Report By:

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

Report: TAB Report

Function: Test, Adjust, & Balance

Date: 01/16/2026

Completed By: National TAB

PROJECT

01-26-26 QT #1114 GREER, SC

2414 S HWY 14

GREER, SC

Client

QUIKTRIP

4705 SOUTH 129TH EAST AVENUE

TULSA, OK 74134

National TAB

Project: 01-26-26 QT #1114 GREER, SC

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

- Damper 3-5 Not Accessible
- Dampers 3-1 Through 3-4 Not Accessible
- EF-1 Not Operational
- Incorrect Kitchen Diffusers
- No Hood End Panels Installed

01-26-26 QT #1114 GREER, SC

Project Issue Information

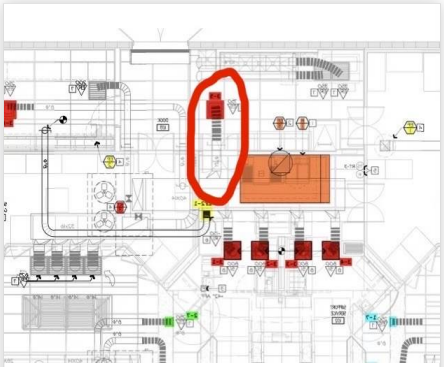
Issue Name : Damper 3-5 Not Accessible

Description : The damper for 3-5 is not accessible. It is located in an area where it cannot be reached.

Created By :	National TAB	**Assigned To :**	National TAB - Dan Hertenstein
Status :	Open		
Priority :	High	**Asset Tag :**	SGRD5
Originated Date :	01/28/2026 - Alex Bauer - National TAB		

Project Issue File Details

01/28/2026



01/28/2026

01-26-26 QT #1114 GREER, SC

Project Issue Information

Issue Name : Dampers 3-1 Through 3-4 Not Accessible

Description : The ceiling tiles that access the mechanical dampers for 3-1 through 3-4 are not able to be moved. The panels moved approximately 3/4" but are not able to be moved out of the way to access the dampers.

Created By :	National TAB	**Assigned To :**	National TAB - Dan Hertenstein
Status :	Open		
Priority :	Urgent	**Asset Tag :**	RT-3
Originated Date :	01/28/2026 - Alex Bauer - National TAB		

Project Issue File Details

01/28/2026

01-26-26 QT #1114 GREER, SC

Project Issue Information

Issue Name : EF-1 Not Operational

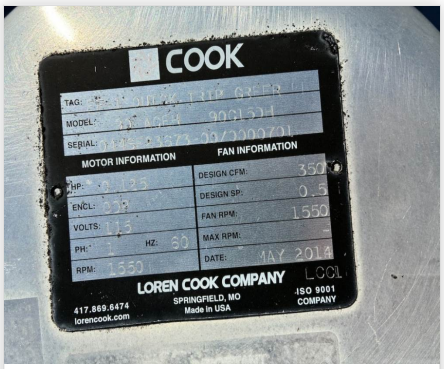
Description : There is power being run to EF-1, the breakers are on, the switch on the fan is on, the speed dial is rotated, and the fan will not operate.

Created By :	National TAB	**Assigned To :**	National TAB - Dan Hertenstein
Status :	Open		
Priority :	Urgent	**Asset Tag :**	EF1
Originated Date :	01/28/2026 - Alex Bauer - National TAB		

Project Issue File Details

1. Open MicrosoftTeams_video_1529515004.mp4
   01/28/2026

01/28/2026



01/28/2026

01-26-26 QT #1114 GREER, SC

Project Issue Information

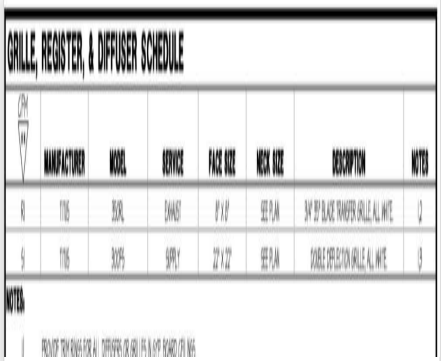
Issue Name : Incorrect Kitchen Diffusers

Description : The kitchen diffusers 3-1 through 3-4 are the incorrect type. They need to be the TITUS 300FS diffuser with the installed deflection blades.

