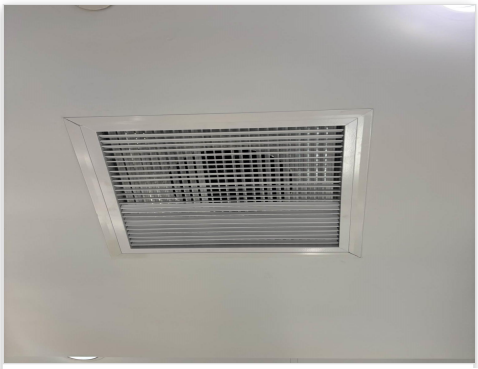

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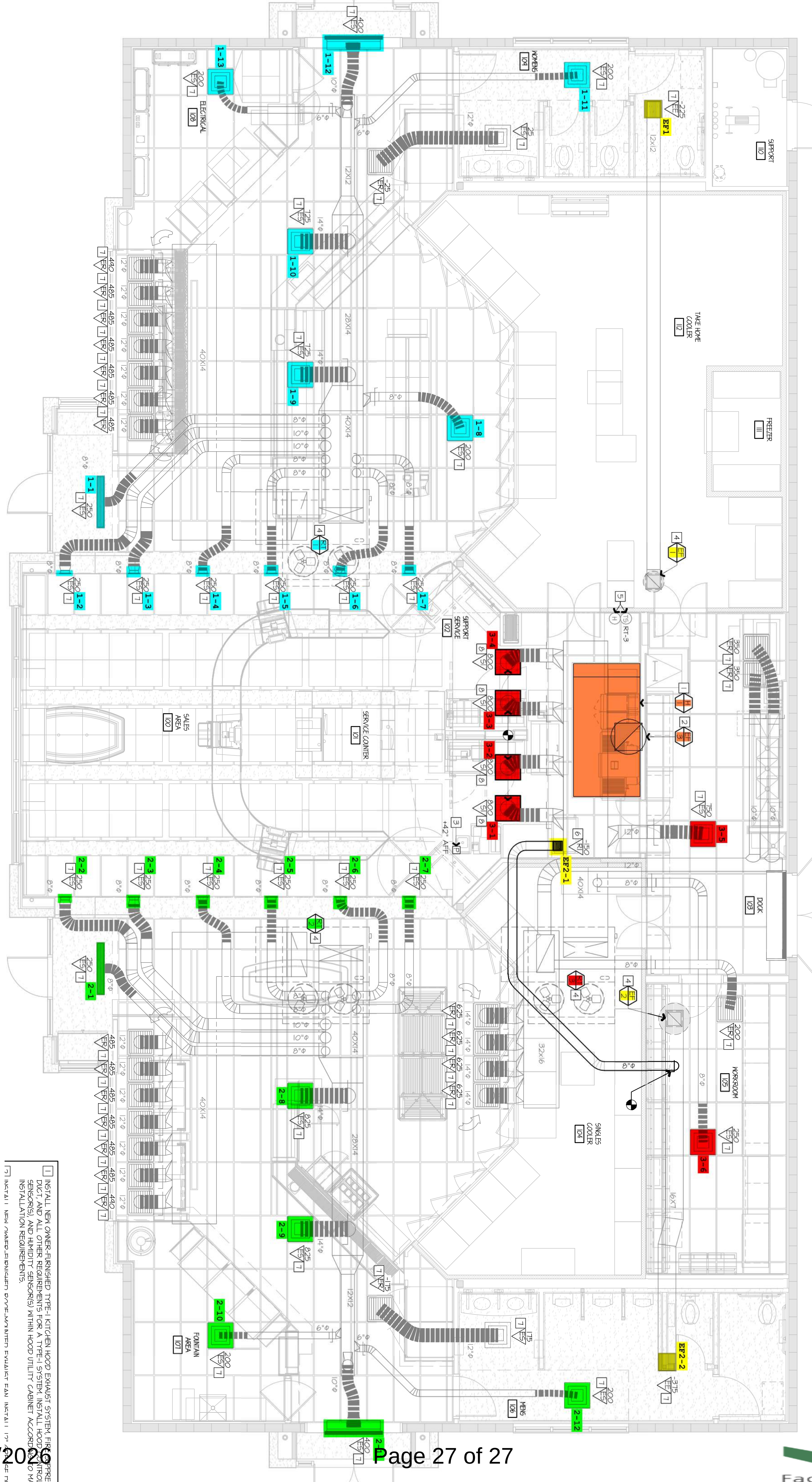
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100
SERVICE COUNTER
101
SUPPORT SERVICE
102
DOCK
103
WOMENS
104
WORKROOM
105
MENS
106
FOUNTAIN AREA
107
ELECTRICAL
108
SUPPORT
110
FREEZER
111
TAKE HOME COOLER
112
SINGLES COOLER
104