Created By :	National TAB	**Assigned To :**	National TAB - Dan Hertenstein
Status :	Open		
Priority :	Medium	**Asset Tag :**	RT-3
Originated Date :	01/28/2026 - Alex Bauer - National TAB		

Project Issue File Details

01/28/2026



01/28/2026

01/28/2026

01-26-26 QT #1114 GREER, SC

Project Issue Information

Issue Name : No Hood End Panels Installed

Description : There are no hood end panels installed as per the Hood Schedule.

Created By : National TAB

Assigned To : National TAB - Dan Hertenstein

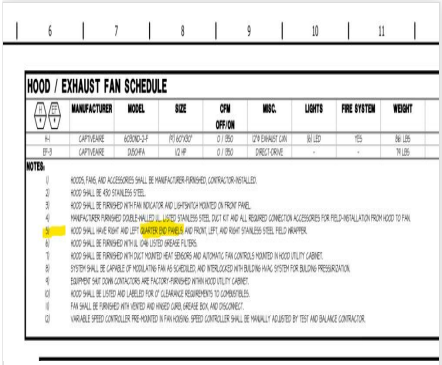
Status : Open

Priority : Medium

Asset Tag : HD1

Originated Date : 01/28/2026 - Alex Bauer - National TAB

Project Issue File Details



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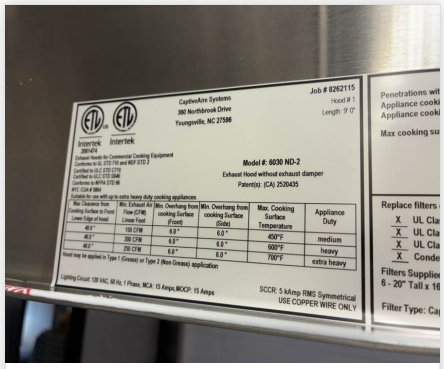


01/28/2026

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	855	350	362				
RTU-2	SALES	800	834	350	380				
RTU-3	BOH/KITCHEN	800	779	350	327				
EF-1	WOMEN'S RR					225	0	225	0
EF-2	MEN'S RR					525	572	525	572
EF-3	HOOD					1350	1385	0	0
TOTALS		2400	2468	1050	1069	2100	1957	750	572

HOODS ON

NET AIRFLOW CALCULATION

TOTALS	DESIGN	ACTUAL
TOTAL OA	2400	2468
TOTAL EXHAUST	2100	1957
NET AIRFLOW	300	511

DOOR TESTED	BUILDING PRESSURE MEASUREMENTS
FRONT	0.0014
SIDE	0.0008
REAR	0.0017
AVERAGE	**0.0013**

HOODS OFF

NET AIRFLOW CALCULATION

TOTALS	DESIGN	ACTUAL
TOTAL OA	1050	1069
TOTAL EXHAUST	750	572
NET AIRFLOW	300	497

DOOR TESTED	BUILDING PRESSURE MEASUREMENTS
FRONT	0.0015
SIDE	0.0041
REAR	0.0012
AVERAGE	**0.0023**

NOTES:

CheckList List

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

01-26-26 QT #1114 GREER, SC

CheckList Information

Name :	01: RTU’s/AHU’s	**Status :**	Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	01/16/2026 - Trinity Dodds - National TAB		
Completed Date :	01/28/2026 - Alex Bauer - 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:	

01-26-26 QT #1114 GREER, SC

CheckList Information

Name :	02: Exhaust Fans	**Status :**	Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	01/16/2026 - Trinity Dodds - National TAB		
Completed Date :	01/28/2026 - Alex Bauer - 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	
Comment:	

EF-1 is not operational, therefore the lack of noise and vibration cannot be verified.

01-26-26 QT #1114 GREER, SC

CheckList Information

Name :	03: Hoods	**Status :**	Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	01/16/2026 - Trinity Dodds - National TAB		
Completed Date :	01/28/2026 - Alex Bauer - 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?	Fail
Comment:	

01-26-26 QT #1114 GREER, SC

CheckList Information

Name :	04: Final Tests	**Status :**	Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	01/16/2026 - Trinity Dodds - National TAB		
Completed Date :	01/28/2026 - Alex Bauer - National TAB		

CheckList Item Details

FINAL CHECKS

HOOD CAPTURE TEST

List kitchen equipment turned on for testing

Comment:

OVEN, FRYER.

List smoke candle type used

Comment:

SMOKE PELLET.

Smoke test capture % - Perimeter of hood

Comment:

100%

Smoke test capture % - Top of cooking surface

Comment:

100%

WITNESS

Date test was completed	01/27/2026

Comment:

TAB tech name / Firm

Comment:

ALEX BAUER/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:

EF-1 is not operational; see issues.

National TAB

Project: 01-26-26 QT #1114 GREER, SC

System/Unit: AHU/RTU

Asset: RT-1 AREA:SALES FLOOR

Unit Data	
	Actual
MFG	AAON
Serial Num	201404-ANEK10300
Model Num	RN-013-8-0-EA0A-152
Num OA Filters 1	1
OA Filter Size 1	22.5X44.5
Num Final Filter 1	2
Final Filter Size 1	19.5X46.5

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

Test Data		
	Design	**Actual**
SF CFM	4200	3954
SF RPM	-	1071
OA CFM (Hoods On)	800	855
OA CFM (Hoods Off)	350	362
RL Voltage	-	102 VFD
RL Amperage	-	7.15 VFD
VFD Max SetPt	-	36.5 Hz
OA Damper Position (Hoods On)	-	46%
OA Damper Position (Hoods Off)	-	38%

Performance Data		
	Design	**Actual**
MA Plenum SP	-	-0.41”
Fan Suction SP	-	-0.53”
Fan Discharge SP	-	0.48”
Total ESP	-	0.89”
Fan Total SP	-	1.01”

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

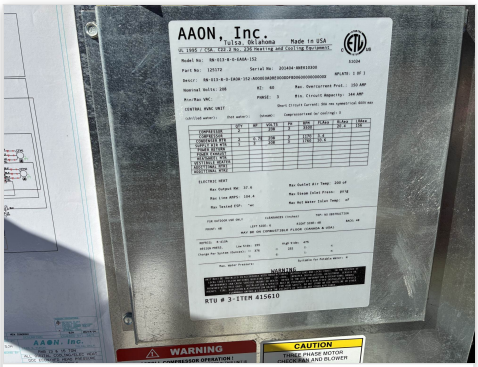
Completed By: Alex Bauer on 01/28/2026

Notes:
This is RTU-3 in the field.

Written By: Alex Bauer on 01/28/2026

Unit Data - PHOTO LOG

01/28/2026



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National TAB

Project: 01-26-26 QT #1114 GREER, SC

System/Unit: AHU/RTU

Asset: RT-2 AREA:SALES FLOOR

Unit Data	
	Actual
MFG	AAON
Serial Num	201404-ANEK10298
Model Num	RN-013-8-0-EA0A-152
Num OA Filters 1	1
OA Filter Size 1	22.5X46.5
Num Final Filter 1	2
Final Filter Size 1	19.5X46.5

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

Test Data		
	Design	**Actual**
SF CFM	4200	4282
SF RPM	-	1056
OA CFM (Hoods On)	800	834
OA CFM (Hoods Off)	350	380
RL Voltage	-	98.8 VFD
RL Amperage	-	7.15 VFD
VFD Max SetPt	-	36 Hz
OA Damper Position (Hoods On)	-	46%
OA Damper Position (Hoods Off)	-	38%

Performance Data		
	Design	**Actual**
MA Plenum SP	-	-0.53"
Fan Suction SP	-	-0.65”
Fan Discharge SP	-	0.43”
Total ESP	-	0.96”
Fan Total SP	-	1.08”

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

Completed By: Alex Bauer on 01/28/2026

Notes:
This is RTU-1 in the field.

Written By: Alex Bauer on 01/28/2026

Unit Data - PHOTO LOG

01/28/2026

01/28/2026

01/28/2026

National TAB

Project: 01-26-26 QT #1114 GREER, SC

System/Unit: AHU/RTU

Asset: RT-3 AREA:BOH/KITCHEN

Unit Data	
	Actual
MFG	AAON
Serial Num	201404-ANEK10299
Model Num	RN-013-8-0-EA0A-152
Num OA Filters 1	1
OA Filter Size 1	22.5X44.5
Num Final Filter 1	2
Final Filter Size 1	19.5X46.5

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

Test Data		
	Design	**Actual**
SF CFM	4200	4237
SF RPM	-	1379
OA CFM (Hoods On)	800	779
OA CFM (Hoods Off)	350	327
RL Voltage	-	168 VFD
RL Amperage	-	9.40 VFD
VFD Max SetPt	-	47 Hz
OA Damper Position (Hoods On)	-	46%
OA Damper Position (Hoods Off)	-	38%

Performance Data		
	Design	**Actual**
MA Plenum SP	-	-0.71”
Fan Suction SP	-	-0.89”
Fan Discharge SP	-	0.81”
Total ESP	-	1.52”
Fan Total SP	-	1.70”

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

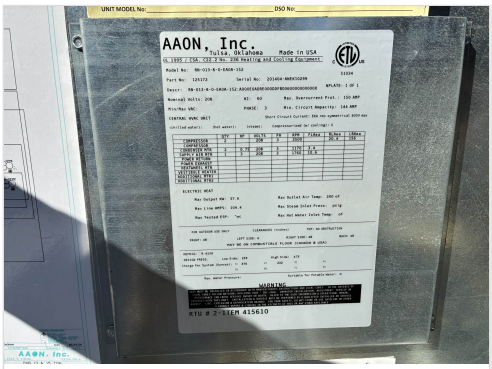
Completed By: Alex Bauer on 01/29/2026

Notes:
This is RTU-2 in the field.

Dampers 3-1 through 3-4 were not accessible. The ceiling tiles were not able to be moved. Damper 3-5 is not accessible.

Written By: Alex Bauer on 01/28/2026

Unit Data - PHOTO LOG



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National TAB

Project:01-26-26 QT #1114 GREER, 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	721	590	721	90.1
SGRD2	SUPPORT SERVICE	SI	12"	800	1	778	629	778	97.3
SGRD3	SUPPORT SERVICE	SI	12"	800	1	711	579	711	88.9
SGRD4	SUPPORT SERVICE	SI	12"	800	1	660	537	660	82.5
SGRD5	DOCK	ES	12"	750	1	1128	924	1128	150.4
SGRD6	WORKROOM	ES	8"	250	1	239	199	239	95.6
Total				4200		4237	3458	4237	100.88%

National TAB

Project: 01-26-26 QT #1114 GREER, SC

System/Unit: FAN - Exhaust

Asset: EF1 AREA:WOMEN'S RR

Unit Data		
	Design	**Actual**
MFG	NA	COOK
Model Num	NA	90 ACEH 90C15DH
Serial Num	-	044SF23673--00/0000701
Type	-	DOWNBLAST
Configuration	-	VERTICAL

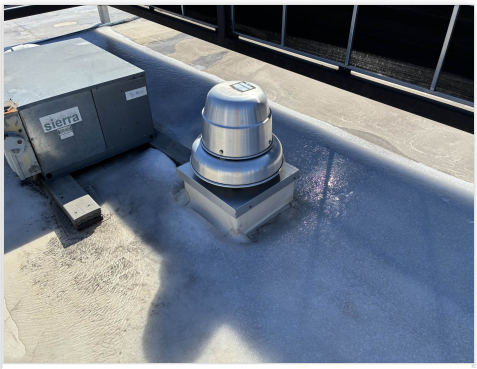
Motor Data		
	Design	**Actual**
Motor MFG	-	QUEACE
Frame	-	48Y
Horsepower	-	0.125
Motor Rpm	-	1600
Phase	-	1
Voltage (rated)	-	115
Amperage (rated)	-	1.7
Service Factor	-	NA

Test Data		
	Design	**Actual**
CFM	225	NA
Fan RPM	-	NA
Fan Rotation	-	NA
Motor RPM	-	NA
System SetPt	-	NA
RL Voltage	-	NA
RL Amperage	-	NA
Total ESP	-	NA
Fan Inlet SP	-	NA
Fan Discharge SP	-	NA

Notes:
EF-1 is not operational.

Written By: Alex Bauer on 01/27/2026

Unit Data - PHOTO LOG



01/28/2026

National TAB

Project: 01-26-26 QT #1114 GREER, SC

System/Unit: FAN - Exhaust

Asset: EF2 AREA:MEN'S RR/COMBI

Unit Data		
	Design	**Actual**
MFG	NA	COOK
Model Num	NA	120 ACE 120C13D
Serial Num	-	44SF23673-00/0002001
Type	-	DOWNBLAST
Configuration	-	VERTICAL

Motor Data		
	Design	**Actual**
Motor MFG	-	FASCO
Frame	-	NA
Horsepower	-	0.25
Motor Rpm	-	1550
Phase	-	1
Voltage (rated)	-	115
Amperage (rated)	-	3.2
Service Factor	-	NA

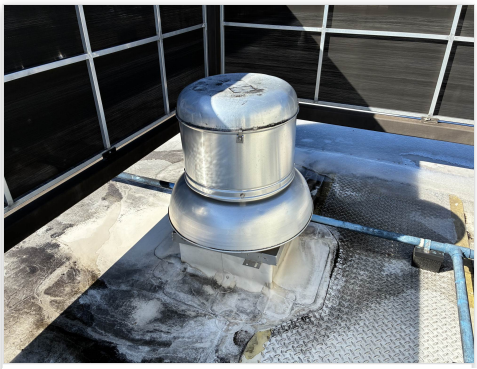
Test Data		
	Design	**Actual**
CFM	525	572
Fan RPM	-	NA
Fan Rotation	-	CCW
Motor RPM	-	NA
System SetPt	-	100%
RL Voltage	-	18.6
RL Amperage	-	1.34
Total ESP	-	0.26”
Fan Inlet SP	-	-0.26”
Fan Discharge SP	-	ATM

Completed By: Alex Bauer on 01/28/2026

Notes:
EF2-1 does not have a damper.

Written By: Alex Bauer on 01/27/2026

Unit Data - PHOTO LOG



01/28/2026

National TAB

Project:01-26-26 QT #1114 GREER, SC

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	248	248	248	165.3
Total				150		248	248	248	165.33%

Completed By: Alex Bauer on 01/28/2026

National TAB

Project: 01-26-26 QT #1114 GREER, SC

System/Unit: FAN - Exhaust

Asset: EF3 AREA:KITCHEN HD

Unit Data		
	Design	**Actual**
MFG	NA	CAPTIVEAIRE
Model Num	NA	DU50HFA
Serial Num	-	8262115
Type	UPBLAST	UPBLAST
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	**Actual**
Motor MFG	-	TELCO GREEN
Frame	-	NA
Horsepower	1/2	0.50
Motor Rpm	-	1800
Phase	-	1
Voltage (rated)	-	208
Amperage (rated)	-	NA
Service Factor	-	NA

Test Data		
	Design	**Actual**
CFM	1350	1385
Fan RPM	-	1160
Fan Rotation	-	CCW
Motor RPM	-	1160
System SetPt	-	51.8 Hz
RL Voltage	-	NA
RL Amperage	-	NA
Total ESP	-	0.67”
Fan Inlet SP	-	-0.67”
Fan Discharge SP	-	ATM

Completed By: Alex Bauer on 01/28/2026

Unit Data - PHOTO LOG

01/28/2026

National TAB

Project: 01-26-26 QT #1114 GREER, 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
Job / Serial Num	-	8262115
Type	TYPE I CANOPY	TYPE I CANOPY
Hood length	108"	108"
Hood Width	60"	60"

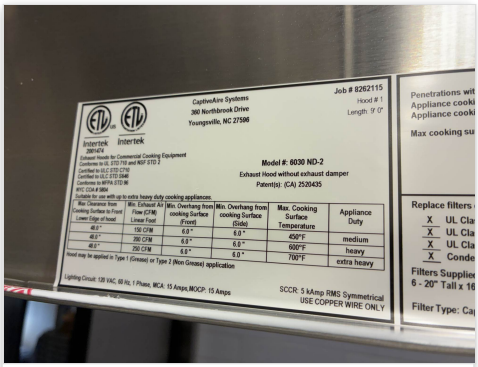
Test Data Exhaust		
	Design	**Actual**
Filter Type	-	BAFFLE FILTERS
Filter Size 1	-	16X20
Filter Qty 1	-	6
Filter AK factor size 1	-	2.08
Filter Total AK Area	-	12.48
Filter1 FPM	-	115
Filter2 FPM	-	101
Filter3 FPM	-	124
Filter4 FPM	-	99
Filter5 FPM	-	127
Filter6 FPM	-	104
Filter Ave FPM(corr)	-	111
CFM	1350	1385

Cooking Equipment	
	Actual
Item 1	OVEN
Item 2	FRYER

Completed By: Alex Bauer on 01/28/2026

Unit Data - PHOTO LOG

01/28/2026



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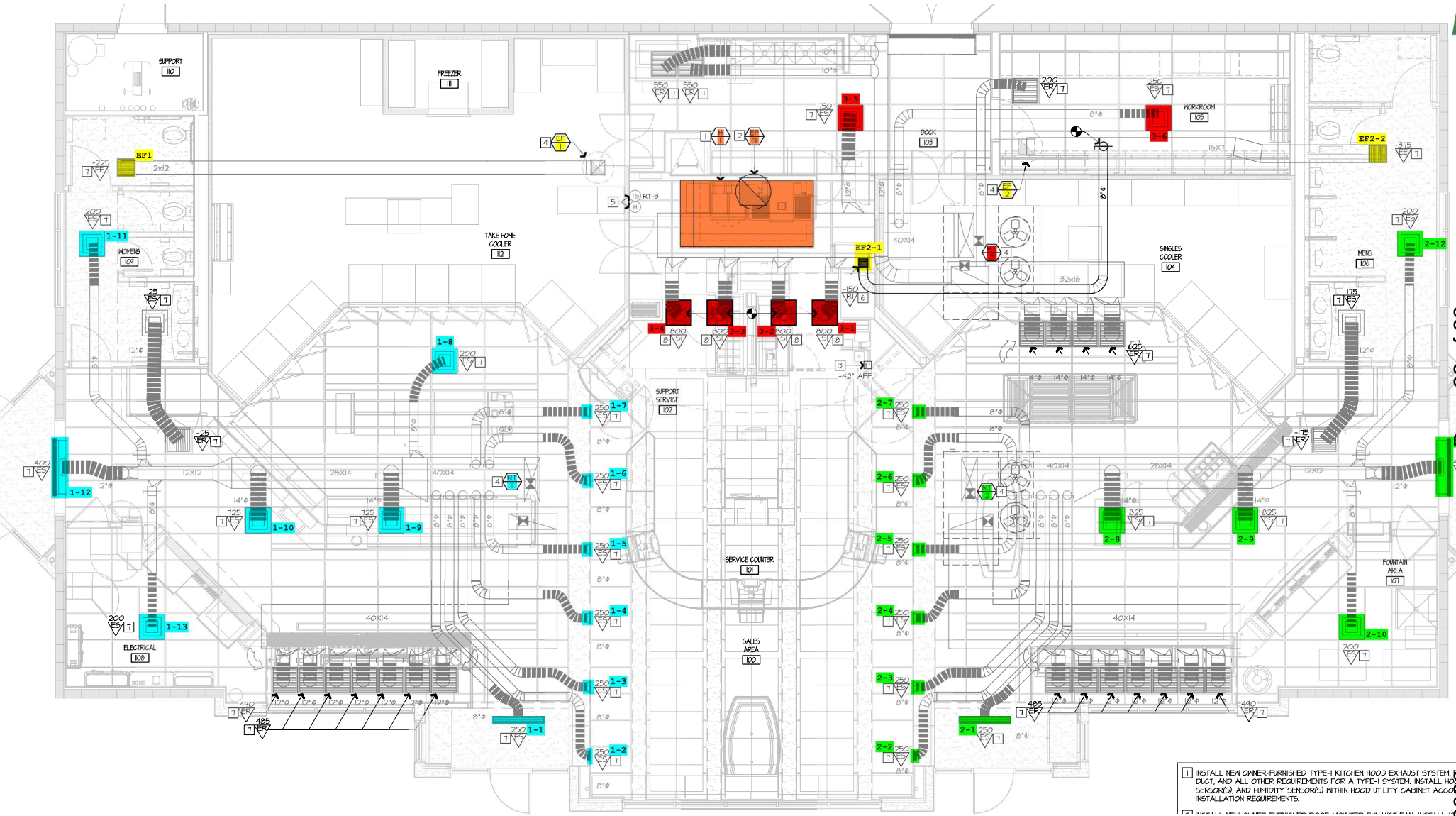

1 INSTALL NEW OWNER-FURNISHED TYPE-I KITCHEN HOOD EXHAUST SYSTEM, FIRE SUPPRE... DUCT, AND ALL OTHER REQUIREMENTS FOR A TYPE-I SYSTEM. INSTALL HOOD CONTROL... SENSOR(S), AND HUMIDITY SENSOR(S) WITHIN HOOD UTILITY CABINET ACCORDING TO MA... INSTALLATION REQUIREMENTS.

Date: 2/11/2026